PHARMACY STUDENTS' VIEWS REGARDING WORKING WITH PEOPLE LIVING WITH MENTAL ILLNESS: THE INTERACTION BETWEEN STIGMA AND PREPAREDNESS FOR PRACTICE.

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December 2022

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Pharmacy students' views regarding working with people living with mental illness: the interaction between stigma and preparedness for practice.

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Abstract

Mental illness is common and stigma surrounding it can have profound effects on those who experience it. Research in pharmacy education has been predominantly quantitative in nature, demonstrating stigmatising views among pharmacy students. This study examined the subjective experience of fourteen pharmacy students and four recent graduates from one UK university. The aim of the research was to explore pharmacy students' views towards people with mental illness and how this interacts with their preparedness for future practice, in order to inform pharmacy curricula to better prepare students for working with people living with mental illness (PMI). Using a methodology informed by constructivist grounded theory, the study generated qualitative data which were used to develop rich understanding of the problem of mental illness stigma in this context of future pharmacy professionals.

Data analysis found evidence of personal and perceived stigma, and that pharmacy students feel unprepared to work with PMI. A variety of reasons accounted for this, and three major data categories were developed explaining how stigma affects students' sense of unpreparedness – Knowing, Doing and Valuing (KDV). These three categories form the KDV cycle, a model providing both explanation of how stigma is perpetuated in pharmacy education and a solution for how this can be minimised. The data support the conclusion that pharmacy curricula should be modified based on the need to enhance pharmacy students' preparedness, thus minimising the impact of mental illness stigma, rather than focusing on stigma alone. Recommendations are linked to the stigma drivers exemplified within the data and to specific learning outcomes required of pharmacy curricula in Great Britain. The thesis presents a novel contribution in the description of mental illness stigma in pharmacy students and evidence-based suggestions for the continued improvement of pharmacy education in relation to minimising the impact of stigma in professional practice.

Key words: mental health, pharmacist, qualitative, pharmacy education, UK higher education.

Dedication

This thesis is dedicated to Celia Feetam, a sorely missed stalwart of mental health pharmacy education, without whom I would unlikely have ever taken those first steps into academia.

Acknowledgements

The fourteen pharmacy students and four recent graduates without whose time and effort this thesis would not exist.

Dr Julian Lamb for your belief, support and encouragement from the very beginning. You inspired me into pedagogical research through your embodiment of excellence in teaching.

Dr Ruth Edwards for understanding me as a person and applying that with kindness in supervision.

Dr Joseph Bush for your subject and process expertise and responding with care and patience to my needs. Your reflections on my work added critical perspectives on the ways pharmacy is taught.

Dr Alexis Paton for your willingness, positivity and genuineness. You pulled me out of the quagmire of analysis where I might still be without your patient guidance.

My family – Mum, Jamie, Joshua and Thomas for your interminable support. I am so impressed by how often and how honestly you made efforts to understand what I have been doing and to celebrate the little successes along the way. You have *all* offered valuable advice on the multitude of challenges I've faced irrespective of age and understanding.

The vast number of friends who have been there throughout to support, listen, advise, distract, read and share musical inspiration, notably Nicola, Katie, Jo, Emma, Ruth, Sam, Caroline, Matt, Hayley, Sue, John and Helen.

The Sambassadors of Groove and Carnaval Transatlântico for your very existence. Being able to continue drumming throughout this research has been, in my opinion, a necessity for my success.

List of contents

Abstract ii

Dedication iii

Acknowledgements iv

List of terms and abbreviations viii

List of tables x

List of figures xi

Chapter 1 - Introduction 1

  The importance of this research 1

  Advantages of the approach 2

  Timeliness of the research 2

  Structure of the thesis 4

Chapter 2 - Literature Review 7

  Introduction 7

  Section One 8

    A stigma concept: stereotypes, prejudice and discrimination occurring on multiple levels 8

    Stigma as a social process 11

    Explicit and implicit stigma 12

  Section Two 13

    Iatrogenic stigma 13

    Pharmacy students' stigma towards people living with mental illness 18

  Stigma reduction interventions 21

    Impact of MHFA on stigma 26

    Work readiness 28

  Shedding new light – what this research adds 30

Chapter 3 – Methodology and Methods 33

  Introduction 33

  Theoretical perspective and conceptual framework 33

  Grounded theory as a guiding methodological approach 35

  My impact on the research 36

  Data generation 37

    Participant recruitment 37

    Phase 1: Focus groups 43

    Phase 2: Interviews 46

  Data analysis 48

    Saturation 53

Ethics 54
Summary 57
Chapter 4 – Knowing: Identifying inadequate knowledge 58
Introduction to the next three chapters 58
Knowing 59
Introduction 59
Aspects of psychiatry are unknown 59
Knowledge of mental illness and its treatment 60
Poor knowledge limits conversation 62
Knowledge and stigma 66
Needing to know more 67
Summary 69
Chapter 5 – Doing: Applying knowledge in practice 71
Introduction 71
Avoiding mental illness 71
Understanding facilitates interaction 74
Relationships and their norms 77
Inadequacy of pharmacy 80
Limited opportunities 81
Developing confidence to apply and build knowledge 84
Summary 86
Chapter 6 – Valuing: Willingness to try 88
Introduction 88
Devaluing mental healthcare 89
Devaluing the self 90
Devaluing mental illness in the pharmacy curriculum 91
Implicit stigma manifestations 92
Feeling pity for PMI 92
Incompetence 93
Avoidance related to fear 94
Language 94
Summary 96
Bringing the data categories together 97
Chapter 7 – Discussion 99
Introduction 99
Knowing, Doing, Valuing: The KDV cycle 99

Knowing and Doing: the relevance of my findings to pharmacy education 99
Requiring more training, or more confidence? 101
Teaching focus and developing understanding 102
Communication as an educational need 111
The difficulty of treating mental illness 115
Valuing people and stigma minimisation 123
Interpersonal and implicit stigma in pharmacy students 123
The problem of self-stigma 125
Identifying strengths 127
Linking the KDV cycle to curriculum development and stigma drivers 129
Summary 132
Chapter 8 – Conclusion and recommendations 133
Introduction 133
Contribution to the literature 133
Pharmacy education recommendations 135
Limitations 136
Reflecting on the impact of this research 138
My professional practice 138
The Aston MPharm degree 141
The wider professional community 141
Future research 142
Concluding remarks 142
References 144
Appendix 1 – Focus group topic guide 161
Appendix 2 – Case vignettes 163
Appendix 3 – Permission from Professor Anthony Jorm to use case vignettes 164
Appendix 4 – Interview topic guide 165
Appendix 5 – Participant information sheet for focus groups 166
Appendix 6 – Participant information sheet for interviews 172
Appendix 7 – Focus group consent form 178
Appendix 8 – Interview consent form 180
Appendix 9 – Participant debrief sheet 182
Appendix 10 – General Pharmaceutical Council learning outcomes for the initial education and training of pharmacists referred to in this research (GPhC, 2021) 183
Appendix 11 – COREQ checklist 184

List of terms and abbreviations

The following terms and abbreviations are used in this thesis.

CGT	Constructivist grounded theory
CMHP	College of Mental Health Pharmacy
COVID-19	Coronavirus disease. An infectious disease which caused a worldwide pandemic in 2020
EdD	Doctor of Education degree
GPhC	General Pharmaceutical Council. The regulatory body for pharmacy in Great Britain
GB	Great Britain
GT	Grounded theory
HCP	Healthcare professional
IAT	Implicit Attitude Test
Mental illness	Throughout this study and in this thesis which describes the work, I have used the term mental illness to refer to any psychiatric health condition. I am aware that there are arguments for the use of other terms such as mental ill health, but this term was adopted in line with the *zeitgeist*, alongside much of the literature in the field and in healthcare
MH	Mental Health
MHFA	Mental Health First Aid
MHL	Mental Health Literacy
MHP	Mental Health Professional – any clinician working in a specialist role
MPharm	Pharmacy degrees in the UK are undergraduate Masters-level degrees which are usually four years in length, followed by a year of in-work training prior to registration as a pharmacist. This is the degree of Master of Pharmacy, abbreviated to MPharm
MSc	Master of Science degree
NHS	National Health Service
OMS-HC	Opening minds scale for health care providers
Patient	Used to refer to any person requiring or receiving healthcare for mental illness. I acknowledge the use of terms less associated with the medical model and illness such as service user, but have chosen to use the term used most frequently and naturally by the participants in this study
PharmD	Used to refer to the pharmacy degree in the United States of America. In the UK, the Doctor of Pharmacy is a professional doctorate which is a postgraduate degree and is not a requirement for professional practice

PIS	Participant Information Sheet
PMI	Person, or people, living with mental illness
Psychotropic medication	Used to describe medicines that are prescribed for the treatment of mental illness. Including, but not limited to, antipsychotics, antidepressants, mood stabilisers and anxiolytics
RIBS	Reported and Intended Behaviour Scale
RPS	Royal Pharmaceutical Society
SDS	Social Distance Scale
Somatic illness	Used to describe any ill health arising from the body, and in contrast to mental illness. The distinction is acknowledged to be flawed, but the term is used to echo a distinction made by participants in this study between mental illness (depicted as invisible and subjective) and physical illness (visible or measurable and objective)
UK	United Kingdom
USA	United States of America
US	United States of America

List of tables

Table 1 Example search terms used 8
Table 2 Levels of stigma, their descriptions and relevance to this research 9
Table 3 Focus group participants’ demographic information........ 40
Table 4 Interview participants' demographic data 42
Table 5 Examples of stigmatising language from focus groups and interviews 95
Table 6 Linking stigma drivers, curriculum recommendations and GPhC learning outcomes 131

List of figures

Figure 1 Conceptual framework for this research 35
Figure 2 Examples of emergent categories presented in the second, third and fourth one-to-one interviews 48
Figure 3 Reflections recorded after the third focus group 50
Figure 4 Examining relationships between data and initial codes 51
Figure 5 Development of the 'knowledge' focused code which eventually became the Knowing category 51
Figure 6 Portion of an original "huge, sprawling map" of initial codes 52
Figure 7 The three major categories as a sequence 97
Figure 8 The three major categories as a cycle: The KDV cycle 97
Figure 9 Miller’s pyramid by University of Saskatchewan, licensed under CC BY-NC-SA 4.0 103
Figure 10 Linking stigma drivers and recommendations for pharmacy curricula to the KDV cycle ... 132

Chapter 1 - Introduction

The stigma associated with mental illness is a subject of international concern across sociopolitical, healthcare and academic arenas. Interest in this topic is clearly demonstrated by the extensive literature which has investigated mental illness stigma within each of these differing domains. As international recognition of the damaging consequences of stigma to people living with mental illness increases, so have efforts to counter it. Healthcare services and the professionals working within them may contribute to mental illness stigma and research has logically focused on stigma reduction in healthcare curricula. In this thesis, I focus on mental illness stigma in the specific context of pharmacy education. Using a qualitative approach, I explore the subjective experience of pharmacy students and recent graduates in order to construct a contextualised description of mental illness stigma and its relevance to future professional practice. These rich, descriptive data are used as the basis for a model representing the interplay of stigma and preparedness for future practice with people living with mental illness. Using this model, I suggest ways in which the pharmacy curriculum could be improved. Such improvement should allow students to feel more prepared for their future roles as well as reducing the impact of stigma within their practice. In this thesis I therefore offer a contribution to the existing mental health stigma literature in the pharmacy context, presenting an explanation of this problem which might allow more focused intervention design in future.

In this chapter, I describe why it is important to focus research on pharmacy students as well as providing a brief rationale for the interpretive approach that I have taken. I will then build upon this in the following chapter. I go on to explain the timeliness of the research from multiple perspectives, before introducing my research questions and the structure of the thesis.

The importance of this research

The World Health Organisation (WHO) Mental Health Action Plan envisions a world in which people living with mental illness are able to “attain the highest possible level of health […], free from stigmatisation and discrimination” (World Health Organization, 2021). In England, the majority of people living with mental illness (PMI) report experiencing stigma related to their mental illness (Mental Health Foundation, 2021) and this is associated with negative consequences to health. There is a significant mortality gap in which life expectancy for people with mental illness is reduced by 15-20 years compared to those without (Thornicroft, 2011). This is in part due to poorer healthcare provided to PMI, highlighting a significant unmet need (Fiorillo and Sartorius, 2021) which pharmacists could contribute to filling. In order for pharmacists to do this, they must leave university ready and willing to work with all patients, irrespective of diagnosis and without discrimination.

Mental illness stigma among healthcare professionals (HCPs) is thought to contribute to poorer levels of healthcare experienced by PMI (Sartorius, 2002; Henderson *et al.*, 2014), offering a possible focus for improvement. Student and qualified pharmacists have been shown to exhibit some stigmatising views about PMI (Harris *et al.*, 2021; Sølvhøj *et al.*, 2021) and the extensive literature in the field is focused on ways to improve therapeutic outcomes and the experience of healthcare for PMI by reducing stigma. Research offering subjective description of mental illness stigma within pharmacy students is extremely limited, and I argue that through examining this issue, a better understanding of the problem will be developed. Such understanding can form the basis for targeted and contextually meaningful interventions based on the specific needs of this group.

Advantages of the approach

An interpretivist methodology was adopted for this research. Interpretivism acknowledges and values the subjective experiences of individual human beings (Crotty, 1998). The research considers stigma as a socially-constructed concept, with no indisputable or universal truth regarding how it manifests or is experienced. Without human interaction and perception, I would argue that stigma cannot exist, therefore interpretivist exploration of it is a logical fit. Constructivist grounded theory (Charmaz, 2014) provides guiding principles for research and supports the choice of focus groups and interviews as the methods used to explore the research questions listed below. Following such a methodology should allow development of a rich explanation of the problem of pharmacy students' stigmatisation of PMI, which is known to exist but lacks adequate description and explanation.

In addition to being closely aligned to the theoretical perspectives taken in the conception of the research, the use of interpretivist methodology should add depth and explanation to the substantive field of mental health stigma in pharmacy students. Henderson and Gronholm (2018) view stigma as a wicked problem (Henderson and Gronholm, 2018). Their conceptualisation of a wicked problem is one that is "open to interpretation, so consensus on one definition (and set of solutions) is not an appropriate aim" (Henderson and Gronholm, 2018). Research focussing on defining and understanding stigma alongside complementary research focussing on interventions is required; both study types are ultimately aimed at stigma reduction (Henderson and Gronholm, 2018). The design of this study therefore offers a novel approach to understanding mental illness stigma in pharmacy students at a United Kingdom (UK) university.

Timeliness of the research

There has been growing international momentum towards stigma reduction for at least two decades but the problem remains and pressure to reduce stigma and improve outcomes for PMI continues. In the wake of the COVID-19 global pandemic, its negative impact on mental health has been reported widely across medical and lay literature. Depression, anxiety and post-traumatic stress disorder have all been associated with the pandemic (Boden *et al.*, 2021), and in England, the extreme pressure on mental health services has been reported by the Care Quality Commission (Care Quality Commission, 2022). Within this challenging mental healthcare context, pharmacists are being called upon to expand their roles, providing a broader range of services to PMI and to expand the capacity of the mental health workforce. Specifically, the National Health Service (NHS) Long Term Plan promotes pharmacists as professionals who can relieve pressures on others where resources are perceived to be more stretched (NHS, 2019). This plan focuses on unmet needs across the health system and calls upon pharmacists to help improve efficiencies in community mental health services, general practice and in care homes (NHS, 2019).

The current public health and healthcare context therefore requires a resilient workforce of pharmacists who are fully prepared for the medicines optimisation roles set out in the NHS Long Term Plan. They must be ready to work with PMI at a time where mental illness is becoming increasingly prevalent and where service provision is already stretched. If pharmacists are to help relieve pressure on the broader NHS workforce, it is imperative that they possess the knowledge and skills to provide the care required by PMI. Of particular relevance will be those areas highlighted in the NHS Long Term Plan – dealing with mental health crises, medicines review and optimisation and signposting. Pharmacy curricula must prepare future pharmacists for these roles, but the value of this training could be compromised by the mental illness stigma already identified in pharmacy students. These considerations come at a time of change within pharmacy education in Great Britain.

Pharmacy degrees in Great Britain are accredited by the regulator for pharmacists, pharmacy technicians and pharmacies in Great Britain, the General Pharmaceutical Council (GPhC), which publishes standards for the initial education and training of pharmacists. There have been two significant changes to the GPhC standards which have resulted in significant redesign of pharmacy curricula. Firstly, in response to the 2011 GPhC standards (General Pharmaceutical Council, 2011) Schools of Pharmacy were required to ensure that curricula were integrated. Integrated curricula are created when individual aspects of teaching, e.g., pharmacology, pharmaceutics and clinical practice are combined into single strands of learning, supporting the learner's sense of the relevance of everything they are taught to their future professional practice (Husband, Todd and Fulton, 2014). At Aston University, the fully integrated Master of Pharmacy (MPharm) degree was accredited in 2019 and teaching of that curriculum began in the same year. This 2019 iteration of the MPharm curriculum was therefore being taught for the first time at the same time as I designed and carried out the research described in this thesis. In 2021 came the second change to GPhC accreditation standards, which allow for the expanded role of pharmacists as prescribers from the point of qualification (GPhC, 2021). The Aston Pharmacy School curriculum is therefore being redesigned in 2022/23 for launch in September 2023, highlighting a prime opportunity for incorporation of the findings of empirical research such as those described in this thesis.

Structure of the thesis

The aim of the research was to explore pharmacy students' views towards people with mental illness and how this interacts with their preparedness for future practice, in order to inform pharmacy curricula to better prepare students for working with PMI. To meet this aim, the following research questions were addressed:

1. What are pharmacy students' attitudes towards PMI?

   Here I explored what interpersonal mental health stigma looks like in MPharm students. Students were asked about their perceptions of PMI and I was interested in finding out about the attitudes, beliefs, knowledge and reported behaviours which might be discussed explicitly, or which became apparent in discussion. Probing questions were used to understand students' perspectives more fully.

2. How prepared are MPharm students to work with PMI?

   Here I explored the anticipated professional behaviours that MPharm students described with respect to working with PMI. Students were asked to reflect on the roles they think pharmacists have with PMI and any barriers to this that they perceived. Probing questions were used to determine why students feel the way they did and how their sense of preparedness might be increased. By asking why students reported feeling the way they did about actually working with PMI, I intended to explore any links between mental illness stigma and intended behaviour.

3. What are the possible origins and contributors to pharmacy students' stigma towards PMI?

   This question focused on understanding the thoughts, beliefs or attitudes underlying the answers which arose in relation to the first two questions. It was answered partly through using probing questions as described in questions 1 and 2 to allow participants to construct possible reasons and explanations for their answers, as well as by asking questions about the MPharm degree programme and wider university mental health (MH) culture. Additionally, recent MPharm graduates were asked to reflect on the findings from questions 1 and 2 to add objective views from the perspective of someone who has been a member of the MPharm group.

4. How do recent Aston MPharm graduates describe their experiences of working with PMI and how does this relate to the undergraduate (UG) experience?

   Here I was interested in exploring recent graduates' individual experiences of their interactions with PMI. Recent graduates were also asked to reflect on the emergent categories from focus group data. The aim was to further develop the emergent analysis arising from focus group data within the context of real-life practice.

The potential implications of this research span three main domains; practical outcomes, reflexivity and a contribution to the wider profession. In terms of practical outcomes, the findings from this research can be used to inform future curriculum development with the intention of better addressing mental illness stigma throughout the programme to ensure that graduates are encouraged to engage in reflexive practice around their own attitudes and feel well-prepared for working with PMI. The research process and its outcomes may also engender a greater opportunity for and emphasis on reflexivity in staff as well as students. Pharmacy students might be encouraged to reflect on the stigmatising views that they might hold and start to think about how these can be reduced and managed in terms of the professional expectations placed on them in advance of graduation. Finally, outcomes from this research will demonstrate a proactivity both of the university and of the profession of pharmacy with respect to the (inter)national agenda for mental health stigma reduction in both lay and professional groups. As such these outcomes may be of interest to other UK pharmacy schools and the General Pharmaceutical Council, the accrediting body for pharmacy.

The thesis begins with a critical review of relevant literature in order to identify the gaps in the literature, thereby situating my research within the context of what is already known. Chapter 2 (Literature Review) therefore begins with an examination of the stigma concept, its levels and dimensions. In the second half of that chapter, I critically examine the studies which have focused on mental illness stigma in healthcare services, among healthcare students and efforts to reduce such stigma. In chapter 3 (Methodology), I describe the theoretical perspectives taken in this research and present a theoretical framework. The chapter moves on to describe the practical steps taken to generate and analyse the data used to answer the research questions listed above. Following that are three chapters (chapters 4-6), which present the data within the three main categories which were identified in my analysis – Knowing, Doing and Valuing. Each chapter consists of a number of subcategories which are explained and exemplified. The interdependence of the categories is discussed as the three chapters progress, culminating in the presentation of a model (the KDV cycle), which depicts this interdependence.

In chapters 7 and 8 (Discussion and Conclusion) I discuss the meaning of my data and its relevance to pharmacy education and efforts towards stigma reduction. This is used to present a refined model describing the interdependence of the three main categories in the data, mental illness stigma and the pharmacy curriculum. I link this model to curricular recommendations based on my empirical data which may support pharmacy students to feel better prepared for their future professional practice with PMI, whilst at the same time reducing the impact of mental illness stigma. Finally, in chapter 8, I reflect on the impact of my research, both on myself and in the fields of pharmacy education and mental illness stigma. I suggest avenues for future research which could build upon the argument presented in this thesis to enable pharmacy students to enter the workforce ready to reduce discrimination of PMI in pharmacy practice.

Chapter 2 - Literature Review

Introduction

In this chapter, I present a critical review of the literature from which I have drawn in the conceptualisation and design of this research. In order to provide an overview of the topic and to identify the gap in the research that I aimed to contribute to, a traditional literature review was conducted. In the review I explored a range of databases, reference lists and works by prominent authors to investigate the concepts which would inform my approach and to situate my specific study in relation to the broad topics pursued in the wider fields of mental health stigma and pharmacy education.

Starting with a paper (Bell *et al.*, 2008) identified through the wider reading for my earlier MSc (Macfarlane, 2019b), I broadened my search to read more widely, using citation searches and the reference lists from papers as I read them. Through this process, I started to develop a clearer idea of what was missing from the literature, and thus the direction and basis for this study. Stigma can be viewed from entirely medical, sociological or political perspectives, for example, and as perspectives shift, so do conceptualisations of the problem and how it might be addressed. A clear description of my perspective on stigma is therefore a vital foundation for this research. In this thesis, my focus is on stigma pertaining to the presence of mental illness and in the specific domain of pharmacy education. It is this convergence of stigma, pharmacy education and mental illness which provided the focus for this research.

To identify relevant literature, I searched Ovid MEDLINE, PsycINFO and PubMed databases using terms related to each of the three themes. Syntax listed here is appropriate to Ovid MEDLINE but was modified for other databases:

Theme	**Examples of search terms**
Stigma	Stereotyping/ Social Perception/ Public Opinion/ Prejudice/ exp Attitude/ Social Stigma/ Social Distance/ Rejection, Psychology/ Human Rights/ (stereotyp* or stigma* or label* or negative image* or ignoran* or misconception* or misperception* or literacy or ((public* or communit* or social or popular) adj2 perception*)).mp.
Mental illness	exp Schizophrenia/ exp Paranoid Disorders/ exp Bipolar disorder/ exp Psychotic disorders/ exp Depressive Disorder, Major/ exp Depressive Disorder/ exp Depression/
Pharmacy (context)	exp Pharmacists/ exp Pharmacy/ exp Students, Pharmacy/ exp Education, Pharmacy/ (pharmac* adj5 (student* or graduat* or undergraduate* or postgraduate* or educati* or school* or course* or curricul* or facult*)).mp.

Table 1 Example search terms used

I have presented my findings and appraisal in two sections of this literature review. In section one, I review different definitions and aspects of stigma in order to describe the stigma concept used in this research. In section two, I offer my critical review of selected research undertaken within the context of mental illness and pharmacy education. Finally, I incorporate findings from the two sections to explain the value of the present study and its contribution to minimising mental illness stigma in pharmacy students and beyond into the pharmacy workforce.

Section One

A stigma concept: stereotypes, prejudice and discrimination occurring on multiple levels

Erving Goffman provided a definition of stigma in the 1960s which has been developed and refined by subsequent authors according to their discipline. In Goffman's definition, stigma describes attributes, or marks, which are "deeply discrediting" (Goffman, 1990, p.13) to the individual. Responding to criticism that early stigma definitions and concepts focused on the stigmatised person rather than the processes and discrimination that they might experience (Link *et al.*, 2004), Link and

Phelan (2001) described a novel concept. Here, the components of labelling, separation, status loss, stereotyped behaviour and discrimination occur in situations in which power is exercised (Link and Phelan, 2001), such as in the provision of healthcare services. The idea that stigma spans cognitive and emotional (e.g., stereotyping) and behavioural (e.g., discrimination) processes is familiar across other stigma concepts (Corrigan *et al.*, 2002; Sartorius, 2007).

In addition to stigma consisting of different processes or components (Corrigan and Watson, 2002) as described above, it also occurs at different levels; inter- and intrapersonal and structural (Cook *et al.*, 2014). Initial exploration of the stigma literature rapidly reveals a complex subject incorporating a wide range of definitions and perspectives. In table 2, I describe those conceptions upon which this research rests and their relevance to this study.

MENTAL HEALTH STIGMA	**LEVEL**	**DESCRIPTION**	**EXAMPLES AND RELEVANCE TO THIS RESEARCH**
	Interpersonal	Explicit or implicit endorsement of negative stereotypes, holding prejudice and enacting discrimination towards PMI in person-to-person interactions of within groups (Corrigan and Watson, 2002) Explicit stigma is conscious and controllable whereas implicit stigma is subconscious and automatic (Stier and Hinshaw, 2007)	**Iatrogenic stigma** is where healthcare professionals (HCPs) contribute to mental illness stigma (Sartorius, 2002). It may manifest as prognostic negativity, diagnostic overshadowing, discrimination and inadequate skills or knowledge to work with people with mental illness Where large groups of a population endorse negative stereotypes, this is referred to as **public stigma** (Corrigan and Shapiro, 2010) A person enacting such stigma is said to have **personal stigma** (Griffiths *et al.*, 2006; Reavley *et al.*, 2018) **Perceived stigma** occurs when people agree that stereotyping, prejudice and discrimination of a particular group occurs (Pescosolido and Martin, 2015)
	Intrapersonal	Internalisation of perceived stigma leading to negative self-beliefs, such as shame, guilt and worthlessness within an individual with mental illness, e.g. “I am incompetent”, “I brought this upon myself” (Corrigan, Druss and Perlick, 2014; Waqas *et al.*, 2020)	**Self-stigma** is outside of the direct focus of this research, however HCPs may affect this positively or negatively through their interactions with people with mental illness and participants with personal experience of mental illness may experience self-stigma
	Structural	Social structures or policy and procedures which lead to discrimination against people with mental illness	Poor coverage of mental illness within university curricula has previously been described as an example of structural stigma (Henderson *et al.*, 2014)

Table 2 Levels of stigma, their descriptions and relevance to this research

Mental illnesses occur frequently amongst the UK population with one person in six meeting the criteria for a common mental disorder (McManus *et al.*, 2016). One in eight adults reports receiving mental health treatment, most commonly medication (McManus *et al.*, 2016) and 90% of adults with mental health problems are supported in primary care (outside of hospital) (NHS, 2019). Pharmacists working in primary care settings like high street pharmacies and in GP practices, in addition to those working in other sectors, will therefore frequently be required to offer professional services to people living with mental illness (PMI). An expanding body of literature shows that the stigma attached to mental illness creates an obstacle to people receiving the care they need from a range of healthcare professionals including pharmacists (Sartorius, 2002; Henderson *et al.*, 2014), with negative impact on physical and mental wellbeing.

Both iatrogenic stigma (interpersonal) and self-stigma (intrapersonal) (see table 2) have been associated with negative consequences for PMI. The presence of iatrogenic stigma (see table 2) can affect both whether and how HCPs will interact with PMI. By considering the psychiatric diagnosis first and foremost, physical health complaints in PMI may not be adequately noted or investigated. This phenomenon is referred to as diagnostic overshadowing as the psychiatric diagnosis overshadows the possibility of the existence of additional, somatic diagnoses (Jones, Howard and Thornicroft, 2008; Kassam *et al.*, 2012). Diagnostic overshadowing can result in premature mortality (World Health Organization, 2014) and this underlines the importance of investigating and addressing iatrogenic stigma in professionals working in general healthcare settings in addition to those working in mental healthcare specifically (Kassam *et al.*, 2012; Sølvhøj *et al.*, 2021).

The potential adverse consequences to the health of PMI which have been seen to arise because of interpersonal stigma, might be amplified in the context of self-stigma (see table 2). This is because those who experience and then internalise stigma may be more reluctant to seek medical support for self-identified problems (Corrigan, Druss and Perlick, 2014; Jennings *et al.*, 2015). Self-stigma has also been reported to be associated with poor self-esteem, reduced adherence to or engagement with treatment, exacerbations of conditions such as depression and anxiety (Link *et al.*, 2001; Alonso *et al.*, 2009; Knox *et al.*, 2014; Seeman *et al.*, 2016) and suicide risk (Pompili, Mancinelli and Tatrelli, 2003; Sharaf, Ossman and Lachine, 2012; Oexle *et al.*, 2018). Poor adherence to prescribed medication may not be immediately problematic in itself, but is subsequently associated with an increased risk of relapse and hospitalisation, reduced quality of life and death by suicide (Chapman and Horne, 2013; Ho *et al.*, 2016; Kane and Correll, 2019).

For the purposes of this study, iatrogenic stigma will be understood as having only damaging consequences. Whilst there are arguments supporting possible indirect positive outcomes of internalised negative beliefs (Shih, 2004), the substantial weight of the literature describes only negative outcomes as being associated with iatrogenic stigma.

Stigma as a social process

Goffman recognised mental illness as an example of a stigmatising mark in the 1960s (Goffman, 1990). Since then, despite a wealth of research and national stigma-reduction campaigns around the world, mental illness stigma remains as a significant social problem (Walsh and Foster, 2021), with only limited evidence of improvement (Henderson, Potts and Robinson, 2020). The continued existence of mental illness stigma might relate to its nature as a wicked, complex problem which has been subject to a wide variation in observational and interventional approaches (Henderson and Gronholm, 2018). Further, it has been argued that stigma can arise as a natural consequence of the rapid cognitive processes of social grouping, and subsequent labelling and stereotyping, that are required for efficiency (Liekens *et al.*, 2012) or to maintain structural integrity within a society (Jhangiani, Tarry and Stangor, 2014; Finzen, 2017).

When a health condition is stigmatised, there is a sense of deviation from a social norm. This might be considered a consequence of evolutionary adaptation which allows people to distinguish between groups of people and to reject people deemed to hold negative attributes (Simmons, Jones and Bradley, 2017). It has been argued that the structure of society can only be maintained if there is clear distinction between acceptable and unacceptable behaviours and with the mechanisms to promote the acceptable, as well as to mark and curb the unacceptable ones (Finzen, 2017). Deviating from a social norm thus results in a person being categorised as an outsider and can result in the exaggeration of the differences between people from different social groups. Members of outgroups might then be assumed to be homogenous, i.e., all members of that group have the same characteristics (stereotyping) (Jhangiani, Tarry and Stangor, 2014). In addition to the attribution of stereotypes to an outgroup, we might also develop unfounded attitudes (prejudices) such as fear and discomfort towards group members (Jhangiani, Tarry and Stangor, 2014). The interpretation of the stigmatising mark is context-specific, with its suggestion of deviation from norm being dependent on the relative scenario. For example, where the ability to tolerate copious quantities of alcohol with little ill effect may be discrediting to an individual in one context, it might be creditworthy in another. Therefore, we might consider that it is not the mark itself that is discrediting, rather the relative sense that is made of it in social context (Scambler, 2009), thus emphasising the importance of social interaction and co-construction in the meaning that is applied to stigma.

Explicit and implicit stigma

In contrast to explicit stigma (see table 2), which refers to the things that people say about their attitudes and beliefs, implicit stigma refers to that which someone might hold irrespective of what they say they believe. Implicit stigma is hard to measure, might be outside of conscious control and may be associated with negative outcomes for PMI when manifested by HCPs (Sandhu *et al.*, 2019). It might also be less modifiable than explicit stigma (Kopera *et al.*, 2015; Wang *et al.*, 2016; Sandhu *et al.*, 2019) although there is growing interest in the literature around identifying and managing this aspect of iatrogenic stigma (Dabby, Tranulis and Kirmayer, 2015; Kopera *et al.*, 2015; Wang *et al.*, 2016; Sandhu *et al.*, 2019; Young *et al.*, 2019; Sukhera *et al.*, 2020). In 2008, Peris et al. investigated the implicit and explicit stigma measures among 1539 people including healthcare professionals, undergraduate students and members of the public (Peris, Teachman and Nosek, 2008). The authors found that explicit and implicit stigma were only weakly related and that while explicit stigma was correlated with healthcare professionals giving a more negative prognosis, implicit stigma was associated with a greater risk of over-diagnosis (Peris, Teachman and Nosek, 2008). Implicit stigma has been found to reduce with increased clinical experience (Peris, Teachman and Nosek, 2008). This has been theorised as being the result of increased education and exposure to PMI (Sandhu *et al.*, 2019).

Medical undergraduates have been found to have similar implicit attitude scores as non-medical undergraduates which is lower than that of psychiatrists (Sandhu *et al.*, 2019). There is an important limitation of this study though. The measure used to detect implicit stigma was the Implicit Attitude Test (IAT (Greenwald, McGhee and Schwartz, 1998)) which relies on shared understandings of what might be good or bad. The authors used type 2 diabetes as a point of comparison to schizophrenia in this test and while they asked for respondents' personal experience of mental illness, they did not ask the same for diabetes. No comparisons were made between explicit stigma of mental illness and diabetes. Extremely high rates of self-reported mental illness were reported by participants and lower explicit stigma was found to be associated with personal experience of mental illness. These observations together therefore support the possibility that a proportion of the group might have had particularly negative attitudes towards diabetes which would have obfuscated the findings of the implicit stigma test. Limitations aside, this research does reinforce the importance of acknowledging both types of mental illness stigma in future research, particularly since bringing implicit attitudes into consciousness may support improvements in explicit attitudes (Sukhera *et al.*, 2020) or behaviours (Ungar, Knaak and Szeto, 2016), and because this component has been frequently absent in other stigma research (Janoušková *et al.*, 2017; Simmons, Jones and Bradley, 2017).

Section Two

United Kingdom (UK) pharmacy education standards require that by the end of the degree element of their training, pharmacy students demonstrate empathy, keeping the patient at the centre of care, treating people as equals, respecting diversity and taking responsibility to ensure that personal beliefs do not compromise person-centred care (GPhC, 2021). It is therefore essential that pharmacy teaching staff ensure that mental illness stigma does not compromise students' ability to reach these standards.

My review of the literature pertinent to mental illness stigma among pharmacists revealed a strong orientation towards positivist methodologies. Most studies objectively examine stigma to either quantify its existence within particular groups, or to measure the effect of an intervention aimed at reducing it. Therefore, as I will explain below, the existence of the problem is well-documented in the literature but there is limited description or explanation of it, particularly in the context of pharmacy.

Iatrogenic stigma

My research focuses on the specific context of pharmacy, but it is important to situate this within the broader research on mental illness stigma among healthcare professionals for two key reasons:

1. Pharmacists neither learn nor practise in isolation from other healthcare professionals. The provision of interprofessional learning is a requirement for pharmacy curricula in Great Britain (GPhC, 2021) and pharmacists are just one of a wide variety of healthcare professionals involved in the care of people living with mental illness
2. Observational and interventional research in healthcare students is predicated on the existence of mental illness stigma among professionals in practice and does not always focus on a particular group.

In this section, I therefore introduce and discuss the limitations of the observational research across healthcare professional groups. Studies focusing on pharmacists alone are comparatively few, but are also introduced here as the existence of stigma, based on these earlier works, is a key assumption of my research.

A 2021 scoping review of mental illness stigma among non-mental health specialists (Sølvhøj *et al.*, 2021) could be expected to provide an overview of the literature in the area and reveal insights into the needs for additional research and thus was suspected to be of particular relevance to my literature review. The authors adopted a recognised framework for conducting a scoping review and showed that most observational studies since 2008 focus on the attitudes of emergency healthcare professionals and doctors and did not concentrate on a single mental illness. The results also revealed the lack of qualitative research in the field (representing about 20% of the 137 studies included) and while 14.6% (n=20) of studies were conducted in the UK, only one of these was focused on pharmacy (Morral and Morral, 2016). Immediately then, we see that iatrogenic stigma has predominantly been studied quantitatively and in professions other than pharmacy, although the proportion of qualitative studies was slightly higher here than in a 2004 review which found qualitative research to be rare, representing 13.8% of the studies reviewed (Link *et al.*, 2004).

However, the quality of the Sølvhøj (2021) study and therefore the reliability of its findings in relation to my research, are called into question based on a methodological flaw within the search strategy. While the authors set out to capture studies across groups of healthcare professionals, having noted that previous literature often targeted a single group, they did not include any terms in their search string relating specifically to pharmacists or pharmacy. Despite this, presumably due to the variety of general terms used for healthcare professionals, the authors identified 17 studies (12.4% of their total) specifically focused on pharmacy and wrote a section on interventions aimed at pharmacists in the results. They did not however give any indication of having re-examined their search strategy to include terms related to pharmacy thus meaning that they might have missed relevant publications. Indeed, in my own review, I have identified several studies focused on pharmacy which should have met the authors' inclusion criteria as described in their paper (Nguyen, Chen and O'Reilly, 2012; Bamgbade, Ford and Barner, 2016; Bamgbade, Barner and Ford, 2017; Cates and Woolley, 2017; Chow, Morrissey and Ball, 2018; Hanna, Bakir and Hall, 2018; McCormack *et al.*, 2018). Thus, while this paper supports my own observations of the literature in relation to the requirement for qualitative investigation focused on pharmacy in particular, its conclusions are to be taken with caution.

In order to identify stigmatising attitudes, empirical observational studies typically employ questionnaires such as the Social Distance Scale (SDS) or the Attitude to Mental Illness Questionnaire as proxy measures. A notable limitation of this is the absence of consensus over the most appropriate measures which should be used. The SDS is used very frequently, but the huge variety of scales in use (over 100, according to one systematic review of mental illness stigma in general (Wei *et al.*, 2018)) reduces the ability to draw any conclusions from across the published literature in this area so far. Even where the SDS is used specifically with MHPs, it has been modified across different studies in terms of content and application (Valery and Prouteau, 2020). In addition, results are likely to be affected by social desirability and the ability to relate the results to future behaviours in a particular social context is imperfect (Link *et al.*, 2004). Interestingly, in one study of community pharmacists in the USA, respondents were asked about the likely responses of other pharmacists to the questions in an attempt to control for social desirability bias in the results

(Giannetti *et al.*, 2018). The authors found that respondents attributed more negative attitudes and greater stigma to other pharmacists than to themselves, apparently confirming the suggestion that respondents are likely to downplay their own negative attitudes towards PMI. Shortcomings aside, the SDS is a valid and reliable scale which has been widely used as a stigma measure in healthcare professional research for decades (Link *et al.*, 2004; Bell *et al.*, 2006; Liekens *et al.*, 2012).

A common, although not ubiquitous, finding of these individual studies has been that healthcare professionals have similar attitudes towards or desire for social distance from PMI as the general population (Jorm *et al.*, 1999; Lauber *et al.*, 2004; Nordt, Rössler and Lauber, 2006; Hansson *et al.*, 2011). As such, they might be considered to evince the same stereotypes, prejudice and discrimination as anyone else. However, the degree to which different professional groups and those working in different settings hold stigmatising attitudes has been found to vary (Valery and Prouteau, 2020). Similarly, the degree of stigma held towards different groups of patients also varies e.g., people with schizophrenia who have been admitted to a secure hospital are more stigmatised than others who have not (Rao *et al.*, 2009). The terms ‘physician bias’ and ‘clinical illusion’ have both been used to refer to the apparent greater stigmatisation of some PMI by mental healthcare professionals compared to non-mental HCPs or those working in non-acute settings. Both terms explain this observation as resulting from extrapolating the experiences of working with people who are currently acutely unwell, or those who have chronic, recurrent illness to the whole population of people who experience that diagnosis (Henderson *et al.*, 2014; Valery and Prouteau, 2020). This relates to the notion of outgroup homogeneity mentioned in section one of this chapter as HCPs might assume that those PMI that they see in clinical practice who might be expected to represent those who are more ill or more refractory to treatment, are representative of all PMI. The value of studies such as these in documenting evidence of iatrogenic stigma which might vary with profession and patient characteristics is clear in terms of creating the foundation for an agenda for change. However, drawing firm conclusions from them is extremely difficult due to the heterogeneity of methods adopted, most notably in stigma measures. Measures are typically adapted and merged for the perceived requirements of a specific study and as such, no two are directly comparable. Proclamations of relative differences in the degree of stigma in different groups are also unreliable due to the likely effects of social desirability which will vary between different groups depending on their knowledge and social context.

Narrowing the focus on the observational literature to concentrate on pharmacy, we find a relative lack of research as already outlined above and that which exists has been predominantly conducted outside of the UK. As mentioned earlier in relation to the Sølvhøj (2021) scoping review, pharmacists may have been overlooked in reviews of the iatrogenic stigma literature and this was certainly the case in a 2020 systematic review of mental health professionals' (MHPs) stigma towards schizophrenia where no pharmacy-specific search terms were used (Valery and Prouteau, 2020). That said, pharmacists' desire for social distance from PMI as well as their sense of discomfort and lack of confidence in providing pharmaceutical care to them has been well documented (Phokeo, Sproule and Raman-Wilms, 2004; Liekens *et al.*, 2012; O'Reilly *et al.*, 2015; Giannetti *et al.*, 2018; Rimal *et al.*, 2022). It is not a new argument nor is it limited to specific countries. Indeed, studies from around the world have highlighted pharmacists' stigmatised attitudes and the imbalance of care offered to PMI for more than 20 years.

Not all findings have been negative however, with pharmacists often suggesting that they are willing and interested in helping PMI, but lack the confidence and comfort to do so (Cates, Burton and Woolley, 2005; Giannetti *et al.*, 2018; Rimal *et al.*, 2022). The same body of literature has identified barriers to delivery of effective care by pharmacists. Pharmacists have reported that their professional services to PMI could be improved had they more time (Phokeo, Sproule and Raman-Wilms, 2004; Watkins *et al.*, 2017), greater confidence (Watkins *et al.*, 2017; Giannetti *et al.*, 2018), adequate privacy (Phokeo, Sproule and Raman-Wilms, 2004) or additional mental health education (Phokeo, Sproule and Raman-Wilms, 2004; Giannetti *et al.*, 2018). Specifically, pharmacists have raised concerns that PMI are difficult to talk to and that their symptoms might affect their ability to communicate (Phokeo, Sproule and Raman-Wilms, 2004). When we consider that patients who receive counselling on the expected therapeutic and adverse effects of their medicines may be more likely to take that medicine as prescribed (Bell *et al.*, 2005), the potential benefits of improving the professional services offered to PMI by pharmacists start to become clear.

Like the literature on healthcare professionals in general, there are notable limitations of this corpus which must be considered when making conclusions based on it. Again, the heterogeneity in methodology, most notably in the (often bespoke) stigma measures used, and the focus of the study (single diagnosis or mental illness in general) limits the ways that results can be compared with one another. In these quantitative studies, stigma is necessarily described as a single, measurable entity, by equating it with labelling (Giannetti *et al.*, 2018) or desire for social distance (O'Reilly *et al.*, 2015) for example, but this disregards the complexity of the stigma process as viewed from the sociological perspective. Some studies have particularly low response rates (<10%) which might relate to the adoption of extremely long surveys (Watkins *et al.*, 2017; Giannetti *et al.*, 2018). Whilst authors in most studies have described the representativeness of their samples, the possibility of nonresponse bias should not be disregarded. Finally, there are important limitations which arise due to the common use of Likert scales in the measures adopted across these studies. Reponses in such data collection techniques are known to be affected by social desirability, but reliability might also be affected as participants avoid responses at the extremes of the scale e.g., strongly agree, favouring the more moderate responses. Additionally, the size of the gap between each point on the scale (e.g., between agree and strongly agree) is open to subjective interpretation (Jamieson, 2004; Theofanidis and Fountouki, 2018). Critically, several of the studies here have inappropriately treated Likert data as continuous, presenting them as means rather than raw percentages or modes (Rickles *et al.*, 2010; O'Reilly *et al.*, 2015; Giannetti *et al.*, 2018). This is problematic as it is inappropriate to suggest a meaningful mid-point between ordinal data points and several authors have used such figures to compare the findings of other research with their own. Overall, we have a body of literature which demonstrates the existence of some potentially problematic attitudes which are inadequately linked with behaviour, difficult to objectively compare to each other and sometimes carelessly interpreted.

Finally in this section, I focus on three observational studies of pharmacists in the UK which represent, to the best of my knowledge, the extent of the literature in this specific aspect of the field in the last 30 years (Maslen, Rees and Redfern, 1996; Morral and Morral, 2016, 2017). These three studies had varied aims from purely exploring the roles of pharmacists with PMI and pharmacist beliefs about these roles (Maslen, Rees and Redfern, 1996), to comparing professional services provided to PMI compared to people with cardiovascular disease and the impact of pharmacist attitudes on this (Morral and Morral, 2016) to specifically assessing mental health literacy (MHL – discussed further below) in community pharmacists (Morral and Morral, 2017). Despite the divergent aims, the three studies reported on pharmacist attitudes towards PMI and thus contribute to the stigma literature. In line with the international findings discussed in the last few paragraphs, UK community pharmacists have been found to espouse generally positive attitudes towards PMI, agreeing for example, that treatment for mental illness should occur in the community (as opposed to hospital) setting, that medication is helpful in the treatment of mental illness and that PMI should have the same rights to a job as anyone else (Morral and Morral, 2016, 2017). However, similar discomfort and lack of confidence in the provision of professional services was found in these UK studies as in those from other countries described above. UK pharmacists have been found to be significantly less comfortable in providing professional services to PMI compared to those with cardiovascular disease (Morral and Morral, 2016) and to differentiate between mental illness with a greater sense of discomfort around schizophrenia than depression (Morral and Morral, 2017). Some deficiency in knowledge has also been identified with a large proportion of respondents reporting that having split or multiples personalities is a symptom of schizophrenia (Morral and Morral, 2017). Finally, desire for social distance from PMI has been shown, particularly from those with diagnoses of bipolar disorder and schizophrenia (Morral and Morral, 2017). Findings from these three papers thus largely echo those of community pharmacists from outside of the UK.

Despite some problematic attitudes and differences in professional practice described in this section, pharmacists need to be able to provide expert care to people with mental illness and this is likely to be a daily requirement irrespective of sector of practice. In 2018, the Royal Pharmaceutical Society (RPS) recommended that pharmacists work to raise awareness of the services that can be provided to people with mental illness (Royal Pharmaceutical Society, 2018). Furthermore, the same report encouraged pharmacy teams to become mental health champions such that opportunities to improve physical health outcomes for those with mental illness are optimised. Pharmacist educators were specifically called upon to ensure that pharmacy curricula adequately support the students to provide the required care (Royal Pharmaceutical Society, 2018). To meet these expectations, it will be necessary to first overcome the mental health stigma manifest within these groups. Research focusing on students is the subject of the next section.

Pharmacy students’ stigma towards people living with mental illness

As we further narrow our focus on the literature to concentrate on pharmacy students, we find that student pharmacists have also been the subject of international stigma research, which has predominantly adopted a quantitative approach (Sølvhøj *et al.*, 2021). The limitations of these studies as well as their contributions to the field will be discussed in this section. I will consider the international research first before focusing on research conducted in the UK.

Like qualified pharmacists, pharmacy students in countries across Europe, North America, Australia, Africa and Asia have been shown to manifest interpersonal and self-stigma and to be affected by structural stigma despite often being found to hold some positive attitudes (Frick *et al.*, 2021). Reviewing the research from outside of the UK, pharmacy students have been shown to have some positive attitudes towards PMI but that these are suboptimal and opposed by the co-existence of stigmatising attitudes, endorsement of mental illness stereotypes and desire for social distance from them (Bell *et al.*, 2008, 2010; Volmer, Mäesalu and Bell, 2008; Cates *et al.*, 2011; Anosike, Ukwe and Oparah, 2020; Alsahali, 2021). More recently, stigma has been shown to extend to the medicines used in the treatment of mental illness (Davis *et al.*, 2022). An important observation of all these studies is the variation in the nature of stigmatising attitudes between students from different countries. This was particularly demonstrated in Bell et al.’s seminal study in which desire for social distance was used as a proxy indicator of stigma in addition to level of endorsement of some mental illness stereotypes (Bell *et al.*, 2010). Levels of stigma across pharmacy students were similar, independent of the country of study (Bell *et al.*, 2010), but the beliefs which underpinned the requirement for social distance varied by country. For example, the stereotype that people with schizophrenia are dangerous was associated with greater desire for social distance in Finland, that they are unpredictable in Australia and that they are difficult to talk to in Estonia and Latvia (Bell *et al.*, 2010). This international variation is interesting, but limits application of the findings within individual countries and highlights the importance of undertaking research within the local context to determine the dominant contributors to the stigma process within a particular group. This study, in common with the other observational research in pharmacy students referenced here, also lacks explanatory power due to the quantitative nature of the data collected. Finally, in common with another work examining attitudes between schools of pharmacy (Chow, Morrissey and Ball, 2018), the authors do not present detailed information about the curricula adopted across the sites included in the study, impeding the reader's ability to draw conclusions about the impact of country of study on the stigma outcomes measured.

These studies thus demonstrate that pharmacy students around the world have some stigmatising attitudes towards PMI and all of the authors conclude that stigma reduction interventions are required. However, the local generalisability and therefore relevance of these research findings is limited by two important factors: country of origin and student demographics. Outside of the UK, health economies and the roles of pharmacists vary, meaning that the expected professional behaviours of qualified pharmacists cannot be assumed to be consistent between countries. As well as differences in clinical practice, variation exists in the age and level of education of pharmacy students in countries around the world so the subjective experience of PharmD students in an American university may be very different to those of an MPharm student in the UK, for example. Student demographic variation between institutions may be relevant here as there is evidence that learning needs with respect to mental illness may differ between cultural groups (Ungar, Knaak and Szeto, 2016; Luo *et al.*, 2018). It therefore seems unlikely that outcomes of research in Alabama, US, for example, where 78.5% of the study participants identified as being White (Davis *et al.*, 2022) will be directly relevant to our cohort in which 8.6% of the MPharm describe themselves in the same way (Senior Lecturer, personal communication, 3rd October 2019). These observations further support the requirement for in-depth, contextual study.

I found two studies focused on pharmacy students' attitudes towards PMI that have been conducted in the UK (Chow, Morrissey and Ball, 2018; Hanna, Bakir and Hall, 2018). Achieving an 89% response rate, Hanna et al. found that their final year participants showed good attitudes towards PMI despite some evidence of stereotype endorsement. Despite these positive results, just over half of the participants reported confidence in speaking about mental illness and around a third felt that their university training on mental health was satisfactory (Hanna, Bakir and Hall, 2018). All participants agreed that PMI experience stigma as a result of their mental illness (Hanna, Bakir and Hall, 2018). The authors conclude that MH teaching in the UK is insufficient and opine that their study offers “useful baseline data” for other UK pharmacy schools (Hanna, Bakir and Hall, 2018). However, a key deficiency is that the authors did not investigate participants’ views as to why the curriculum was insufficient, nor did they offer detailed description of its content which would be vital for comparison with other schools.

The other UK study was conducted in the same region of the UK that I work in and therefore provides a greater potential for comparable data (Chow, Morrissey and Ball, 2018). These authors drew participants from two schools of pharmacy in the region and had intended to compare data across the two sites. However, with only 11% of their data coming from one university, the data were eventually pooled and not compared. It is impossible to determine the overall response rate in the study as the authors do not include the number of students who were invited to participate. Similarly, they do not report on the representativeness of their sample, so it is very difficult to judge this as a possible source of bias. Finally, the design of the study is difficult to follow in terms of relating the outcomes to their initial aim. Chow et al. aimed to investigate the sufficiency of mental health teaching and designed their study to measure this by exploring participants’ preparedness to communicate with PMI. Their instrument established participants’ knowledge and attitudes towards PMI and a parallel was drawn between this and preparedness to communicate despite the lack of any questions about subjective sense of preparedness. In terms of the results, the authors found their participants’ knowledge about mental illness to be lacking with specific gaps around working with people who have engaged in self-injurious behaviour or who are experiencing acute psychosis. They go on to conclude that the pharmacy degree does not improve students’ overall perception of PMI and that specific mental health first aid (MHFA – see Impact of MHFA on stigma, below) training should be offered to pharmacy students. The authors do not provide any baseline data to support this conclusion nor relate their survey questions to the curriculum at either school of pharmacy. Overall, I find the conclusions of this study to be founded upon a confusingly designed study and as such the results add little to the evidence base already presented.

In summary, we have seen that research to date has revealed a range of stigma manifestations among pharmacy students around the world. The nature and determinants of the stigma within different groups of students is highly variable, but the works reviewed here almost exclusively conclude that pharmacy education should be expanded or improved so as to minimise students’ negative attitudes (Bell, Johns and Chen, 2006; Bell *et al.*, 2008; Volmer, Mäesalu and Bell, 2008; Hanna, Bakir and Hall, 2018; Anosike, Ukwe and Oparah, 2020; Alsahali, 2021). Some authors have made specific recommendations such as introducing MHFA training (Chow, Morrissey and Ball, 2018), or including PMI in delivery of education (Cates *et al.*, 2011), whereas others have made more specific recommendations in acknowledgement of the complexity of the problem. For example, Bell et al. (2010) suggest that mental health education needs to be tailored to the local determinants of stigma (Bell *et al.*, 2010) and Davis *et al*. (2022) recommend additional research to better understand the effect of this stigma on professional behaviours (Davis *et al.*, 2022). The impact of anti-stigma interventions aimed at student HCPs is being investigated and reported on worldwide and the following section highlights some of the important findings and concerns in this growing body of literature.

Stigma reduction interventions

Interventions which might improve attitudes towards mental illness have been widely reported and those pertinent to pharmacy students have included lectures, visits and field trips to mental health settings, "active-learning exercises", mental health first aid (MHFA) courses and contact-based interventions (Bamgbade, Barner and Ford, 2017; Keating *et al.*, 2019; Frick *et al.*, 2021; Sølvhøj *et al.*, 2021). There have however, been some questions raised such as whether improvements in attitudes might predict improved future behaviour, the longevity of any positive effect from interventions, the potential impact of other levels of stigma, and the possibility of negative outcomes. The focus of this section will be on these potential concerns around what we have learnt so far as this provides important context for my own research.

Studies assessing the relative merits of anti-stigma interventions for healthcare students have supported approaches based on contact theory (Patten *et al.*, 2012; Stubbs, 2015; Fernandez *et al.*, 2016; Carroll, 2018; Henderson and Gronholm, 2018). These interventions focus on facilitating contact between student HCPs and PMI and examples have included people with lived experience providing education, sharing first-hand experiences and working in cooperation with students towards a common goal (Bell *et al.*, 2006; Volmer, Mäesalu and Bell, 2008; O'Reilly, Bell and Chen, 2012). Contact-based interventions in student and general populations have been shown to improve attitudes towards mental illness (Nguyen, Chen and O'Reilly, 2012; Patten *et al.*, 2012; Gronholm *et al.*, 2017; Maunder and White, 2019), although desire for social distance may not be improved (Bell, Johns and Chen, 2006). There are two important methodological limitations of these studies. The first is that they do not specifically consider the possibility of adverse effects of their interventions, except for the possibility of increased scores in the adopted proxy measure. The second is the reliance on social distance, or other proxy measures, as being equated with stigma. By making this equation, any positive impact of the intervention being tested can only really be concluded to be on the proxy measure (e.g., desire for social distance) rather than on the broader social process of stigma. I will discuss these two key limitations in turn.

Negative outcomes from contact-based, or any other, intervention are a possibility. Professionals with greater experience of working with people with mental illness as well as those who have attained higher levels of education have been shown, in some studies, to have poorer attitudes towards people with schizophrenia (Jorm *et al.*, 1999) suggesting that contact with PMI alone is insufficient to reduce stigma and might exacerbate it. Additionally, very limited professional exposure to mental illness might worsen negative attitudes, creating a J-shaped curve for the correlation between exposure and attitudes (Hawthorne *et al.*, 2020). So, whilst the literature leans strongly in favour of contact-based intervention, it is critical to understand the subjective experience of the target group and any stereotypical views they might manifest such that the contact does not prove affirmatory in this respect.

The premise of research into contact theory-based strategies thus far however appears to have been that by reducing interpersonal mental illness stigma in students, future professional behaviour will be improved. As mentioned above, some interventions have been shown to result in improved attitudes towards people with mental illness as well as short-term improvement in behavioural intention (Friedrich *et al.*, 2013). However, it has been suggested that improvements may be limited to attitudes alone and not extend to (professional) behaviour (Henderson *et al.*, 2014; Maunder and White, 2019). Studies which have used the Social Distance Scale (SDS) or similar to identify stigmatising attitudes might be criticised due to poor correlation between the questions asked, which have a strong focus on personal behavioural choices rather than professional responsibilities, and actual professional behaviour. Given what has already been discussed about implicit and explicit stigma, it is of course reasonable to expect that someone scoring highly on the SDS might discriminate against PMI in both personal and professional domains, and social distance has as such been used as an accepted proxy for potential discrimination (Corrigan, Edwards, *et al.*, 2001; Liekens *et al.*, 2012). It might be also argued however, that desire for social distance might not necessarily relate to professional competence (Bell, Johns and Chen, 2006) or that desire might be different in the context of the provision of professional services (e.g., providing medicines advice) compared to personal encounters (e.g., engaging a babysitter).

One group did report correlation between attitudes and behaviour (Corrigan *et al.*, 2002), but this conflicts with other findings and is specifically doubted by some authors who argue that attitudes poorly predict individual behaviours (Angermeyer and Schomerus, 2017). Research among healthcare students has sometimes used behavioural intention as a proxy indicator for actual behaviour (e.g., (Clement *et al.*, 2012; Friedrich *et al.*, 2013; Winkler *et al.*, 2017)). This might be because this is less resource intensive than observing actual behaviour, but also because opportunity to observe actual behaviour might be extremely limited if not non-existent for some healthcare students. Behavioural intention has been assessed using the Reported and Intended Behaviour Scale (RIBS), a short scale which asks about experiences of mental illness and willingness to live with, work with, live nearby and continue a relationship with someone with a mental health problem (Evans-Lacko *et al.*, 2011). This scale has been used to investigate the behavioural intentions of healthcare students (Clement *et al.*, 2012; Friedrich *et al.*, 2013). However, in their paper focused on public stigma, Corrigan and Shapiro (2010) explain that the time that elapses between the reported intention and the actual behaviour is important here (Corrigan and Shapiro, 2010). These authors assert that where the actual behaviour is more than a week away from the reported behavioural intention, that the intention is less likely to reflect actual change and also that a person's beliefs which inform their attitudes and subsequent behavioural intention will vary according to the situation (Corrigan and Shapiro, 2010). Indeed most research supports only a transient positive effect of stigma reduction interventions (Waqas *et al.*, 2020). As already described, qualified pharmacists have previously been shown to have positive attitudes towards working with PMI but have also reported providing a lower standard of care to people with psychiatric compared to somatic diagnoses (Phokeo, Sproule and Raman-Wilms, 2004; Scheerder, De Coster and Van Audenhove, 2008). These findings suggest that linking attitudes and reported behaviours and actual behaviour in this way is not entirely reliable, particularly when the intended behaviours measured are not directly representative of the specific behaviours required for providing healthcare to PMI (Link *et al.*, 2004).

The Opening Minds Scale for Health Care providers (OMS-HC) is a multidimensional stigma scale for which structural and content validity has been demonstrated across a broad range of healthcare students, including pharmacists (Kassam *et al.*, 2012; Modgill *et al.*, 2014; Sastre-Rus *et al.*, 2019). The OMS-HC includes subscales on attitudes, disclosure and help seeking and social distance and has been used to demonstrate the positive impact of a range of stigma-reduction interventions in groups of pharmacy students (e.g., see (Patten *et al.*, 2012; Diefenderfer *et al.*, 2020; Robinson *et al.*, 2020; Hsia *et al.*, 2022)). When reviewing these studies, it is important to note that at least three forms of the scale (12-, 15- and 20-items) have been used which makes it very difficult to compare the findings in a meaningful way. As a minimum, these papers show that a validated scale exists for measuring the impact of stigma interventions in pharmacy students, but their findings lack explanatory power. Further, some statements on the OMS-HC are open to troublesome interpretation which limit the conclusions which can be drawn from the results. For example, one statement on the 20-item version reads "The best treatment for mental illness is medication" (Kassam *et al.*, 2012). The degree to which a respondent agrees or disagrees with this statement is likely to be affected by a variety of factors including how they conceptualise mental illness, their knowledge and experience of various treatment options and the degree to which they identify with the medical model of mental illness. As a result, changes in degree of agreement with the statement are of arguable value in terms of a person's likely future professional practice.

In recognition that existing stigma scales did not accurately reflect the professional interactions that community pharmacists would have with people with mental illness, Fujii and colleagues (2021) designed and tested a specific schizophrenia stigma scale for use with this professional group (Fujii *et al.*, 2021). The new 27-item scale only included items which were representative of stigma which would inhibit a pharmacist's ability to provide effective patient care. Following development of the scale, the authors used it to measure stigma reduction in a randomised controlled trial comparing an educational intervention to an education plus contact intervention. This method allowed the authors to specifically distinguish between differences pre- and post-intervention in desire for social distance for professional services (e.g., "I find it difficult to communicate with patients with schizophrenia") and in the personal domain (e.g., "I would not want my children to work with a patient with schizophrenia even if his/her symptoms are well-managed by medications"). After either education or education plus contact intervention, stigma scores improved significantly in the desire for social distance for professional services, but not for personal social distance (Fujii *et al.*, 2021). This finding supports the suggestion above that reliance on the Social Distance Scale may distort findings in other studies as there may be a distinction between professional and personal attitudes (Fujii *et al.*, 2021). This was a well-conducted and reported study, the key deficiency of which was the absence of any test of duration of effect. The post-test scale was administered immediately after the intervention, so no conclusions can be drawn about its efficacy in stigma reduction once participants were out of the intervention context and had had time to reflect on their experience.

Finally, outcome measures in stigma-reduction studies focus on a single level of stigma, usually interpersonal stigma. A clear rationale of reducing interpersonal stigma is outlined in the literature for interventions aimed at reducing iatrogenic stigma (Henderson *et al.*, 2014), but it has also been suggested that interventions may be improved in terms of effectiveness, reach and longevity if they address more than one level of stigma concurrently (Henderson and Gronholm, 2018; Rao *et al.*, 2019). For example, since the existence of structural stigma may influence the effects of interventions aimed at individuals, interventions should aim to address stigma at both levels at the same time (Henderson *et al.*, 2014). A 2020 systematic review found no stigma reduction initiatives in educational institutes which were designed at both policy and system levels (Waqas *et al.*, 2020).

Not all stigma reduction interventions aimed at healthcare students have been based on contact theory though. Previous research has consistently shown pharmacists to request more education focused on mental illness generally, or specific to the diagnosis in question in the study (Phokeo, Sproule and Raman-Wilms, 2004; Scheerder, De Coster and Van Audenhove, 2008; Giannetti *et al.*, 2018). The suggestion from these studies is that ignorance drives stigma and that by increasing levels of education, stigma will be reduced. It may indeed be fair to take study participants at their word when they suggest that increased knowledge about mental illness will lead to increased confidence by improving their sense of conscious competence, thus some research has investigated the value of educational strategies alone in pharmacy students (Bamgbade, Ford and Barner, 2016; Pepa, Hsia and Lee, 2021). We must however, be wary of the "educational panacea", which has been described as "the practice of solely educating staff" (Brunero *et al.*, 2018). As these authors point out, educational strategies aimed at improving attitudes among healthcare students and staff have limited supportive evidence. It is also possible to exacerbate stigma with some educational messages. For example, attributing schizophrenia to biological cause is associated with more negative attitudes of mental healthcare professionals (Valery and Prouteau, 2020). For an academic, it is perhaps difficult to put the suggestion to one side that increasing the volume of education might help in favour of other approaches, particularly given the number of observational studies of stigma among pharmacy students which suggest that curricula be expanded as described above.

The impact of the learning which occurs over the course of a standard degree programme on attitudes towards mental illness has been studied. One American study compared attitudes towards mental illness and desire for social distance over the course of undergraduate pharmacy studies to determine the impact of their current degree programme in the absence of any specific modifications aimed at stigma reduction (Cates, Neace and Woolley, 2012). The authors found that while desire for social distance reduced after completion of the curriculum, pharmacy students' attitudes towards PMI remained largely unchanged by the end of the degree. This study is limited by the lower completion rate at the end of the degree programme (57% compared to 90% at the start). Those who completed the surveys at the end might have represented a population who were more engaged in the treatment needs of PMI and who better understood the social desirability of reduced desire for social distance, thus skewing the results in favour of that outcome measure. Even so, given that stigmatising attitudes remained at the end of the programme, the research supports the need for curricular intervention aimed at producing long-lasting and practically relevant improvements in attitudes. It must not be assumed that increased volume of unfocused education around mental health will lead to improvement, rather the specific needs should be targeted. We must avoid the temptation to assume that something is better than nothing. Overall, anti-stigma strategies must be honed in accordance to the needs of specific groups (Henderson and Gronholm, 2018).

Enhancing undergraduate curricula with the aim of improving attitudes and knowledge about mental health makes sense in terms of preparing the future workforce, and this responds to the call to action from the RPS as outlined above. The concept of mental health literacy (MHL) has been drawn upon in studies of both qualified and student pharmacists, to depict more than merely the sum of facts that people know about mental illness. Mental health literacy has been defined as "knowledge and beliefs about mental disorders which aid their recognition, management or prevention" (Jorm, 2000), thus going beyond what someone knows, to incorporate the ways in which knowledge is applied, particularly with a healthcare perspective. Increasing mental health literacy through curricular enhancements may go some way to addressing mental health stigma at the structural level (Henderson *et al.*, 2014) but as already suggested, addressing interpersonal stigma in tandem with these structural changes is of fundamental importance when considering the educational requirements of pharmacy students as their future professional roles depend on interpersonal interaction.

Impact of MHFA on stigma

Mental Health First Aid (MHFA) training is an educational approach that is gaining traction in the intervention literature as a stigma-reduction and mental health literacy-increasing approach for pharmacy students and in healthcare more widely, albeit predominantly in the US and Australia (El-Den *et al.*, 2020). Due to the recent and focused interest in MHFA, as well as wider uptake and interest in the UK (Gorton *et al.*, 2021), the effects the training have thus far been reported to have on mental illness stigma are briefly reviewed here.

Despite ballooning interest in MHFA as an intervention, it is not a new phenomenon. In 2011, third year pharmacy students at one university in Australia were offered the opportunity to complete MHFA training in addition to the standard mental health curriculum. Sixty students were selected to complete MHFA training and were compared to the 212 who did not in terms of social distance, MHL and self-reported behaviour towards PMI (O'Reilly *et al.*, 2011). Significant reduction in desire for social distance was found in those who had completed MHFA training, alongside improvements in MHL although not all measures reached statistical significance. Whilst self-reported behaviours improved, with increased confidence towards providing professional services to PMI among those who had completed the training, participants remained less confident and interested in doing so with PMI compared to those with cardiovascular illness (O'Reilly *et al.*, 2011). This study has several strengths and offered an important and early contribution to the MHFA literature, but there are two limitations which might limit the value of the results. Firstly, the authors noted the significantly higher proportions of females and people with pharmacy work experience in the MHFA group, but did not discuss the representativeness of this, nor the possible impact on the outcomes. Particularly in relation to previous work experience, it is possible that these people had a greater sense of conscious incompetence around working with PMI and therefore were more able to identify the value of their learning. Secondly, the post-test measurements were conducted at six weeks and there was no discussion around what the cohort did in the intervening period which might have also affected the post-test results e.g., clinical placements.

Frick et al (2021) investigated the impact of compulsory MHFA training on third year PharmD students in North Carolina over several domains including self-efficacy, knowledge about mental health, attitudes and empathy towards PMI (Frick *et al.*, 2021). This study included results from nearly 72% (n=97) of the year group who had completed the required surveys both before and after participation in MHFA. All students in the cohort completed the training and there was no control group. Overall, Frick et al. found that MHFA did not reduce total mean scores on either the Social Distance Scale (used in this study as an indication of discrimination against PMI) or the Index of Attitudes Towards the Mentally Ill (used in this study to determine favourability of students' attitudes towards PMI). However, there were some statistically significant changes in specific domains of both scales, e.g. "I would not ride in a taxi driven by someone who had been in a mental hospital", "School teachers who have been in mental hospitals should not be allowed to teach" and "We cannot expect to understand the bizarre behaviour of mentally ill persons". It may be that in the more numerous domains in which a significant change was not seen, that students' discrimination and perception could already have been considered favourable. For example, at pre-intervention, 74.2% of participants agreed that "It is wrong to shy away from people who have mental disorders" and 96.9% agreed that "Mental illness is nothing to be ashamed of". It is reasonable to suggest that the more favourable the score at pre-intervention, the smaller any impact can be expected to be. The authors do acknowledge this possibility and suggest that the high pre-intervention SDS scores, suggesting greater willingness to interact with PMI, may relate to the majority of participants having stated that they knew someone who has or had a mental illness. They also suggest, in line with the conclusions of other authors, that the high degree to which stigma towards mental illness is incorporated into society means that more than one intervention may be necessary in order to improve existing perceptions. Notably, anyone who had already completed MHFA which had not expired at the time of the intervention was excluded and links for post-exposure surveys were provided during the training, so no sense of the longevity of the effect can be determined. It might have been interesting to compare survey results from this group with the post-intervention results from those participating in the research to see if there were any differences between those who completed the training as part of the pharmacy course and those who didn't as well as the effect of time since the training was completed. However, the number of people excluded might have been too small to allow this.

Improvements in MHL and stigmatising attitudes have also been shown across different populations after MHFA training (Morgan, Ross and Reavley, 2018; Loureiro and da Costa, 2019), going some way to explain the recent uptake in healthcare curricula.

Work readiness

Wider research has considered both pharmacy students' conceptions of their preparedness for professional practice as well as their perceptions of how prepared they consider themselves to be. A limited corpus has focused on mental health specifically. Even though some of this research has looked at relative sense of preparedness to work with people with different diagnoses, to the best of my knowledge, the interplay of stigma and preparedness has not been investigated in depth with pharmacy students. So far, research has been undertaken from the perspective of curricular sufficiency, i.e., that if pharmacy students are less prepared for working with PMI than for people with other diagnoses, that the curriculum requires improvement. The key findings of research in this area will be discussed here as context for my research.

Pharmacy students have been shown to consider having a positive attitude to work, being motivated and professional, being willing to learn and possessing good communication skills as meaning that they are ready for the workplace (Fejzic and Barker, 2015). Alongside other healthcare students, pharmacy students were found in another study to conceptualise preparedness for practice as incorporating knowledge, experience and confidence (Ottrey *et al.*, 2021). Participants felt most prepared when they had the knowledge and skills necessary for their professional roles but when they had also been exposed to practice, allowing them to learn by doing and to develop confidence in what they could do. These studies exemplify the differences in the way that terms such as readiness and preparedness might be used and interpreted by different people, thereby highlighting a deficiency of quantitative studies which have asked participants to rate their preparedness for practice numerically (e.g.,(Rutter, Taylor and Branford, 2013)). The Ottrey (2021) study offers interesting insights due to its qualitative design, however the inclusion of healthcare students with different employment pathways to pharmacy and the fact that it was conducted in Australia mean that the findings might be less relevant to UK pharmacy students. Additionally, participants were being asked to discuss their preparedness for work in general rather than any specific aspect of this, such as working with PMI.

Another Australian study aimed to investigate the perceptions of readiness for clinical practice as well as the key influencers of readiness with a cohort of final-year students studying medicine, dentistry and pharmacy (Malau-Aduli *et al.*, 2022). In this study, almost four fifths of the 132 final-year students (61.4% female) rated themselves as well-prepared (well-prepared or extremely prepared) for the effective and sensitive patient and carer communication which would be required as part of their future role. Only around half of them (52.1%) declared themselves well-prepared for managing their own health, including stress. The authors report that overall, the qualitative data revealed a sense that undergraduate training had adequately prepared students for their future professional roles and theoretical knowledge and communication skills were specifically identified as important attributes gained during the courses. However, when asked for recommendations which would enhance readiness for their future professional roles, students identified a need for "improved support for mental health care and building of resilience/adaptation skills that were perceived as currently lacking in their curricula" (Malau-Aduli *et al.*, 2022). Very limited presentation of results meant that it is difficult to establish whether students were asking for more focus on their future roles in supporting people living with mental illness or the need to be able to look after their own mental health needs. Indeed, this additional need as highlighted by the participants did not feature at all in the discussion or conclusions to the study, so it is difficult to know exactly what the participants were asking for or even how prominent this need was within the data.

In their 2013 study of pharmacy curricula, Rutter et al. surveyed the teaching content of pharmacy degrees around the UK as well as how prepared the graduates from each school felt to work with PMI. Broad variation was found in terms of teaching content and style, but of relevance to the current study, 58% of respondents felt fully prepared regarding their knowledge of the medicines used in the treatment of mental illness and 35% felt fully prepared in their knowledge of the signs and symptoms of mental illness (Rutter, Taylor and Branford, 2013). At the other end of the scale, between one third and one half of respondents felt not at all prepared for their future communication and signposting roles, nor did they understand care pathways in mental illness or the roles of other healthcare professionals (Rutter, Taylor and Branford, 2013). Notably, Rutter et al. included participants from the 2012 pre-registration year, but also who had graduated within the previous 5 years. This brings about a limitation as participants' views on the ways in which their pharmacy course had prepared them might have been coloured by their experiences of professional practice as well as the time that had elapsed since graduation, thus they might not reflect the feelings of pharmacy students at the point of graduation from those same schools of pharmacy. Indeed, the authors found that the qualified pharmacists in their study perceived themselves as less well prepared than those who were undertaking their pre-registration year, concurring with the findings of Scott et al (Scott, Friesner and Miller, 2010), as well as “close association” between self-reported competence and confidence (Rutter, Taylor and Branford, 2013). Rutter et al. however, tentatively associated the greater perceived competence among pre-registration pharmacists with recent improvements in curricula rather than possible unconscious incompetence among those with less experience.

Shedding new light – what this research adds

In order to develop evidence-based curricula aimed at minimising discrimination of people living with mental illness in pharmacy practice, we must listen to and develop an understanding of the nature of the explicit and implicit stigma in the pharmacy education context. We must also better understand the ways in which such discrimination might arise on the interpersonal level as well as considering stigma on the structural level. This highlights the need to understand how pharmacy students think about their future interactions with and preparedness for their future professional practice with PMI. To date, these understandings remain underdeveloped in the context of UK pharmacy students and this study aims to resolve this situation, adding the necessary data to explain the problem and to inform evidence-based curriculum design.

Understanding the needs of the learner is a key principle in education (Ungar, Knaak and Szeto, 2016). Stigma, considered from the social constructivist perspective is a problem that is related to context, and I propose that it is not possible to isolate the stigma from the people involved in a meaningful way. Ungar, Knaak and Szeto (2016) argue that in order to design effective anti-stigma interventions, we must first understand the starting point in relation to both how learners want to learn as well as their attitudes and behaviours towards PMI (Ungar, Knaak and Szeto, 2016). Further, the authors highlight that learners may have learning needs of which they are unaware in addition to those that they are able to articulate (Ungar, Knaak and Szeto, 2016).

As discussed in this chapter, the literature suggests and clearly agrees on some approaches to reducing stigma in healthcare students, but we should not be tempted to race ahead of the science (Corrigan and Shapiro, 2010). By understanding the problem as it is experienced by our pharmacy students, tailored approaches can be taken which are specific to the needs of the group (Wahl and Aroesty-Cohen, 2010) and which minimise the risk of unintended harmful outcomes. As Wahl and Aroesty-Cohen argued over a decade ago, developing understanding of how (professional) attitudes towards PMI develop during training will help to explain how both positive and negative attitudes arise in HCP but will also support the design of curricula in which positive attitudes are engendered and fostered (Wahl and Aroesty-Cohen, 2010). The following section describes how my research will build upon what is already known about mental health stigma in pharmacy students and how we can go about best preparing them for their future professional roles.

We have seen that stigmatising attitudes towards mental illness have been reported amongst healthcare professionals, including pharmacists and pharmacy undergraduates. This suggests that pharmacy students are graduating despite being inadequately prepared to work with people with mental illness, highlighting an unmet need within their undergraduate education. Iatrogenic stigma has been associated with poor outcomes for people with mental illness and it is unacceptable, from a pharmacy education perspective, that pharmacists might contribute to this. The ways that iatrogenic stigma in pharmacy undergraduates might affect future professional pharmacy practice, and the unmet learning needs that are associated with this, therefore form the problem on which this research is predicated. My professional responsibilities as a pharmacist educator and mental health pharmacist drive my desire to improve the current scenario. Before we can design interventions likely to be most relevant in a specific context, we must first seek to fully understand the problem, i.e., the nature of stigma, how this impacts the sense of preparedness to work with PMI and therefore the unmet learning needs. As I consider the complex problem of mental illness stigma to be socially constructed, the research seeking to understand it must echo this philosophy. Therefore qualitative research, building upon the work already undertaken by other researchers (Riffel and Chen, 2020a) is a logical next step, and the need for this has been identified in an earlier scoping review as a specific gap in the current evidence base (Sølvhøj *et al.*, 2021).

There has already been some qualitative exploration of iatrogenic stigma amongst healthcare students. One focused on medical students in China (Luo *et al.*, 2018) and is as such less relevant here but the notable conclusion was that through understanding students' attitudes we can inform educational initiatives aimed at stigma reduction and this supports the current research. More relevant here is a recent study which used qualitative description and thematic analysis to explore the knowledge, attitudes and behavioural responses of 18 healthcare students towards people with mental illness in a Canadian university (Riffel and Chen, 2020a). Participants were recruited from nine different healthcare programmes and were found to hold generally positive views of people with mental illness. However, despite these positive attitudes, several stigmatising perceptions remained evident in the findings such as mental illness being more difficult to treat than physical illness. Participants also reported feeling poorly equipped to work with people with severe mental illness (Riffel and Chen, 2020a), echoing the concerns of UK and Ireland students in a survey of experiences of mental health curricula in which only 33.2% felt adequately equipped by their pharmacy course to support PMI (Gorton *et al.*, 2021). Riffel and Chen (2020) suggested that further, discipline-specific, exploration is required in order to identify any correlation between teaching and the attitudes and behaviours of students (Riffel and Chen, 2020a). This study only had two students from each discipline, including pharmacy, so the authors' suggestion for further work alongside this notable limitation support my argument for context-specific, qualitative exploration.

As what I believe to be the first qualitative study of mental illness stigma in UK pharmacy students, my research focuses on contributing to current knowledge by developing a relativist understanding of the nature of mental health stigma in this group. As well as adding description and explanation to the existing positivist literature corpus, this will serve to build upon the results of the limited number of qualitative research studies carried out with healthcare students and add a UK perspective (Luo *et al.*, 2018; Riffel and Chen, 2020a). By understanding students' subjective, contextualised experience, we will be better placed to build upon the practical approaches already described in the literature and take a reflexive, person-focused approach to curriculum design in order to address mental illness stigma in a contextually meaningful way. We will also be prepared to avoid negative outcomes, such as confirmation of negative stereotypes, which might occur when the nature of the underlying problem is not fully understood.

Chapter 3 – Methodology and Methods

Introduction

This chapter will begin by describing the theoretical orientation that I adopted for this research and how I used this to weave many of the conceptual strands which were introduced in the last chapter into a theoretical framework for the research. I then describe how these theoretical underpinnings informed the choice of constructivist grounded theory as a guiding methodology. Moving into the more practical aspects, participant recruitment and selection of appropriate data generation[1] methods are outlined along with detailed information regarding the specifics of the data generation, analysis and the consideration of ethical concerns.

As described in chapter 1, the aim of the research was to explore pharmacy students' views towards people with mental illness and how this interacts with their preparedness for future practice, in order to inform pharmacy curricula to better prepare students for working with PMI.

Theoretical perspective and conceptual framework

Having identified my aim and research questions, I was encouraged in the first year of this professional doctorate programme to examine my own epistemological views on the topic of enquiry so I would be able to make logical and defensible choices about the research design. In this way, I began to examine the interplay between the different elements which would inform each other in the study: epistemology, theoretical perspective, methodology and methods (Crotty, 1998).

I take the constructivist view that the nature of mental illness stigma is something which is likely specific to the people involved and the context in which they are operating (Braun and Clarke, 2013b). I therefore argue for the logic in seeking to understand and explain the nature and social construction of stigma within a group from an interpretivist perspective. As discussed in the last chapter, positivist approaches, which suppose the existence of a single universally accepted truth – such as the existence of stigma – have provided a useful background upon which my research can build. Within a particular group then, such as a group of pharmacy students, the nature of stigma will depend on the culture within that group. This includes the behaviours and practices exhibited by group members, the norms and values brought by them, and the core assumptions that underpin all of this (Schein, 1992). In contrast to positivist stances, taking an interpretivist approach allows a researcher to capture all of these elements as data and analyse them together.

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[1] I use the term data 'generation' rather than data 'collection', in acknowledgment of the active role played by the researcher during focus groups and interviews to produce the data which would be subsequently analysed (Birks and Mills, 2015)(p72).

Interpretivism provides a theoretical perspective from which we might attempt to understand and perhaps explain the complexities of human behaviour (Crotty, 1998, p.67). Human interaction and behaviour are assumed to be the fundamental pieces from which stigma is socially constructed but we cannot assume to label a person as wholly ‘stigmatising’ or ‘not stigmatising’ in nature. Rather, stigmatising attitudes and behaviour will depend on the context. Therefore, by exploring the subjective experiences and interactions between people in a group, we might be able to start to describe and explain the impact of stigma on all levels on future professional behaviour. From a practical point of view, stigma is assumed to exist and to be an influential factor in social interaction and this study will provide an interpretive exploration of this in the context of a group of pharmacy students.

My early reflexivity led me to identify strong person[2]-focused principles throughout my professional (academic and clinical) practice akin to those of the Humanistic psychologist Carl Rogers. When taking a Humanistic approach, we must listen with care to the subjective experiences of the individual and their perspectives on those experiences rather than trying to study them from a detached, objective point of view (Gross, 2020, p.21). Carl Rogers advocated for developing understanding of the individual and he set out the conditions of congruence, empathy and acceptance which must be met to facilitate development or growth within other people (Rogers, 1980; Smith, 2014). In applying these principles to my interpretivist theoretical perspective, I underline the value of human meanings and actions. I consider the contributions brought to research by the whole person, including their emotions and feelings, not just that part of them which identifies as a pharmacy student (Lewis-Beck, Bryman and Futing Liao, 2004). These principles underpin my passion for, and approach to, supporting future pharmacists to meet their professional expectations. They should learn to provide services based on the needs of individuals, free from prejudice, assumption and irrespective of their diagnoses.

These principles and perspectives would naturally impact on the way that I co-constructed meaning with interview participants (Charmaz, 2014) and these were therefore incorporated into the developing conceptual framework for the research. The development of a conceptual framework allowed me to situate myself and my research. It shows how my formulation of, and approach to, the problem of mental health stigma among pharmacy students guided my choice of methodology and shaped the research in a rigorous way (Mittenfelner Carl and Ravitch, 2020, p.33).

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[2] I ascribe to the adoption of Rogers’ later reference to the *person* as the point of focus, rather than the role that person might be playing in a specific interaction such as *student, learner, patient* or *client*. This is because I am aligned to Rogers’ Humanist view, that the whole, intricate and complex being will affect the nature of the interaction rather than just the role adopted by that person (Gross, 2020, p.22).

So far in this section I have described the underpinning theoretical orientation for the research. Bringing these key concepts together with those pertaining to the notion of iatrogenic stigma already described in chapter 2, the following conceptual framework was developed:

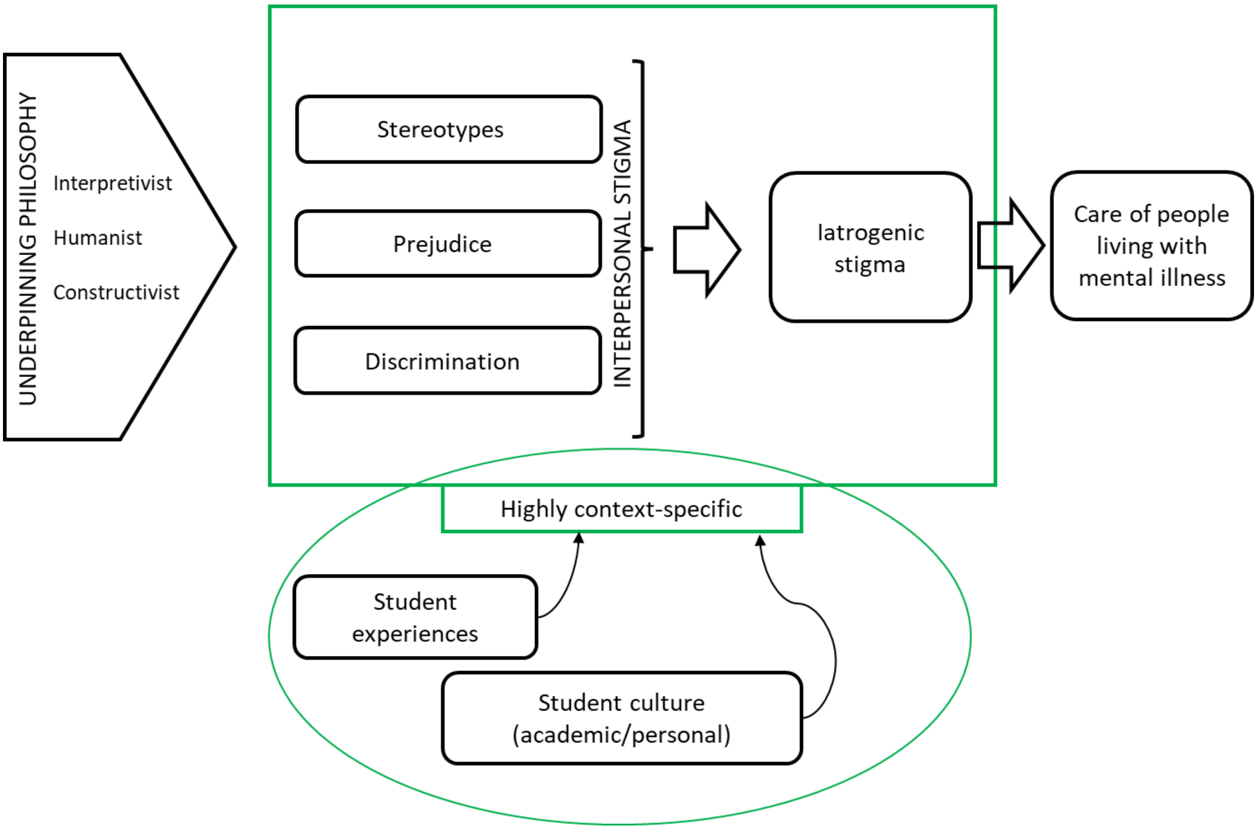

Figure 1 Conceptual framework for this research

Considering this framework alongside the research questions as listed in the previous chapter, I was presented with some choice in terms of methodology including grounded theory, ethnography and phenomenology. Choice of methodology depends to some extent on the nature of the questions being asked. Grounded theory is described as being of particular value when a problem has been identified but lacks explanation, where there is scope for the development of new insights (Flick, 2018), and where the focus of the research includes sociological processes (Braun and Clarke, 2013b; Gehrels, 2013). Grounded theory was therefore chosen as a guiding methodological approach for my research which focused on providing explanation of the social processes of stigma.

Grounded theory as a guiding methodological approach

In pursuance of rigour in research design, implementation and analysis, it was important for me to adopt an appropriate methodological anchor for this research. I valued having guiding principles to consider at each decision point. In the early epistemological considerations described above, I spent time considering my approach to the concept of mental illness stigma and the degree to which this represents a problem. Since I conceptualise stigma as something which is socially constructed

(Braun and Clarke, 2013b, p.336), following a methodology which embraces co-construction of knowledge made logical sense. Considering this alongside my Humanistic principles, I decided that my research must concentrate on the students' subjective experience, rather than my observations of them. It was considered reasonable to accept the existence of interpersonal mental illness stigma within the cohort as has already been identified in quantitative research (see chapter 2) as an assumption of the research, and to focus my study on qualitative data collection alone.

Constructivist grounded theory (CGT) was selected as a guiding approach to this research (Charmaz, 2014). The constructivist underpinning philosophy of CGT appealed to me because it matched the theoretical approach to the research questions and this methodology was therefore utilised to guide my attitude to research design and to data collection in the field. My study incorporated key features of a grounded theory approach of minimising preconceived ideas, concurrent data collection and analysis, and the aim of developing an explanation of a poorly understood problem which is grounded in subjective experiences. Adopting this guiding approach allowed me to utilise a constructivist methodology to develop an understanding of a mutually agreed truth.

Developing a clear understanding of my theoretical perspectives and the subsequent choice of guiding methodology meant that I had a consistent frame of reference for decisions which had to be made in the whole research process. This is what I mean when I refer to the methodological anchor. A consistent guide was just that – not a prescription for what must be done, but a decision support tool which enabled objective thought around the potential positives and negatives of different courses of action. Thus, this research can be said to be guided by the principles of constructivist grounded theory and not a grounded theory study per se. My choices here offered framing and perspective (Gehrels, 2013) for what came next rather than a forced, operationalised plan.

My impact on the research

It was important to me to acknowledge the part that I as the researcher would play in the construction of findings. As already discussed, the subjective experiences of each participant are clearly critical to this co-construction, and within constructivist grounded theory this is true not only for the group being studied but also for the researcher. Entirely impartial observation and analysis is not expected in CGT. The researcher is required instead to reflect on how their experiences will colour data interpretation and this should occur throughout the research process and in the final reporting of it (Charmaz, 2014).

I acknowledged from the start that the research that I was planning pertained specifically to the School of Pharmacy in which I worked and the social structures within it (Silverman, 2021, p.377). From its inception and throughout the design, data generation and analysis to this final thesis, I was a part of the research and my role in this was formed and informed by my earlier experiences (Charmaz, 2014; Silverman, 2021). I therefore describe the relevant details here:

A white, British female, I began this research in my late 30s having worked for around 15 years in mental health pharmacy. Professionally, I identified as a pharmacist-educator, with two professional roles. I worked one day per week as a lead specialist mental health pharmacist in a National Health Service (NHS) Trust that I had worked in since 2006. Three days per week, I was a Teaching Fellow, delivering postgraduate courses in mental health pharmacy. Towards the end of the EdD programme, in early 2022, I resigned my NHS post to concentrate on my academic role, becoming Programme Director for the courses. My passion for the focus of this research was related to my professional specialism and dedication to the provision of excellent pharmaceutical care for people living with mental illness. The specific research focus was inspired following an earlier MSc through which I initially became aware of the literature described in chapter 2. As a practising mental health pharmacist in clinical and academic settings, I felt well situated to contribute to this developing literature corpus. When the professional Doctor of Education course was offered at my institution, I felt compelled to take advantage of the opportunity to develop and follow the line of enquiry described in this thesis.

The vast majority of my experience with mental illness is professional in nature. My passion and determination for the focus of this research were situated within my professional sense of responsibility rather than any particular personal campaign.

Data generation

Participant recruitment

Careful consideration of the choice of data sources is a vital step in ensuring data quality (Birks and Mills, 2015). The strategy for this research was to seek participants from populations with relevance to my research questions who would hold the greatest knowledge of the subject under exploration. Such purposive sampling (Silverman, 2022) is recommended in the early stages of qualitative research using grounded theory methodology and two populations were chosen for this research – pharmacy students at Aston University and those who had recently graduated[3] from the same School.

Focus groups with pharmacy students and one-to-one interviews with recent graduates were therefore used as sources of primary data and these approaches are discussed in detail later in this chapter. Following the focus groups and initial stages of analysis, the interviews were used to add to

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[3] For the purpose of this study, recent graduates were defined as those who left Aston University within the preceding 24 months at the point of recruitment.

the development of the emergent categories based on recent graduates' experiences of being a pharmacy student but with the additional value of practical experience in the workplace. In this way, I explored how undergraduates' views on their imagined future interactions with PMI related to the real experiences of postgraduates, which allowed me to consider the likely implications for the pharmacy degree. Purposive sampling therefore allowed the research aim to be addressed from different, but relevant perspectives, through the inclusion of participants from different degree cohorts and for my early analytical ideas to inform the following data generation (Charmaz and Thornberg, 2021).

Pharmacy (MPharm) degrees in the UK are undergraduate Masters level degrees which are usually four years in length, followed by a year of in-work training prior to registration as a pharmacist (referred to as the Foundation or Pre-registration year). I chose final year students of the MPharm course at Aston University as the first population from which to seek participants. This is because their studies were almost complete at the time of data generation, so they were likely to hold the richest and most current experience of the course and would also have experienced all compulsory mental health teaching within the curriculum. I avoided limiting my sampling as much as possible so that the participants would be likely to hold a broad range of views about the subject that I was interested in. The study was therefore advertised to all final year pharmacy students at Aston University through email communication, through direct communication during teaching, and in meetings between academics and students.

All final year students (N=160) on the pharmacy degree programme in 2020/21 were invited to participate in this study and interested parties were asked to contact me by email. The only inclusion criteria were being a current MPharm student in the final year at Aston Pharmacy School, being able to converse in English and having access to a device suitable for video conferencing. Due to the COVID-19 pandemic, all pharmacy students were able to access such a device for teaching and all pharmacy students would have an appropriate level of spoken English due to the entry requirements for the degree programme, so neither consideration limited inclusion in practical terms.

The entire final year cohort was made aware of the study and the method for expressing interest in participation via group emails sent by me. In recognition of the possible greater efficacy of communication coming from a person of influence (Krueger and Casey, 2015), these emails were followed by a second email from a senior member of academic staff who was well known to the fourth year students. Krueger and Casey (2015) suggest that people are more likely to consider participation when they feel that they have been identified by a respected individual as being someone with expertise in the area of interest (Krueger and Casey, 2015). Therefore, some MPharm staff were asked to contact their personal tutees or project students as they would already have an established rapport which might facilitate recruitment. Recruitment of pharmacy undergraduates occurred between November 2020 and April 2021, resulting in 22 expressions of interest. Fifteen people agreed to participate and were allocated to focus groups. One person dropped out prior to the focus group taking place, resulting in fourteen people taking part across three focus groups. All participants were provided with a £5 coffee shop voucher following their participation in lieu of the refreshments that would have been provided had the data collection occurred in person. No other incentives were provided to participants.

The three focus groups were held online using Microsoft Teams® and the average duration was 100 minutes (range 96-104 minutes). Participants were almost all female (93%, n=13) with mean age 22.6 years (range 21-34 years) and mostly Asian (43% n=6). Full demographic information for focus group participants is listed in Table 3 :

	FG1	**FG2**	**FG3**
Variable	N = 5 (*n*)	N = 5 (*n*)	N = 4 (*n*)
Gender			
Male	0	1	0
Female	5	4	4
Age (years) (mean)	21.8	24	21.75
Ethnicity (self-described)			
Bangladeshi	1		
British-African	1		
White British Jew	1		
Pakistani	1	1	
Sudanese	1		
Indian		1	
Black		1	
British Asian		1	
White British			1
Black African			1
White			2
Nationality			
British	4	5	3
Sudanese	1		
Nigerian			1
Pre-HE education			
UK	4	5	3
Sri Lanka	1		
Nigeria			1
Experience of mental illness			
I have personal experience of mental illness	4	2	2
I have a family member with mental illness	3	3	2
I have a close friend with mental illness	3	3	2
I have had contact with people with mental illness as part of work or education e.g., at University, during work experience or in my paid employment	2	2	1
I have visited a mental health (psychiatric) clinic or hospital in an educational or professional (working) capacity	1	0	0

Table 3 Focus group participants' demographic information

In line with grounded theory methodology, data analysis started following the first focus group and from that point onwards, data generation and analysis were conducted simultaneously. Subsequent data generation was carried out with individuals who could further support development of initial findings and the development of emerging categories, and this is the hallmark of theoretical sampling (Charmaz, 2014). Recent graduates were therefore selected for the second phase of data generation in order to contextualise and further develop the emergent categories in the data obtained from pharmacy students. Their experience of pharmacy practice since graduation afforded them a perspective which was critical to the objective discussion and interpretation of the data generated from the pharmacy students. I felt that this group, with their personal experience of being a final year pharmacy student, might possess greater capacity to offer objective reflection on the opinions of the undergraduates than if had I relied on just undergraduate reflections alone. The rationale here was that by giving recent graduates the opportunity to discuss the data generated from another cohort, that they would be less likely to provide socially desirable answers. In addition, recent graduates brought experience of actual professional interactions with PMI to the data generation whereas undergraduates were talking about the imagined future interactions.

Twelve people from the year which graduated in Summer 2020 had given me their permission to contact them following graduation for research purposes. This represented a small proportion of the graduating cohort (8%, N=148) and it is likely that asking for such permission around the time of final examinations limited the number of expressions of interest received. Emails with details of the research were sent in March 2021 to all twelve recent graduates who had given me permission to contact them, and recipients were asked to reply if they were interested in participating. Where no response was received, a follow-up email was sent one month later in April 2021 and a final round of emails was sent in late August 2021 before recruitment was curtailed within the practical confines of this EdD study. I had originally hoped to interview around 10 recent graduates, however this recruitment activity resulted in expressions of interest from only three individuals. One person declined the invitation, and no responses were received from the remaining eight people. An additional recent graduate contacted me regarding a separate matter and since they met the inclusion criteria, I offered some study information. This final person expressed interest in participating and thus through this final opportunistic effort, four people were recruited to this phase. There were no withdrawals. Recent graduates were thus recruited between March and September 2021 and interviews were held online between May and September 2021. The average duration of interviews was 66 minutes (range 56-80 minutes). Demographic details are listed in table 4:

Variable	N = 4 (*n*)
Gender	
Male	1
Female	3
Age (years) (mean)	23.5
Ethnicity (self-described)	
Indian	1
British Asian	1
White British	2
Nationality	
British	4
Pre-HE education	
UK	4
Experience of mental illness	
I have personal experience of mental illness	2
I have a family member with mental illness	1
I have a close friend with mental illness	1
I have had contact with people with mental illness as part of work or education e.g., at University, during work experience or in my paid employment	4
I have visited a mental health (psychiatric) clinic or hospital in an educational or professional (working) capacity	2
Sector of practice	
Hospital	1
Split: GP/community	2
Community	1

Table 4 Interview participants' demographic data

It was not an intention of this study to explicitly link participants' demographic details with their responses nor to analyse any links between them. However, I was aiming to describe and explain the social construction of a particular phenomenon within a specific social context. Demographic particulars are relevant to defining the students' social context and collecting details about this was therefore deemed relevant to allow full discussion of the eventual findings and to compare these with the existing literature. Demographic questionnaires were written informed by earlier research in this field. With the exception of the last question regarding previous experience of mental illness, all answers were provided as free text so that participants could give their personal choice of identity within each category. For the experience of mental illness question, participants were given five options (see tables 3 and 4) and they were able to select as many as they felt applied to them. The meaning of 'personal experience' of mental illness was deliberately left up to the participant to decide as I did not feel it appropriate to set any limits as to what this might mean to a given individual. Demographic data were provided anonymously using Microsoft Forms® in advance of focus groups or interviews.

Phase 1: Focus groups

Focus groups were chosen as the method of data generation in the first phase of this research for several reasons. Firstly, they are of considerable value for generating large amounts of data which have been co-constructed by members of the group (Sin, Tavares and Amaral, 2019). Gathering the first-hand experiences of participants and how these are expressed on an interpersonal level were considered essential to meeting the aim of this research. The group setting would allow discussion of a range of views between people from within the group being studied. The intention was that as participants raised and discussed their points, the conversation would allow them to interrogate their thoughts and assumptions and make sense of them (Silverman, 2021). Some people might naturally feel more inhibited about sharing their views as they feel that they have little of substance to add or perhaps that their views are not meaningful. These people might be more willing to contribute in the group setting as they can respond to and collaborate with others who are less reticent to talk (Braun and Clarke, 2013b; Robson and McCartan, 2016). Uneasiness might be reduced through the development of a sense of community and the discussion feels like a safe one in which to express their honest opinions (Tausch and Menold, 2016).

A topic guide (see appendix 1) was developed in line with the research questions. Questions were informed by published literature in the field and were interrogated in doctoral supervision for face validity. The guide was used to ensure that the important topics for discussion were covered in each focus group, however unexpected and theoretically interesting points brought up during conversation were also pursued even where this resulted in deviation from the topic guide. This example of theoretical sampling allowed for “identifying and pursuing clues” (Birks and Mills, 2015, p.67) in the data whereby I could be led in data generation to those issues felt to be most relevant by the participants.

The focus group topic guide started with an opening question. This was designed to be extremely quick and easy to answer and to offer every participant the chance to speak within the first few minutes of the focus group. Such questions are recommended to increase the chances of additional contributions from every member over the remainder of the conversation (Krueger and Casey, 2015). Following this, an introductory question was designed to stimulate thoughts and discussion around the area of mental illness specifically. Finally, the guide dealt with the key concepts for discussion in the focus group and these were designed around the research questions. Open-ended questions were written to allow exploration of the key areas of interest and the guide was applied flexibly such that the flow of conversation could be guided by participants, with the freedom to follow up on topics of importance that they raised. In this way participants were encouraged to describe their subjective reality in their own terms (Charmaz, 2014).

In the main body of the guide, case vignettes describing people who meet the diagnostic criteria for depression and psychosis were used as a prompt for discussion about attitudes and beliefs regarding people living with mental illness (PMI) (see appendix 2). Participants were asked to discuss their reactions to the cases and to consider their anticipated professional behaviours towards people with symptoms such as those described. The decision was made to use vignettes that have previously been utilised in stigma research with pharmacy students as a focus, but not to specify any particular diagnosis/es in the topic guides. Permission for the use of existing vignettes was granted by Prof A Jorm, the first author of a paper containing case vignettes of depression and psychosis (see appendix 3) (Jorm *et al.*, 1997). The use of similar vignettes has been established in numerous studies of mental health stigma as a method of data collection over more than 20 years (Jorm *et al.*, 1997, 2005; O'Reilly, Simon Bell and Chen, 2010; O'Reilly *et al.*, 2015). This method was chosen to better focus participants' reflections on the specific topic of interest, being "diagnosable" mental illness, and to minimise the risk of over-inclusion of phenomena such as stress and sub-clinical anxiety. By providing a specific description of a person with defined symptoms, the possibility of participants being over-inclusive in their mental depictions of how someone with mental illness might present should have been limited as each group member was starting with the same descriptions. Additionally, attaching a label of a particular diagnosis to the vignette might have heightened the negative attitudes towards the person described (Ogunsemi, Odusan and Olatawura, 2008). Braun and Clarke (2013) explain that the use of vignettes is particularly suited to providing focus in focus groups and interviews in which sensitive topics are to be discussed as these theoretical cases are easier for people to discuss than experiences or viewpoints related to real individuals (Braun and Clarke, 2013a).

Despite my years of experience of interviewing patients and other clinicians for professional purposes, I set about this stage of the research with a keen sense of the importance of good interview technique in order to generate high quality data. I was conscious of how the skills necessary for effective research interviews vary from the skills I had previously accrued in the clinical setting. During the thematic analysis (Braun and Clarke, 2013b) of data in my MSc research (Macfarlane, 2019b), I reflected on my naivety which was at times apparent in the data. For example, reading transcripts left me on several occasions being painfully aware of times where I should have probed the interviewee more deeply or where I had believed that I understood what a participant was saying at the time but that with reflection, their meaning was less clear. Braun and Clarke (2013) refer to the development of an 'analytical ear' in qualitative interviewing by which they refer to the ability to reflect critically on what you are hearing so as to be able to consider both content and possible theoretical meaning concurrently (Braun and Clarke, 2013b, pp.9-10). To develop my interview skills, I was able to practise and receive feedback on my technique during the taught year of the EdD course and this was valuable in bringing what I had learned through the MSc into sharper focus when I considered my approach to interviews for the present study.

Running a pilot focus group is advantageous to road test the topic guide in a representative setting, giving an indication as to whether it is likely to yield data which help to answer the research questions. In addition, it provides an opportunity to test that the practicalities of running the group have been adequately considered and catered for. For example, during the time that I was writing the ethics application for the first phase of this research in March-May 2020, it became increasingly clear that running in-person focus groups would not be possible due to the developing COVID-19 pandemic. The timing of this was serendipitous in that I was able to write some contingency into my ethics application. I had not initially planned to run focus groups online, but this became a necessity and in fact was probably advantageous in the end, particularly in relation to ease of participation and dropouts which were not found to be a problem in this study. In discussion with my supervisors, I decided to run the first focus group as a pilot. I recruited the participants by exactly the means as was intended for all focus groups and went through the same procedures in terms of provision of information and receiving informed consent from each participant. The focus group was recorded, and one supervisor attended as a co-moderator. It was originally intended that should the pilot study run smoothly, giving rise to valid data, the focus group would be included in the eventual analysis. As no problems were encountered, the data from this pilot were included in the analysis.

As part of my preparation for the first focus group, I reconsidered the teaching on research methods which was delivered in the taught year of the EdD programme. In addition, I read, both from textbooks (Braun and Clarke, 2013b; Krueger and Casey, 2015) and published articles (Tuttas, 2015; Richard *et al.*, 2020) to refresh my understanding of the approach and those things that I must keep in mind during the group itself to optimise data generation. These preparative steps included rehearsing my topic guide and its association with the study aims so as to tune my analytical ear (Braun and Clarke, 2013b) and maximise theoretical sensitivity during data generation (Charmaz, 2014).

From a more practical point of view, I tested the technology to ensure that recordings would work with the software and decided to use a voice recorder as a backup. I also ensured that instructions to participants about maintaining privacy wherever possible and minimising background noise such as from eating or from other household members had been clearly communicated. I confirmed that participants were aware that the expectation was that webcams would be turned on throughout the focus group. Through my connections with staff in the School of Pharmacy, I was aware that most students seemed to prefer to deactivate their cameras during synchronous teaching and were reluctant to activate them even when asked by staff. This was not a problem unique to Aston University, particularly since the emergency switch to online teaching in response to the COVID-19 pandemic (Castelli and Sarvary, 2021; Atout *et al.*, 2022; Jayasundara *et al.*, 2022). Webcam feed was deemed necessary as part of data generation in my study from two perspectives. Firstly, in terms of development of a natural-feeling conversation. If camera images were unavailable, then participants would not be able to respond to non-verbal cues which might indicate that an individual is about to speak. Furthermore, they would be unable to respond to more general non-verbal cues from other participants (Tuttas, 2015). Although these cues are more limited when people are viewed via webcam, there is still some opportunity for these normal social responses (Kite and Phongsavan, 2017). Personally, I was able to use the visual clues from the camera feed to check that no participant seemed adversely affected by the content of the conversation. The second area of necessity related to the transcription and analysis (Tuttas, 2015). Only audio files were shared with the external transcription company and speech was correctly attributed to individual participants in most cases, but the availability of video recordings meant that I could check this. It also allowed me to review the non-verbal interactions, such as indications of agreement or disagreement in the analysis phase, and this supplemented the field notes that I had made during the focus groups themselves.

Phase 2: Interviews

In phase 2 of data generation, I wanted to hear about recent graduates' experiences of working in practice with people living with mental illness. Then within this context of subjective experience and reflection, I wanted to explore the emergent findings from the focus group data to further develop the emergent categories (Birks and Mills, 2015). I felt that as the participants explored their own experiences of professional practice whilst they reflected on the emergent findings from phase 1, they would be well-placed to suggest what might have better prepared them for working with people living with mental illness as they embarked upon their careers.

One-to-one interviews were chosen as the most appropriate method for this phase of data generation for two key reasons. The emphasis of data generation in this phase was on understanding the subjective lived experiences of individuals . The depth of discussion into the specific experiences of each individual was critical and such deep discussion was facilitated by the one-to-one approach. In one-to-one interviewing, I was able to explore specific details of the experiences described more easily than would have been the case in the group setting. In the group setting, the time available to fully explore these first-hand accounts would have been more limited and meaning or emphasis might have been altered as other group members contributed. Finally, from a practical perspective, the flexibility offered by arranging a one-to-one meeting (compared to a group meeting for example) with busy healthcare professionals was felt to be likely to contribute positively to the ease of recruitment (Braun and Clarke, 2013b).

The topic guide for the interviews was written after the focus group data had been transcribed and initial coding had taken place (see appendix 4), to enable focus on the emergent themes in the data. As part of the interview, I presented the emergent concepts from the phase 1 data using a Microsoft PowerPoint® slide and briefly explained the data behind these. Participants were asked to reflect on the possible meanings and explanations of these concepts based on what they knew about the research and their experiences of working with PMI in practice as well as their experiences of the Aston MPharm degree. Those concepts which did not hold any meaning for the participants were also discussed. As data generation and analysis were running concurrently at this point, the approach to this also underwent evolution.

From the first interview in May 2021, the process progressed from providing codes which seemed to have analytical depth to using tentative categories as a prompt for discussion instead. The list of concepts provided to the first interviewee was rather long and the participant was asked to choose from it and reflect on those aspects which resonated most strongly with them. No indication of the ways that the data were felt to interact with each other were given in this first interview. The participant was asked to discuss what the focus group participants might have meant when they discussed these things and the factors which might have influenced them. On reflection, this reinforced and validated my observations and interpretations of the data to that point. It also helped me to think more broadly about the development of the analysis and supported my reflexivity, with differences in perspective on what appeared to be most important in the data. A deliberate time interval was left between this first interview and the second such that the data from the first interview could be coded and analysed alongside the focus group data before the second one-to-one interview occurred. The second interview was thus held in August 2021. By this time, tentative categories were in development, and I had a better sense of the interactions between codes and tentative categories. It was these that were explored with the second and subsequent interviewees, see figure 2:

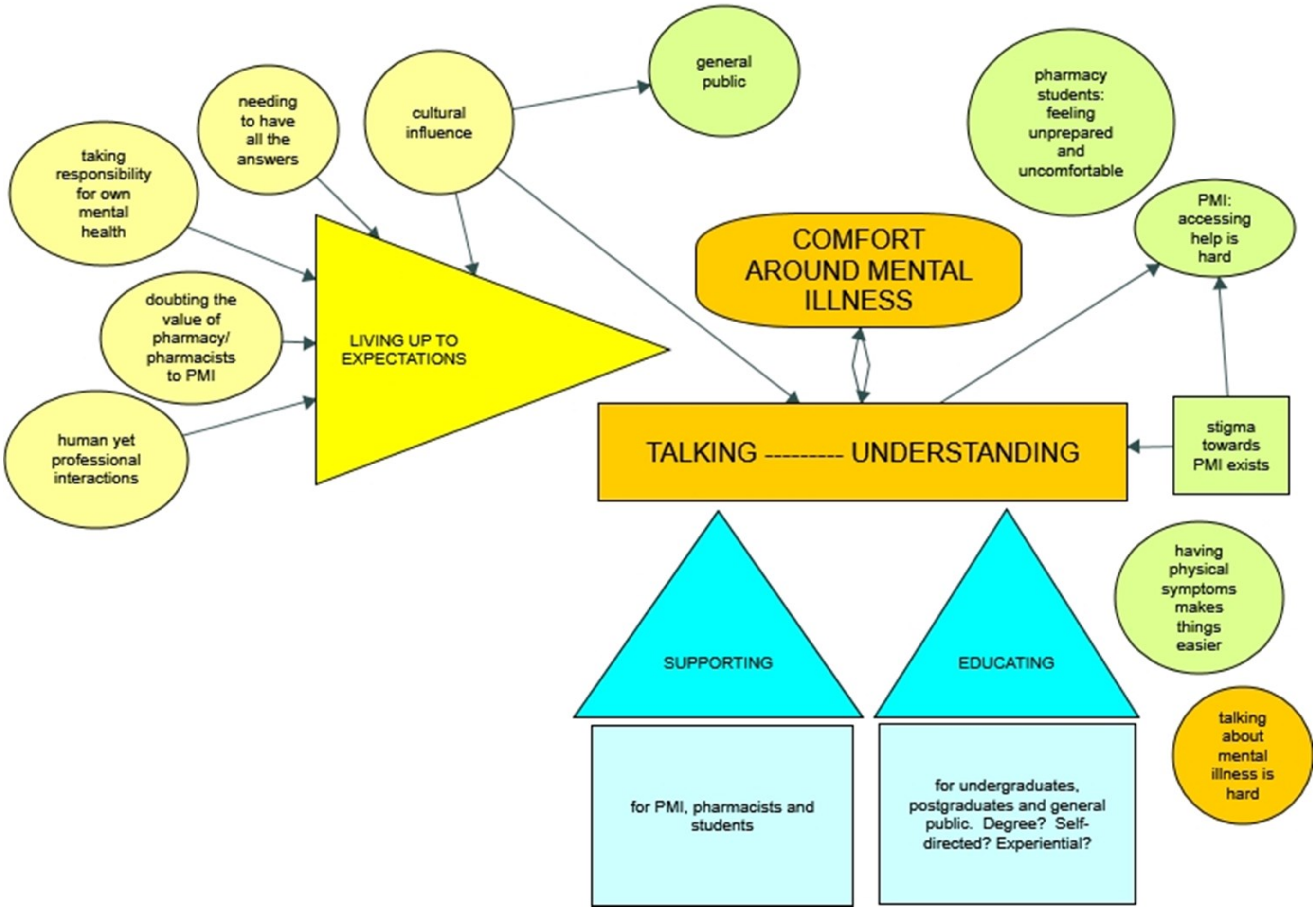


Figure 2 Examples of emergent categories presented in the second, third and fourth one-to-one interviews

These conversations therefore facilitated exploration of the analytical relevance of the concepts and allowed me to reflect on the degree of theoretical saturation in emergent categories. A discussion of theoretical saturation is provided later in this chapter.

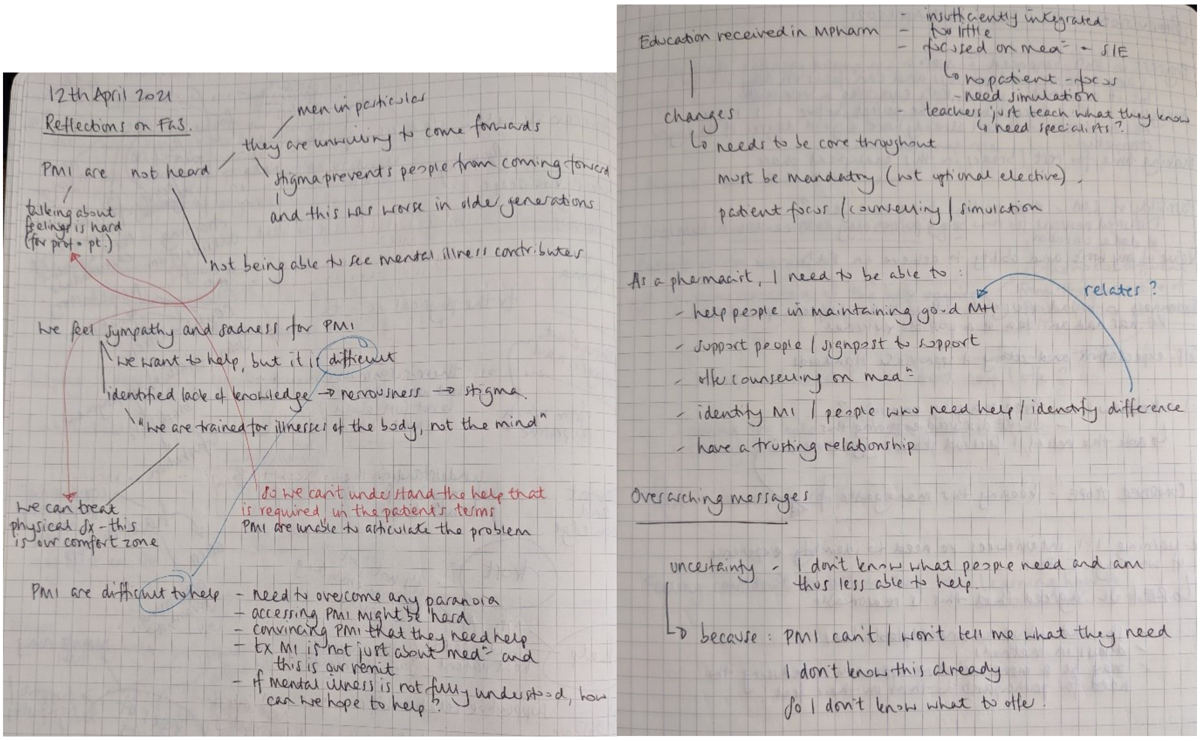
Data analysis

In grounded theory analysis, it is common for transcriptions of interviews and focus groups to be incorporated into a single analysis, as encapsulated in a grounded theory framework for novice researchers (Chun Tie, Birks and Francis, 2019). Indeed, grounded theory methodologists promote the inclusion of “all sorts of data” (Flick, 2018 p.34) and “methodological eclecticism” (Charmaz, 2014 p.27) to generate data which are analysed together as a single “data corpus” (Charmaz, 2014 p.28). All data are coded, independent of their source and this might include an interviewer’s field notes (Charmaz, 2014 p.136) or the initial codes from data generated earlier in the study (Charmaz, 2014 p.127). Data which have been co-constructed between researcher and participants (Charmaz and Thornberg, 2021) are eventually transcribed into text (Ralph, Birks and Chapman, 2014) prior to inclusion into the developing analysis. The variety of primary data sources incorporated into a single analysis can be broad, depending on what is revealed in early data generation. For example, Knaak and Patten (2016) analysed primary data from interviews with different populations (each with their own distinct question guide) and also incorporated general qualitative feedback and written documents in their data corpus (Knaak and Patten, 2016).

This is the approach that was used in my research. Data from both primary sources used in this study were analysed as a single corpus, with each new transcript (whether from focus group or interview), being incorporated into the emerging analysis using the constant comparative grounded theory method (Charmaz, 2014 p.132). Each new contribution to the primary data, independent of the source, was subjected to initial coding (see below) and then incorporated into the development of categories and emergent theory by means of constant comparison between data, codes, focused codes and categories. This was possible because of the common focus of the data generation. Therefore, my approach of analysing interview and focus group transcripts “collectively” was consistent with the advice of grounded theory methodologists and was comparable to the analytical technique in other grounded theory research (Chen, 2011; Minas, Anglin and Ribeiro, 2018; Harrison *et al.*, 2020).

Following Charmaz (2014), data analysis in constructivist grounded theory begins with initial, and then focused coding in order to develop categories which fully explain the data (Charmaz, 2014). These processes as they pertained to this study will be described here although it should be noted at this point that they should not be imagined as discrete and sequential steps. Rather the process involved constant comparison, moving backwards and forwards between stages and raw data. Overall though, and as with the analytical methods described by other grounded theorists, the net movement was from descriptive codes of low analytical value to more abstract, analytically-relevant codes as the process progressed (Birks and Mills, 2015).

Immediately after each focus group, I discussed the proceedings and the data generated with the co-moderator to reflect on the discussion while it was fresh in our minds. By the point of the second focus group, initial coding had already begun, so from that point onwards, these debriefing discussions allowed me to reflect on theoretical insights and I wrote notes and memos on these reflections (Mey *et al.*, 2013; Birks and Mills, 2015) (see figure 3):



12th April 2021

Reflections on FG3.

PMI are not heard

talking about feelings is hard (for prof + pt.)

they are unwilling to come forwards

men in particular

stigma prevents people from coming forward

and this was worse in older generations

not being able to see mental illness contributes

We feel sympathy and sadness for PMI

We want to help, but it is difficult

identified lack of knowledge → nervousness → stigma

"we are trained for illnesses of the body, not the mind"

We can treat physical dx - this is our comfort zone

So we can't understand the help that is required in the patient's terms

PMI are unable to articulate the problem

PMI are difficult to help

- need to overcome any paranoia
- accessing PMI might be hard
- convincing PMI that they need help
- tx MI is not just about med^{n} and this is our remit
- if mental illness is not fully understood, how can we hope to help?

Education received in MPharm

- insufficiently integrated
- too little
- focused on med^{n} - S/E
  - no patient-focus
  - need simulation
- teachers just teach what they know
  - need specialists?

changes

needs to be core throughout

must be mandatory (not optional elective)

patient focus / counselling / simulation

As a pharmacist, I need to be able to:

- help people in maintaining good MH
- support people / signpost to support
- offer counselling on med^{n}
- identify MI / people who need help / identify difference
- have a trusting relationship

relates?

Overarching messages

uncertainty - I don't know what people need and am thus less able to help.

because: PMI can't / won't tell me what they need

I don't know this already

So I don't know what to offer.

Figure 3 Reflections recorded after the third focus group

My familiarity with the data grew as I read and re-read the transcripts from the point of accuracy checking onwards. Initial line-by-line coding was completed based on entire transcripts from focus groups and interviews as well as notes I had taken, supplemented with those from the focus group co-facilitator. Although it has been suggested that coding based on notes alone might allow the researcher to focus on the salient points in the data, using entire transcripts allows for the development of ideas and understanding which might otherwise not arise (Charmaz, 2014)(p136). I found that my field notes in addition to those made by the co-facilitator were of value as part of the constant comparison between data sets and between observations which allowed the development of a sense of the relative importance of codes.

In the initial, line-by-line coding, gerunds were used to name the codes. These '-ing' forms of verbs (e.g., *describ**ing**, feel**ing**, avoid**ing*** etc.) allowed the creation of active codes which described what was happening in the data in order to remain focused on the processes therein (Charmaz, 2014). *In vivo* code names (those using the participants' own words) were also used to help ensure that the coding and analysis were grounded in the data collected. I used both pen and paper and NVivo Plus 12® software as I coded and as I listened to the recordings. This allowed me to consider the coding with perhaps a different analytical sensitivity in comparison to using the computer software alone (see figure 4). I found it useful to be able to use pen and paper to put different codes next to each other on a page and consider the degree of overlap for example (see figure 5). This allowed comparison and the consideration of concepts with an element of theoretical playfulness (Charmaz, 2014, p.137). Using both pen and paper, and NVivo® meant that the efficiency of my coding was likely reduced as, having 'played' with codes on paper, I had to then modify them in the software, but having all initial codes listed in one place which allowed easy searching and sorting was valuable as I moved into the next stage of focused coding.

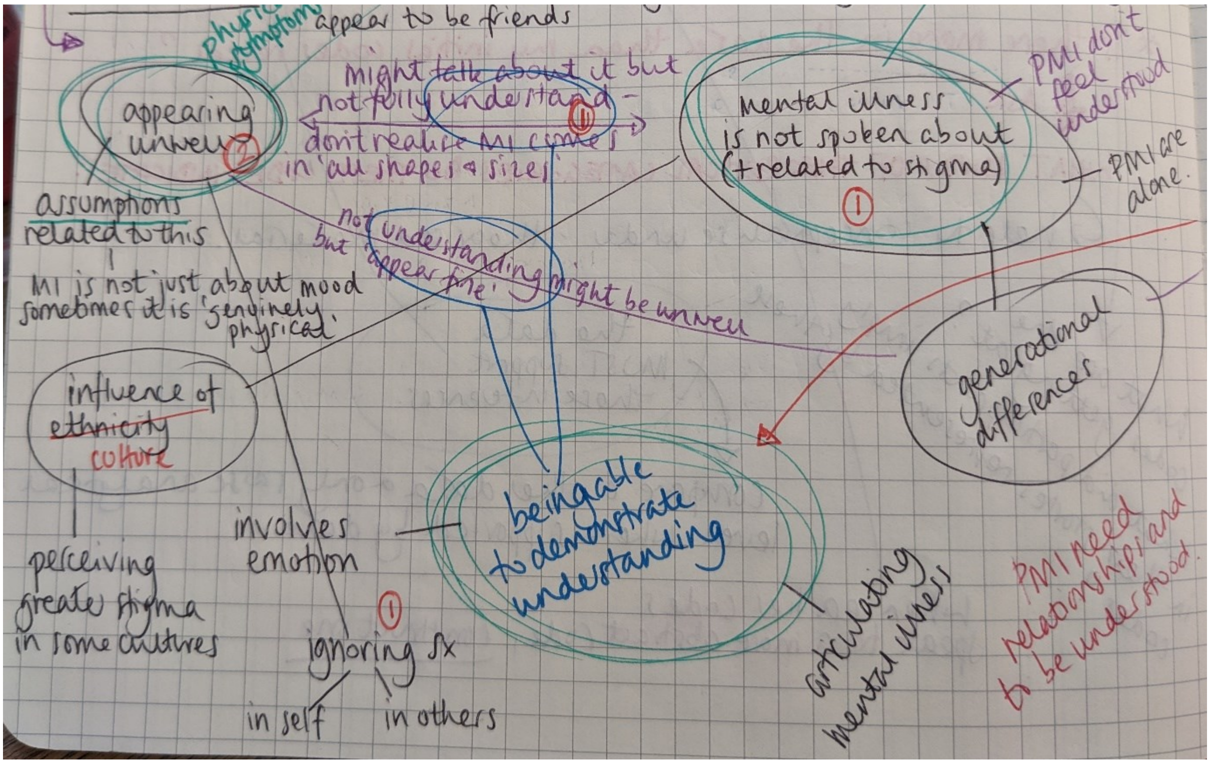
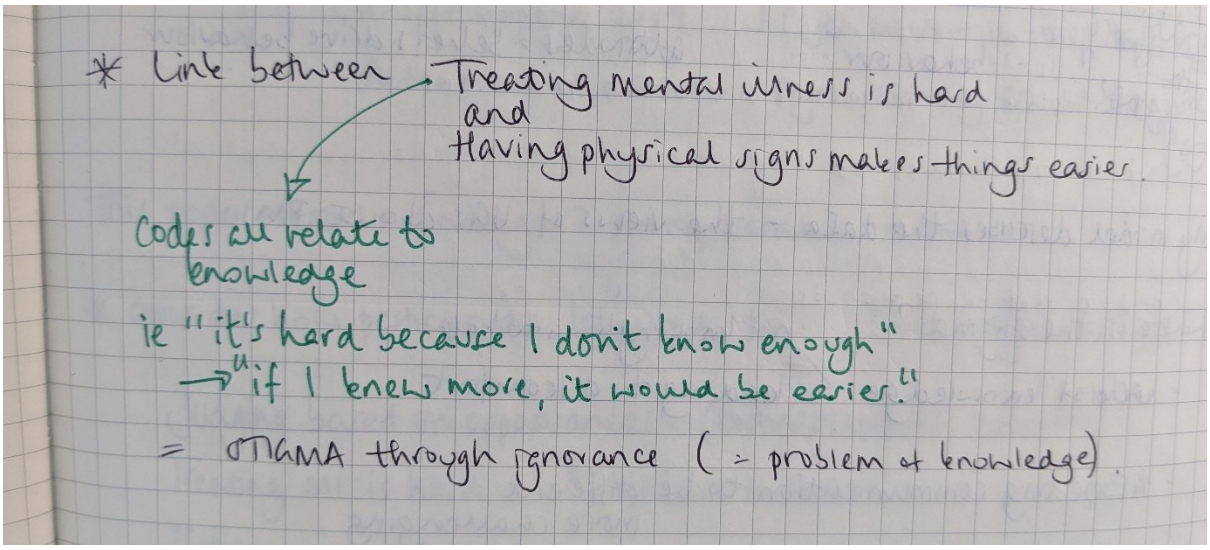


Figure 4 Examining relationships between data and initial codes



* Link between Treating mental illness is hard
and
Having physical signs makes things easier.

Codes all relate to knowledge

ie "it's hard because I don't know enough"
→ "if I knew more, it would be easier!"

= STIGMA through ignorance (= problem of knowledge).

Figure 5 Development of the 'knowledge' focused code which eventually became the Knowing category

Through the process of constant comparison, reviewing the initial codes with the original data, I eventually raised those codes that I considered to have the greatest analytical significance to the level of focused codes. This was not a straightforward, unidirectional process, rather I spent long periods of time deliberating over the nuanced differences between code names and their contents until I was satisfied that the focused codes I had identified were indeed those which best accounted for the data generated to that point (Charmaz, 2014). Despite the inductive approach to coding, I found that it was important for me to keep copies of the research questions in print in front of me and this became increasingly important as I moved into focused coding to avoid pursuing analytical paths which were irrelevant to my questions.

The process of focused coding continued throughout data generation and beyond and as such, I frequently had to go back and re-examine those codes which had previously stood out to me as being important or prominent (Charmaz, 2014; Birks and Mills, 2015). Throughout this period, new focused codes were generated, and others deleted or merged. From this point onwards in the analysis, I made frequent use of diagramming which I found extremely useful in considering the relationships between codes and focused codes (Charmaz, 2014; Birks and Mills, 2015). Initially, these diagrams were huge, sprawling maps of all my initial codes, which allowed me to consider all the data at once and start to get a sense of the shape of the analysis (see figure 6).

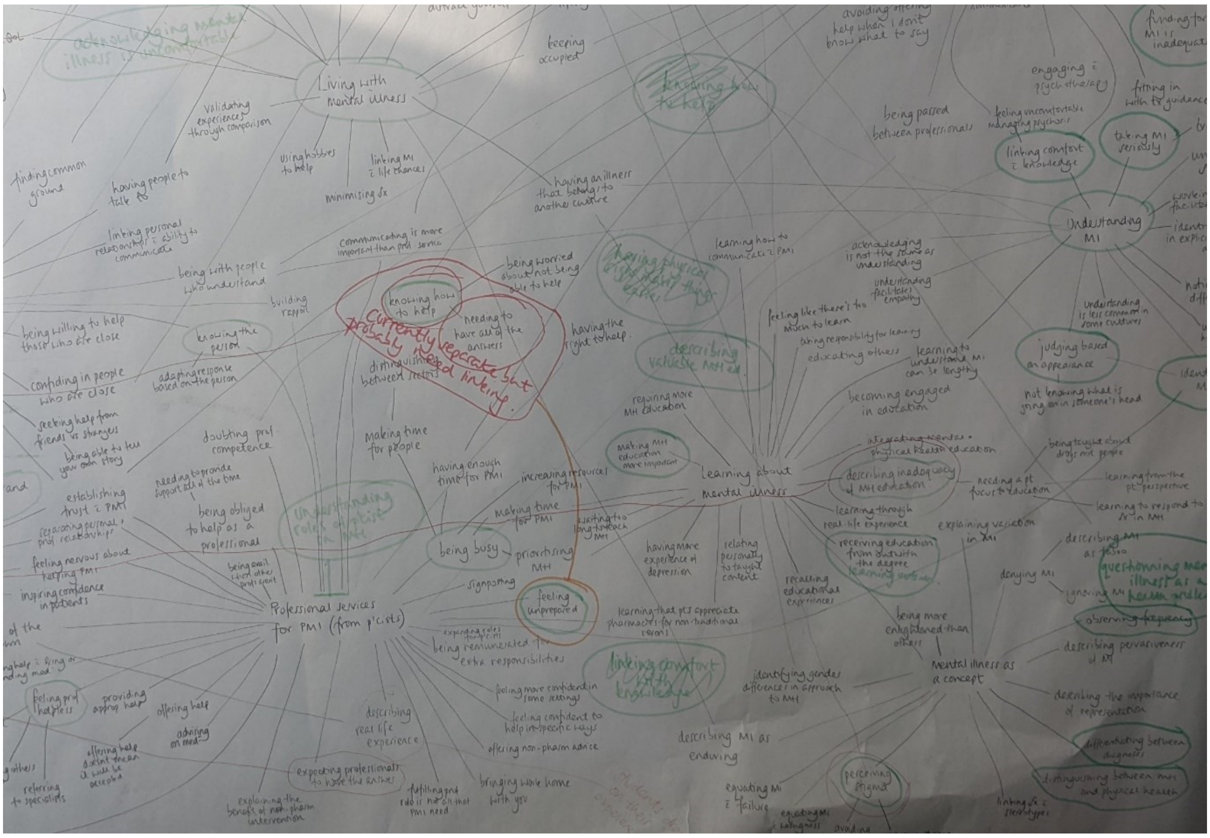


Figure 6 Portion of an original "huge, sprawling map" of initial codes

Clustering and relationships between codes helped me to feel more confident about the development of focused codes and subsequent mapping of these was a useful way to visualise all my data as I re-listened to the original recordings. As Birks and Mills (2015) suggest, this helped me to “restore calm” to my coding, as I found the long, unwieldy list in NVivo® somewhat difficult to get an overall sense of (Birks and Mills, 2015, p.100). Eventually, through many iterations, my diagrams and other charts created with pen and paper dominated my use of NVivo® software and it was through this method that I subsequently organised my data into the final categories. Again, development of the categories was not a quick process and through constant comparison of data with codes and categories, I re-modelled them on several occasions. Eventually, I was content that there were three categories which satisfactorily described the data, and these are the focus of the next three chapters.

I did not formally check transcripts, coding or the final results of the analysis with interviewees. However, I did summarise the key observations from each focus group towards the end, using participants’ own words and phrases in a style reflecting Rogers’ person-focused method (Rogers, 1980) and which Cathy Charmaz has recognised in her own practice (Charmaz, 2014). This allowed participants to review my summarised understanding of their experiences and add their thoughts on the relative importance and relevance of topics as well as to add aspects that they felt that I had omitted. I also had permission to go back to participants to clarify points and my understanding following transcription and during analysis, and this avenue of exploration was used on a handful of occasions. In such circumstances, queries were sent to participants by email (as a group for focus groups data or individually for one-to-one interviews) and responses were invited by email. These responses were added to the overall data generated and incorporated into them for analysis as described above. Therefore, whilst formal member checking did not occur in this study, steps were taken to ensure accuracy of the representation of participants’ contributions. It is important to note that formal member checking with focus group members would have been extremely difficult and potentially limited in value due to participants’ focus by that time being on their final-year examinations.

Saturation

Determining sample sizes in qualitative research is not dependent on being able to generalise the results and cannot be predicted in advance of data analysis as in quantitative work (Cohen, Manion and Morrison, 2007). The value of rich, subjective description of phenomena cannot be limited to numerical representation and must instead be continually assessed during data generation and analysis dependent on the theoretical position taken for the research (Baker and Edwards, 2012). Grounded theorists continue sampling until theoretical saturation is reached.

Theoretical saturation is one of the critical features of a grounded theory study. This concept was first described by Glaser and Strauss in 1967 and they explained how it defines a stopping point in data collection for a specific category (Kenny and Fourie, 2015). The concept of theoretical saturation can however be challenging when viewed through the lens of constructivist grounded theory. This methodology allows for multiple realities and acknowledges that research participants and researcher construct data in partnership (Charmaz, 2014). As such, it might be argued that each new participant's view will bring a new subjective reality, bringing a clear challenge to achieving true saturation. The problem is confounded since achieving saturation relies on the researcher's decision that data categories are in fact fully explained and this will rely, to some extent, on the skill and experience of that researcher.

Charmaz (2014) offers some advice to researchers grappling with the possibility of whether or not they have reached a point of theoretical saturation (Charmaz, 2014). For example, considering the notion of repetition in data, she advises that hearing the same stories in new data does not mean that no new concepts are to be found within, just as different stories do not necessarily bring new concepts (Charmaz, 2014, p.213). So following Charmaz and to avoid making a false conclusion regarding apparent possible theoretical saturation, when it appeared that nothing new was happening in the data, I re-examined and re-coded data to determine whether new analytical possibilities existed (Charmaz, 2014).

As well as theoretical or conceptual limitations to achieving theoretical saturation, there are also practical ones. Within the limited scope and confines of this EdD research, it was not feasible to go on recruiting to be absolutely certain that concepts were fully developed. Additionally, Flick (2018) avoids subscribing to a particular definition of theoretical saturation, arguing instead that this is something the researcher must simply become certain of rather than it being reached when a specific criterion is met (Flick, 2018). Taking all of this into account, the pragmatic approach chosen for this study was to define theoretical saturation as the point at which no new focused codes were being developed within a given category.

Ethics

Ethical approval

This study was approved through the Aston University College of Business and Social Science Research Committee in two phases. Approval for phase one (focus groups with MPharm students) was granted in October 2020 (205-05-20-Macfarlane). At that stage, the Committee asked that separate ethics application be made for the second phase of the research since it was not possible to write a draft interview schedule to use with recent graduates until data generation and analysis from phase one had begun. The draft interview schedule was written for phase two in March 2021 and approval was granted by the same Committee in the same month(239-03-21).

Ethical considerations

The following potential risks were considered in the design and ethical review of this research:

My relationship with proposed participants/Power relationships: the proposed sample for participants included current and recent students of Aston Pharmacy School. Whilst I was a member of staff within this school, I had little contact with the undergraduate students. Therefore, the sample was unlikely to include anyone with whom I had a personal or professional relationship. The risk of any power imbalance in the researcher-participant relationship was therefore minimised.

Assumed knowledge about mental illness and experience of working with people living with mental illness might have created a power imbalance from participants' perspectives. I felt it possible that if I emphasised my clinical background to students that this might enhance any differential they felt in terms of expertise. From an ethical point of view, it was important that participants were aware of my background and the reasons I was carrying out the study and this was included in the Participant Information Sheets (PIS, see appendices 5 and 6). However, I attempted to minimise the impact of this by only talking about my clinical practice at the end of focus groups and interviews. In the introductory parts of the focus groups and interviews, I simply introduced myself by name and moved on to the importance of participants' views and opinions to the research thereby hopefully minimising the perception of any power imbalance.

Participants for whom English is not a first language: it was possible that students whose first language is not English would be recruited to this study. However, all students were current undergraduates or recent graduates in professional practice. As a pharmacy course accreditation requirement, students must reach English language requirements sufficient for study of the course and to work as a trainee (GPhC, 2021) and at Aston the requirement is IELTS level 6.5 (Aston University, 2017). Participants were therefore assumed to have a level of English sufficient to allow participation in this study without the need for translation. At the start of focus groups and interviews, I ensured that each participant was comfortable with participating in spoken conversation in English.

Right to withdraw: potential participants were informed of their withdrawal rights on both the Consent Forms (see appendices 7 and 8) and PIS. The right to withdraw data within 2 weeks of one-to-one interviews was highlighted on Consent Forms, PIS and the Participant Debrief (see appendix 9). The equivalent forms for focus groups stated that withdrawal from the group was acceptable at any point. However once recording had begun, the data provided by the individual would not be removed and would be included in the analysis. This is because the data attributable to that individual may not be fully discernible.

Participant debriefing: all participants were offered the opportunity for verbal debrief with me following interviews and focus groups. All participants were sent a copy of the Participant Debrief sheet which provided contact details for support should they have been required. No such contact was received from any participant as far as I am aware. However, participants were given contact details for University and national support systems as well as mine and those of my supervisor.

Maintaining confidentiality: participants' rights to confidentiality and anonymity were respected throughout. Participants were reassured that their identifiable information would be protected at all times and that any quotes used in future publications would be anonymised to maintain confidentiality.

It is always possible that individuals may be able to de-anonymise data if they have detailed knowledge of the institution and individuals under question. The risk of this was minimised by careful removal of identifying information from transcripts. If data from a specific individual were de-anonymised, then the risk to that person was expected to be low. If a particular quote was deemed to demonstrate an extreme view, supervision was to be sought with regard to the way that the quote was reported so as to optimise anonymity. In such circumstances fictionalisation and alteration of identifying features of data could be considered, but this was not required in the end.

Had any participant disclosed anything which suggested that they or someone else was at risk of harm then confidentiality would have been breached in order to seek help for that person. The participant would have been informed of this at the time that the decision was made.

Sensitive topics: Discussion of mental illness in general may result in sensitive conversation. Participants were not asked to discuss their own experiences of mental illness nor those of people close to them. However, due to the nature of the research, it was possible that participants would engage in such dialogue which could cause personal stress, anxiety or otherwise cause harm to participants.

Participants were able to terminate the interview or leave the focus group at any time. Interviewees were able to pause the interview or skip questions. Had any participants become distressed, then they would have been offered support where appropriate.

Any emotional distress experienced by the participants could in turn have been distressing for me. Had this situation arisen, I would have used my strong clinical and professional supervision network for support. This would not have compromised the confidentiality of any participant.

The potential benefits which might arise from the outcomes of this research were felt to outweigh all of these risks. This assessment took into account my clinical and research experience, outcomes from supervisory conversation around risk and consideration of British Educational Research Association (BERA) guidelines (British Educational Research Association [BERA], 2018).

Informed consent

In accordance with the ethical approval for this research, written informed consent was required from each participant prior to the start of their focus group or interview. Where this was not received in advance of the planned focus group or interview, the start of the data generation was temporarily delayed while the appropriate form was completed. All participants were given the opportunity to ask any final questions before the recording and data generation began.

Participants were all informed verbally and via the Participant Information Sheet (see appendices 5 and 6) of their right to terminate their participation at any point. Focus group participants were informed that any data provided up to the point of withdrawal would be included in analysis due to the difficulty of withdrawing their contributions from a conversation and maintaining flow and meaning within the data. Debrief was provided in written form after each focus group and interview and participants were also given the opportunity to discuss any negative personal experiences of the data generation with me in my capacity as an experienced mental health professional.

Recruitment of vulnerable adults was not anticipated and no formal mental capacity assessment was planned. However, being experienced in capacity assessment, I would have been capable of identifying any behaviour from participants which might have given cause for concern. A sensitive approach to any such concerns was planned to allow me to exclude any participant who was felt to be lacking in capacity to give informed consent for participation.

Summary

In this chapter I have explained how the theoretical perspectives taken in my research informed and shaped my choice of methodology and methods. I have laid out the practicalities of data generation as they were experienced, and the processes involved in analysis. Whilst data analysis was something that I experienced to be a complex and spiralling process, it was one that I enjoyed. There was a great sense of accomplishment when I reached the point that a category really did account for the data which in turn offered rich description of participants’ experiences within that category. The three main categories of data will be described in the following three data chapters: Knowing, Doing and Valuing.

Chapter 4 – Knowing: Identifying inadequate knowledge

Introduction to the next three chapters

I devised this study with the aim of exploring pharmacy students' views towards people with mental illness and how this interacts with their preparedness for future practice, in order to inform pharmacy curricula to better prepare students for working with PMI. Following data generation using focus groups and one-to-one interviews, as described in chapter 3, I initially developed 6 data categories: Knowing and understanding, Communication, Resources, Differentness of mental health, Stigma, and Confidence in ability to help. However, as I wrote about and developed these, it became clear that some could be grouped together or become subcategories of others. Inductive analysis therefore eventually led to the development of three major categories in the data which describe the factors which influence participants' preparedness to work with PMI. Each category has 4-6 subcategories which are organised as follows:

1. Knowing: Identifying inadequate knowledge
    a. Aspects of psychiatry are unknown
    b. Knowledge of mental illness and its treatment
    c. Poor knowledge limits conversation
    d. Knowledge and stigma
    e. Needing to know more
2. Doing: Applying knowledge in practice
    a. Avoiding mental illness
    b. Understanding facilitates interaction
    c. Relationships and their norms
    d. Inadequacy of pharmacy
    e. Limited opportunities
    f. Developing confidence to apply and build knowledge
3. Valuing: Willingness to try
    a. Devaluing mental healthcare
    b. Devaluing the self
    c. Devaluing mental illness in the pharmacy curriculum
    d. Exemplifying stigma – participants' implicit stigma

These three categories build upon each other as the participant examines the knowledge and skills that people have and then starts to consider the 'how's and 'if's of actually applying that knowledge to support PMI. The sufficiency of knowledge is at the foundation of this and, as we will see later, is where participants assume problems must lie when they feel uncertainty in the other categories.

As described in chapter 2, mental illness stigma can occur across interpersonal, intrapersonal and structural levels (Cook *et al.*, 2014) and encompasses cognitive, emotional and behavioural processes (Corrigan and Watson, 2002; Larson and Corrigan, 2008). Participants in this study introduced and discussed the existence of mental illness stigma and perceived its occurrence at each of these three levels. In each category, stigma was seen to account for or modify some of the content and as such stigma is discussed across all three major categories although there is naturally more emphasis on this in the final one, Valuing (see chapter 6).

The content of the three major categories will be described sequentially over the course of the next three chapters. In this chapter, I begin with the most fundamental of the three: Knowing.

Knowing

Introduction

People have different amounts of knowledge about mental illness and about the experiences of people living with mental illness. This variation in knowledge was accounted for from multiple perspectives in the data. Participants talked about, and exemplified, their own knowledge as well as that of those around them, including people living with mental illness, healthcare professionals and academic staff. Overall, participants painted a picture in which levels of knowledge are poor. This included what is and can possibly be known about mental illness as well as how this might affect conversation and interactions with PMI. There was a shared concern among participants that this perceived lack of knowledge brings about a significant obstacle to their future professional practice. Participants readily explained how they thought the situation might be improved. The data here are organised into five distinct subcategories:

1. Aspects of psychiatry are unknown
2. Knowledge of mental illness and its treatment
3. Poor knowledge limits conversation
4. Knowledge and stigma
5. Needing to know more

Aspects of psychiatry are unknown

Attempting to rationalise their own perception of inadequate knowledge, participants doubted that anyone knows enough about mental illness. They described their own knowledge as being limited by the amount that can be taught within what they perceived to be a poorly understood aspect of medicine. In this sense, participants suggested that they were being taught to the limits of current knowledge but that these limits are significant and present a barrier to their future patient care. The extension of this assumption was that since the pathological processes are not fully elucidated, effective treatments cannot be created:

> *"you know, we understand, we talk about things like broken bones and hypertension, we understand what's gone wrong, we can, we understand sort of the process and how it's involved in the body and how we can, for example with hypertension we can give medicines that change a couple of enzymes, or like inhibit something in the renal system, wherever you want to go, and we can sort of alter how the physiology of someone's body is working, whereas with mental health because we haven't had that time, … it hasn't been studied for long enough, we don't understand it well enough to have these really brilliant effective techniques that work every time so I think from our point of view it's really difficult to have medicines that work brilliantly when we don't necessarily understand what's gone wrong in the first place."* **FG3P1**[4]

Some participants therefore sympathised with the position of teaching staff, who could not be expected to adequately teach the subject of mental illness when too little is known about it in general. This view was not uniform though, with one focus group participant opining that there was more that could be taught, although this would take education too close to the limits of current knowledge:

> *"I think as well, because we don't know everything about it and there's, you know, so many unanswered questions which is why we don't get a full education on it, which definitely negatively impacts, it's like we're going around in a circle, because we want to know more, but then there's only so much they teach us, but then they can teach us a bit more, then it'll leave other questions and then we want to know more about that, and we can't answer everything because they don't know everything."* **FG3P4**

Knowledge of mental illness and its treatment

Pharmacy students demonstrated that they know about mental illness. They have conceptions of what mental illness is, how it feels to live with it and the impact on people around PMI. In conversation, they drew on personal experiences, whether this was personal experience of mental illness, or their appreciation of how mental illness might be on a continuum with things that they do have experience of:

> *"Like it's happened to me so many times when I feel, down for a few days and "oh my God am I like that down?" Really like self-diagnosing. I'm like "oh no, I'm fine" because I know it's just a few days things. But then when I compare it to other people I'm like "yes, obviously they were struggling to get out of that" and I can see how it's different for me that I was just down for a few days and how it affected them."* **FG2P5**

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[4] Quotes are attributed to participants as follows:
For focus groups, 'FG' denotes that it was a focus group, followed by the number of the group and then the participant number in that group (e.g., FG1P1 – focus group 1, participant 1)
For interviews, 'I' denotes that it was an interview, followed by the participant number (e.g., IP1 = interview participant 1). Where quotes were obtained in follow-up communication, this is stated at each occurrence.

> *"…like unemployment or stresses at work, stresses at uni, at school, whatever's going on, that can I think have a massive impact that people don't necessarily realise, … it's not as simple as just saying "oh well deal with whatever's stressing you out, then you'll be fine" type thing, so it's that sort of prolonged, potentially struggling with certain things, that can sort of like all mount up."* **FG3P1**

Students explained different reasons that mental illness might occur, focusing strongly on psychosocial triggers rather than genetic and biochemical aetiological theories of mental illness. They also described a range of approaches to support recovery from mental illness again focusing on social support, sometimes in favour of medication. However, despite displaying such knowledge, they considered themselves not to know enough about mental illness and this appears to result in feelings of discomfort. Participants explained feeling at a loss in describing how they could help PMI from a professional perspective. They related this to a range of deficiencies in their knowledge and skills pertaining to the treatment of mental illness: an inability to explain mental illness, to distinguish between pharmacological treatments and lack of knowledge about responding to symptoms of mental illness in the pharmacy setting. This latter point was seen as being worse for some mental health diagnoses (e.g., schizophrenia) than others (e.g., depression). Importantly, participants were aware of what they don't know, and this was associated with a sense of discomfort and unpreparedness for working with PMI in their future roles as pharmacists:

> *"…if someone came into a community pharmacy and I thought they were having a heart attack or something, you know what to do, like call 999, […], but if someone came into the pharmacy and they were having the equivalent of that, that it was to do with mental health, I feel like you wouldn't know what to do, […] there's no clear like thought process in my mind of what I do, […] so how can you know that what you're doing is the best for the patient?"* **FG3P4**

Indeed, participants struggled to fully define the role of the pharmacist in the care of people living with mental illness. Discussions around the provision of help centred on a perception of needing to have all the answers. That is, being able to make treatment recommendations both at times of crisis and more generally which would take account of the whole variety of needs that they expected PMI to have. Against this context of demanding expectations of themselves, participants consistently expressed that they did not have sufficient knowledge and skills to support all PMI:

> *"I wouldn't know how to help them, as a pharmacist."* **FG1P1**
>
> *"But just being able to say to him, you know what, it's okay, like we can help you, let's talk about it, let's take you to the consultation room. Just, you know, acknowledging him is the first main thing, I think, that's how I would deal with it. It probably isn't the best thing to do, like I said, like* [FG1P5] *said, like we've all said, we haven't been taught about it so to be honest, we're not professionals on how to deal with it…"* **FG1P4**

This was particularly the case for people living with psychosis, with participants appearing less certain about how they might help John, the person described in the psychosis vignette compared to Jay, the person described in the depression vignette:

> *"I wouldn't feel as comfortable to and that's purely because I probably don't know enough about what lifestyle to give, what sort of, like medication sort of I do know like how they work and stuff, I wouldn't know like which one to give him because I feel like I would need more in-depth sort of analysis of what he has exactly. And even to refer him, I wouldn't, I'd probably need some time to see where I would refer him to…"* **FG2P1**

The focus of undergraduates' suggestions of their future roles was on signposting PMI to the services of other professionals. However, here again they explained deficiencies in their knowledge. Participants worried that they wouldn't necessarily know where to signpost to and were concerned about passing PMI from place to place which might cause frustration for that individual:

> *"…been to a doctor and I've come to you with the prescription, you're now sending them on to someone, they'll probably be referred on to someone else, to someone else by the doctor as well, so feels like they're going from one person to one person, so again it may make them even more reluctant, you know, look for advice further down the line. So although I feel like I would want to give someone my opinion, as a professional it may not always be the right thing to do because it may not be right for them."* **FG2P4**

Poor knowledge limits conversation

Poor knowledge about mental illness was related to people's inability to talk about it, for healthcare professionals, PMI and amongst the general public. Vitally, if people do not know enough about mental illness, then they may not recognise symptoms which are representative of a pathological process:

> *"whereas compared to like a physical illness, like say you've broken your leg or something you know immediately "oh I need to go to like A&E" or "I need to go to the hospital", whereas like mental illness it might take them years to realise oh that they had depression or some sort of other illness, maybe like bipolar or something"* **FG2P1**

However according to participants, once people know enough to determine that mental illness might be present and that help is required, inadequate knowledge might still hamper help-seeking and the provision of care. This could result from the subjective nature of mental illness which makes describing individual experiences hard. Alternatively, participants identified that people might not know the specific way in which conversation about mental illness should be approached. The concern here was that this help-seeking process is therefore fraught with difficulty from cognitive and emotional perspectives. Emotional difficulty with communication will be discussed separately in the next category (Doing), as in that situation the knowledge is possessed but the way the person feels about what they know has an impact on what they choose to do.

As mentioned above, mental illness was considered by participants to be less obvious and more subjective than somatic illness. In talking about obviousness and subjectivity, participants were referencing their perception of the unequivocal nature of the way in which somatic illness can be proved or demonstrated such as through examination or blood tests. This was compared to mental illness for which, in the participants' view, demonstration of symptoms depends on the PMI's ability to explain their experiences:

> *"And because they can't show what's wrong, I think that like influences it more, because if they've got a rash it doesn't matter that they can't describe it because you can see it, but like it's really important that they describe it properly, and I think they might worry about that."* **FG3P2**

People living with mental illness might find it hard to describe what they are experiencing for different reasons; they might not be able to define exactly what they need in terms of support or even know the words to describe their experience:

> *"…they don't want to look stupid, they don't want to… People don't want to call things the wrong words, like they might not be able to explain how they feel and that might really bother them, like they don't want people to feel they're stupid, or like if they use the wrong words they don't want people to like get the wrong kind of idea."* **FG3P2**

Identification of mental illness was seen then to rely heavily not only upon the PMI's ability to describe what they are experiencing but also on the healthcare professional's ability to recognise that description as being related to a specific pathological process. Healthcare professionals with poor knowledge of mental illness might also disrupt this process if they lack the right words to talk about mental illness or lack the knowledge to understand the problem and care needs as described by the PMI:

> *"Maybe even like your knowledge, like if you're not, like you can only give advice to someone if your knowledge is up to scratch, you know what I mean? Like that could be a communication* [barrier] *as well I guess maybe… If you don't know enough about it then that can be like a communication* [barrier] *because the patient might be talking about stuff that you don't know enough about maybe."* **FG2P1**

There may even be a problematic knowledge differential here. If the PMI knows enough to be able to approach the pharmacist and ask for help, but the pharmacist does not know what can be offered, then this might disrupt help-seeking through disruption of confidence in the professional:

> *"And then I don't want to be like "oh one second" and try and search something up and then to John I'm like "look, like oh I don't know anything about it" and he might feel then a bit more like cautious or worried or think like "she doesn't know anything about it so how do I know that she's going to give the right advice?" kind of thing. It might come across to him like "oh, you know, I can't really trust her or can't talk to her about it because she has to like look things up…""* **FG2P1**

In terms of the way that mental health should be spoken about, participants clearly described needing a different approach to provide care for people with mental illness compared to those with somatic illness:

> *"I think there's another issue with mental health in general in that different patients need completely different sort of like approaches."* **FG3P1**

Specifically, participants highlighted concerns about not knowing how to talk to PMI, or not knowing what help it would be appropriate to offer. They were particularly concerned about the technicalities of conversation in terms of language choice and a 'correct' way to talk to PMI. Participants opined that their discomfort around how they would speak to PMI in the future was because they had not been specifically educated on this:

> *"And then she started talking about her feelings and I just thought oh, I was just here to check your blood pressure and your cholesterol, I'm not really sure what I need to say now. I was very very stuck at that point and then I came out, I got her printout and I was just telling the pharmacists, I didn't know what to do, like I just didn't know what to say, like I didn't know... I just did not... I had no idea what to say."* **FG1P1**

Being without specific training in how to talk to PMI, participants felt that they were therefore ill-equipped to work with them:

> *"…if Jay* [vignette depicting depression] *comes into a community pharmacy he's more likely to get help because I feel like we're all very comfortable with saying "oh okay, he seems depressed", we can talk to him, find out kind of what the root cause like* [FG1P1] *was saying and then kind of go from there, refer him if necessary, but with John* [vignette depicting psychosis] *if he came to a community pharmacy I feel like we wouldn't know what to do with him because it's something we're not taught about, it's like "okay, what do we do?" And I think that's the issue."* **FG2P2**
>
> *"I think knowing somebody has a mental illness makes you more aware of your communication and the words you are using. I think you become more conscious of your thoughts and words and try to ensure they will not 'upset' the other person. In general, when talking to people you are freely able to speak and express yourself whereas communicating with somebody with a mental illness makes you almost double-check what you say before you say it."* **FG1P1 (in follow-up)**

Once conversation is established, it was considered vital to use words that the PMI would be comfortable with to avoid provoking a negative reaction. There was clear agreement between participants that by choosing the wrong words to communicate with PMI, the pharmacist risks making things worse for the person needing support:

> *"…you just have to really take caution with how you deal with it, like not to worsen it but to, you know, alleviate it…"* **FG1P2**

Recent graduates expanded upon this subcategory as they reflected on some of the interactions that they had had with PMI in professional practice. These participants supported the sense that a specific approach or skill set is required for communicating with PMI and talked about increasing their confidence in such communication through practice, whether with real patients or in mock scenarios:

> *"I was a bit uncomfortable initially, but I thought I needed to do this because number one I'm going to be starting in mental health, and I have shadowed my actual tutor doing it, so that did give me a bit of an ease before I did it, and also I just role played with him just to ask, so I made sure I asked the right questions, because I wasn't very like, because I needed to make sure I understand the red flags to be honest, things that might actually be something, like okay, I need to like refer it to someone else."* **IP1**

> *"I think leading up to it, at the beginning, when I first started doing drug histories for mental health patients I was really nervous, just because I feel like, especially when patients have got things like anxiety you kind of realise that like anything that you say can have an impact on them, so if you were to say something about their medication they could really overthink it and think, "Oh gosh, like is something wrong?" like "am I doing anything wrong?", so I feel like I was really wary of that when I first started but I think the more practice I kind of got speaking to mental health patients I kind of realise that it's actually, it's okay and now I feel like a lot more confident doing it, so... But at the beginning I was really nervous but now I think I'm okay. After practicing, I think I'm okay."* **IP2**

However, when probed, graduates struggled to identify specific examples of how they have had to do things differently. They still reported needing to give more time to interactions with PMI or to think about the way they conduct the conversation, but on further examination agreed that this does not necessarily depend on the presence of a mental health diagnosis. One recent graduate was clear (through having taken specific training on working with PMI in crisis) that doing harm was very unlikely and explained that pharmacy students just need to learn that this is the case:

> *"I think the fear of doing harm outweighs the sort of need to say… I think it holds people back from saying anything and I think if people can be taught that you almost can't say anything wrong, it would make people feel more comfortable. Because they're almost, there is never a right thing to say. That's what, there is never a perfect thing to say so I think if people can understand that, then it makes it an awful lot easier to navigate."* **IP3**

Finally, participants also reflected on knowledge about mental illness and how this is reflected in conversation in more general terms, among the lay population. They linked greater knowledge with increased sense of comfort and easier conversation through enhanced familiarity:

> *"…and only more recently has it come to actually be something that people talk about, and are made more aware of, and so they have like the campaigns and to reduce stigma, and to get people talking about it…"* **FG3P4**

Increasing knowledge about mental illness among the general population would therefore further facilitate conversation, according to participants. This is for two key reasons. Firstly, individuals would have a better grasp of the concepts and words involved in describing experience of mental illness, i.e., through education, they are given the tools for conversation. The second reason is that through education stigma can be reduced, as stigma was felt to be fuelled by ignorance as I will explain in the next section. As would be expected, acquiring the specific communications skills for working with PMI was seen to be a requirement of pharmacy education which is currently lacking. This will be discussed, along with other perceived educational requirements, in the last subcategory in this chapter (Needing to know more).

Knowledge and stigma

Mental illness stigma was seen to be perpetuated by, and contribute to, lack of knowledge. Participants felt that in their interactions with PMI, people demonstrate interpersonal stigma because of their ignorance regarding mental illness and its treatment:

> *"…when people mention mental illness, most people actually don't know it's like a proper thing, like they think you're just being dramatic, or you're being childish, like they don't actually realise that people are actually struggling, like they actually need someone to speak to. Most of the time, some people will just disregard it as "oh just, I don't know, sleep, or I don't know, eat something, like that, or it's not that deep", or something like that, I think it has to do with the stigma around it. Like I'm grateful that in the generation that we're in now like there's more awareness of stuff that is happening, […], it's not everywhere in the world that most people are educated about mental illness, […] I feel like the UK has done like a great job in our awareness and stuff but there's still loads of cases in the world, in Africa, that don't really have like the proper understanding of what it is."* **FG3P3**

Mental illness was also described as being trivialised by people who know about it, but who make assumptions based on how someone looks, perhaps thinking that they might not be experiencing mental illness because they appear to be doing OK:

> *"And she said to me, "you're perfectly fine, there's nothing wrong with you, why are you in therapy?" And she meant no like beef, she meant no like harm by saying it but she had like no idea how, like why would I be in therapy for anxiety when I seem fine."* **FG1P5**

Alternatively, ignorance might lead to the casting of negative value judgements about PMI which might result in avoidance:

> *"…you know, if you label them mentally, like you have mental illness, it's like "oh, you know, that person won't like have like, you know, they won't get married, they won't like…", people will be like "oh no, we don't want to be with this person because they have a history of this issue" and the thing is the person might have recovered from it but actually the family is like, the family of like say the boy or girl who wants to marry the person they'll be like "oh no, we can't allow this marriage because this person has a history of this or has a history of that", you know."* **FG2P3**

Interaction between knowledge and stigma was also identified in the pharmacy curriculum. By having insufficient curriculum content on mental health, ignorance is perpetuated which contributes to the interpersonal stigma among pharmacy students in the same way as described for members of the public above:

> *"I think that still increases the stigma, because you just don't know… it's not common knowledge like how certain mental health conditions can be treated. I feel like as well like say in uni, like we don't get taught loads and loads about mental health either, like I feel like we sort of get given a few like symptoms and the medications that you give and the side effects and that's like sort of it, there's not like a big discussion and you don't go really deep into it, and you don't cover all of the different conditions there are, like mainly we cover like the key ones, like depression, anxiety, schizophrenia and that's it. So I think that's where the stigma comes from."* **FG3P4**

In addition to exacerbating the problem of mental illness stigma through insufficiency in the curriculum, participants identified that the teaching itself might contribute. Examples included academic staff whose teaching failed to consider the needs of people in the student group who might have lived experience of mental illness as well as them saying things which students considered to be overtly stigmatising:

> *"So, for example, we had, there were two lecturers that taught us about different mental health topics. One was particularly empathetic and one, I feel, it was very, it was very factual and very to the point but possibly disregarded the experiences of people in the room and didn't appreciate that certain phrases or descriptions may be triggering for some people."* **IP3**

Needing to know more

"I don't think, I know we don't know enough as we should to help the public there." **FG3P3 (original emphasis)**

Participants explained that they felt that their knowledge about mental illness was insufficient at the point of graduation and that this could be improved by increasing the amount of teaching focused on this subject, but also by attending to the focus and its delivery; two areas in which they identified additional shortcomings.

The positive effects of increased knowledge within interpersonal, non-professional relationships between people with and without mental illness were described by participants. However, they also talked about their own professional confidence increasing via increased exposure within the curriculum and the sense of familiarity that this brings. If they felt more familiar with the presentation and treatment of mental illness from a pharmacy perspective, then they would know what to expect and this would mean that they would feel prepared for their future roles. Thus, despite describing psychiatry as a poorly understood aspect of medicine, participants identified some specific inadequacies in the existing curriculum which they felt could be enhanced. Participants consistently asserted that greater emphasis should be placed on mental illness in the pharmacy curriculum in terms of the volume of teaching, its presence throughout the degree (including being integrated within other somatic conditions) and by addressing the subject from a wider range of perspectives (e.g., expanding person-focus):

> *"I think last year was the first year we actually learned about the different conditions. It was in the neuro module and I loved that module because it was actually so interesting but it took to 3rd year to start talking about mental health issues...and again, it was only a lecture for like one or two mental health issues and like that's not enough. […] I think it shouldn't be a 3rd year thing, it should be a 1st, even a 2nd year thing would have been an improvement and then to speak about it more in the 3rd year. So in 3rd year we were finding out what exactly is this illness and what the medication can be done for it, we could do that in 2nd year and then in 3rd year, learn how… what's the best way to go about this, how can we help them more, more like a conversation thing instead of just actually learning what it is."* **FG1P5**

Role-modelling good understanding of mental illness within the educational setting was considered important by participants. They highlighted the importance of lecturers possessing a high level of understanding and demonstrating this in their teaching. From participants' perspectives, this included being able to deliver teaching in an empathic way; demonstrating that empathy towards both the subject matter itself and anyone in the teaching environment who might have lived experience of the mental illness in question. Participants gave specific examples of times when they felt that the delivery of the teaching could have been improved to role-model empathy in the management of mental illness:

> *"…there needs to be sort of a sensitivity to how these topics are handled because some people who are learning about them might have experienced them. And if there is a lack of, sort of, empathy and support shown in what's being taught, for the person who's sat there and has experienced that, makes it so much worse."* **IP3**

In terms of content, there was a clear focus in the data on both the need to learn about how to talk to PMI and having a greater person-focus within taught content. As described above, participants felt that there is a specific way to talk to PMI and that they lacked knowledge about this. Unsurprisingly, participants articulated a need for addressing this within the MPharm curriculum:

> *"I think we need to be taught like the conversation..."* **FG1P1**

Going beyond initiating and continuing conversation with PMI, participants wanted the curriculum to better prepare them for applying theoretical knowledge in practice more generally. While undergraduate participants felt that they had learned some science (aetiology of mental illness and pharmacology), they were unsure of how this knowledge should be used in practice:

> *"How to recognise it, how to speak to them, the actual best things to signpost for different situations. We just need like a 5 credit module which is more like roleplay where you're actually like this person's like this, now what?"* **FG1P5**

> *"I think the only time I remember talking about mental health is in neuropharmacology and it was not even from a patient care perspective, it was "oh this is what's going on…these are the treatments available" and that's it."* **FG2P3**

However, participants began to reflect on the nature of this knowledge acquisition and that it might not be possible to fully meet their imagined needs within the confines of the pharmacy degree which is predominantly taught in the academic setting. They were referring here to the unique and unpredictable nature of interactions with people in the clinical setting and suggesting that aspects of this would have to be learned through practice:

> *"…like there's one that has issues with his family, the other one has issues with work, someone is coming in with issues with his partner, or her partner is like, they are different, and case-by-case like that, so I feel as much as practice at uni could help, it doesn't take into consideration the fact that you need your experience like in the work, because yeah it's mental health as I said earlier, it's something that we're still trying to understand, so there's so much that lecturers can do to include like the scenarios and stuff but as much as scenarios could help, we're going to be dealing with real life people, not made up like scenarios and stuff."* **FG3P3**

Indeed, this represented an example of a key difference between data from recent graduates and undergraduate participants. In this example, recent graduates were able to reflect on the proclaimed needs of the undergraduates, explaining that much of the knowledge that they sought would come with experience in practice. One participant brought this view into sharp focus with succinct advice about what can actually be achieved as a part of undergraduate study. The participant suggested that perhaps students' expectations at the point of graduation should be addressed accordingly, teaching them that sometimes experiential learning will just be beneficial in identifying that they won't always have the answer, but that they will learn from such scenarios:

> *"…everyone goes in feeling unprepared and uncomfortable because you're not going to know everything."* **IP4**

Summary

Participants in this study identified deficiencies in knowledge about mental illness in themselves and felt that this arose from inadequate teaching in the pharmacy degree. However, deficiencies were also described in the field of psychiatry itself and among the general population. Poor levels of knowledge about mental illness create a barrier to effective communication with PMI and were seen to contribute to interpersonal stigma. Participants were therefore clear in their assertion that increasing knowledge about mental illness is a critical requirement underpinning their ability as future healthcare professionals.

Participants valued knowing about mental illness and its treatment, but distinguished this knowledge from having an understanding which was perceived as something deeper. From the participant perspective, the distinction was in the ability of the understanding person to empathise with PMI, applying their knowledge in their interactions with them. This might be formal, as in the provision of healthcare by a healthcare professional or informal, as in the interactions between family members. Knowledge was described as something that comes before understanding and this process was not limited to healthcare professionals. It was clearly problematic when people were felt to have insufficient knowledge about mental illness as they would therefore be poorly equipped to support PMI. However, participants also explained that someone might possess knowledge about mental illness but still demonstrate poor understanding by applying their knowledge badly, or choosing not to apply it at all. Having an appropriate level of knowledge about mental illness and its treatment, was seen as being critical to the development of empathic understanding. Participants saw this development of as vital to people being able to apply their knowledge and skills in practice and participants' descriptions of the barriers to such application are the focus of the next chapter, Doing.

Chapter 5 – Doing: Applying knowledge in practice

Introduction

In this chapter, Doing, we move from the cognitive to the behavioural, and consider the barriers that participants perceived to applying knowledge in practice. The overriding sense within the data was of inability and inadequacy although there were limited examples of participants being able to identify areas in which pharmacists bring professional value to the treatment of people living with mental illness (PMI). This category builds on the possession of knowledge as discussed in chapter 4, to focus on how that knowledge might, or might not, be applied in practice. As I will describe, the barriers that participants described were seen to limit their interactions with PMI, negatively affecting their ability to do their job. In turn, this reduced their confidence and preparedness for their future roles. These barriers are categorised into six subcategories:

1. Avoiding mental illness
2. Understanding facilitates interaction
3. Relationships and their norms
4. Inadequacy of pharmacy
5. Limited opportunities
6. Developing confidence to apply and build knowledge

Avoiding mental illness

"…because of the stigma, I think people are less willing to seek help, and I think it's not helped to the same level as a physical problem, or condition is, at all." **FG3P4**

In this category of Doing, behaviour around mental illness was seen to be modified by the existence of both interpersonal and intrapersonal stigma. That is, mental illness stigma causes people to behave differently around PMI and the behaviour of PMI themselves might be affected. Participants seemed to particularly sympathise with the difficulty experienced by PMI. They described the discomfort that might be experienced by both people with and without lived experience of mental illness, who when needing to talk about it, might subsequently avoid doing so. Discomfort around mental illness was associated with emotions such as embarrassment, disappointment and guilt and the stereotypes that someone might hold about mental illness:

> *"…whereas mental health is considered … like embarrassing, it's weak that you've, that you can't handle your own life type of thing, I think that's where I perceive the stigma to be coming from."* **FG3P1**

This concept of avoidance due to discomfort was depicted as being a societal problem, rather than one which pertained specifically to healthcare professionals or the educational context per se. Avoidance was frequently related to the likelihood or content of conversation about mental illness.

Indeed, participants described mental illness as a sensitive or taboo subject which requires careful navigation. They were concerned that because of its sensitive nature, discussing mental illness might prove unacceptable to PMI and that this might lead to unpredictable responses. This made participants, particularly undergraduates, feel wary of such interaction:

> *"I would say he definitely needs actual medical intervention. But I do agree with you, the communication and how to break it down to him will... I think situations like him is where you would experience cases of like if you said to him, would you like to go... I think you would benefit from seeing someone, I think he would be the type of person to respond, "oh my God, why? Do you think I'm crazy or something? You think I'm crazy...""* **FG1P3**

Even where participants felt that they might be able to broach the subject of mental illness with someone, they were concerned that its sensitive nature might cause distress to the individual:

> *"Maybe that's what makes it a little bit of like a difficult thing to talk about because you kind of don't want to... Not that you don't want to offend anyone but like you don't want to bring up a sensitive subject that might affect somebody, I guess, if they don't want to talk about it, I think that's why."* **IP2**

Interpersonal stigma was also seen to vary, and this was explained as being related to the culture of some social groups. For example, people from particular ethnic, age or gender groups were described as having a culture in which greater interpersonal stigma is exhibited than in others. In these groups, the existence of mental illness might be minimised or entirely denied, which clearly affects the ability to talk about it:

> *"I think men obviously do find difficulty in actually expressing their emotions but also I think there's also a culture aspect as well, you know. I've noticed personally, Asians, we don't talk about mental health, it doesn't exist. You cannot talk to your parents about mental health, it just doesn't happen. I think it is starting to get better within the younger generation, like I feel like the younger generation feels comfortable speaking to everyone else in that generation, but I think that's only so helpful if you're really comfortable with the people that you hang out with, which is not always the case…"* **FG2P2**
>
> *"…like it's getting way-way-way much better because there are more like black mental health practitioners, black mental health like professionals in the field now so people have seen that representation and thinking about "oh, if they're black then I can talk to them like without the stigma of thinking, oh it's just a white person disease"* **FG1P2**
>
> *"It feels like they've failed. Because you know, I think it's a generational thing actually because you know, men through generations have been told, no, you're the man, you need to have your act together, crying is for the weak, you know, talking about feelings is for the weak, you know. All these like bad things that if it even comes to the point where he's experiencing something like this, I think it's easier to go to a state of denial and instead of admitting it, because then they feel like they've failed themselves and they've failed what everyone else expects of them."* **FG1P3**

Participants observed that because of interpersonal stigma, PMI might face difficulty in talking about their experience of mental illness. This difficulty was seen to be widespread, but particularly great within the aforementioned groups. Participants expressed that any attempt by PMI to bring attention to underlying mental illness might then be trivialised or disregarded by the person that they are talking to, thus avoiding the need for further conversation:

> *"And then particularly I think it's even not in just sort of, obviously it's not just men, there's still that thing of if someone has depression, people's first reaction is often like, "oh cheer up, it'll pass, and you'll get over it", and "oh you just need to sleep more, or drink more water""* **FG3P1**

Participants also described PMI as internalising this interpersonal stigma, leading to a fear of judgement from other people in relation to their experience of mental illness. Such an experience was likely to affect the behaviour of PMI. As a result of internalised stigma, PMI might minimise their symptoms, avoid acknowledging them at all and avoid seeking help in order to avoid being labelled with mental illness:

> *"I personally feel like maybe it's they don't want the label, I guess because I feel like once you seek treatment I feel like maybe they might just feel like they've kind of got a label with it, so for example, if they were feeling down and they thought like okay, I'm going to go seek treatment but they just don't want the label of like you've got a depression or you've got anxiety or you've got bipolar or something like that, they just don't want to be labelled with it. […] Maybe it might be because it makes it a little bit real, I guess. So sort of... Not that, not that like not talking about it makes it not real but it kind of just... It makes it a thing, if you get what I mean, sort of like it makes it like, like it's a real thing whereas if they're sort of not labelled with it, it's kind of like they're okay, maybe."* **IP2**

There was one deviant case identified in this subcategory. One focus group participant spoke about mental illness becoming easier to speak about now, suggesting that the need to avoid talking about mental illness might be reducing and that people are less bound by the possible adverse reactions of those around them:

> *"I was just about to say that we live in a time now where no-one really cares about what anyone else thinks anymore and we also have access to more resources. So I've noticed like online, even on social media, a lot of people now come out and speak about their experience and share their stories and then they say someone... Like when someone shares their story it inspires someone else to also come out and say, I'm not alone, there's nothing wrong with me, there's millions out there that are going through the same thing as me but whereas before because no-one had the... Well not courage, it was like no-one really had the strength to actually share their story, everyone just kept it like to themselves."* **FG1P3**

The speaker here is however talking specifically about people sharing their experiences online; in a space with greater anonymity and where the reactions of readers are not immediately apparent to the sharer. This therefore reinforces the analysis here, that mental illness is described as a subject which is avoided due to discomfort.

Specifically in this study, the wider (national and international) social context at the time of data collection was seen to be important in modifying avoidance of mental illness. This is because the COVID-19 pandemic was at its height in the UK and mental illness was being mentioned frequently in the news. The data suggested that participants sensed a slight improvement in the ease of talking about mental illness, thereby lessening the taboo, which they related to the global pandemic:

> *"I remember it was probably sometime last year when the whole COVID thing started, like I remember speaking to my mum, she was like "I hope your mental health is okay", and [interruption], sorry, and I was kind of surprised, because that's not the sort of discussion we've had before. But now like I see her trying to be like interested in my mental health, not just "how is uni going", "are you eating", and stuff like that, like she genuinely wants to know if I'm okay."* **FG3P3**

Understanding facilitates interaction

"Because I can appreciate the discomfort in talking about mental illness and because it… I think if you've not had a mental illness, it's hard to understand, it's hard to comprehend." **IP3**

In chapter 4, I described how not knowing enough about mental illness was shown to make conversation about it difficult. The data in this chapter build upon this concept to describe situations in which people might know about mental illness, but still experience barriers to actually engaging in effective interaction due to lack of shared understanding. This might be a result of lacking empathic understanding of what it might be like to experience mental illness. Alternatively, someone might not be able to relate what they know about mental illness to another person's subjective description of their experience. Both of these barriers were seen to be modified by degree of experience of mental illness.

Participants conceptualised understanding of mental illness from an interpretivist perspective as something involving human interpretations of reality (Crotty, 1998, pp.66-67). Someone with a good understanding of mental illness was portrayed as someone who demonstrates empathy, being able to imagine what life might be like for someone living with mental illness. Without developing this sense of empathy, participants suggested that responsibilities towards PMI could not be adequately fulfilled because no, or minimal, shared understanding of need can be accomplished. Such responsibilities occur in the formal domains of providing healthcare and education, but also in the informal interactions between PMI and their friends and family.

Members of the general population were often described as lacking understanding of mental illness. When this was perceived, participants described a scenario in which despite possibly *knowing* about mental illness, people who lack understanding of it are unable to relate well to the needs of PMI:

> *"… a lot of people that I've met that have mental health issues say that the thing that makes them feel even worse is that no-one out there can understand, it's like they can talk to someone but they still don't feel like they're getting across to that person, so that could help make them feel worse."* **FG1P3**

On lamenting the consequences for PMI of poor public understanding, participants identified themselves as being more enlightened than those around them. Participants appeared keen to exemplify not only their own comparatively better understanding of mental illness but also the importance of increasing the level of understanding in the general population for the overall benefit of PMI. Ultimately, participants were clear on the value of being able to empathise with PMI and felt that a greater understanding of mental illness and empathy were closely related:

> *"so to some people it might seem … like I've noticed a shift in their mood but you don't know what it's actually doing to them and it can cause frustration to even the people around them and their friends and it's about having that mindset of … having empathy and like compassion to others and showing them that like, you know, I can understand it's frustrating to me but right now it's not about me, it's about the other person and me doing my best to help them get there and that's the thing, that's why I think even though mental health is spoken about, I don't think people get the full extent"* **FG1P3**

Despite describing themselves as occupying this position of relative enlightenment in the social scenario, participants differentiated between providing help in personal versus professional domains. They were concerned about not being able to adequately understand the experiences and needs of PMI and that this would prevent them from being able to offer professional help. Specifically, they were concerned that a lack of shared understanding about the best or right treatment for mental illness between individuals presents a particular impediment:

> *"Whereas with physical health it's a lot more black and white, you know, you can treat what's in front of you…"* **FG3P1**

They described needing to be flexible in the treatment approaches that they could identify and offer in accordance with the needs of the individual. In this way, part of defining the needs of the individual was seen to be based on determining that person's expectations of what can be provided by the healthcare professional. Without understanding the needs of the individual in this way, it would be very difficult to offer help. Even once a treatment approach has been chosen, the management of mental illness was conceived of as a long and complicated process:

> *"…it's not like a maths problem, you know, mental health, it's not like something that's like a quick fix, you know, you can't just figure out, oh okay, that this person's got this wrong with*

> *them or you know, has this problem, let's sort it out and that's it, it's done, it's a progress, you know, it's development within that person, their emotional wellbeing, physical wellbeing, everything is affected and that doesn't fix in 1 day or 2 days or a couple of weeks, it could take years."* **FG1P4**

Without being able to fully define these needs, which requires a good understanding of mental illness and its treatment in practice, participants were concerned about their ability to provide help. They went further here though and wondered whether they might cause harm through trying. Participants cautioned against making assumptions about someone's poorly-understood experiences or needs, expressing that it can be tempting to make a judgement about ill health based on someone's appearance:

> *"…he doesn't seem like he's, you know, he's got any physical symptoms that are wrong with him, he doesn't seem ill, it's just his parents are concerned about him being alone or although he's, there's nothing in here to say he's said anything about how, if he has personally got a problem. He may not be able to express that, but he's not actually said he has a problem. But Jay* [vignette depicting depression] *you can visibly see that he, people are saying that he visibly looks like he's sad and miserable, which is where you should be concerned, whereas John* [vignette depicting psychosis] *they're concerned that he's alone and he may be speaking to himself which is, it's hard to determine and that can be determined as someone being unwell or not because he's not even expressed it himself or there's not any physical attributes…"* **FG2P4**

> *"…because he's refusing to see anyone, talk to anyone, even bathe, like basic hygiene, keeping on top of his basic hygiene, you really don't know what's going on with his head, what he's feeling like and he feels as though he's being spied on so it makes you think, because we don't know anything about what's going on in his head it's just difficult, like how would you... How would you get him to speak about that?"* **FG1P4**

Broadly speaking, experience of mental illness, whether in the professional arena or in personal relationships, was seen to engender a greater understanding of mental illness:

> *"In my family I've seen more of the people who work in healthcare, they tend to understand it more so than those who don't work in healthcare. Which is something that just like I just realised while you were saying that because it's so true, like when you have, you know, even if they're first gen if they work in healthcare they tend to understand the implications and, you know, the effects of it than those who actually don't work in healthcare."* **FG2P3**

Experience of mental illness was seen to arise through contact with PMI, or from personal experience, but both were considered valuable in engendering empathic understanding. Participants described a sequential approach to developing such understanding though. They described this as something which starts with the ability to identify and talk about personal mental health, before then being able to do the same for other people:

> *"I think, yes, you have to take responsibility for your own mental health to then be able to help other people with mental health issues because you have to be able to understand the concept of mental health"* **IP4**

Relationships and their norms

According to participants, everyone needs relationships on which they can depend to support their own mental health. This subcategory describes the importance that participants ascribed to these relationships for PMI as well as how their nature might affect how support for mental illness can be negotiated. Specifically, participants articulated a need for PMI to be surrounded by a range of supportive individuals including family, friends and healthcare professionals. Through supportive relationships, PMI might see that people have time for them and that they are safe to talk about their experiences in a way that will not be subject to judgement, i.e., they will be met with empathy. However, some relationships were felt to incorporate boundaries which might inhibit provision of care according to the accepted norm for that relationship. Problems in support for PMI were therefore identified when relationships were absent or boundaries within them were too great.

Participants suggested that it would be of particular concern if their patients living with mental illness did not have sufficient access to informal support to complement what they can offer as professionals. Where such support structures are present for PMI, the role of the pharmacist was perceived to be easier:

> *"…as like a healthcare professional I feel like for me it would be easier to help Jay* [depression vignette] *because of the fact that he's got the work network so, you know, there's counsellors at work... He's actually going out, you can somehow access him, like someone out there will be able to get in touch with him…"* **FG1P4**

But the converse was also seen to be true, in that where such relationships were absent, participants expressed concern that this might undermine the support that they could offer:

> *"I think like a big barrier is you are a medical professional at the end of the day, you're not their family, so all you can really do is like give them help there and then whilst you're in the pharmacy … But for example if they feel good whilst they're speaking to you, they think they've got, imagine it's something in their home life that's causing this, they go back home, … and then things aren't getting better. I feel like it's quite hard … because you can't be there for them all the time…"* **FG2P5**

After the existence of relationships in the first place, the impact of the nature and qualities of these relationships were discussed alongside how this might impact the provision of care. Firstly, participants discussed the nature of relationships. This was described as depending on the people involved, their knowledge (as already described in chapter 4) and the expectations that each party has of the other. Ultimately, conversation about mental illness may be too difficult or at least might need navigating with great care:

> *"So we may know, okay, we could probably say these things and it will help them, like a structure say to a conversation for someone who had mental health issue but do we really hold that type of position in their life to be able to talk to them like that?"* **FG1P4**

Building on this, participants talked about the importance of getting to know PMI and building rapport with them. Developing a good sense of a person and building rapport enhance the likelihood that mental illness will become an acceptable topic of conversation within that relationship:

> *"I feel like if you don't know someone that well, people generally don't like talking about their feelings, and going too deep into that, and I think like what* [FG3P1] *said a little bit ago working in a pharmacy, people love telling you about their physical problems, like "I've got this, I've got this, I've got this", they won't shut up about it, but if you speak to them about their feelings there's almost like a block there … unless it's like a family member or a friend where you know that person, you're in that comfortable space to speak about stuff like that"* **FG3P4**

> *"And so you might have to build up this rapport with them, maybe even for a few times that they come into the pharmacy, it might not be straightaway where they're like "okay, I'm feeling this, I'm feeling suicidal, I'm feeling depressed", they might not come out and say it, it might be something else that they'll say,"* **FG2P2**

Having a close relationship might however bring about a deleterious effect on the ability to talk about mental illness. Participants described a scenario in which the listener might make assumptions about the experience or needs of the PMI based on the knowledge that they already have about this person, thereby reducing the subsequent understanding of the actual situation. In this way, the ease of making assumptions based on what one person already knows about another was felt to be a barrier to the development of empathy. The person living with mental illness might therefore decide not to talk to someone with whom them have a close relationship for fear of their experiences and needs not being fully understood as a result of assumption or extrapolation:

> *"I think it's a thing of blank slates, you know … when that person doesn't know anything, it's literally just you just talking and I definitely think it's easier to talk to professionals, like someone that doesn't know anything about your life … than maybe someone that can inject their own thoughts and feelings ..."* **FG1P2**

In the data described above, we have seen that closer relationships are generally seen to facilitate support for PMI, however even close relationships were seen to be modified by what is expected of them. For example, the norms of the pharmacist-patient relationship were discussed as presenting both opportunities and threats to providing care to PMI although the opportunities were somewhat more limited. Participants described PMI as likely to feel at ease speaking to pharmacists about their mental illness because of an expectation that they would be able to help due to their professional standing. However, this was dependent on the development of a trusting relationship first.

Participants shared the concern that their professional role prevents them from interacting in what they described as a natural, human way. They described a sense of liminal discomfort, seeing the need to fulfil responsibilities to PMI as both a person and a professional in the same instant, but being concerned that by responding in a human, empathic way, they compromised their professionalism:

> **FG1P3:** *"I think, like back to like what you said, training, like give actual training on how to speak to... Like tell people what the difference is between being professional and being... Like combining empathy and being professional at the same time because..."*
>
> **FG1P4**: *"Human nature... Yeah ..."*
>
> **FG1P3**: *"Because I don't know the difference, genuinely, I think human nature is just to console someone but then as according to the guidelines of the legislations it could be deemed unprofessional or illegal, so I don't know."*

As a professional for example, participants felt that it would be inappropriate to use instinctive, caring responses such as physical contact or to show their emotions when working with someone experiencing distress. Participants agreed that such responses were to be avoided. Talking about a consultation with a patient prescribed antidepressants, one participant described what they thought would have happened had they reacted emotionally to the patient's story:

> *"It would have made it worse. I'm glad I kind of held it in but I really wanted to just be like..."* [gestures tears flowing down face] **FG1P5**

Maintaining a professional approach in the pharmacist-patient relationship was considered to be a priority. Physical contact was described as offering greater comfort to PMI than words alone, but it was felt not to be possible to offer this whilst maintaining professionalism. This boundary was further reinforced by physical boundaries such as workspaces, screens and physical distancing required due to the COVID-19 pandemic:

> *"it was difficult in that your sort of natural instincts to comfort someone, particularly in a COVID bubble, were somewhat restricted."* **IP3**

Finally, pharmacists were described by participants as having a status which would be associated with the expectation of the ability to provide care. If PMI approach pharmacists with an expectation of help, then this affords the pharmacist the opportunity to provide it. The pharmacist's ability to meet this expectation however, depends on their knowledge and skills and participants felt a burden associated with this expectation. They felt that even if the pharmacist possesses some of the required knowledge and skills, that they would be insufficient to meet the PMI's needs which were seen to be broad and that the pharmacist would be stretched beyond their traditional roles:

> *"So I think we are naturally going to come from like the pharmacy perspective, […], so you can sort of think about oh well the patient comes in and they need antidepressants, or antipsychotics, or whatever's going on, but I think we've all mentioned it before, you know, you need to treat the patient as a whole, you need to figure out if there are any contributing factors. So if there's something specifically, socially, it may be that you need to get other departments involved, […], it may be that they have physical health conditions, either caused by their sort of lack of self-care and things like that, and it's that sort of multidisciplinary holistic care we need to look at what the patient needs. And I think it's […] quite difficult to understand how maybe sort of the CBT and talking therapies, things like that, may actually be more beneficial, […]. Whereas there are, particularly with mental health, a lot of other things that need to be considered..."* **FG3P1**

Inadequacy of pharmacy

Heightening the difficulty applying mental health knowledge in practice arising due to poor understanding and relationship barriers, participants described the inadequacies that they perceived in the treatment options at their disposal as pharmacists. Participants were aware of the availability of medicines for the treatment of mental illness and felt that they could talk to PMI in general terms about them. However, they also perceived these medicines to be of limited value in practice. They explained that the value of medicines is limited by their variable clinical effectiveness and specific perceived problems arising with their use such as risk of addiction, side effects and the need for long-term use. In relation to clinical effectiveness, participants considered medicines as being a supportive aspect of treatment, emphasising that they are only one part of the solution and they were uncertain that medicines could really be relied upon to treat mental illness:

> *"…like we're trained for illnesses that affect the body but this is something that affects the mind, and … like I don't know, it just sounds like it's not something that medication can solve so it's very, it's tricky…"* **FG3P3**

> *"while Jay* [vignette depicting depression]*, although he may still have mental problems, he has symptoms that he's not sleeping, he's losing weight, these are things we can actually take steps to manage while John* [vignette depicting psychosis] *is a lot more complex"* **FG2P4**

This led to a degree of helplessness or reductionism prevailing in discussions about the value of pharmacy and pharmacists to PMI. As well as themselves doubting the objective value of medicines in mental illness, participants discussed some ways in which PMI might doubt their usefulness. For people who are already taking medication for mental illness, participants suggested that there might exist a raft of valid concerns, from the risk of addiction to the need to take medicines in the long-term and the risks of adverse side effects:

> *"I think us as pharmacy students probably know that yeah, there's side effects but every drug has a side effect, every single drug have side effects, so yeah, okay, you might become dependent on these things but you can wean off these drugs and people need to be aware that they can do these things, like some people will think that if they start antidepressants they're going to have it for the rest of their lives. That's not necessarily true."* **FG1P4**

Thus, even where students recognised the possible benefits of pharmacological intervention, there was a degree of therapeutic nihilism within the data; a sense that such approaches are doomed to fail and might not therefore be worth recommending to PMI:

> *"…you can put them on an SSRI or a TCA or whatever you're doing, it isn't necessarily going to help, and I think that would always be in the back of my mind if I was prescribing it, but I'm giving this to someone who is in potentially a really bad place, and I don't know that it's going to work. And chances are it might not…"* **FG3P1**

The complexity of treating mental illness was further increased by the intangibility of mental illness which has already been discussed in relation to knowing and talking about symptoms. Participants were concerned by how they could measure the effects of medicines in mental illness and suggested that without this, they could not track treatment progress in an objective way. In these conversations, participants exemplified their awareness of other, non-pharmacological treatment approaches but expressed uncertainty about understanding their relative place in the treatment of mental illness. This uncertainty possibly exacerbated participants' concerns, leaving them confused about the relative value of support from a pharmacist to PMI:

> *"…sitting in a pharmacy and talking to the pharmacist I don't think that's actually the best option. There are people that are qualified, like mental health nurses for example, they're seeking help and like I said before I think like help sessions or sessions with people suffering from a similar thing, like support sessions for them, I think that's where that's really important. But obviously I think over the years, help for mental health by the government obviously it has been slashed like quite a bit so it's hard to even get onto these things. But I think they are the best like primary help for them for listening than maybe pharmacists because we do have our jobs and we can't always guarantee that time for them."* **FG2P5**

Limited opportunities

So far in this category, we have seen that the ability to apply knowledge to practice has been limited by mental illness being an avoided subject, poor understanding of the experience of PMI, relationship barriers, and the perceived inadequacy of pharmacy in supporting PMI. The next subcategory considers accessibility in the sense that when people know what is required, it is not always available. This was viewed from the perspectives of both pharmacist and PMI, but either way, the result is the PMI not being able to get the support that they need.

From the pharmacist perspective, participants explained their concern that they might not be able to access PMI in order to help them. Sometimes, the barriers to accessing PMI were perceived to be so great that they were insurmountable, and communication became impossible. Examples included technology failures during physical distancing in the COVID-19 pandemic, acute and severe mental illness and encountering people who are entirely unwilling to talk about mental illness. In each of these examples, the participants explained themselves as having little to no power to modify the situation. These examples, whilst being minimally present in the data and therefore not discussed further, add important context to the barriers that PMI might experience in trying to access care described in more detail below.

In their discussions, participants agreed that PMI need to be able to depend on the availability of accessible formal mental health support, but they perceived many failings in this in healthcare. The nature of these support structures was external, but complementary, to the help that might be provided by pharmacists to their patients. Participants related this poor accessibility to inadequate provision of services which they frequently associated with lack of funding and asserted that PMI have to wait too long for treatment after they request it. The focus here appeared to be on accessing talking therapies, with participants feeling that PMI are aware of long waiting lists to access treatment. This awareness makes PMI less likely to seek help:

> *"I think we all understand that* [mental health] *is obviously as serious as a physical problem, but also I think the way it works is it's like quite underfunded as well, and you know, there's a lot of people trying to seek help and there's just not a balance of being able to provide the services to those who need it, in an effective way."* **FG3P4**
>
> *"I just want to say that I think you've also got the whole NHS underfunding issue as well. Yeah, so that's obviously then caused issues, you know, if you try to make an appointment, you know, your GP will say go to this place but it's like "oh you're not getting an appointment for a year" and it's like what's the point of appointments so far in the future?"* **FG2P2**

Participants spoke about the links between underfunding and inadequate service provision in a matter-of-fact way, suggesting that this is a reality which PMI just have to live with. These inadequacies were explicitly related by participants to their own roles as pharmacists and the part that they would play in mental healthcare. For example, participants described pharmacists' services as being more available to PMI than these other support structures:

> *"They either have to pay for it themselves privately to actually speak to an actual therapist because it will take you a year to speak to somebody with the NHS or they're left, unfortunately. Which is then probably like a pharmacist could step in because we're free and here but it's a bad system."* **FG1P5**

Going a step further, some participants seemed to consider a role for themselves in bridging the gap between the needs of PMI and actual service provision. This might take the form of being the person to provide mental health support, providing longer-term follow up after discharge from mental health services, or liaising directly with another service whose support has been inadequate in meeting the needs of their patient:

> *"So I did that, I went round, I was told there was a half-an-hour wait and I said, "I'm not leaving here without this prescription because I do not know what this patient will do if they don't have it." So they managed to get a doctor to sort of sign it there and then."* **IP3**

The amount of time that is required to provide professional services to PMI was also seen to limit opportunities for providing help. Participants spoke in terms of the limited time that they and other healthcare professionals have and how this limits the utility of their interactions with PMI and perhaps whether they even have the opportunity in the first place. Being able to spend time with PMI was associated with demonstrating that pharmacists care about and value the individual. Participants felt that this was likely to put people at ease and to engender a more open dialogue in which the PMI would be more likely to request support for mental illness. It also affords opportunity for the pharmacist to get to know the individual, enhancing the therapeutic relationship and making it easier to identify which professional services might be required:

> *"…it's all very well having your mental health specialists that have stabilised a patient and helped them through the crisis point, but it's your community pharmacists that are going to see them every two, four weeks or however often. They're going to be the ones that they build that relationship with that we've mentioned before, about building that trust…"* **FG3P1**

Time, in the professional context, was perceived as something that is externally controlled. This meant that participants expected to have little choice in determining how it is spent:

> *"…my experience in community pharmacy is very different, it's sort of like you've got to like just get everything done in the timeframe, like yeah you've got the pharmacy advisors or like the pharmacy assistants who can sit and talk to people sometimes but as the responsible pharmacist you've got to deal with the CPSC[5] referrals, you've got to sign off all these prescriptions, you've just got so much going on, like I don't think I've personally ever seen the pharmacist free enough to actually just sit down and have a chat with someone…"* **FG1P1**

> *"…you can't spend, you know, how long you actually want to spend with this patient because especially when you think there's something, you know, like they might be having suicidal thoughts or something, something like that where you really do want to help them but it's kind of like at the same time it's like "okay, how much can I do when I've got, you know, a queue of patients and like a load of baskets to check?" you know?"* **FG2P2**

Participants indicated that more time is required for consultations with PMI but also expressed concern that offering time to PMI would result in them wanting more and more, adversely affecting the time remaining for other patients. People living with mental illness were therefore described as needing a greater time investment compared to people with somatic diagnoses:

> *"Like even if they had a physical illness I would still make sure I do all the same things but I think it's more like a psychological thing for me, like in my head I would just be a bit more wary if I knew it was a mental health patient, so I think... I think it's just a subconscious thing, I think I would just end up spending more time doing the history and really taking my time with it if I knew it was a mental health patient."* **IP2**

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[5] The participant was referring to CPCS (Community Pharmacist Consultation Service), which is an advanced service for the management of minor ailments.

Participants were understandably concerned about how these perceived limits on their time could be managed in a way that met everyone's needs. By describing time pressures as being externally controlled, something that pharmacists just have to adhere to, they painted themselves into a picture of helplessness; they want to help, but can't as there just is not time:

> *"I feel like you haven't got enough time to spend the actual time that they require, like you might spend 15 minutes with one person and it helps them that one day and then they go away and they feel like your help was very, very useful, then they come back the next day and they want to spend half an hour with you and have a chat and then, but you know you're a pharmacist and you have to be cost effective with the NHS resources…"* **FG2P4**

> *"That's the other thing, like being cost effective and then also time management it's just it's quite a nightmare sadly and it's one of those things, that's why I think it's really important to know you can refer to this place that will actually have the time to speak to the patient for, you know, half an hour, an hour or whatever they want."* **FG2P2**

Developing confidence to apply and build knowledge

Exacerbating the difficulties presented due to the poor level of knowledge already discussed in chapter 4, participants described a lack of confidence in applying the knowledge they do have in practice. Participants described wanting to enhance the confidence that they have in their knowledge through application in practice, using support mechanisms and through being able to refer to appropriate resources for help. The data here relate to those described in the last subcategory too, as opportunities to build confidence will naturally feel limited where participants perceive insufficiency in their contact time with PMI.

As we saw in the chapter 4, participants identified a need for more education, and this would be enhanced by demonstrating to pharmacy students how this knowledge is used in practice. Overall, participants were concerned about the perceived complexity of treating mental illness *("…because mental health is very complex, because there's no right or wrong answer on what to give to patients…"* **IP1**) and they wanted more learning opportunities such as integration of mental health scenarios into clinical workshops, in which real-life clinical risk was minimised. Participants expressed that such learning in the classroom could then be further enhanced through incorporation of clinical placements in mental health settings. The suggestion was made that mental health practitioner role models are required within the teaching staff to increase students' sense of familiarity with the roles of pharmacists in the care of PMI and to exemplify practical application of knowledge:

> *"…you know, it's something you see in real life, you can't really emulate that properly in education. But for someone like, say for someone like yourself who is specialised, who has experience in that, that can come and talk to us, just for a short amount of time, […] you can gain a lot from someone else's experience and just, you know, sitting down and saying I have*

> *this patient, […] because you can't do, follow these sort of NICE guidance… I remember we did in our elective, […] well this is what we would normally do, but the patient didn't want that, so this is how we incorporated things and changed it to help with that. And that's something that I think we don't get with mental health, something that we don't sort of have that aspect of, it's very strictly like "this doesn't work, we do this dosage, that doesn't work, we do this", whereas you do have to include the patient in there, it's not just their brain."* **FG3P1**

Confidence in applying knowledge in practice was also reinforced when participants thought they would be able to access other people and/or written information. Predominantly, participants focused on the availability of other people as a source of comfort; often professionals who were seen to be in possession of greater experience, skills or wherewithal to support PMI. Drawing upon their experiences or observations of practice, participants therefore expressed greater comfort in supporting PMI when they knew that there were other people whom they could rely upon for support. These supporting people were proximal to the individual thereby instilling confidence and reducing concern about what might arise during interactions with PMI because there was someone else to call upon if required. Additionally, having more experienced practitioners available affords the valuable opportunity to either test out a planned approach to a situation in advance, or to rely on others as more of a safety net – people with greater expertise who are available should an unanticipated need arise:

> *"…so like if you're in a hospital pharmacy say and you're doing a ward round or something and you see Jay* [vignette depicting depression]*, I feel like you'd be quite comfortable talking to him and because you're in a setting where you've got this multidisciplinary team it's a lot easier for you to not necessarily refer but just call someone in that would, you know, someone part of like the mental health team or something…"* **FG2P2**

At the extreme, one participant preferred the idea of referring to more experienced or specialised professionals as soon as it was clear that someone needs treatment for the symptoms of mental illness, thinking that this would be the most appropriate course of action for the person:

> *"…say I'm talking in a community setting obviously, I'd be more inclined to refer … to somebody who's more specialised in both treatments and any advice that I would give them I feel like would be helpful towards them. Like for example for a lot of like the issues that they might be having, like John* [psychosis vignette] *not being able to sleep at night and walking around talking, I would probably give him some, you know, sleep hygiene tips and things like that. So I feel like we know things which are not necessarily going to affect the person negatively but in terms of pharmacological treatments I would say I wouldn't recommend any to both of them because I think there needs to be more research done by a specialist. So I feel like referral would be like the best course of action and I don't think I would feel cautious … or nervous … I feel like I'd be confident in referring them."* **FG2P3**

The recent graduates, who had been in professional practice for several months by the time they were interviewed for the current study, were able to exemplify and expand on the value of having other professionals around you, giving a better sense of the teamwork which might be required in mental healthcare. In interviews, these examples included different members of the pharmacy team who had already established good relationships with particular PMI. These team members were seen to be in a strong position to offer emotional support to PMI in acutely stressful situations, in turn making space for the pharmacist to overcome the technical difficulties in the situation. Additionally, participants described examples of how pharmacy and general practice teams can work together for the PMI, thereby sharing the burden of care.

One recent graduate participant also reflected on the advantages of the availability of material resources from the perspective of enabling professional independence. The value here was in being able to retrieve and act upon the information during interactions with PMI, perhaps in the context of appropriate signposting:

> *"…all the information that I needed was on the system which was directly in front of me, so all the local places you can refer to and local numbers for crisis lines and stuff like that, that was all there if I needed it and easy to access whereas in community, I think it happened maybe once but it was less easy to access therefore felt a little bit more uncomfortable…"* **IP4**

This case might be considered deviant from the rest of the data in this subcategory as the participant is talking about working in isolation, albeit with material resources, to support PMI. However, this supports the explanation of the subcategory in that across the data, participants refer to using resources to develop the confidence to take autonomous actions. Participants therefore explained the value of being able to access reference sources whether in the form of a more experienced person or reference materials in supporting their professional roles with PMI. In either case, participants suggested that they gained confidence to carry out their professional role through access to such information sources and that without them, they would be less confident to meet the needs of PMI.

Summary

In this chapter, I have described the data which fit the major category of Doing. Behaviour around the subject of mental illness has been seen to be affected by a range of influences related to the subject of mental illness itself as well as the different attributes of actors in various social situations, including PMI, their friends and family, healthcare professionals and the general public. For participants, confidence to work with PMI was a particular modifier of their future professional behaviour and some suggestions for how this confidence can be improved were described. The subcategories presented here coalesce into this major category to paint a picture of mental illness as being hard to treat. Mental health is hard to treat because it is difficult to talk about and difficult to understand because it cannot be seen or measured. Further, because it is difficult to treat, there might not be sufficient time or resources to offer to PMI who need them. Inaction, arising as a result of these difficulties was seen to devalue mental illness and its treatment in professional practice and in the pharmacy curriculum. This will be explored in the next chapter: Valuing.

Chapter 6 – Valuing: Willingness to try

Introduction

Over the course of the last two chapters, I have demonstrated how participant data fit into the first two major categories of Knowing and Doing. Through participant quotes and examining the relationships between these, I have exemplified participants' opinions on the importance of knowledge about mental illness and how this is perceived to be lacking from multiple perspectives. This lack of knowledge can, but does not necessarily, affect subsequent actions. What people do, or don't do, around people living with mental illness might be as a result of their poor underlying knowledge. I also showed that someone might possess reasonable knowledge about mental illness, but still not do enough, or even anything at all, to support PMI and that there are a variety of other forces which are thought to drive this inaction.

In this chapter, I conclude the presentation of the data with the third major category, Valuing. As with the last chapter, the content builds on what has gone before. Just as the possession of knowledge modifies resultant action so does action modify the value ascribed to PMI and their experiences. The lower value of mental illness, particularly in comparison to somatic illness, was described in relation to it being taken less seriously. This observation crossed several domains: education, healthcare and within society at large, in which mental illness is disregarded entirely or given less time and attention than somatic illness. The attribution of lower value is a fundamental aspect of stigmatisation, which can occur through the processes of labelling and stereotyping (Link and Phelan, 2001; Schulze and Angermeyer, 2003; Pescosolido and Martin, 2015; Stutterheim and Ratcliffe, 2021).

As described in the chapter 5, participants generally viewed mental illness stigma from a perspective of personal enlightenment. They did not seem to consider themselves as a source of stigma, but described it occurring within and between people and at structural levels all around them; it was a problem associated with other people. However, during analysis, examples of mental illness stigma were apparent within the ways that participants spoke about PMI in terms of both content and word choice. I refer to these stigma manifestations as being implicit, as participants did not appear to recognise themselves or their actions as being explicitly stigmatising. This chapter therefore describes observations of both explicit and implicit stigma within the data, and these are grouped into four subcategories:

1. Devaluing mental healthcare
2. Devaluing the self
3. Devaluing mental illness in the pharmacy curriculum

4. Exemplifying stigma – participants' implicit stigma

Devaluing mental healthcare

Healthcare services were seen to devalue mental illness, and people experiencing it, through poor availability and by taking somatic illness more seriously. This clearly links to the limited opportunities to access services as already discussed within the major category Doing. The interaction between limited service availability and the messages this gives about the value of PMI are difficult to disentangle, but through lack of availability, lower value was seen to be ascribed to the needs of people living with mental illness. Participants perceived this as an example of structural stigma in the health setting insofar as provision of mental healthcare is inadequate and discrimination is experienced in the general healthcare setting:

> *"I think I said it before but it's just not held to the same standard as physical health, and like I think with the difficulty in accessing help, creates more stigma because of just nothing there to actually direct people to, all of the time, and I think how* [FG3P1] *said as well it's complex, and you know, it can be really difficult to treat, and it's embarrassing for some people, like it just builds it up, and builds it up."* **FG3P4**
>
> *"…if there's physical symptoms like "oh yeah, okay, this and this and this is wrong with this person" but when it comes to your mental health unless you're expressing physical symptoms, which not everyone does, you know, it can be something where, you know, a GP or someone you've referred to is going to be like "oh no, they're fine" or, and just completely overlook them…"* **FG2P2**

Participants suggested that only PMI with the most serious conditions get treated and that people had to wait until they had hit *"rock bottom"* (FG3P1) before treatment was justified. This was explicitly compared to somatic illness in which intervention was seen to occur more readily:

> *"…people don't seek help until they have like hit that rock bottom, until they've had a breakdown or until they are seriously ill, whereas and they don't sort of potentially seek treatment, or they aren't treated until that point. Whereas if you like break your arm, or break your leg like we were saying, you don't wait until they've broken every bone in order to treat that issue, like we're more preventative, there's not as much… it's getting a lot better, in recent years particularly I think I've seen a lot more support around and things like that, the uni have got a lot better, but there's less of the sort of preventative, help you to not reach rock bottom, and obviously by the time someone's hit that stage it's a lot harder to treat, and a lot harder to help them."* **FG3P1**

This dichotomy in treatment was seen to extend to the roles of pharmacists working with PMI. Participants described the likelihood that in their professional practice, they would focus on, and therefore value, objective, somatic symptoms over subjective symptoms of mental illness:

> *"…we treat the physical symptoms, so someone comes to us and says "I'm having trouble sleeping", you realistically if they suffering from something like depression, we need to treat the depression because that's causing the problem sleeping, but because we understand*

> *sleeping better we can give them tablets to help them sleep, and that's sort of seen as, it's putting a band aid on a really serious wound, you know, it's not going to help in the long run, but it's a physical symptom, we see it, that's like our comfort zone, we understand it better so we can treat it better, so we go with that rather than actually treating what's causing the issues if that makes sense."* **FG3P1**

While participants appeared theoretically willing to support people living with mental illness, they had an expectation of PMI also making an effort in being willing to listen to and then act on professional advice i.e., that they would value the advice sufficiently to take the recommended action. Sometimes this was discussed in personal terms, with participants describing the steps that they had taken to look after themselves and on other occasions they were more explicit about their expectations of their future patients' agency:

> *"But ultimately the choice of going to those services will be up to that person, so it's like there's really not much you can do other than that."* **FG1P3**

The sense of helplessness arose in the data again here as already seen in the inadequacy of pharmacy and limited opportunities subcategories of Doing (chapter 5). In this instance, participants suggested that it might not be worth trying to help if their advice or services were going to be disregarded eventually anyway.

Devaluing the self

People living with mental illness were perceived as being dependent on the availability of formal and informal mental health support structures – places that they can turn to for help. Building on the observation that mental healthcare itself might be devalued, another subcategory of data described the effects of this on PMI. When services are inadequate and do not meet the needs of PMI, they are let down by the system. In turn, this was seen to be off-putting to PMI, with participants suggesting that people who want or request help for mental illness might disengage or give up when services do not meet their needs and they start to feel devalued:

> *"…it's been in the news quite a lot about like different waiting times, and stuff like that, so people probably think well what's the point, like if I'm going to be on a waiting list for two years is there any point even going forwards and asking for help if they know it's going to take that long to actually get any help in the first place, they might just think oh well I'll just kind of struggle along on my own and sort of see what happens…"* **FG3P2**

This might also engender a sense among PMI that they are insufficiently ill to warrant intervention, thus devaluing their own experience and further exacerbating the situation as people wait too long for appropriate treatment:

> *"…so because you can't get like almost immediate help straightaway, it causes it to get worse, and then that causes more detrimental effect to the person, rather than being able to access help straightaway."* **FG3P4**

People living with mental illness were also described as not having sufficient self-worth and that as a result, they do not feel that they deserve help and support. They might identify other people who are more in need of help and support than they are. Alternatively, PMI may blame themselves for the presence of mental illness and both these self-stigma manifestations were seen to further inhibit the likelihood that PMI would seek the help that they need:

> *"I also think like back to the original question as to why they might not want to get help is like that it affects their self-worth so much that they don't deserve, they don't think they deserve help … I need to do this myself, I don't deserve help, like this is like... And literally they've just put themselves down even more."* **FG1P5**

Devaluing mental illness in the pharmacy curriculum

In addition to the healthcare system, structural stigma was discussed as occurring in higher education, though participants did not necessarily identify the problems they discussed as being representative of stigma. Mental illness was described as being less prominent compared to other therapeutic areas within the pharmacy curriculum. This was seen as contributing to stigma for two key reasons. Firstly, the minimal time dedicated to mental illness in the curriculum devalues it, perhaps reinforcing or creating prejudices about the importance of mental illness, and by extension PMI, in pharmacy practice. Secondly, failing to teach our students what they perceive to be enough about mental illness, means that ignorance is perpetuated, reinforcing all of the difficulties already discussed in chapter 4 (Knowing):

> *"…so I've had sort of the Papyrus training, things like that, but again yeah it wasn't with uni, so I would still feel… and I think that may build into the stigma through my point of view of I would be nervous to try and get involved in these patients' care, purely because I don't know that I would be the best person to do it, because I don't know, or I wouldn't feel that I would know enough to actually be of help to them."* **FG3P1**

Participants shared the view that mental illness should be ascribed greater value within the pharmacy curriculum. Here, value was indicated by quantity (number of hours or number of sessions) of teaching relative to other subjects in the curriculum:

> *"…you know, English, maths, history, mental health, it's like it needs to be like taught, like stepwise, not just sort of like oh, here's a 3 hour lecture on mental health for this year, then you're going to have another lecture next year on mental health, it's like well, no, it's an everyday condition, it's the same as cardiology, mental health should have the same importance as cardiology or renal, something like that…"* **FG1P1**

Discussing the perceived inadequacy of their education on mental illness, the suggestion arose that perhaps the subject is deliberately avoided because it is difficult for academic staff and students to navigate:

> *"I don't know if some of it is down to the kind of, a bit of stigma as well, like we were saying at the start, like if lecturers know that people are going to be uncomfortable talking about it, and you always get that one person that's like, "oh this isn't real", like they might just think it's not, if you know, you can't teach a lecture if somebody's sat there going, "oh the brain isn't real, mental health isn't real", it's kind of, is a bit hard to teach it in a way that makes those people that think like, that understand. So, I don't know if that's part of it as well, is that like it is an uncomfortable topic for some people."* **FG3P2**

Participants suggested that because mental illness seemed to have lower value within the curriculum, students might interpret this as meaning that learning about it is also of low value, something that they do not need to know much about. Another way of measuring value in curricula was considered here – that of assessment weighting. Participants suggested that if something was not worth a large portion of their degree that it is less worthy of study and that students will naturally focus their efforts on things that seem to matter the most in this respect. Finally, value was also associated with those things being taught later in the course, most proximal to professional practice as could be assumed to be the most clinically relevant. Participants raised the possibility of teaching mental health throughout the course and progressing from introductory topics in year one to the skills that they will be using in practice in final year and this view was supported by this recent graduate:

> *"…have it in final year as well because I guess final year, like students just see it as the most important year, I guess, and maybe make it a little bit more of the syllabus, so like it's not just about physical health it's also about mental health, so students feel like a bit more confident, like going out, like going out of uni that they've just studied it before pre-reg."* **IP2**

Implicit stigma manifestations

Stereotypes of mental illness endorsed within Western populations include dangerousness, incompetence, permanence and blameworthiness (Volmer, Mäesalu and Bell, 2008; Corrigan and Shapiro, 2010; Sheehan, Nieweglowski and Corrigan, 2017). When participants discussed their observations, perceptions and experiences of PMI, endorsement of some mental illness stereotypes was apparent as was evidence of some prejudice towards mental illness, suggesting agreement with some of these stereotypes (Larson and Corrigan, 2008). No participant expressly recognised a link between the ways in which they described thinking about mental illness or people living with it and their anticipated future behaviours. These aspects of the data are therefore presented here as implicit stigma manifestations which included pitying PMI, stereotype endorsement and the use of stigmatising language as will be discussed in the following four short sections.

Feeling pity for PMI

The first implicit stigma manifestation was identified in the feelings of pity for PMI which were shared by participants. When speaking about mental illness, participants described their sense of pity using words such as *"sadness"*, *"upset"* and *"detrimental"*. Elaborating on these feelings, participants spoke about the loneliness which they presumed was felt by people living with mental illness and how *"terrifying"* some symptoms must be, as well as explicitly referring to mental illness as being stigmatised and by association, the negative impacts of this on PMI. Feelings of pity have been associated with attributing a sense of that PMI are not in control of their symptoms and tend to engender a wish to help (Corrigan, River, *et al.*, 2001; Riffel and Chen, 2020b). In my research, both of these experiences, feeling sad for PMI and the sense that PMI lack control over their symptoms, were apparent in the data:

> *"…it is just like this overwhelming like sadness for them, because it's like with both of those cases I can't, you know, I've not experienced that, I can't put myself in that position, but it is like particularly with patients that are potentially having hallucinations and that paranoia, things like that, it must be terrifying not knowing what's real, what's fake, that constant like anxiety that there may be someone after you, there may be someone spying on you, that feeling of with both cases "I can't sleep but I'm really tired, or I'm not eating, I'm not looking after myself", like you just, so that sadness, you really feel for them, and you want to help them, but then it might, sort of you to my pharmacy head and I know it's really difficult to help them…"* **FG3P1**

The uncontrollability of symptoms of mental illness was also related to a sense of professional helplessness:

> *"…although you've done everything you possibly can, sometimes the mental illness takes over."* **IP3**

Incompetence

Suggestions of incompetence were evident within the data. Participants did not refer explicitly to PMI as being incompetent, rather they inferred that their ability or cognitive processes were somehow impaired. One specific example of such inference within the data was when participants discussed PMI's ability to articulate their experiences of symptoms of mental illness:

> *"I would see it as just somebody with, stuck with a lot of stuff in their mind that they're not able to communicate well to another person."* **FG2P4**

Participants attempted to rationalise or justify this deficit, but the ultimate intimation when taken at face value, was that PMI are less able to describe their experiences than people without mental illness. Participants also suggested a view that PMI might be more cognitively impaired than people without mental illness. For instance, PMI might be less likely to pay attention when pharmacists try to offer advice on medication or may be less aware of their medicines regimen overall:

> *"…say if I'm doing a drug history and I ask them, okay, like they tell me their medicines and then say there's something on their GP record that they haven't mentioned and maybe it's just something that they used to take a long time ago but they'd forgotten about, so if I*

> *come out with that medication, I'm like okay, this is still on here, do you take it, then they might think, oh and they might start to get worried that "oh, should I be taking it? Maybe I shouldn't be taking it" and they could get worried about something like that, so I think it was little things like that or even if like, for example, they get a bit... Say if they're on a lot of medicines and I'm trying to like confirm it and then like they can't remember, they might get a bit stressed and say "oh, like should I know the names of all my medicines? Why don't I?" things like that."* **IP2**

Avoidance related to fear

Participants used words relating to fear ("*worry*", "*wary*", "*anxious*", "*nervous*" for example) when they spoke about pharmacists' professional interactions with PMI:

> *"So I would feel a bit more like, maybe like anxious with John* [vignette depicting psychosis] *because I want to give him the correct care but I might not know what care to give him, so I'd be more like worried if I said something wrong and that might trigger maybe something more."* **FG2P1**

Although all data were analysed together, there was a minor differential here between participants depending on whether they were students or recent graduates. Whilst students spoke about fear in regard to future, imagined interactions with PMI and apprehension involved in non-professional interactions with PMI, recent graduates were able to use their experience to describe emotions that they had actually experienced. Despite this, fear was a commonly spoken about across the data. Fear was specifically related to the risk of adverse consequences following interaction with PMI like making things worse or failing the individual altogether by not providing any help. At the extreme, interactions with PMI might be avoided altogether:

> *"…people might not feel they want to say something because if they say it then they might have to feel like they have to have a solution to that problem and they might not have that solution because they just might be like, you know, maybe they're just like people who aren't trained in like within pharmacy or any sort of like NHS or within health so they don't know what to do, they've just recognised something is wrong but they might not have the solution so they might not know where to go to, so what's the point in sort of saying "oh this is wrong but sorry, I can't help you, I don't know what to do"?"* **FG2P1**

Endorsement of incompetence and dangerousness stereotypes were indicative of implicit stigma as participants did not explicitly label PMI in these ways, rather it was implied in the way that they spoke as exemplified above.

Language

The final example of implicit stigma manifestation was in the language used in the focus groups and interviews. The nature of language itself can be stigmatising and can suggest conscious or unconscious prejudice. The importance of person-first language and the avoidance of value judgements has been reported in the research literature but also disseminated widely through charities such as the Mental Health Foundation (Mental Health Foundation, 2019) in the UK and

Everymind in Australia (Everymind, 2022). Research has shown that the use of stigmatising language about PMI might not affect stigmatising attitudes of healthcare professionals (Martinelli *et al.*, 2020). However, the use of stigmatising language by healthcare professionals may be perceived as discriminatory and perpetuate the problems caused by stigma such as reduced help seeking (Cantlie, 2021).

There is good agreement between these sources about the language which should be avoided to avoid stigmatisation of PMI. The use of stigmatising language by participants in this study was therefore seen to contribute to this major category of Valuing. Participants used terms and phrases which might cause offence or might be considered inaccurate in their discussions. Sometimes these were used as they described their own thoughts and experiences. In other instances, participants used terms which might be considered problematic, but were referring to the thoughts or actions of other people. In this sense, they were suggesting that the words were not their own, but those that others might use. Examples of these are listed in table 5:

Problematic language type	**Examples (emphasis is mine to highlight stigmatising language):**	**Arose in**
Disease-first language and negative value judgements	*"…she almost **committed suicide**…"* *"…if they **suffering from** something like depression…"* *"…because it seems like he's kind of paranoid, could be **schizophrenic**…"* *"…it will be like oh **you're psychotic** or you're this or you're that…"*	FG1, FG2, FG3, IP3
Inaccurate language which sensationalises or trivialises:	*"…that it's actually **messing with his head**…"* *"Yeah, it's like you're **a crazy person**."* *"…poor compliance with her **mental medication**, for her medication for her mental, yeah."*	FG1, FG2, FG3, IP1

Table 5 Examples of stigmatising language from focus groups and interviews

Participants frequently referred to the need to *deal* with the problem of mental illness. However, this word was also used throughout focus groups and interviews in direct relation to people or groups of people. When referring to PMI (as opposed to dealing with a problem) this choice of words infers a sense of undesirability; a task or role that participants do not relish as the person appears to be being described as a problem. When used to describe a problem, the term itself appears reasonably neutral, e.g., "we'll deal with that later", but often sounds negative when related to a person, e.g., "I'll deal with you later" as the parallel is drawn between a person and a problem. The term suggests that negotiation is going to be required and that the process or task will not be straightforward, hence the job becomes less desirable and perhaps put off until later. Use of this word in reference to the problem of mental health was extremely common throughout the data. However, it was also used in reference to PMI in two of the three focus groups and three of the interviews in ways similar to the following examples:

> *"…everyone needs to be educated to a certain extent on* ***how to deal with these people****…"* **Interview participant**[6]
>
> *"There was* ***one person that was very difficult to deal with*** *because she just struggled with just general life really."* **Focus group participant**

One participant perhaps realised this sense of negativity and amended their choice of words mid-sentence:

> *"…then we had someone from like the patient care side come and talk to us, about* ***how we deal with like what we do with*** *actual patients…"* **Focus group participant**

And I was not immune from using the term in the same way:

> *"…as you've all said, you know, you don't have to be a specialist mental health pharmacist* ***to be dealing with people*** *who experience mental illness every single day in your professional and your personal life…"* **Hannah, FG1**

The choice of language to use in relation to mental illness can be difficult for people to navigate and as a known concept, this might contribute to participants' sense in this study that they need to be very careful about word choice and that there are right and wrong things to say to and about PMI. As shown in these data, the way language is used might reveal implicit personal stigma. It can also trigger implicit stigma in others (Werder *et al.*, 2022), emphasising the importance of considering the way language is used in pharmacy teaching.

Summary

In this final data chapter, I have shown how participants described mental illness and people living with it as being valued or devalued because of the ways that knowledge and behaviour are used, or not used. Overall, participants were concerned about the way that they see mental illness being devalued in healthcare and pharmacy curricula. People living with mental illness were described as being affected by this as they internalise this message of reduced value, fuelling intrapersonal stigma. The final subcategory (Implicit stigma manifestations) may at first seem a little detached from the remainder of the analysis as it doesn't tell the story of the data like all of the other subcategories. However, it is here that we see examples of the ways that participants feel and talk about mental illness and PMI. It was therefore felt to be extremely important to present these data

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[6] In this section, specific identifiers have been removed to minimise the risk of victimising the speaker

as part of this major category as these observations are relevant to and inform the discussion which follows in the next chapter. They also offer critical examples of beliefs and behaviours which might be improved following curricular changes based on my findings and the resulting recommendations. Before moving on to discuss the findings of this research and their contribution to the literature, I describe how the three major categories support one another.

Bringing the data categories together

As suggested as the last three chapters have progressed, the three major categories of Knowing, Doing and Valuing cannot be viewed as discrete processes, rather each process informs and modifies the next. They might therefore be viewed as a sequence:

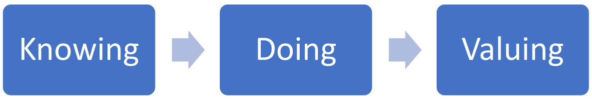

Figure 7 The three major categories as a sequence

Here, what is known about mental illness informs what can be done which in turn demonstrates value, or lack thereof. This sequence suggests that if we are to reduce the stigma around mental illness, which can be conceptualised as increasing its value, we can aim at the value itself, but we must also consider the underpinning knowledge and actions. However, this sequence is complicated and attributing messy, human, social processes to a single part of the sequence is challenging, as has been seen in some aspects of the last three chapters. Additionally, by affecting the value of mental illness, we then make knowledge of the subject more or less important, thus taking us back to the beginning and showing that the categories are perhaps better viewed as a cycle:

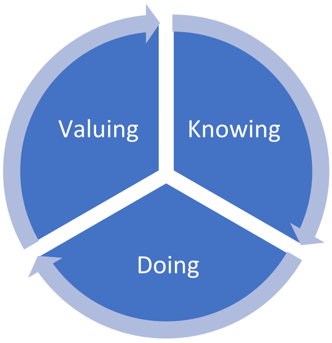

Figure 8 The three major categories as a cycle: The KDV cycle

As with the sequential presentation, this model demonstrates the importance of aiming stigma reduction strategies at all three stages of the process whilst acknowledging their interplay and the possibility that making improvements will amplify the effects of intervention as the cycle continues. In the next chapter I will discuss how my research has provided the empirical evidence from which this model has been developed and how this contributes to knowledge in the field of mental illness stigma and pharmacy education.

Chapter 7 – Discussion

Introduction

In this chapter, I review the findings of my study and their relationships to previous research in this field, with reference to three stages of the KDV cycle: Knowing, Doing and Valuing. Alongside articulation with current literature, the novel contributions that the findings bring to existing knowledge are described. Finally, I provide a model summarising how my findings might change the way that we think about the relevance of mental illness stigma to preparing pharmacy students for their professional roles.

Knowing, Doing, Valuing: The KDV cycle

Overall, participants felt unprepared for their future roles with PMI and as discussed over the last three chapters, this was modified by the existence of stigma at intrapersonal, interpersonal and structural levels. The categorisation of the data showed that both what people know and what they do about mental illness affect the way that it is valued. The categories were found to be cyclical in that when mental illness is valued, knowledge about it increases as it becomes worth knowing more. Each of the three categories was broad in content and as described, there was some overlap as might be expected from descriptions of human processes which cannot always be neatly categorised. In the Knowing category, we learned that participants feel that they do not know enough about mental illness and that they attribute this to deficiencies in the teaching in the MPharm degree programme. Poor knowledge was seen to perpetuate stigma and inhibit what people can do to help PMI. Thus, moving into the Doing category, participants talked about their unpreparedness to work with PMI. They described lacking knowledge and skills but also the confidence and ability to apply them. Participants described feeling helpless, with most of the barriers to providing professional services being outside of their control, e.g., time constraints, inadequate therapeutic approaches and inadequate service provision. Finally, Knowing and Doing were seen to inform the way that mental illness and PMI are valued. Participants explained how mental illness is devalued in the curriculum and in healthcare and recognised a need for improvement. Critically, participants did not seem to recognise that the deficiencies that they had identified in their own knowledge and future professional behaviour would in turn devalue mental illness. All of this was encapsulated in figure 8 at the end of chapter 6: the KDV cycle.

Knowing and Doing: the relevance of my findings to pharmacy education

"I think it's sad that our responsibility is to signpost them. The fact that we can't do much more, it is saddening to me personally. I wish I could find a way that like pharmacists are more involved."
FG1P4

Pharmacy students perceived their preparedness for working with PMI to be hampered by their poor knowledge about mental illness and its treatment, giving rise to the first stage of the KDV cycle. They explained that this results from there being insufficient focus on the subject in the pharmacy curriculum and opined that this inadequate teaching would propagate stigma through ignorance. Such inadequacy has already been labelled as an example of structural stigma in existing literature (Henderson *et al.*, 2014). The relatively small amount of teaching in comparison to other therapeutic areas led participants in my study to feel that mental illness was devalued within the curriculum, and this affected assumptions about the future worth of this content. Participants explained that subjects given little teaching time and that are not assessed are associated with lower value in terms of assessment and clinical relevance. This observation supports the pedagogical instruction that curriculum content must be aligned with learning outcomes and assessments so that students can construct meaning in what they are learning (Biggs, 2003). As students learn, they will make assumptions about the value of those aspects of the degree programme which are most prominent in teaching and assessment. Indeed, participants in this study asked for more education on mental illness which is integrated with other areas of healthcare and taught across all years of the curriculum rather than as a discrete aspect in a single year of teaching. The deficiencies described by my participants were not however limited to volume. What they learn about mental illness, and thus how they develop understanding of it, was seen to relate to teaching content and approach as well as the time dedicated to it.

We therefore see how the Doing and Valuing aspects of the KDV cycle are influenced by pharmacy education: where Doing is minimal, Valuing is reduced. Participants were able to tie in the Knowing aspect here when they discussed the likely reasons for the imbalance they perceived in teaching. As presented in chapter 4 (Knowing), participants related this to the amount that is known about this therapeutic area in general. They also exemplified the impact of the KDV cycle when they suggested that the volume of teaching might be limited because of stigma, in that less attention is paid to a subject which might make staff or students feel uncomfortable. In their 2014 literature review, Henderson et al. explained the importance of addressing structural stigma at the same time as attempting to reduce interpersonal stigma, and they specifically cite poor mental health coverage in university curricula as an example of the former (Henderson *et al.*, 2014). In addition to insufficient mental health teaching in the curriculum, my data show that mental illness was not taken seriously by some students and that education was not always delivered with sufficient sensitivity, thus emphasising the need to take a multi-level approach to minimising the impact of mental illness stigma within the degree programme. My data may plausibly be taken as evidence of structural stigma within the Aston MPharm curriculum and this should therefore be considered in future curriculum design.

Requiring more training, or more confidence?

My findings lend support to increasing the volume of mental health teaching in the pharmacy degree. Participants were clear that they believed that they had not been taught enough and that this restricted them in terms of their future practice, reinforcing the link between Knowing and Doing in the KDV cycle. As I described in chapter 2, the need to be taught more about mental illness is a common finding in the mental health stigma literature, particularly where deficiencies in professional practice are identified (Phokeo, Sproule and Raman-Wilms, 2004; Scheerder, De Coster and Van Audenhove, 2008; Giannetti *et al.*, 2018). However, although there was strong agreement in the need for particular improvements, participants often varied in their recollection of what had been taught and the relative importance of this. For example, where one participant talked about the emphasis in taught content being on science with insufficient focus on the needs of the whole person, another said that teaching had focused on social care and that there had been insufficient teaching on side effects and interactions of psychotropic medication. As such, it seems that variation in expectations of both the degree and future professional roles will impact the perceived value of the taught content of the pharmacy degree. What participants had in common was that they did not feel prepared for their future roles and that they attributed this, at least in part, to inadequate education. They lacked confidence in what they had been taught and as a result lacked confidence around their future interactions with PMI.

Confidence was a prominent theme in the findings of my study and this was closely associated with perception of knowledge, as has already been seen in earlier research (Rutter, Taylor and Branford, 2013). My data showed that participants do have some knowledge of the way that mental illnesses might present and how they should be treated, but that they were uncomfortable with the adequacy of this knowledge. In fact, mental health literacy (MHL) has been found to be high in qualified pharmacists (O’Reilly, Simon Bell and Chen, 2010; Morral and Morral, 2017) and considering this, the question that naturally arises is at what point do pharmacy students feel like they know enough about a subject? One might argue that the literature is full of examples of people asking for more training as a default suggestion when a potential inadequacy is identified, in mental health and other aspects of healthcare. In their 2021 study, Papineau and colleagues (Papineau *et al.*, 2021) found that when asked about education around provision of hormonal contraception, pharmacy students felt that their education had been adequate. Despite this, these participants also expressed a desire for additional training and the authors reported that in other studies, licensed (qualified) pharmacists have identified a need for additional training in order for implementation of pharmacist hormonal contraceptive prescribing to be effective. As recognised by participants in my study, the pharmacy curriculum is very full, and it would be challenging to add extra content unless this was to the detriment of another subject. The problem might therefore be re-framed in terms of confidence: at what point do pharmacy students feel confident in the knowledge that they possess? Alternatively, do pharmacy student expectations of required competence match what is actually required of a foundation year pharmacist? The data from my study show that recent graduates explained that confidence was something that would develop once people were in the workplace. However, the empirical data also revealed ways that pharmacy students' confidence in their knowledge could be enhanced within the degree.

It is therefore useful to think about the specific training needs that are identified through my data. Participants want a greater person-focus to the teaching, allowing them to see how treatments are used in practice, pharmacists' roles within this and the differences that these can make to people's lives. The empirical findings support a need for education specifically focused on communicating with PMI. For the remainder of this section, I will discuss the ways in which considering the KDV cycle can support the development of pharmacy education that facilitates the translation of Knowing into confidence for Doing in relation to working with PMI.

Teaching focus and developing understanding

The possession of knowledge about mental illness and having a deeper understanding of it were discussed as critical prerequisites to positive interactions with PMI. Although participants demonstrated some knowledge of mental illness, they described this as being insufficient to meet the requirements of their future roles. They explained that undergraduate pharmacy education should support the development of understanding and suggested that this might occur through experiential learning. Understanding is a difficult concept to quantify and explain, but it was used by participants to denote ability to 'get' the concept of mental illness and its ramifications. It was seen as a progression from mere possession of knowledge, in that someone might possess knowledge but still have poor understanding. There is a parallel here with the attainment levels required in pharmacy education standards in Great Britain which are based on Miller's Triangle (or Pyramid) of Clinical Competence (Miller, 1990) (see figure 9). I focus briefly on this model here due to its direct relevance to learning outcomes for pharmacy education in Great Britain and because considering the KDV cycle might facilitate understanding in how to promote better development of student competence. In Miller's model, 'knowledge' is at the bottom of the triangle (level 1), where learners possess knowledge which can be reproduced in formal assessment such as a written exam or multiple-choice test. As competence increases, learners know how to use their knowledge, and this can be assessed in written assessment (level 2) with practical demonstration of skill occurring at the next level (level 3). Finally, the pinnacle of clinical competence (level 4) is reached when learners can “act independently and consistently in a complex but defined situation” (GPhC, 2021, p.8).

Figure 9 Miller’s pyramid by University of Saskatchewan, licensed under CC BY-NC-SA 4.0

My data therefore situate pharmacy students’ mental health competence at the bottom two levels of the model, where they appear to be stuck. Although students declare inadequate knowledge, they reflect on what they have been taught within the pharmacy curriculum and are able to exemplify their knowledge in conversation. Indeed, lectures on a range of mental illnesses, including their aetiology and treatment are delivered within the Aston MPharm curriculum. However, it is clear within the data that it is due to inadequacies in knowledge that students do not feel ready for their professional practice, meaning that the KDV cycle stalls as students feel unable to progress from Knowing to Doing. In Miller’s terms, students feel unable to show their knowledge. Returning to the concept of the development of understanding of mental illness as introduced by my participants, the data suggest that there are three key contributory factors underpinning the development of a sense of understanding:

1. A lack of opportunity to practise, i.e., assessments at level 3 (demonstrating application of knowledge) of Miller’s triangle within the curriculum
2. Inadequate opportunity to develop empathy for PMI, meaning that they struggle to see things from the perspective of PMI
3. Personal stigma, such as the endorsement of mental illness stereotypes which is likely to affect the ability to provide care that is focused on the person.

The KDV cycle offers opportunities for intervention which might address each of these factors as explained below.

Lacking opportunity to practise

The perceived inadequate mental health teaching in the pharmacy degree provides students with insufficient opportunity to practise the application of knowledge. Akin to earlier research, my data revealed a sense that the pharmacy degree inadequately prepares students for all aspects of working with PMI (Rutter, Taylor and Branford, 2013; Gorton *et al.*, 2021) and this might be related to the type as well as the amount of learning opportunities provided. Testing competence at higher levels (through simulation and objective structured clinical examination, for example), should enable pharmacy students to feel that they have demonstrated their skills and thus enhance confidence in their abilities. It should reinforce the Knowing and thereby drive the Doing aspects of the KDV cycle. Addressing the recognition in my data that the content of summative assessments might be equated with value, it is important that mental health competence testing is incorporated into summative examination. However, there is also likely to be value in developing and testing competence in teaching exercises and formative assessment. This way, pharmacy education would better emphasise the Valuing aspect of the KDV cycle, further reinforcing Knowing as mental illness becomes something more worthy of academic attention. If students are not afforded the opportunity to prove competence in these ways, it seems that they fall back to a state of uncertainty about whether they even possess the knowledge required. This is supported by comments made by recent graduates in my study, who explained that through practice they had honed their skills and thereby increased confidence in their execution. Although recent graduates explained that this confidence increases through simply having to use their skills in practice, they also gave examples of ways in which they had tested their level 3 and 4 competence (i.e., ‘shows’ and ‘does’ respectively, see figure 9), in simulated environments. Examples provided included roleplay with a supervisor and training courses taken outside of the pharmacy curriculum. These participants therefore exemplified the value of developing confidence in their knowledge through mock scenarios and how this supported what they could offer to PMI. Relating this to the KDV cycle, we see that without ensuring student competence in application of mental health knowledge, pharmacy students feel unable to progress to the Doing phase. It is likely that this could be rectified within the pharmacy curriculum by considering the ways in which students are assessed at levels 2 and 3 of Miller’s triangle as a minimum.

In the second of these contributing factors (developing empathy), participants describe something in line with the sociological concept of *Verstehen* (Crotty, 1998). Empathy will be discussed more broadly below, but its association with knowledge is described here. Although *Verstehen* might be literally translated as meaning *understanding*, it is taken in sociology to explain the ability to take someone else's perspective and to understand their experience of the world around them (vom Lehn, 2020). To have *Verstehen* therefore requires empathy as well as knowledge in order to be able to determine what it must be like to walk in someone else's shoes. As previously discussed, participants were cognisant of a requirement to be able to clearly understand the needs of PMI and to be able to work with them to determine what help should be offered. They expressed concern about their competence to offer such individualised care, explaining that they were uncertain of their ability to truly understand the subjective, intangible experiences of PMI. This presented a barrier to care which was augmented by participants' low confidence in appropriate treatment or management strategies. The development of *Verstehen* was seen in the data to be dependent on communication, as where barriers to communication were perceived, the needs of PMI could neither be communicated nor understood. Communication as a specific educational need will be discussed later in this section.

Pharmacy is a degree programme rooted in the positivist natural sciences (Rathbone and Jamie, 2016). The positivist paradigm accepts the existence of an objective truth and pharmacy students are thus learning in a world of right and wrong with correct and incorrect courses of action. Although treatment planning in pharmaceutical care is not always black and white, sometimes having unpredictable variables, the ways in which students' knowledge, and the way that they apply it, are tested reinforce a positivist mindset. Dealing with multiple 'correct' approaches may thus prove challenging (Oltmann and Boughey, 2012), and contribute to the KDV cycle stalling at the Doing stage. Pharmacists have been shown to most readily identify with a 'scientist' identity for themselves, reflecting the scientific foundations of their training (Elvey, Hassell and Hall, 2013). This raises a pedagogical problem in which students need to move from a position of knowledge possession (conceptualised by participants from a positivist perspective) to one in which understanding is demonstrated (conceptualised by participants from an interpretivist perspective). Participants seemed to conceptualise knowledge as representing the facts and skills about mental illness which can be tested and might be determined to be incorrect or correct. But they also clearly articulated a need for interpretivist understanding of the experience of PMI, to allow provision of empathic care. It is unsurprising that they felt unprepared to manage this epistemological shift and that they attributed it to inadequate knowledge given their assessment-focused, positivist mindset. Pharmacy education should therefore consider not only assessment of mental health knowledge and skills as learners progress through the ranks of Miller's triangle, but also the need of the learner to manage this epistemological shift as they develop their interpretive skills. Pharmacy students need to feel confident stepping out of the security of black-and-white positivism and learn to manage the shades of grey and individual values and needs brought by each of their future patients. The KDV cycle encourages consideration of *how* students might move from Knowing to Doing and the barriers that might prevent this. It therefore offers opportunities for pharmacy educators to consider the best ways to support development and demonstration of clinical competence through addressing these barriers as discussed in this chapter.

Further complicating pharmacy students' appreciation of mental illness and the ability to provide holistic person-centred care, is the Cartesian dualism[7] evident in the setup of both UK healthcare services and health education (Harrison *et al.*, 2017). In the UK, mental illness is traditionally taught and treated separately from somatic illness. As such, and as specifically noted by the members of one of the focus groups in my study, the split between mind and body is reinforced to pharmacy students both within the degree and in the health system that they will work in. My data show a clear appetite among pharmacy students for mental healthcare to be better integrated into the rest of the curriculum. Efforts to integrate pharmacy teaching in terms of linking pharmacology and clinical practice for example, have been underway in pharmacy curricula for over a decade (Husband, Todd and Fulton, 2014). Through acknowledging the need to ensure that teaching is representative of practice, e.g., by teaching the ways that mental illness is treated with focus on the patient rather than the medicines, the value of the KDV cycle is reinforced. Students need to understand the Knowing and Doing in a real-life context. As a result of my findings, some modifications were made to the way that mental health teaching is provided in Aston Pharmacy School. This is one example of the early impact of my research. As the third year of the Aston MPharm was being designed for the newly integrated course (academic year 2021/22), I was asked to be involved in redesign and delivery of mental health teaching. As a direct result of the findings of my research, I advised that each mental health lecture be split into two, therefore immediately increasing the volume of teaching. The first lecture was focused on the background to the condition, including its presentation and treatment guidelines. The second lecture then focused on the management of the same condition in clinical practice. In addition, where depression and bipolar disorder had previously been covered in a single lecture, I suggested that each required its own set of two lectures. Mental health clinical teaching was therefore increased in volume for each condition[8] and the focus on use of medicines in the clinical management of mental illness was given extra focus. Increased focus on how medicines are used in practice may help alleviate the concerns

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[7] Cartesian dualism refers to the assumption that mind and body can be considered separately.

[8] Science (pathology and some pharmacology) teaching remained unchanged in volume and content.

that were evident in my findings around the value of medicines in the treatment of mental illness, and therefore promote the Doing stage of the KDV cycle, but this has not yet been tested.

In relation to the problem of Cartesian dualism as mentioned above, my data revealed concerns around the examination of mental illness in isolation in the curriculum. Participants were aware that mental illness does not occur in isolation and it might complicate, or be complicated by, the presence of somatic illness. They suggested that mental illness should not therefore be taught in isolation in order to be more representative of clinical practice. This underlines the importance of the content of teaching in facilitating Knowing in the KDV cycle – it needs to be both relevant and realistic. There are some important points for reflection here: firstly, there are practical limitations to how conditions can be taught, and it makes sense to teach the basics in isolation. Secondly, participants suggested that the teaching did not have to rely on didactic content, nor should mental health be limited to one teaching period in a single year of study. Taking these two suggestions in combination, it might make sense to consider teaching the basics of mental health earlier in the curriculum[9] and, as participants suggested, to increase the complexity year on year. This could be achieved by incorporating mental illness into clinical workshops and dispensing and counselling sessions in which multiple therapeutic areas are covered. Not only would this allow greater opportunity to apply knowledge in practice, but it would also afford the students additional learning opportunities regarding the interplay of somatic and mental illness. Finally, considering the value that pharmacists can offer through advice regarding the management of mental illness in the context of another somatic illness would help reduce the sense that mental illness is the domain of specialised professionals. It should be borne in mind though, that this final point was reasonably minor in my data.

Inadequate opportunity to develop empathy

The empirical findings from this study show that empathy is understood as a necessity in interactions with PMI. In terms of the KDV cycle, being able to empathise with an individual is part of Doing, but also supports the Valuing phase, as the needs of the person are brought to the centre of the interaction. However, participants described explicit barriers to this such as communication and access difficulties, time limitations or the need to remain professional. In addition, the personal stigma expressed by participants such as the endorsement of stereotypes or the use of stigmatising language, is likely to affect their efforts to truly listen empathically and remain free of judgement. It has been previously proposed that it is easier for people to overcome pre-existing negative attitudes when they are supported to develop understanding of what it might be like to experience mental

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[9] Mental health science and clinical lectures currently take place in year 3.

illness (Cates *et al.*, 2011). Therefore, interventions aimed at improving empathy are thought to exert greater effect than delivery of didactic content alone (Cates *et al.*, 2011), reinforcing the cyclical nature of the KDV cycle. Ensuring that there is sufficient emphasis on the real-life applications of theory in teaching as described above, might require specific expertise within the faculty or particular delivery methods. A recent vision statement for mental health pharmacy practice in the USA highlighted the need for mental health first aid (MHFA) training in pharmacy curricula (Dopheide *et al.*, 2022). This training programme has already been included in some pharmacy curricula worldwide (Frick *et al.*, 2021; Gorton *et al.*, 2021; Pham *et al.*, 2022). Dopheide et al. also recommended the inclusion of a board-certified psychiatric pharmacist (BCPP) as a member of faculty in schools of pharmacy who can work with other specialists to "develop case-based learning modules that integrate psychiatric and medicine topics in real-world settings" (Dopheide *et al.*, 2022). An equivalent to this in the UK, might be to have mental health pharmacists who are credentialed by the College of Mental Health Pharmacy (CMHP) involved in curriculum design, or at least specialist mental health teacher practitioners.

From early in the data generation and analysis, it was clear that pharmacy students were particularly concerned about knowing how to interact with people experiencing acute mental illness. Both of the vignettes used to prompt discussion in the focus groups were descriptions of people experiencing acute mental illness, and this might have affected the way that students considered their future roles. Participants' discussions were focused on their perceived inability to support anyone experiencing a mental health crisis and whilst this might have skewed the data, in that participants may not have thought about their professional roles with people with more stable mental illness, it remained an important observation. As already described, community pharmacists are readily accessible healthcare professionals and it is possible that they will encounter people in mental health crisis. Not least, pharmacists have a professional responsibility to be aware of the possibility that someone is trying to access medicines or other products with which they intend to harm themselves. It is therefore critical that pharmacy students feel prepared for these situations, just as they would other emergencies such as myocardial infarction or anaphylaxis. Indeed, in my study recent graduate participants reported their professional experiences with people who admitted to wanting to harm themselves and with recent overdose in their first year of practice.

Reflecting on these findings around dealing with crisis, the KDV cycle appears to stall at all three stages. Pharmacy students claim insufficient knowledge which stops them from being able to do anything to help. Ultimately, my data support the suggestion that pharmacy students attributed lower value to people experiencing mental health crisis than other emergencies as other, arguably less urgent, roles such as checking prescriptions might take priority. As a result of these data, I supported the development of the business case for the incorporation of MHFA training into the Aston MPharm from academic year 2021/22. In addition to my findings providing the foundation for the application, I volunteered as a staff member for the delivery of the sessions and was able to reflect to the students on the importance of what they were learning based on my findings. Mental health first aid training was delivered again in academic year 2022/23, and as a result of my findings, I will lobby for its inclusion earlier in the curriculum in the imminent redesign of the MPharm. Finally, I was involved in the early discussions between the University and the local Mental Health NHS Trust to develop a Mental Health Teacher Practitioner position. In these conversations, I was able to draw upon the results of my research to explain the value of additional mental health expertise in the faculty, as suggested by Dohpeide et al. (Dopheide *et al.*, 2022) and for the potential of being able to offer specific mental health placements to pharmacy students. Both of these things directly answered the strong requests in my data for increased clinical teaching in mental health, supporting the Knowing stage of the KDV cycle. The MHFA training course and clinical placements in mental health settings also afford opportunities for students to see application of mental healthcare, supporting transition from Knowing to Doing through experiential learning. The first Aston University MH Teacher Practitioner took up their post in academic year 2021/22 and began working with undergraduates in September 2022.

Finally, in order to support development of empathy and therefore *Verstehen* within pharmacy students, it might be necessary to incorporate contact with PMI into the pharmacy curriculum. My data revealed that developing understanding of mental illness is facilitated through experience. Some of this experience could be provided in the academic setting as part of taught content. However, personal experience was also seen to support the development of empathy and participants seemed to value the opportunity to maximise their experience in the safe academic setting, before they have the professional responsibility for a real person’s wellbeing. Interventions to provide such experience of interacting with PMI have already been included within pharmacy curricula and these are based on the principles of contact theory (Patten *et al.*, 2012; Ungar, Knaak and Szeto, 2016; Keating *et al.*, 2019). Where such interventions have been incorporated into pharmacy curricula already, they have involved a limited number of people with lived experience of mental illness working alongside groups or whole cohorts of pharmacy students. Being aimed generally at stigma reduction, the outcomes of such interventions have been measured quantitatively, as for other stigma intervention research, but Ungar, Knaak and Szeto (2016) describe contact interventions as facilitating the development of personal connections with PMI and improving understanding (Ungar, Knaak and Szeto, 2016). There might be value therefore, in investigating how contact with PMI can impact on the KDV cycle.

Personal experience from outside of the degree might also be beneficial in terms of being able to empathise with PMI. More than half (56%, n=10) of the participants in this study identified themselves as having personal experience of mental illness. I did not analyse the results of my study according to the demographic information provided by participants, rather this was collected and provided here for context. The rate of personal experience of mental illness in this study seems high in relation to national statistics (McManus *et al.*, 2016) but is similar to a recent qualitative study of 18 healthcare students in Canada (Riffel and Chen, 2020a). As Riffel and Chen (2020) reflect, it is possible that those with personal experience felt more compelled to participate in this study however the rate of personal experience with mental illness in Aston Pharmacy School is unknown, as is the way that participants interpreted the term ‘personal experience’. Even if available, such figures may not be reliable since pharmacy students have been shown to be uncomfortable talking about their mental health needs with employers and it is likely that this could be extrapolated to willingness to report the same to their academic institution due to concerns around fitness to study and fitness to practice policies (Hanna, Bakir and Hall, 2018). Difficulties around disclosure of mental illness will be discussed in more detail later. An important observation is that despite this apparently high rate of personal experience, participants clearly articulated their unpreparedness for their future role. They distinguished between what they might be able to offer to a friend in terms of support and what their responsibilities might be as a professional. It was this latter point which caused particular concern. We must be mindful that while our pharmacy students might bring their personal experiences of mental illness to their time at university, this might not positively impact their ability to talk about it or to imagine themselves as a professional providing care for PMI.

Previous research has shown that personal experience of mental illness might have greater impact on reducing desire for social distance from PMI than specific interventions (Frick *et al.*, 2021). This view was supported by my participants who described the value of learning and experience of mental illness which had come from outside of their pharmacy education. This is likely to be related to enhancing the Valuing stage of the KDV cycle through personal experience. Where people are more familiar with mental illness, they may perceive it as something less extraordinary than those with less experience. As a result, those with personal experience may be less prone to devaluing PMI and require less social distance from them. Indeed, Frick and colleagues suggested that the positive impact of personal experience of mental illness and the development of interpersonal skills that result from personal contact may be more important in reducing need for social distance than participating in formal MHFA training (Frick *et al.*, 2021). In recognition of the need to develop these interpersonal skills, Dopheide et al. recommend that all pharmacy students should have the opportunity to develop a therapeutic alliance with someone living with mental illness (Dopheide *et* *al.*, 2022), which would support the Valuing stage of the KDV cycle. The authors suggest that close contact and conversation might counteract some biases that might otherwise prevent pharmacy students from providing care to PMI (Dopheide *et al.*, 2022). These findings are particularly interesting in the context of my own research as my participants highlighted a broad array of concerns about their future clinical practice despite their personal experience of mental illness. As discussed in chapter 2, the quantitative literature in this field has largely focused on proxy measures of stigma such as the Social Distance Scale to measure the impact of their interventions. My study however, shows that it is not only stigma which affects the future professional practice of pharmacists, but also the interplay of stigma with all stages of the KDV cycle. Therefore, whilst contact interventions might help to reduce stigma (at least in relation to one specific proxy measure), future practice will still depend on developing students' confidence in the Knowing and Doing stages of the KDV cycle. Interventions should therefore target all three stages of the cycle to optimise outcomes in relation to those concerns raised by my participants which are not all representative of stigma.

It is notable that increased contact with people living with mental illness is not universally found to reduce stigma. A recent study in the US found overall reduced stigma following a psychiatric clinical rotation but that for some students stigma had increased (Diefenderfer *et al.*, 2020). The authors postulated that the type of patients with whom the students had contact might have adversely affected stigma scores. Larger-scale research is required to test this association, but it resonates with broader studies which have found greater stigma among mental health professionals compared to the general public. These studies have suggested that mental health professionals might have more stigmatising views as a result of increased contact with people who are less responsive to treatment for example (Jorm *et al.*, 1999). The relevance of this to the current study is in recognising that whilst having a majority of participants with personal experience of mental illness might have amplified responses that are sympathetic to the needs of PMI, this cannot be assumed to be the case.

Communication as an educational need

Communication arose time and again throughout my findings as a fundamental necessity for being able to look after the self, to enact professional services and as something which lacks attention in pharmacy education. In relation to the KDV cycle, participants suggested in relation to communication, the cycle stalls at Doing because of a specific deficit in Knowing. The particular concern raised by participants was that talking to people living with mental illness is different to talking to anyone else and something that requires specific skills. Projecting forward to their future professional roles, pharmacy students felt that they did not currently possess these skills and recent graduates empathised with this view. This concern is consistent with and adds to earlier quantitative work which has shown that pharmacy students have greater confidence in counselling people with somatic rather than mental illness and believe that it will be difficult to talk to PMI (Gawley, Einarson and Bowen, 2011; Rutter, Taylor and Branford, 2013; Bamgbade, Barner and Ford, 2017). Further, a 2021 study of UK and Ireland pharmacy students found that only 33.2% of participants felt adequately equipped by their degree to support PMI and highlighted a strong unmet need in communication skills (Gorton *et al.*, 2021). My participants were specifically worried that without knowledge of how to talk to PMI, they would risk saying the wrong thing and somehow cause harm to the person they were trying to help, hence stalling the KDV cycle as mentioned above. The data therefore revealed a strong sense that communicating with PMI is tangibly different to talking to other people and that more specific training in such communication is thus required in this within pharmacy curricula.

Although communication barriers have been highlighted as a cause for concern across earlier research (Scheerder, De Coster and Van Audenhove, 2008; Liekens *et al.*, 2012; Rubio-Valera, Chen and O'Reilly, 2014; Brunero *et al.*, 2018), it is plausible that this is not due to the actual need for a different approach. An alternative argument might be that the perceived communication barriers are not specific to mental illness, rather the mental illness is being inappropriately viewed as the reason for the difficulty. In this instance, the problem moves from the Knowing stage to the Valuing stage of the KDV cycle, as the mental illness itself is seen as the barrier. For example, if someone is very distracted, whether due to hallucinatory voices, or because of having a young and inquisitive child with them during a consultation, the same skills are required of the healthcare professional to manage the distraction. Similarly, if someone is scared of medication, whether because of a delusional belief about it, or because they have read headlines in the newspaper which give cause for concern, the skills required of the healthcare professional are the same. Therefore, taking the prominent finding in my data about this specific need to learn how to talk to PMI, we might consider the underlying problem a little differently. The view that mental illness is different to somatic illness should be considered in light of the context in which the participants are situated, that of future healthcare professionals. Through doing this, we might suppose that when asked to think about PMI, pharmacy students will naturally consider this as a group of patients from which they are external. Therefore, it is possible that for a pharmacy student to consider differentness between those with mental illness and those with somatic illness is no different to a member of the general public considering someone living with mental illness as being different to themselves. As such, this difference may be just as much a marker of stigma as the 'them and us' conceptualisation among the general public (Corrigan *et al.*, 2015). In the most positive light then, these data indicate pharmacy students’ conceptualisation of an unmet need around communication with PMI; a view which nonetheless supports the existence of perceived stigma. However, a dimmer view might be that as a result of not considering themselves at all in the population of people requiring pharmacy services, pharmacy students’ view of differentness may be representative of the same stereotype endorsement and prejudices as are seen in the general public (Sheehan, Nieweglowski and Corrigan, 2017).

Corrigan and Nieweglowski (2021) argue that difference might be a term or concept that people are less wary of attributing to any stigmatised group since it is “content-less”; it does not describe a specific trait such as dangerousness or unpredictability (Corrigan and Nieweglowski, 2021). In this way, the devaluing of the stigmatised group may seem to be of a smaller magnitude than when they are labelled with specific stereotypes. The prominence of the sense of differentness in my data perhaps indicates the (subconscious?) endorsement of stereotypes of mental illness; dangerousness, incompetence and permanence by pharmacy students (Sheehan, Nieweglowski and Corrigan, 2017). Re-examining the properties of differentness as defined in my data (mental illness being harder to identify, harder to treat and of lower value than somatic illness), it is possible to align two of these to the categories described by Sheehan et al (2017) (Sheehan, Nieweglowski and Corrigan, 2017). When participants describe mental illness as being hard to identify, they focused on the difficulties that arise when an individual needs to describe their experiences which might represent views of assumed incompetence. Elements of assumed dangerousness or unpredictability were also apparent in the data. Pharmacy students feared discussing a mental illness diagnosis with a patient due to concerns about how they would react. Indeed, returning to the subject of communication specifically, the data suggest a fear of the unknown in terms of what PMI might say. Might they ask a question that the pharmacist finds it difficult to answer? Or, of greater concern, they might disclose alarming information such as suicidal intent, that the pharmacist would be compelled to do something about. My findings therefore suggested real belief amongst pharmacy students that there are specific words to use with PMI, but likely to drive this belief this are both personal stigma and fear of the unknown. Talking to PMI therefore presents a significant and complicated concern to pharmacy students which should be approached in the pharmacy curriculum from both practical and stigma awareness perspectives. The KDV cycle is helpful here as it reinforces that the perceived difficulty in communication with PMI might be rooted in either or both of the Valuing or the Knowing stages. Pharmacy teaching should target both stages in order to facilitate students’ future communication (Doing) with PMI.

It makes sense given these concerns, and irrespective of their cause, that pharmacy students feel they should be better prepared through the pharmacy curriculum for communicating with PMI.

Specific requests for the incorporation of lessons on how to talk to PMI were commonly made, echoing the recommendations made in earlier research (Knaak and Patten, 2016; Bamgbade, Barner and Ford, 2017). Unfortunately, neither Knaak and Patten's model (Knaak and Patten, 2016) nor the intervention literature in pharmacy students so far have specifically addressed what should be taught about communication or how. This may lend weight to the suggestion that this observation is more indicative of a result of stigma (Valuing) than a true unmet need in communication (Knowing) as suggested above. Knaak and Patten's specific incorporation of teaching "what to say" in stigma reduction interventions is not supported by any significant discussion in their paper (Knaak and Patten, 2016) but it is corroborated by my findings and may relate more to enhancing healthcare professional comfort than a specific educational need. As one recent graduate said in my study, it may be that we need to teach pharmacy students that communicating with PMI is "*just talking to people, at the end of the day"* (IP2). Pharmacy students in Aston Pharmacy School already engage in teaching sessions on communication skills in general as well as holding difficult conversations and they have opportunities to practise their communication skills in patient simulations. Highlighting that this existing skill development can be applied to all patients may reduce the sense that specific skills are required for talking to PMI (Brunero *et al.*, 2018). Skill development might be further enhanced by offering simulations with a patient who is experiencing auditory hallucinations for example (Hsia *et al.*, 2022). Finally, the possibility that concerns are centred on the risk of a patient disclosing something alarming such as recent or imminent self-harm could be specifically raised in the curriculum, through MHFA training for example. Such teaching and learning opportunities should support students to develop confidence in their knowledge such that they feel more prepared for the Doing of their future professional role with PMI. In this way, the KDV cycle can be used to identify students' learning needs and then to support their progression to higher stages of competence in Miller's model (see figure 9) in the specific context of communicating with PMI.

As identified by my participants, it is important to consider that it may be difficult to teach and rehearse communication skills in the academic setting to such an extent that graduates feel fully prepared. My data show appreciation of the patient as an individual person, and the need to provide individualised care. Since individuals will have varied needs and mental illness presents a heterogenous group of health conditions, communication strategies will naturally vary. Here, my findings emphasised the need for real-life practice to gain experience and confidence and this relates back to managing the expectations that pharmacy students have of themselves at the point of graduation. Pharmacy students and their preceptors[10] have already been shown to identify communication skills as a necessary attribute for readiness for professional practice (Fejzic and Barker, 2015). However, in that study, both groups shared the view that soft skills were not something that could necessarily be taught within the university curriculum. Rather their development may depend on the experience and personality of the individual. As pharmacy education in Great Britain evolves to meet the learning outcomes set out in the 2021 GPhC standards for the initial education and training of pharmacists (GPhC, 2021), pharmacy schools will have greater responsibility for students' learning up to the end of the fifth (and final) year of training, where they are expected to collaborate with employers and educational bodies. As such, the findings of my study become increasingly relevant irrespective of whether this confidence needs to be built in the academic environment or in practice, as it may be that some aspects of the KDV cycle need to be learned through real life practice. It is possible that with increasing hours of practice time within curricula meeting the 2021 standards, the perceived communication needs of students will be better met in the absence of additional curricular developments.

The difficulty of treating mental illness

Pharmacy students professed their willingness to help, describing pharmacists as being in a suitable position to support PMI. However, their confidence in their ability to do this was undermined by their espoused notion that mental illness is difficult to treat, and this resulted in a sense of helplessness in the data. This helplessness might relate to a disparity in what participants see around them in terms of the prevalence of mental illness compared to the volume of mental health teaching within the MPharm degree. Pharmacy students clearly recognise that mental illness is a prevalent problem. It is all around them in society, with mental health-related public health messages being hard to avoid. As participants highlighted, this was particularly the case during the COVID-19 pandemic when the damaging effects of national lockdowns and isolation on mental health, particularly to the vulnerable members of society, was national news e.g., (BBC News, 2021). Mental illness is therefore a problem that is heard of frequently in society. A natural extrapolation from this might be that it is difficult to treat. If mental illness was easily managed, then one might assume that the magnitude of the problem would appear smaller. For comparison, for someone to fracture a bone is a common occurrence (Donaldson *et al.*, 2008). The diagnosis and management however, are normally straightforward and there is no national campaign encouraging people to look out for those who might be trying to live with a fracture or encouraging those who think they

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[10] A preceptor is "practicing pharmacist who serves as a role model to guide a pharmacy student, preregistration trainee, or resident in the development of their professional knowledge, attitudes, and practice skills." (Knott, Mylrea and Glass, 2020)

might have one to seek help. This may seem preposterous, but the comparison makes it easy to see why pharmacy students might start to assume that the opposite is true of mental health; it must be hard to identify and once identified, difficult to manage. In relation to the KDV cycle, such observations may cause the cycle to stall at the Doing stage because of participants' sense of helplessness. Participants also appreciate the gravity of the problem and talked about the likely impact of untreated mental illness on individuals and those around them, describing bleak pictures of a lonely existence associated with the risk of self-harm. Thus, where the Doing stage of the KDV cycle is reduced due to perceived difficulty of treatment, these data support the argument that Valuing is also reduced.

When pharmacy students reflect on what they have learned about mental illness over the course of their undergraduate studies, they describe it as being dealt with in isolation from somatic illness, as described above. They also lament the relative volume of teaching compared to that for somatic illnesses such as cardiovascular disease and perceive the former as being inappropriately inadequate. It makes sense then, that the pharmacy student who perceives mental illness as a prevalent and serious societal health problem and contextualises this against the teaching they have received, might assume that mental illness must be extremely difficult to manage. They might assume that this is because the treatments are ineffective, or because it is so difficult that it is not the material that should be taught to students and must be reserved for more experienced practitioners. Another interpretation is that students might draw the conclusion that despite the obvious scale of the problem of mental illness, it is not worth trying to treat and as such mental illness and/or its treatment is devalued within the pharmacy curriculum. This exemplifies a way in which devaluing mental illness in the pharmacy curriculum by dedicating insufficient time and attention to it can in turn reduce Knowing and Doing amongst pharmacy students.

The difficulty of treating mental illness was seen to vary according to the diagnosis and the severity of the symptoms, as has been reported in earlier studies (Riffel and Chen, 2020b). My data show that when people were perceived as being more ill, their treatment was imagined to be more difficult. The data here clearly support the argument that participants will draw a line between what they know about a subject and their confidence in being able to help. For example, with reference to depression, one participant explained that *"everyone knows someone that's been in* [that] *situation"* (FG2P2) and this familiarity was associated with being more able to help. Psychosis and schizophrenia in contrast, were perceived as more serious and more difficult to treat, paralleling with the earlier findings that schizophrenia is associated with more stigma than other mental illnesses (Riffel and Chen, 2020a). Both conditions are taught in the Aston MPharm curriculum, but participants spoke about being more experienced with depression from learning both inside and outside of the degree (e.g., in their social context or through self-directed learning) and therefore expressed greater comfort with it. Indeed, participants spoke about the need to normalise mental illness. In this sense, depression is perhaps perceived as a more normal condition about which more is known and where people living with the condition are devalued less than those with conditions considered less normal, such as schizophrenia. These conditions do of course differ in their prevalence, with schizophrenia being less common than many other mental illnesses such as depression (World Health Organization, 2022), thus it is reasonable that people would be more familiar and comfortable with depression as they are likely to have greater experience of it. This lends weight to an argument for increasing emphasis in teaching on some conditions such as schizophrenia and psychosis.

My findings suggest two areas of concern for pharmacy students which could be addressed in the pharmacy curriculum to reduce feelings of helplessness and the sense that mental illness is difficult to treat:

1. Feeling that pharmacists are insufficient in providing care for PMI
2. Concerns around the negative effects, or lack of effect, of psychotropic medication

Addressing these areas of concern should facilitate the Doing stage of the KDV cycle and my evidence-based recommendations for this are discussed below.

The insufficiency of pharmacists

Participants saw pharmacists as a single part of the broader mental healthcare system. They were uncomfortable about the boundaries of this though, and the exact part that pharmacy has to play in mental healthcare. The same uncertainty has been found in pharmacy students elsewhere, as well as in healthcare students of other disciplines (Devraj *et al.*, 2019). Unsurprisingly, the recent graduate participants in my study were better able to list some of the roles for pharmacists and these echoed the views of community pharmacists in New Zealand (Crump *et al.*, 2011). Interestingly though, and in line with the views of undergraduates in my study, Crump et al. found that pharmacists described their roles as being predominantly focused on listening to PMI and expressed their wish to extend their roles into more active medication management (Crump *et al.*, 2011). This communication focus to the pharmacist's role would give my participants particular cause for concern though as they did not feel adequately prepared for this as already discussed. My data suggest that it is important that pharmacy curricula specifically demonstrate the value that non mental health specialists can contribute to the care of PMI. This will not only exemplify and explain the roles of pharmacists with PMI, but also help to reduce the sense that managing mental illness is a specialist role. This is particularly important because the excess mortality among PMI is predominantly related to somatic illness and poorer physical healthcare (Thornicroft, 2011). Even when specific mental health needs are met by other professionals, pharmacists in all sectors still need to be able to work with PMI in order to address this (Sølvhøj *et al.*, 2021).

The interdependency of pharmacy with general practice was discussed and recent graduates described situations in which PMI had been let down by poor links between the two. This resonates with the literature which has shown that qualified pharmacists describe poor communication between health professionals as presenting a significant barrier to care of PMI (Watkins *et al.*, 2017). Additionally, patient information might be difficult to obtain from general practitioners (Scheerder, De Coster and Van Audenhove, 2008), which might be of particular concern to my participants who felt comforted at the idea that other professionals might be able to support them in the care of PMI. Since the precise roles of the pharmacist in the care of PMI in the community remains poorly-defined and an ongoing subject of research (Murphy *et al.*, 2014; Rubio-Valera, Chen and O'Reilly, 2014; El-Den *et al.*, 2021; Frick *et al.*, 2021), it may be that until this is further clarified, cooperation between pharmacists and other healthcare professionals remains limited. This begins to outline the boundaries of the Knowing that can be developed in the KDV cycle and which are likely to be particular to different groups of healthcare professionals. Participants in the current study wanted to be able to refer people on to others with more skills and experience, but also wanted to be able to learn from them. However, as accessible healthcare professionals, it is vital that pharmacists can offer appropriate advice to those seeking help, with confidence that they are providing their part of mental healthcare. Poor knowledge of typical patient journeys in and between services may explain the uncertainty in my findings. This perhaps highlights a need for interprofessional learning within the pharmacy curriculum such that pharmacy students better learn the roles and responsibilities of different services and the professionals within them. Ultimately, this should provide an improved sense of the roles which can be played by pharmacists, again helping to manage students' expectations of what they can do as well as the knowledge required for this.

My findings depicted PMI as needing more than the pharmacist can provide, and this appeared to detract from the things pharmacists *can* do. The problem here may be that due to having a poor understanding of the roles of pharmacists in supporting PMI, the need for external support appears more prominent. As a result, participants describe themselves or their abilities as insufficient to meet the needs of PMI, echoing professionals' feelings of incompetence and powerlessness found in earlier research (Riffel and Chen, 2020b). My data revealed a sense of comfort in having the opportunity to be able to defer to someone with more experience or skill. I consider two ways to view this perception of personal insufficiency based on whether it is felt to be permanent or not. It could be that participants saw this dependence on other professionals as being something transient;

that their reliance on other people would reduce to some extent as their own knowledge and skills expand. In this sense, a problem of Knowing is described. Alternatively, it could be that participants view the management of PMI as being too difficult or outside of the remit of pharmacy, and this might be more related to Doing. In this latter sense, being able to depend on the availability of other people becomes a permanent need. Although the undergraduate data support a sense of permanence here, that pharmacists might never be able to sufficiently meet the needs of PMI, they were collected entirely from students and recent graduates. Further exploration of this would have required data collection from professionals with more extensive experience which was beyond the scope of this doctoral study. Data from recent graduates however, supported a greater, better-defined role for pharmacists which is less dependent on other people as experience and confidence in practice grow. These data support earlier findings but also reveal a need to manage the expectations of pharmacy students in relation to their future roles and the expected level of competence at graduation. Confidence must be instilled as to the positive ways in which pharmacists might support PMI, as described above, but pharmacy students must also have realistic expectations of themselves, and not expect to be able to have all the answers for every need posed to them by PMI straight away. They need to be able to manage this uncertainty and feel confident at dealing with scenarios in which they don't already have an answer. As shown in previous research, minimising any sense of powerlessness is important to allow the development of professional satisfaction (Riffel and Chen, 2020b). By optimising confidence and reducing the senses of powerlessness among pharmacy students, we might better promote the Doing aspect of the KDV cycle, empowering pharmacists to get more involved in the care of PMI from the point of graduation.

Finally, time was presented as a considerable barrier that is difficult to overcome and which creates insufficiencies in pharmaceutical practice. Time pressures were predominantly discussed in relation to the professional lives of pharmacists, although time pressure in the degree programme was also described. My findings support the notion that time is against the pharmacist when they need to offer care to PMI. Participants described needing to take time for people in order to build rapport and trust, but also felt that the time available to them was limited with insufficient time to dedicate to PMI. This finding is not novel (Scheerder, De Coster and Van Audenhove, 2008; Crump *et al.*, 2011; Rubio-Valera, Chen and O'Reilly, 2014; Riffel and Chen, 2020b). My data suggest that if extra time was taken to work with PMI, that the care offered to other patients would be compromised and participants were uncomfortable with how they would manage this balance. This may go some way to explaining the earlier observation that healthcare professionals have negative perceptions of the care demands of people with severe mental illness (Riffel and Chen, 2020b). My data therefore support the current understanding that pharmacists experience discomfort around the professional services that they will be able to offer to PMI and the negative impact of time restrictions on this.

When participants spoke about their future interactions with PMI, it became apparent that there are some internal (within the pharmacist) time-consuming mechanisms. Participants spoke about needing more time for PMI and imagined this as being related to the time-consuming needs of the PMI but their subconscious, internal processes may also impact on this. Participants described a need to take their time with PMI, thinking about the language that they use and perhaps taking more care as they felt less confident about their professional role in supporting someone living with mental illness. The overriding concern was that by having a poor grasp of the medical need that there might be unidentified risks and that the need to take more time was in an effort to minimise the possibility of making things worse.

Whilst participants talked about needing more time for interactions for PMI and explained this in terms of the person’s needs, it appears that their own lack of confidence in the interaction brings about a sense of wariness which results in more time being required. Time that they can ill afford. This brings about a complex aspect of Doing in the KDV cycle. Where participants described the barriers to Doing as being external, i.e., lack of time, data analysis revealed interplay with an internal lack of confidence to apply knowledge. There is a subsequent impact on Valuing if PMI are not deemed worthy of being given the professional time that they need. It is fair to depict pharmacies as often pressurised environments in which it feels that there are insufficient hours in the day, but how these hours are used is within the gift of the pharmacist to an extent, in relation to their evaluation of patient needs and prioritisation. The data from this study suggest an unwillingness to prioritise PMI and as such a lower value is perhaps ascribed to these patients compared to others. Participants suggest that this is something beyond their control, that they are unable to make time for PMI or it is at least hard to justify doing so, even when the person might be in crisis. This conflict in prioritisation of services is a known phenomenon in the organisational culture literature (Jacobs, Ashcroft and Hassell, 2011; Hann *et al.*, 2017; Scahill *et al.*, 2018). These papers support my participants’ conceptualisations of pharmacy as a pressurised working environment in which the focus is not always on the needs of the patient and where the pharmacist may not feel that they have the autonomy to determine which activities deserve more time. Overall, it is outside of the scope of this study to comment on or make recommendations about the difficulties presented by the organisational culture of participants’ future workplaces or the working relationships of pharmacists with other healthcare professionals. However, it is relevant that pharmacy students are cognisant of these pressures and the ways in which they might impact on their future roles with PMI.

It is critical that the pharmacy curriculum creates graduates who value PMI sufficiently such that these barriers do not feel any greater than they do for any other patient.

Concerns about psychotropic medication

A degree of therapeutic nihilism came across in the empirical data whereby participants suggested that, even when asked for help, they wouldn't be able to offer much or that what they could offer would be of limited value. Here, the data reinforce the value of the KDV cycle in considering the multiple barriers to the provision of pharmaceutical care to PMI. Even if there is not a problem of Knowing, i.e., pharmacy students feel adequately informed about the treatment of mental illness, difficulties in Doing might still arise. This might be because of the nature of people's knowledge or their beliefs about the value of treatment to PMI. As such all three stages of the KDV cycle can support understanding of this problem. It was perhaps surprising to find that pharmacy students had little apparent confidence in the use of medicines to treat mental illness. It is plausible that participants felt that discussing the use of medicines with PMI was too obvious a role to mention, and it was difficult to ask about this in interviews without putting words into their mouths. However, specific concerns about the therapeutic value and likely negative consequences of taking medicines for mental illness were clear within the data. Variable confidence in the value of psychotropic medication has previously been found amongst healthcare students (Chow, Morrissey and Ball, 2018; Devraj *et al.*, 2019; Alsahali, 2021) but this a complex area in which opinions are likely to be influenced not only by taught content in pharmacy curricula, but also cultural differences in the understanding of concepts like recovery as well as personal experience. My data show dissatisfaction with the balance of teaching content on the pharmacotherapy of mental illness, with insufficient attention paid to the application of theoretical knowledge. It is therefore possible that pharmacy students were missing the knowledge of the clinical utility of these medicines, as might have been the case in the study by Chow et al (2018) in which students didn't know that antidepressants might be used in the treatment of anxiety disorders (Chow, Morrissey and Ball, 2018). Poor understanding of the use of medicines in groups perceived as difficult-to-treat could easily be addressed by provision of information about the efficacy of medicines in these groups within pharmacy teaching, however the impact of such interventions on stigma is limited (Gawley, Einarson and Bowen, 2011; O'Reilly, Bell and Chen, 2012; McKee, Larose-Pierre and Rappa, 2015).

Perceptions of the clinical utility of psychotropic medication may possibly be adversely affected by teaching and wider messages about it in society. It is reasonable to acknowledge, as supported by my data, that the relationship between the pathology of most mental illnesses and the pharmacology of the medicines used to treat them is poorly elucidated. Pharmacy students are therefore taught pharmacology alongside a range of possible aetiologies for the mental illnesses covered in the curriculum. The lack of clarity about the reasons for therapeutic effects might therefore be confusing to pharmacy students, particularly in the absence of teaching focused on the clinical use of these medicines as suggested in my data. Additionally, the success of treatment with medicines like antidepressants and antipsychotics is complicated by heterogenous definitions of recovery and significant drop-out rates in clinical trials. It is not my intention here to argue for or against the use of psychotropic medication in mental illness as this is a decision to be based on the needs of individual patients in the context of the best available evidence and treatment guidelines. It is however relevant to consider the impact of these messages on the way the pharmacy students think about the utility of psychotropic medication. Not only might teaching be confusing, but pharmacy students also hear the same messages about psychotropic medication as the rest of the population from the media. As I was writing up the findings of this research for example, a systematic umbrella review[11] of the evidence for the popularly-held serotonin depletion theory of depression was published (Moncrieff *et al.*, 2022). This publication was followed by the popular media including radio and newspaper articles, some of which made suggestive links between this new evidence and a lack of evidence for antidepressants[12] (*New research has found that serotonin is 'not the key' to depression*, 2022). Without the ability to apply informed, critical thought about what the new publication actually means, pharmacy students may receive and internalise the same confusing messages about psychotropic efficacy as does the social consciousness.

My data therefore reinforce the importance of ensuring that the clinical use of psychotropic medication is adequately covered in pharmacy curricula, as already discussed. In addition to describing the potential value of psychotropic medication on the individual level, pharmacy students must learn that appropriately skilled pharmacists can help patients and prescribers to navigate the confusion of population level data and therapeutic uncertainty to apply a biopsychosocial approach to determining the best therapeutic options for them at a given time. The appropriate use of psychotropic medication for the treatment of mental illness is enshrined in national guidelines and their prescribing is widespread. Pharmacy students must therefore be able to discuss the evidence that is available to the general population in order to have evidence-based conversations focused on the needs of the individual to support their patients to make decisions about their care. It is possible that through the provision of limited information about an ill-defined and confusing therapeutic area, pharmacy students are left in doubt about the value of these medicines as explained here. These feelings of doubt might lead to the sense among pharmacy students that there is little point in

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[11] A systematic umbrella review is a review of already published systematic reviews.

[12] I do not offer any opinion in this thesis on the validity of the umbrella review or the resultant reports in the media, rather this is used as an example of influences on the social consciousness which pharmacy students will also hear.

trying to help, supporting observations of therapeutic pessimism and professional impotence seen in my data and in earlier literature (Henderson *et al.*, 2014; Knaak and Patten, 2016).

Overall, my findings, taken alongside the existing literature suggest that the pharmacy curriculum needs to enable a better understanding of the role of pharmacotherapy in mental illness. It is important to consider not only how much pharmacy students know about psychotropics and the adequacy of this compared to expected learning outcomes, but also what students think about their use in practice. Whilst students' comfort in their knowledge might appear higher in other studies than my data suggest (McKee, Larose-Pierre and Rappa, 2015), the way that these medicines are valued in practice is also relevant. My data therefore add to what was already known about the existence of therapeutic pessimism and feelings of professional impotence as well as going some way to explain pharmacy students' desire to learn more about the treatment of mental illness. Students' conceptualisations of recovery in mental illness need to be explored in teaching as well as the ways that pharmacists can support and promote this. Through the KDV cycle, we see that the nature of Knowing as well as having confidence in knowledge are important in promoting Doing.

Valuing people and stigma minimisation

"…the way you've been brought up, […] it's very difficult to actually change that kind of stigmatism." **IP1**

In common with other studies, my research found evidence of both perceived stigma and personal stigma which might modify pharmacy students' future professional behaviours (Hanna, Bakir and Hall, 2018). As already discussed, my findings are in broad agreement with the literature that mental health teaching is insufficient and that through making specific improvements, stigma might be reduced. Inadequacy of teaching may be considered representative of structural stigma and my participants themselves identified that this would perpetuate stigma through ignorance. What this study adds is a contextualised explanation of the complex way that stigma interacts with students' sense of preparedness, as described by the KDV cycle. The empirical data presented in this thesis support the suggestion that it is this whole process that should be targeted in attempts to tackle mental illness stigma. In this section, I discuss the prominent aspects of stigma within the data.

Interpersonal and implicit stigma in pharmacy students

It is interesting that participants seemed to have little difficulty in suggesting the ways in which internalised stigma might affect the help-seeking behaviours of PMI which is consistent with literature already published in this field (Clement *et al.*, 2015). However, personal endorsement of mental illness stereotypes or possession of mental illness prejudices was not associated by participants with their anticipated future behaviour. This is unsurprising given that participants did not consciously identify such stigma manifestations within themselves. This compounds earlier findings that pharmacy students may not recognise that their own attitudes and beliefs about mental illness could create barriers to effective delivery of professional services (Volmer, Mäesalu and Bell, 2008). Existing attitudes might be very hard to change since they are so ingrained into the social norm (Frick *et al.*, 2021) and as discussed in chapter 2, social categorisation and subsequent labelling are natural social processes. It would therefore be prudent not to make pharmacy students who identify implicit or explicit personal stigma feel admonished and alienated as this might cause them to adopt positions of defence. Instead, the social norms and pervasiveness of stigma manifestations should be examined and then incorporated into human-centred curriculum design, allowing people to reflect on their personal stigma. Through this process, discussion of the possible effects of such stigmatisation on future professional behaviour can be explored such that pharmacy students are encouraged to be mindful of this as they begin their careers. Alongside this, opportunities to highlight and disconfirm negative stereotypes about mental illness should be capitalised upon throughout the degree programme and the language used in teaching should be reviewed to ensure that it is not stigmatising.

As I have discussed throughout this chapter, many of the barriers to pharmacy students' sense of preparedness for their future practice may be indicative of personal or structural stigma. In 2016, Knaak and Patten introduced a model for designing and delivering anti-stigma programmes for healthcare providers (Knaak and Patten, 2016). As a result of their investigation, they identified four drivers of healthcare provider stigma (Knaak and Patten, 2016):

1. Pessimism about recovery/feeling like what they do doesn't matter
2. Seeing the illness ahead of the person
3. Lack of skills/confidence
4. Lack of awareness of own prejudices

My data exemplify and explain each of these in the specific context of pharmacy students. The findings reveal specific interpretations of stigma drivers in pharmacy students, but as already discussed, this is intertwined with other barriers to preparedness for future practice. The KDV cycle can support understanding of this interplay. For example, "pessimism about recovery" was seen to incorporate likely poor knowledge of the ways that psychotropic medication can help people in meaningful ways as well the possible endorsement of stereotypes of permanence and uncontrollability. Similarly, "lack of skills/confidence" was directly linked to absence of opportunities to apply knowledge in practice within the pharmacy degree, but this was closely integrated with concerns around the lack of specific skills around communication with PMI. The ways that my data exemplify Knaak and Patten's drivers and the possible solutions offered through consideration of the KDV cycle will be summarised later on this chapter, but there is also an important addition to this list contributed by my findings – that of self-stigma.

The problem of self-stigma

Participants in this study evinced the acceptability of mental illness in other people. They demonstrated little in the way of personal stigma, although some stereotype endorsement and problematic language use were observed as discussed in chapter 6 and above. Participants did however perceive mental illness stigma in people and organisations around them and were clear that this needs to be reduced to enable improved support for PMI. They also recognised that self-stigma might reduce help seeking and engagement with treatment amongst PMI compared to those with somatic diagnoses. This contributed to their sense of professional impotence, as they described situations in which they could provide help, but would not have the opportunity to do so, due to the barrier created by self-stigma. In the context of these observations, they described a need for increased attention to mental illness in the pharmacy curriculum, starting from year one and that this needs to focus initially on students' personal mental wellbeing. Participants agreed that in order to be able to support other people, that they must first be able to recognise and talk about their own mental health, suggesting that they feel unable to do this currently. This is particularly insightful and perhaps alludes to a need for increased mental health support for pharmacy students, across all years of study, to reduce self-stigma. The data did not demonstrate explicit self-stigma among participants, but participants spoke with certainty about the impacts of it and if they had experience of self-stigma themselves, it could be expected that they would not expressly discuss it. Earlier research suggests the existence of self-stigma among pharmacy students who avoid help-seeking and disclosure for fear of adverse consequences on their fitness to practice (Chow, Morrissey and Ball, 2018). It is possible that Aston University pharmacy students also avoid disclosure and help-seeking for mental illness for fear of potential consequences to their future professional practice (Personal communication, senior Pharmacy academic 21.10.22 and Aston University Registered Mental Health Nurse 11.9.19).

There is a wider issue of self-stigma in pharmacy students and in Higher Education more generally. Despite evidence of positive attitudes towards PMI in the literature, negative attitudes about having a mental illness and what this means for the self can be found among healthcare students which then persists into the professional workforce. Participants' own mental health was deliberately avoided in the topic guides for this research, although some people appeared to draw from personal experiences in their conversation, particularly around the ease of communication about mental health and help-seeking processes. Significantly greater stigma has been associated with disclosure and help-seeking than with attitudes to PMI and this self-stigma does not seem to be modified by medical education (Sandhu *et al.*, 2019). This suggests a shared sense among healthcare students that mental illness is more acceptable in other people than in themselves, echoed and supported by my data. From these observations, I argue that when considering Knaak and Patten's (2018) list of healthcare provider stigma drivers in the context of pharmacy students, self-stigma should be added.

The purpose of this study was to describe stigma and its contribution to pharmacy students' sense of preparedness for working with PMI. Through doing this, I hoped to be able to make recommendations about adaptations to the pharmacy curriculum which might improve things in a meaningful way for pharmacy students. I have shown that if we provide the Knowing, facilitate the Doing and promote the Valuing whilst also highlighting mental illness stigma as a problem in pharmacy curricula, then pharmacy students' preparedness should increase. However, if pharmacy students remain unable to apply this preparedness to themselves, then I would argue that we continue to fail our students. Healthcare professionals should lead from the front in stigma reduction, a view which has been shown to be shared by pharmacy students in the UK and Ireland (Gorton, Strawbridge and Macfarlane, 2023). As highlighted in my data, one benefit of reducing the impact of stigma would be ensuring that people value themselves highly enough to seek help when they need it. Our pharmacy students need to be able to do this for themselves, free from fear of professional judgement, as well as enabling this for their patients. Enabling pharmacy students to consider and look after themselves as a person, as well as a future healthcare professional, and reducing the impact of self-stigma should help protect against the potentially tragic consequences of self-stigma which have been previously seen in the healthcare professional community (Henderson *et al.*, 2012).

My data revealed ideas around reducing the burden of self-stigma within students at the University. Participants in the current study emphasised and prioritised being able to look after their own mental health before being able to support other people with their mental health. They talked about normalising conversation regarding mental illness and the provision of adequate and well-signposted mental health resources within the University to develop a culture in which it is acceptable to talk about, and seek help for, mental illness. Data from this study therefore highlight the importance of open discussion about mental illness from personal and professional perspectives from the beginning of the degree. It is fundamentally important that pharmacy students hear and adopt messages of the importance of help-seeking for themselves as students as well as for their future professional roles.

Identifying strengths

Not all of the findings of this study were negative. Participants demonstrated some positive attitudes and beliefs in relation to the way they thought about PMI and their future professional roles with them. It is important to discuss these and to consider them alongside the data presented above as they may provide the potential kindling upon which a curriculum improvement agenda might be constructed.

Although limited in frequency in comparison to data focused on inadequacy, the positive observations from my research should be reflected to pharmacy students. These positive aspects could support students' future practice, even where they currently feel that they are overridden by incompetence, ignorance or inability related to some external factor. More specifically, where pharmacists perceive self-worth and value in the support of PMI, this should reduce the negative impact of personal stigma and poor confidence via the KDV cycle. Pharmacy students were aware of the prevalence and importance of mental illness. They knew that whatever sector of pharmacy they were planning to work in, they would be working with PMI and were able to describe the value of building rapport and trusting relationships with PMI. This is important because mental illness is prevalent and because pharmacists are frontline healthcare professionals whom the public can easily access. These two things mean that pharmacists working in the community setting will have frequent contact with PMI. Interestingly, this sense of awareness represented a distinction in the data arising from pharmacy students and recent graduates. The latter group expressed their surprise at how much they had encountered PMI in professional practice whereas pharmacy students appeared to be expecting this. It is of course hard to tell whether the expectations of pharmacy students are realistic, or whether this will be an even more prominent part of their role than they imagine, thus accounting for the surprise expressed by recent graduates. Alternatively, recent graduates' surprise may have been more about the nature of their involvement, and that this extended beyond medicines supply.

From this awareness of prevalence, but also recognition of unmet needs of PMI, arose pharmacy students' expectations that pharmacists should be involved in mental healthcare. At this point many started to flounder, uncertain of what should be provided and how barriers to provision might be overcome, as has already been discussed. My participants did however identify a role for pharmacists in signposting and bridging the gap between healthcare services. This need was seen to arise where the links between healthcare providers are broken, waiting lists are too long or PMI don't fit in to the standard treatment protocol, all of which risk PMI *"falling through the cracks"* (FG1P5). My data suggested that pharmacists might be able to bridge a gap by providing longer-term follow up to people who are discharged from mental health services. Davis (2022) used the term ‘bridging the gap’ to describe initiatives in the US whereby attempts are being made to use pharmacists to meet the needs of PMI in similar ways to those alluded within my data (Davis *et al.*, 2022). Pharmacists can facilitate access to mental health services and provide counselling on psychotropic medication at the same time. A notable tension arose in the data here though because participants in my study did not feel confident in the signposting role. The ideas that my participants had around being well-placed to help and how this meshes with the inadequacies they perceived in current mental healthcare, were juxtaposed with low confidence in actually providing professional services to PMI, in line with earlier findings (Phokeo, Sproule and Raman-Wilms, 2004; O’Reilly *et al.*, 2015). A narrative within the data therefore emerged of “I want to help, I just can’t…”. Participants then explained a broad range of barriers as already discussed. Previous research has identified a range of such barriers, including lack of private space (Phokeo, Sproule and Raman-Wilms, 2004; Crump *et al.*, 2011), the possibility of unpredictable and difficult behaviours from PMI (Liekens *et al.*, 2012) and insufficient knowledge on behalf of the pharmacist (Phokeo, Sproule and Raman-Wilms, 2004) many of which resonate with my own findings.

Participants frequently described the ability of pharmacists to build rapport with their patients, getting to know them in general and therefore establish a relationship of trust. In my data, this was related to enhanced ability to identify change in an individual and having the right to discuss this with them. Previous research has shown that community pharmacists are able to establish trusting relationships with PMI and thus that they are ideally placed to help in the identification of depression (Rubio-Valera, Chen and O’Reilly, 2014), and to be able to speak openly with patients (Crump *et al.*, 2011). Mey et al. (2013) found that the development of rapport comes first, allowing for subsequent development of trust in the relationship (Mey *et al.*, 2013). This development of trusting relationships is valued by PMI as they relate it to the sense that care is individualised to them and that the pharmacist is working in their best interests as a person (Mey *et al.*, 2013). My participants’ awareness of their future opportunities to build relationships with patients is therefore an important facilitator which should be represented to pharmacy students. Students should be reminded of the development of their soft skills such as the use of verbal and non-verbal communication to build relationships (Crespo-Gonzalez *et al.*, 2022) when clinical mental health teaching is delivered. This should allow student pharmacists to see the value of these skills across all patient groups, including PMI.

Finally, it was positive that participants identified stigma as a cause of discrimination and therefore something which needs to be overcome. This echoes findings across pharmacy students in the UK and Ireland (Hanna, Bakir and Hall, 2018; Gorton *et al.*, 2021), suggesting an audience who will be receptive to stigma reduction initiatives.

As mentioned above, it is important to emphasise and develop these existing strengths of pharmacy students during undergraduate education so that we increase awareness of the foundations on which we have to build. However, the issue of social desirability should also be discussed here as it is plausible that this might re-frame the findings somewhat. As discussed in chapter 2, the use of scales such as the Social Distance Scale in stigma research has been criticised as people may well know those answers which will suggest negative attitudes and are likely to want to paint themselves in a positive light. Given that pharmacy students and pharmacists are likely to be aware of those answers which expose more negative attitudes, and the split between attitudes and behaviours repeatedly shown in the literature, perhaps the positive attitudes described in my findings are also an artefact of social desirability. If we accept this as a possibility, then it further intensifies the need to fully understand and develop strategies against the barriers to providing professional services to the person, irrespective of their diagnosis.

Linking the KDV cycle to curriculum development and stigma drivers

Throughout this chapter, I have discussed the important findings of my research as they pertain to pharmacy students' preparedness for their future professional practice with PMI. I have shown that stigma at intrapersonal, interpersonal and structural levels can modify this sense of preparedness which itself is rooted in the possession of knowledge, the ways that knowledge is used, and the value ascribed to mental illness. Throughout this discussion, the impact of the curriculum at Aston Pharmacy School and how this might be developed to optimise graduates' sense of preparedness whilst minimising the impact of stigma have been explained. As already discussed, the KDV cycle is a continuous process, and intervention at a single point should lead to benefits in other stages of the cycle, but a more logical and efficient approach in terms of optimising outcomes would be to address deficiencies in all three stages. This would involve a multi-level approach to stigma reduction as a part of improving pharmacy students' preparedness. As such, we might better address the professional knowledge, behaviours and values required of pharmacy professionals in ways that are grounded in the needs of our pharmacy students.

As the accrediting body for Schools of Pharmacy in Great Britain, the General Pharmaceutical Council (GPhC) sets out the required learning outcomes for the education and training of pharmacists (GPhC, 2021). In table 6, I relate the stigma drivers previously observed in healthcare students that I listed earlier (Knaak and Patten, 2016), with findings from my own study and add the additional driver of self-stigma. I also list the recommendations for pharmacy curricula based on my empirical findings and link these to the relevant GPhC learning outcomes:

	Pharmacy student stigma drivers[13]	Explanation from this study	Recommendations	Link to GPhC learning outcomes[14]
A	Pessimism about recovery/feeling like what they do doesn't matter	Participants were uncertain of how they could help PMI (chapter 4, Knowing) Participants felt that even if they tried, it might not help (chapter 5, Doing) Participants were uncertain of the value of psychotropic medication (chapter 5, Doing)	Pharmacy degree teaching needs to: 1. show how medicines are used in practice and focus on the value of psychotropic medication as part of the wholistic care package 2. incorporate the concept of recovery from service user perspectives 3. show how pharmacists contribute to the care of PMI	2 9 14 15 28 53
B	Seeing the illness ahead of the person	Participants used examples of illness-first language in their conversation (chapter 6, Valuing) Participants considered PMI to be different to people with somatic diagnoses (seen throughout the data, discussed in chapter 7)	Pharmacy degree teaching needs to: 1. exemplify person-first language 2. explain and embody person-centredness in mental healthcare	1 9 15 53
C	Lack of skills/confidence	Participants felt that their knowledge about mental illness and its treatment was insufficient (chapter 4, Knowing) Participants lacked confidence in applying their knowledge (chapter 5, Doing), mainly due to concerns around communication (chapter 4, Knowing)	Pharmacy degree teaching needs to: 1. present opportunities to practice applying theoretical knowledge in practice 2. observe pharmacists in clinical practice 3. focus on communication with PMI	3 10 15 17 18 28 44 53

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[13] Building on those suggested by Knaak and Patten (2016)(Knaak and Patten, 2016)

[14] See appendix 10 for wording of GPhC learning outcomes

D	Lack of awareness of own prejudices	Participants described perceived stigma but seemed to endorse several mental illness stereotypes (chapter 6, Valuing)	Pharmacy degree teaching needs to: 1. encourage reflection on stereotypes and prejudice about mental health and how these might affect professional practice	1 9 15 53
E	Self-stigma/support needs	Participants felt unable to talk about mental illness in some groups (chapter 5, Doing) Participants reported feeling unable to manage their own mental health needs or needing support with this (chapter 5, Doing)	Pharmacy degree teaching needs to: 1. empower individuals to look after their own mental health 2. empower individuals to lead from the front in acknowledging the need for disclosure and help-seeking	15 28 41 52

Table 6 Linking stigma drivers, curriculum recommendations and GPhC learning outcomes

Figure 10 shows how the evidence-based recommendations set out in table 6, link to the KDV cycle. This depicts how all three aspects of these key determinants of pharmacy students' preparedness to work with PMI can be targeted, optimising pharmacy students to manage mental illness, in themselves and others.

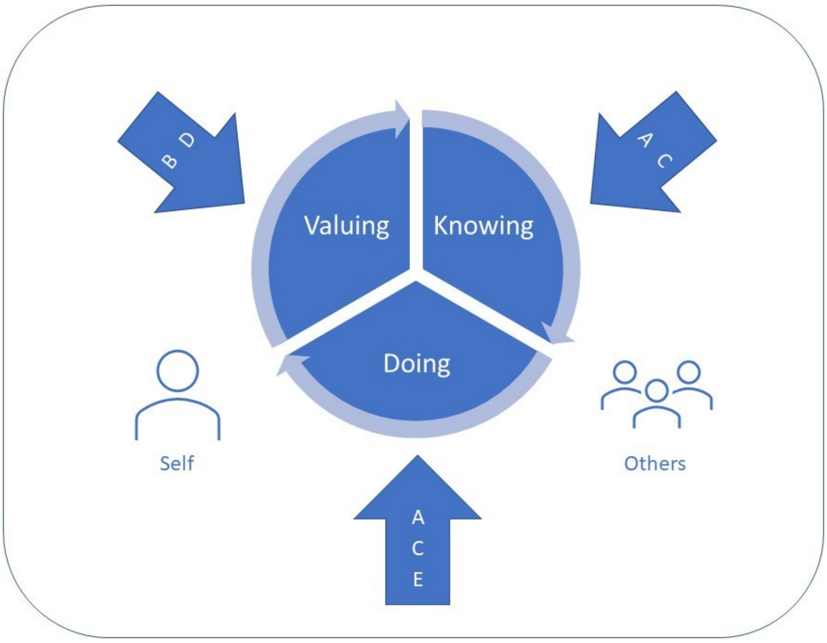

Figure 10 Linking stigma drivers and recommendations for pharmacy curricula to the KDV cycle

It is notable in figure 10 that the stigma driver in row E of table 6 (Self-stigma/support needs) was seen to be related to the Doing category of the data, rather than Valuing. This highlights the implicit nature of the data around self-stigma within pharmacy students in my research. In accordance with the findings, supporting students to take action around their own mental health (Doing) should in turn promote development of greater self-worth via reduced impact of self-stigma (Valuing).

Summary

The aim of the research was to explore pharmacy students' views towards people with mental illness and how this interacts with their preparedness for future practice, in order to inform pharmacy curricula to better prepare students for working with PMI. In meeting this aim, my findings have been shown to support previous observations of mental illness stigma among pharmacy students and contribute a contextualised description of this problem. Furthermore, I have developed an explanation of how stigma affects pharmacy students' preparedness for their future clinical roles and how this interacts with the possession of knowledge, the confidence to apply knowledge and the way that mental illness is valued within and without the pharmacy curriculum. This is described by the KDV cycle which also offers suggestions as to how sense of preparedness can be improved in ways that are grounded in the experiences of pharmacy students, while at the same time minimising the impact of stigma on their future practice. These suggestions have been discussed throughout this chapter and specific recommendations are described in the next one.

Chapter 8 – Conclusion and recommendations

Introduction

In chapter 2 I described the gap in the current literature which I aimed to contribute to with this research. My findings provide a contextualised description of the stigma manifestations within pharmacy students at a UK university and describe the interplay of these with students' sense of preparedness for their future professional practice with PMI as described by the KDV cycle. As discussed in chapter 7, my data provide evidence that stigma and students' sense of preparedness are intertwined and as such, should be addressed concurrently within curricula. In this chapter, I review the key findings of my research and how the KDV cycle not only describes how stigma is perpetuated, but also how it might be used to inform future pharmacy curriculum design. Following that, I describe some of the limitations that I have identified within my research and its findings, before reflecting on the impact of the whole project on my own professional practice and the Aston University MPharm degree. Finally, I make recommendations for future research to build upon the findings.

Contribution to the literature

My findings show that stigma is perpetuated through the Knowing, Doing, Valuing (KDV) cycle. Perceived and personal stigma were exemplified within my data, but these concepts were not considered in isolation, rather they impacted the possession of knowledge, application of knowledge in practice and the value ascribed to mental illness. Possession of knowledge was found to be of fundamental and underpinning importance. Not only did pharmacy students feel that they possessed insufficient knowledge about mental illness, they also articulated the broad range of ways which poor knowledge propagates stigma through ignorance and discrimination. Because of poor underpinning knowledge, pharmacy students felt ill-equipped to apply their knowledge in practice, meaning that they lacked confidence around their future professional roles with PMI. Analysis revealed that this confidence was associated with lack of opportunity for practice which was related to the existence of structural stigma in pharmacy education. However, questions were also raised about how realistic students' expectations are of their expected competence at the point of graduation with recent graduates offering valuable insights into the importance of postgraduate learning and experience in practice. Perceived stigma on intra- and interpersonal levels were also portrayed as significant barriers to this Doing aspect of the KDV cycle. Finally, poor knowledge and inaction devalue mental illness and those living with it, but the opposite it also true – possessing greater knowledge facilitates action which imparts value to mental illness. At this point we come to understand the value of the cyclical nature of the KDV model. When greater value is ascribed to mental illness, greater knowledge ensues, due to giving it greater focus in the pharmacy curriculum for example. Then as already seen, having superior knowledge should facilitate its application in practice and so on. Alternatively, where inaction around mental illness leads to it being devalued, knowledge can suffer due to reduced teaching or reduced sharing of personal experiences for example.

The KDV cycle I have developed is unique in that it both describes how stigma continues to be reinforced in pharmacy, whilst also offering a solution to ending the negative version of the cycle I have previously described. It is both explanation and solution. In chapter 7, the KDV cycle was explicitly linked to stigma drivers from the data and to pharmacy curriculum learning outcomes. A key finding of this study was that mental illness stigma is intertwined with students' sense of preparedness, which means that deficiencies in all three stages of the KDV cycle should be addressed throughout pharmacy curricula, rather than as a single, discrete intervention. Stigma at all levels (intrapersonal, interpersonal and structural) was identified in my findings and targeting curriculum redesign at all three stages will therefore present a multilevel approach to minimising the impact of stigma in the MPharm programme as has been previously recommended (Henderson *et al.*, 2014).

This study developed a rich exploration of stigma manifestations amongst pharmacy students which is grounded in first-hand experience. To the best of my knowledge, this is the first entirely qualitative, discipline-specific exploration of pharmacy students' views on mental illness in the UK. My findings present an important contribution to knowledge as I have provided an explanation of how this stigma is experienced and its relevance to students' future professional practice which was previously lacking. This creates an evidence base on which to design learner-focused curriculum changes. My findings add to the existing knowledge that stigma exists among pharmacy students, but they also offer exploration and explanations of that stigma within the context of Aston Pharmacy School. Through discussion of my findings, I have offered explanation of the way that stigma interacts with students' sense of preparedness for practice, which itself hinges on possession of knowledge, application of that knowledge and the value attributed to (people living with) mental illness. I have highlighted those areas of the curriculum which might need more attention in order to minimise the impact of stigma and produce pharmacists who feel prepared for their future roles with PMI. Pharmacy educators should be able to take these explanations and use them to develop evidence-based learning resources and curricula. As described in chapter 2, the literature in this field has already demonstrated the existence of mental illness stigma, as a function of specific proxy measures, amongst pharmacy students.

Pharmacy education recommendations

Below, I build upon the data discussed in chapter 7 to make specific recommendations regarding pharmacy education.

Supporting Knowing (see chapter 4 and row A in table 6 in chapter 7):

1. Contextualised examples of the ways in which psychotropic medication is used in the treatment of mental illness should be incorporated into the degree. The place of psychotropic medicines alongside other treatment modalities such as psychological intervention should be exemplified
2. Incorporate teaching on the person-focused concept of recovery and investigate the roles of psychotropic medication (from clinical and patient perspectives) in this
3. Explain the roles of pharmacists in all sectors in contributing to the care of PMI
4. Teach mental health care from interprofessional perspectives e.g., alongside nursing and medical students, so that students learn the value of each professional group and patient care pathways in the care of PMI. This will better support development of knowledge of the holistic approach to care in mental illness including diagnostics and treatment strategies
5. Ideally, facilitate student investigation into the value of psychotropic medication and pharmacists from patient perspectives so that students can learn this for themselves

Supporting Doing (see chapter 5 and row C in table 6 in chapter 7):

6. Coursework and assessment should provide opportunities for students to practice applying their knowledge to the pharmaceutical care of PMI, both as the primary diagnosis and when this is part of the medical history of a case. This should be implemented across all stages of the degree, with increasing complexity as students progress. Mental illness and its treatment need to be normalised in the context of pharmacy practice and this will provide an opportunity for this normalisation
7. Exemplify the roles of pharmacists in the care of PMI in practice through observation. Students should be encouraged to specifically reflect on the value they have observed pharmacists bringing to the care of PMI
8. Provide a range of opportunities for students to practice communication with PMI. This might include counselling and advising on medication, but also responding to symptoms and managing mental health crisis. Ideally, provide the opportunity to speak to a person living with mental illness about their medication and the roles of pharmacists in their care. Otherwise, consider the use of actors and auditory hallucination simulation (Hsia *et al.*, 2022)

Supporting Valuing (see chapter 6 and rows B, D and E of table 6 in chapter 7):

9. Ensure that teaching materials and academic staff role model the use of person-first language and avoid other problematic language (see chapter 6)
10. Encourage reflection on the importance of person-centredness for all patients, including those living with mental illness. Consider the possible barriers to this in teaching and ensure that teaching itself has the person as its focus
11. Teach about all levels of mental illness stigma specifically and allow opportunity for students to reflect in a safe space on how their personal stigma might affect their future practice. Discuss strategies for overcoming personal stigma in a non-threatening way
12. From the earliest possible stage of the degree, create an environment in which talking about personal mental illness is acceptable and in which people are empowered to disclose their needs and seek help where required
13. Within teaching, consider ways in which pharmacists can disclose mental illness and seek help where required. Discuss the importance of this in terms of minimising the impact of stigma.

Limitations

As with any study, there are limitations to this study worth briefly discussing. Having investigated the views of a single cohort of final year pharmacy students at a single university, the generalisability of the findings may be limited. This might in part be mitigated in Great Britain through GPhC accreditation, since pharmacy education must meet GPhC standards to produce pharmacists who are "dedicated to person-centred care" (GPhC, 2021, p.5). Through my application of a constructivist lens to data analysis, the part that I have played in the interpretation of the data means that this interpretation cannot be claimed to be the only one. However, my data echo many previous findings across the broader iatrogenic stigma literature, reinforcing these observations as well as my analysis. By incorporating the views of recent graduates, I have added a dimension of professional relevance to the data as well as reflections on the pharmacy student data which should be less prone to social desirability bias. A completed consolidated criteria for reporting qualitative research (COREQ) checklist is available in appendix 11 for transparency (Tong, Sainsbury and Craig, 2007).

Methodologically speaking, a key contrast between my study and some others in this field is that I did not offer any point of comparison when asking participants to consider things like their feelings or their sense of preparedness. As discussed in chapter 2, other stigma research has asked pharmacy students and qualified pharmacists to answer questions about attitudes and behaviours towards PMI compared to people living with diabetes or cardiovascular disease for example. As I did not do this, one might argue that I have assumed that the findings described in this thesis are specific to mental illness and that this is a limitation of the work. Similarly, the conclusions made based on the language used by participants and their reported preparedness for working with PMI were made in isolation, without consideration of other health conditions. It cannot be assumed that similar results would not have been found in relation to other conditions, had this been explored. However, developing breadth and depth of rich data focused exclusively on mental illness was my intention for this study. The qualitative methodology adopted may in fact be useful to examine whether the same interplay of the KDV cycle and stigma occur in other therapeutic areas such as substance misuse or to compare the interplay in less stigmatised diagnoses such as diabetes.

The undergraduate data were predominantly focused on the roles of pharmacists in community settings. This is interesting given the variety in destinations for foundation year study which participants reported. It must therefore be recognised that it is possible that sense of preparedness might have been different had participants been asked to focus specifically on the roles of pharmacists in hospital settings. That said, both groups reflected on some aspects of hospital pharmacy and where relevant to the findings (e.g., support from other professionals), these have been articulated in this thesis.

Whilst the study was advertised to all final year students, those who participated may have represented a group who already hold greater passion or interest in mental health. Only one participant identified as male which means that males were underrepresented in relation to the typical demographics of the pharmacy programme. Data may not therefore have been representative of the whole year group. Despite this, the data generated a broad range of focused codes and by the end of the third focus group, no new focused codes were added to categories and this was taken to indicate theoretical sufficiency (Dey 1999, quoted in (Charmaz, 2014)).

Finally, the COVID-19 pandemic is likely to have had some impact on the findings of my study. For example, restrictions to the number of people in healthcare settings and the need to reduce non-essential roles like facilitating student visits, meant that this cohort of students had had less clinical placement time than would usually be expected. This means that they may have had fewer opportunities to meet PMI in the healthcare setting or to observe pharmacists working with them. It is possible that had they been able to attend the workplace visits which would normally occur in year four, the findings of this study might have been different. That said, my data were reflective of and support the findings of other studies, as described in chapter 7, suggesting that they might be considered to have been broadly representative.

The nature of the data may also have been affected by the ongoing pandemic. For example, pharmacy students who were adversely affected by the pandemic might have emphasised the need for support for self-care more than they would have done had the social context been different. Similarly, the impact of isolation requirements on mental health was being widely reported in the lay press, meaning that pharmacy students might have been more aware of societal mental health needs than might have otherwise been the case.

Physical distancing and online learning might have affected student perceptions of their course and its delivery. Focus groups with pharmacy students were conducted in November 2020 to April 2021 by which point students had finished their third year online and then started their final year using a mixture of online and in-person teaching. Recent graduates recruited to the one-to-one interviews however, completed their degree in the first half of 2020 when learning (and final examinations) were moved entirely online. It is possible that perceptions of the teaching methods themselves affected student satisfaction with the contents of their studies which might have been borne out in my findings. Similarly, if student mental health was adversely affected during the pandemic, then the nature of the data might have been different than if the data had been generated at another time.

Reflecting on the impact of this research

My professional practice

Researcher reflexivity is an important part of the interpretive tradition in which my research is situated. As already discussed in chapter 3, reflection on what the researcher brings to data analysis and making this explicit is a methodological imperative in constructivist grounded theory (Birks and Mills, 2015). Such reflexivity is important throughout the research and the impact of the research on the researcher should also be considered as part of this process (Cohen, Manion and Morrison, 2007). In this section, I reflect on the impact that the research has had on me and through this process, describe some of the less tangible impacts of the whole research process.

In the first year of the doctoral programme, I was encouraged to examine and reflect critically on the professional journey and identity change which would need to occur through the research process. In the context setting analysis that I wrote as a result of that reflection, I explained the development of my identity as a pharmacist educator up to the point of beginning doctoral study. Drawing upon theory to conceptualise my development, I recognised those personal and organisational forces which shaped my changing professional identity and how I might draw upon and learn from these in order to take my first steps to becoming a researching professional. I concluded my conceptualisation as follows:

> *"As a specialist mental health pharmacist-educator with such a strong sense of responsibility towards optimising outcomes and in a context of recognised scope for improvement, it is logical to me to undertake research in the area of mental health pharmacy education. To maintain my motivation over the duration of the proposed research, and of critical relevance to an EdD, it is vital that the research that I undertake feels professionally relevant with potential positive impact on professional practice*(Lindsay, Kerawalla and Floyd, 2018)*. In accordance with the findings of Lewitt et al. (2014), the collegiate culture within the School of Pharmacy, the support of key members of MPharm staff for my undertaking an EdD and the institutional support for enhancements in the way that we meet the needs of our beneficiaries should culminate in the creation of a professional context that is likely to foster change and innovation*(Lewitt, Snowden and Sheward, 2014)*."* (Macfarlane, 2019a)

After redefining my professional identity as a pharmacist educator who uses their "*skills to define research questions within this specific professional context and design and carry out appropriate studies to answer them."*, I went on to describe my feelings at that point of being *"awash"* and *"moving a little inelegantly from conversation to conversation and from one journal article to another"* (Macfarlane, 2019a). As I now look back on the intervening three years of active research, I am able to identify the impact that the research process and content has had on my professional practice, not least my ability to manage change, uncertainty and imperfection. I worked through three changes in my supervisory team over the three research-active years, all in the context of a global pandemic which impacted the way that I was working in my clinical and academic roles as well as the way in which the research had to be conducted. My natural instinct to plan has paid dividends in managing this change and uncertainty, but I have also honed skills in communication and moderating my search for perfection. Each change in supervisory team brought about changes in perspective on my research which could have been destabilising. However, through taking time to discuss and share perspectives on what I am doing, I have learned to value the opportunities that this can bring in terms of new ideas and concepts in analysis, affirmation of worth and differing ideas on what is most important. I feel that all of this has added rich depth to my research and the analysis of my findings. On a personal level, I have learned that independence is not equivalent to success, that embracing imperfection is sometimes a necessity and that (as I have always suspected), good planning allows me to enjoy the academic and intellectual aspects of my endeavours.

This is not to say that feelings of being awash and inelegant were a thing of the past as I wrote the concluding parts of this thesis. But as I look back through supervision records, memos and my research journal, I see the documentation of the development of a new researching professional who has made logical and defensible choices about good ways to pursue an important research question. I have become more comfortable with managing the inelegancies which are part of the research process as I have experienced it. For example, the long hours of writing extremely messy sentences and paragraphs to explain analytical decisions which felt quick and intuitive was frustrating and maintaining passion during this difficult process was challenging. Through experience, and careful supervision, I have learned that the process is eventually fruitful and that this stage is actually a necessary part of interrogating the analysis itself.

Over the last 12-18 months of the doctorate, I have felt the benefits of my developing expertise in the journal articles that I have peer-reviewed with increased confidence and skill and the support that I have been able to give to my own students. I have built upon practical analytical skills first employed in my MSc (Macfarlane, 2019b) and have been proud to reflect on this development as I re-read my research journal. There I see evidence of the further development of my analytical ear (Braun and Clarke, 2013b) which was evidenced through a quality assurance process of my coding process by my supervisor as well as in subsequent supervisory discussions. Based on the subject of this research, I was asked to join a research collaboration focused on pharmacy curricula and Mental Health First Aid (MHFA) training. The group has published one paper (Gorton *et al.*, 2021) already and another has been accepted for publication in 2023 (Gorton, Strawbridge and Macfarlane, 2023). Thus, this doctoral research has allowed me not only to develop skill in research methods which I have applied outside of this specific study, but also to foster collaborative links with other academics. Finally, in January 2022 I applied for promotion to and was awarded, Senior Teaching Fellow. This, at least in part, reflects the value of doctoral study on my professional career in which pedagogical research is valued.

Finally, critical reflection on my teaching and professional values as a pharmacist educator have allowed me to think about the emphasis in my teaching at different levels. The importance of adopting sociological perspectives in mental health teaching has been emphasised to me and has influenced my professional approach. For example, in conversations with year leads about mental health teaching in the pharmacy curriculum, I have raised the possibility of limiting the separation of mental and somatic illness in teaching to minimise the impact of dualism (Nettleton, 2021, p.86) on our students. Rather than labelling hospital placements and mental health placements separately, with separate introductory sessions, these could all be considered under an umbrella term such as clinical placements. This is an avenue I wish to pursue in the curriculum redesign for 2023 (see chapter 1). Another example is in my heightened awareness of the messages that I portray in my own mental health teaching and how students' beliefs and attitudes might impact what they hear in my teaching. Finally, I have taken opportunities to highlight the importance of person-centredness, choosing this as the topic to talk about to delegates at a mental health pharmacy conference which I was asked to Chair.

Overall, it is my belief that both the content and the process of this research has had wide-reaching impact on me as a professional which I will take forward into the next stages of my career.

The Aston MPharm degree

The professional doctorate in education allows not only the development of research skills, but also the development of a novel contribution to professional practice (Burgess, Sieminski and Arthur, 2006). I have already explained the impact of this research on me and my professional practice, but this impact also extends to my current professional context – the Aston University pharmacy degree. Earlier in this chapter I described the recommendations that I make as a result of my findings and these all relate to the pharmacy curriculum. Based on the evidence that I have provided, adopting these recommendations should allow student pharmacists to feel more prepared for, and reduce the impact of stigma in, their future professional roles with PMI. As already described (see chapter 7), there have been several innovations within the Aston pharmacy degree which have been driven by the interim findings of this research. However, now that formal recommendations can be made, further enhancement may be possible.

Importantly, having started this doctoral journey as a peripheral member of pharmacy staff with little, if any, impact on the MPharm degree, I am now armed with the evidence to provide valuable input into the redesign of the programme in line with the updated GPhC accreditation standards (GPhC, 2021). Appropriate application of my findings should enhance not only the delivery of the programme and the way it is perceived by students, as described above, but also by the accrediting body. This is because my findings and the recommendations based on them can be explicitly linked to GPhC learning outcomes (see table 6, chapter 7), against which the programme will be assessed. Person-centredness and professional practice are two domains of the GPhC standards, covering a large number of the learning outcomes. These should be directly enhanced through better integration of mental health teaching within the curriculum and through allowing students to practice skills which are subsequently assessed and encouraging self-reflection in terms of personal stigma. Importantly, the possibility that the degree programme itself can be viewed as a source of structural mental illness stigma will be mitigated.

The wider professional community

I have contributed an original understanding and description of mental illness stigma within UK pharmacy students. Although contextually specific, the clear resonance with the existing literature in this field might help other Schools of Pharmacy to consider the approaches taken in their own mental health teaching. This might be most feasible through future publication of the findings of this research, particularly if they can be linked to the process of GPhC reaccreditation.

Future research

I consider the adoption of qualitative methodology as having brought about a valuable contribution to the field. Not only have I been able to compare my data with earlier quantitative studies to demonstrate the existence of the problem of stigma towards mental illness, but I have been able to describe this problem and link it to professional practice in a way that has not previously been reported. Although the potential value of qualitative exploration of this problem had been suggested by several groups, this is the first study of this kind in the UK, and the findings demonstrate the value of the methodology. That said, the research was carried out at a single university and similar studies might make different recommendations based on their varied social context. Such exploration is therefore encouraged to allow evidence-based approaches in different Schools of Pharmacy.

As the Aston MPharm has incorporated MHFA training in the academic year 2021-22 and then clinical placements and mental health simulations in the academic year 2022-23, further qualitative exploration would be of value to determine how attitudes and sense of preparedness evolve as students engage with these new learning experiences. Building on my findings and their discussion, it is possible that preparedness might actually reduce as students become increasingly conscious of their future roles with PMI and the sense of incompetence that they may have around this. Empirical research to determine the effects of these curricular enhancements should therefore be undertaken to see how they impact on the KDV cycle to ensure that outcomes are optimised. It may be preferable to design such research using mixed methods so that the significance of the impact of each intervention can be measured whilst developing understanding of the subjective experiences of students allowing value to be both measured and described. Serial data might also be useful to determine changes in preparedness and stigma as the course progresses. This might become increasingly relevant with re-accreditation as universities retain some responsibility for the education of training of foundation pharmacists during their first year in practice. Publication of the findings of such studies would be encouraged to demonstrate the value to other Schools of Pharmacy of investing in contextualised qualitative research of their own pharmacy students as described above.

Concluding remarks

Through the development of the KDV cycle, this study has contributed to the knowledge in pharmacy education about how mental illness stigma is perpetuated and its effect on students' preparedness to practice. Serving as both explanation and solution, the KDV cycle provides a way forward in understanding how stigma is reinforced, and thus where efforts can be made to reduce stigma for future generations of pharmacists. Further, the cycle could be applied to practising pharmacists and existing professional development and training, offering ways to reduce stigma in the present workforce too. My work substantiates the value of qualitative exploration of a topic which is well-known but poorly understood within a given context so as to take evidence-based approaches to curriculum design. This has been evidenced by the impact already achieved as a result of the findings of the study. The thesis argues that stigma should not be tackled in isolation. Instead, students' knowledge, application of knowledge and the value ascribed to mental illness should be addressed alongside mental illness stigma within pharmacy curricula.

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Appendix 1 – Focus group topic guide

Introduction

Ground rules

Please tell me your name and what sector of pharmacy you plan to work after graduation

If I ask you to think about mental illness, what is the first thing that comes into your mind?

I'm now going to read two descriptions of people who meet the diagnostic criteria for different mental illnesses. Don't worry – you're not going to be tested on this, I just want to paint some pictures for you so that we've all got a similar thing in our minds when we think about the next sets of questions. The questions are going to be about how you feel about the people I describe and what it might be like to work as a pharmacist with them. I won't be testing your knowledge – it's your feelings that are important here. So these are the things you might want to think about as I read. I will copy the descriptions into the chat as well so you can read along with me if you wish. Feel free to take notes.

(Read vignettes)

Topic 1: Thoughts around people described in the vignettes

Consider emotional responses to the people described

Question examples: What emotions did you notice? What do you think caused you to feel this way? How did you feel when you heard the descriptions?

How this may vary with context (e.g. professional vs personal relationships and settings?

What might life be like for the people described?

Prompts: what might day-to-day life be like? Might there be differences to your own life? How might their symptoms affect their quality of life?

How people might find themselves in such situations?

Question examples: What causes John and Jay to experience the things described? Why does this happen?

The need for and type of support which might be offered/sought

Question examples: What sort of help do John and Jay need? What should be offered? How might this help?

Topic 2: Thoughts and feelings around working as a pharmacist with the people described

What would it be like to provide pharmaceutical care to the people described?

Question examples: What would it be like to provide pharmaceutical care to John and Jay? How do you feel about providing pharmaceutical care to them? What sort of things would you be doing?

Roles of pharmacists in this context – feelings of preparedness for this role?

Question examples: Can you describe the roles of pharmacists in providing care for people like John and Jay? How prepared do you feel for doing this? What are your concerns/What is making you feel unprepared? What helped you to feel ready?

Discussion of barriers to care

Question examples: What challenges to providing care do you perceive? What causes these challenges/barriers? Explore any differences between PMI and other Dx suggested by participants

Enhancing preparedness of the pharmacist

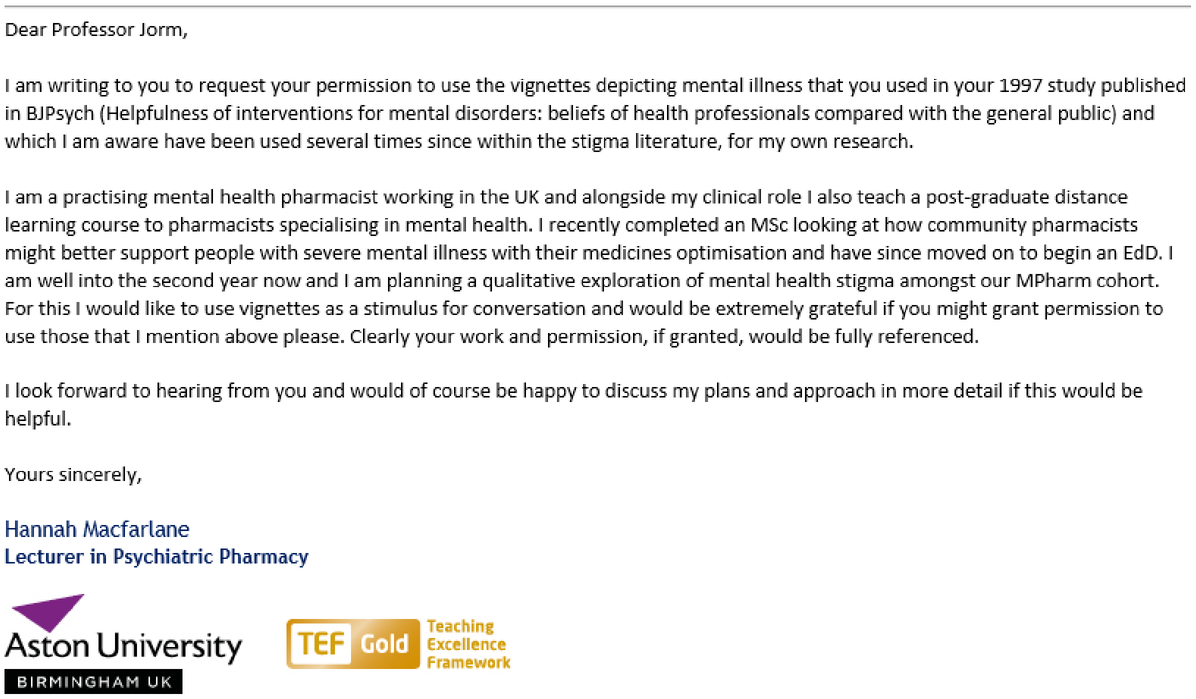
What might it feel like to be fully prepared to work with people with mental illness? How could your experience at university be changed to support that?

Appendix 2 – Case vignettes

John: John is 24 and lives at home with his parents. He has had a few temporary jobs since finishing school but is now unemployed. Over the last six months he has stopped seeing his friends and has begun locking himself in his bedroom and refusing to eat with the family or to have a bath. His parents also hear him walking about his bedroom at night while they are in bed. Even though they know he is alone, they have heard him shouting and arguing as if someone else is there. When they try to encourage him to do more things, he whispers that he won't leave home because he is being spied upon by the neighbour. They realise he is not taking drugs because he never sees anyone or goes anywhere

Jay: Jay is 30 years old. He has been feeling unusually sad and miserable for the last few weeks. Even though he is tired all the time, he has trouble sleeping nearly every night. Jay doesn't feel like eating and has lost weight. He can't keep his mind on his work and puts off making decisions. Even day-to-day tasks seem too much for him. This has come to the attention of Jay's boss, who is concerned about his lowered productivity

Appendix 3 – Permission from Professor Anthony Jorm to use case vignettes



Dear Professor Jorm,

I am writing to you to request your permission to use the vignettes depicting mental illness that you used in your 1997 study published in BJPsych (Helpfulness of interventions for mental disorders: beliefs of health professionals compared with the general public) and which I am aware have been used several times since within the stigma literature, for my own research.

I am a practising mental health pharmacist working in the UK and alongside my clinical role I also teach a post-graduate distance learning course to pharmacists specialising in mental health. I recently completed an MSc looking at how community pharmacists might better support people with severe mental illness with their medicines optimisation and have since moved on to begin an EdD. I am well into the second year now and I am planning a qualitative exploration of mental health stigma amongst our MPharm cohort. For this I would like to use vignettes as a stimulus for conversation and would be extremely grateful if you might grant permission to use those that I mention above please. Clearly your work and permission, if granted, would be fully referenced.

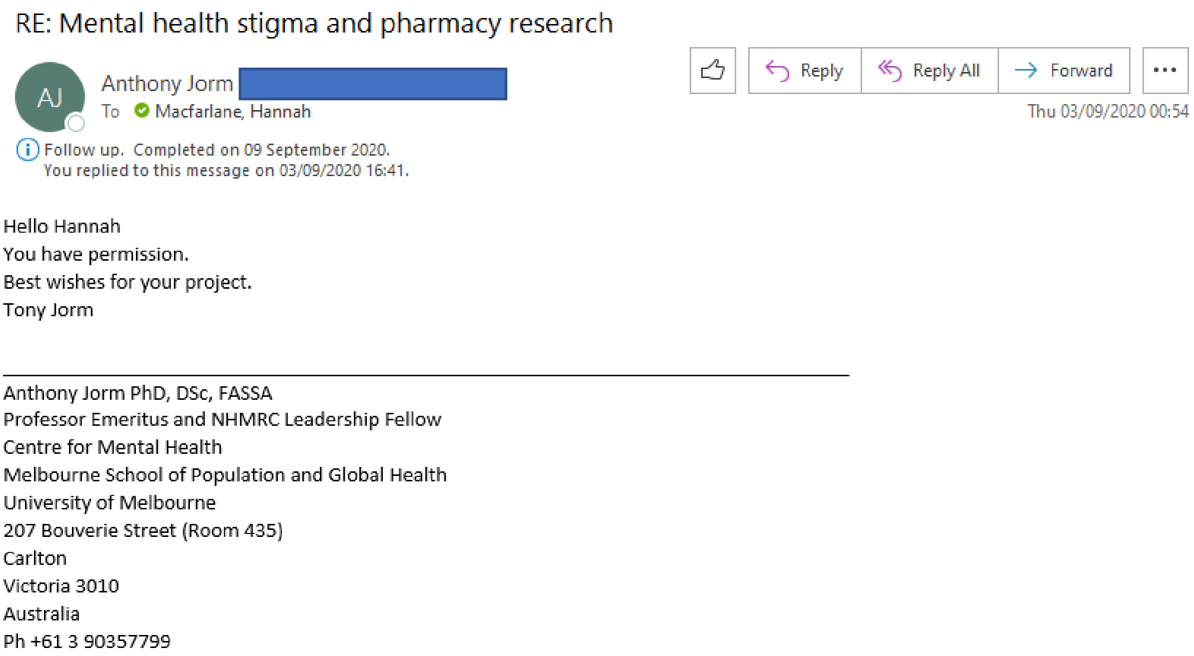
I look forward to hearing from you and would of course be happy to discuss my plans and approach in more detail if this would be helpful.

Yours sincerely,

Hannah Macfarlane
Lecturer in Psychiatric Pharmacy

Aston University
BIRMINGHAM UK

TEF Gold Teaching Excellence Framework



RE: Mental health stigma and pharmacy research

Anthony Jorm [redacted]
To Macfarlane, Hannah
Thu 03/09/2020 00:54

Follow up. Completed on 09 September 2020.
You replied to this message on 03/09/2020 16:41.

Hello Hannah
You have permission.
Best wishes for your project.
Tony Jorm

Anthony Jorm PhD, DSc, FASSA
Professor Emeritus and NHMRC Leadership Fellow
Centre for Mental Health
Melbourne School of Population and Global Health
University of Melbourne
207 Bouverie Street (Room 435)
Carlton
Victoria 3010
Australia
Ph +61 3 90357799

Appendix 4 – Interview topic guide

Welcome and introductions – confirmation that consent is received and participant's questions are answered

1. Please describe some professional interactions that you have had with people with mental illness
2. How do these experiences compare to your expectations of working with people with mental illness when you graduated?
3. Explore observations from focus group data (e.g. believing that talking to people with mental illness is hard)
   (present these in written format to enable more free-flowing, participant-led conversation)
4. How might these feelings and beliefs affect students' sense of preparedness to work with PMI?
5. Focus group participants reported feeling unprepared to work with PMI. Do you have any further thoughts on why this might be?
6. How can Aston help students to feel better prepared for working with PMI?
7. In this research I am exploring and trying to describe the stigma towards mental illness which might manifest amongst MPharm students and how this might affect their preparedness to work with PMI. Is there anything else you'd like to add which you think might be relevant to this?

Appendix 5 – Participant information sheet for focus groups

Aston University

Exploring mental illness stigma and its contribution to the preparedness of MPharm students for working with people with mental illness (Phase 1)

Participant Information Sheet

Invitation

We would like to invite you to take part in a research study.

Before you decide if you would like to participate, take time to read the following information carefully and, if you wish, discuss it with others such as your family, friends or colleagues.

Please ask a member of the research team, whose contact details can be found at the end of this information sheet, if there is anything that is not clear or if you would like more information before you make your decision.

What is the purpose of the study?

People who experience mental illness may be less likely to ask for help from healthcare professionals, such as pharmacists. This might then be associated with worse outcomes for people experiencing mental illness, such as their illness not being treated well enough.

The purpose of this study is to talk to groups of pharmacy undergraduates (focus groups) about their attitudes and beliefs towards people who experience mental illness (like depression, schizophrenia or bipolar disorder). We would like to understand these attitudes and beliefs and find out whether these have an effect on how prepared pharmacy students feel to work with people who experience mental illness in their future careers. To fully understand these things, we think we will need to talk to around 15-30 people in small groups.

The information that we collect will be used in combination with the findings of the second phase of the study to inform the future design of the pharmacy curriculum. By understanding the attitudes and beliefs of pharmacy students at Aston, we hope to develop a more student-focused approach to mental health education within the course.

Why have I been chosen?

You are being invited to take part in this study because you are a pharmacy student at Aston University.

You might also be receiving this information if you have responded to a poster advertising the study.

What will happen to me if I take part?

If you decide to take part, then you will be asked to participate in one focus group. You will be able to choose from a range of available focus group times.

On the agreed date, you will attend a room in the University* for a group interview (the focus group) with other pharmacy students. We are expecting around 6-8 people in each group. Refreshments and a light meal will be provided for meetings held on campus.

The focus group will be led by Hannah Macfarlane and a co-facilitator may be present. Hannah will lead the group through the issues we would like to explore. There are no right or wrong answers, we are just interested in your opinions.

The focus group is expected to last around 90 minutes and will be recorded. A second facilitator may be present to help take notes from the session.

Before the recording begins you will be asked to complete a short survey of demographic information. This is just so that we can report on the range of people who took part in the study.

*Should Social Distancing remain in place at the point of data collection, focus groups will be held virtually using software such as Skype, WhatsApp or MS Teams.

How will the conversations that take place during the focus groups be recorded and the information I provide managed?

With the group’s permission we will audio record the focus group.

The recording will be typed into a document (transcribed) by a transcriber approved by Aston University. During the transcription process any names that have been used will be replaced with a pseudonym.

Audio recordings will be destroyed as soon as the transcripts have been checked for accuracy.

Any extracts from the group discussions that are included in the reporting of the study will be anonymous.

If you agree to take part in a focus group full confidentiality cannot be guaranteed on behalf of the other focus group participants, although all participants will be asked to maintain confidentiality at the start of the focus group.

How will the video recordings made during the study be managed?*

The video recordings will be destroyed as soon as the research team have analysed the information in them to answer the research question.

We will ensure that anything from the analysis of the videos that is included in the reporting of the study will be anonymous.

*only relevant to focus groups conducted online (e.g. Skype, WhatsApp, MS Teams) which will be recorded using inbuilt software which captures video and audio simultaneously. Only the audio data will be used in the analysis.

Do I have to take part?

No. It is up to you to decide whether or not you wish to take part.

If you do decide to participate, you will be asked to sign and date a consent form. You would still be free to withdraw from the study at any time without giving a reason. If you leave the focus group once it has begun, it will not be possible to remove your data from the study.

Will my taking part in this study be kept confidential?

Yes. A code will be attached to all the data you provide to maintain confidentiality.

Your personal data (name and contact details) will only be used if the researchers need to contact you to arrange study visits or collect data by phone. Analysis of your data will be undertaken using coded data.

The data we collect will be stored in a secure document store (paper records) or electronically on a secure encrypted mobile device, password protected computer server or secure cloud storage device.

To ensure the quality of the research, Aston University may need to access your data to check that the data has been recorded accurately. If this is required, your personal data will be treated as confidential by the individuals accessing your data.

What are the possible benefits of taking part?

We hope that you will find it interesting to be part of engaging conversation with your peers about the research subject. However, there are no direct benefits to you of taking part in this study.

The data gained will be used to inform future curriculum design for the pharmacy course. The aim of this is to ensure that Aston pharmacy graduates feel well-prepared to work with people with mental illness when they leave university.

What are the possible risks and burdens of taking part?

Taking part in this study is expected to be low risk. However, for some people, it may be stressful to have conversations about mental health, even though we are not going to ask you for any personal experiences.

Due to the nature of a focus group, the things you say will be shared with the other members of the group. You need to think about whether you are happy to do this. The group will be asked to maintain confidentiality about the things that each of you has said once the focus group has finished.

At the end of the focus group, you will be given the opportunity for debriefing and you will be able to ask any questions that you might have.

The burden to you will be to commit 1-2 hours of your time to take part in the focus group.

What will happen to the results of the study?

The results of this study may be published in scientific journals and/or presented at conferences. If the results of the study are published, your identity will remain confidential.

A lay summary of the results of the study will be available for participants when the study has been completed and the researchers will ask if you would like to receive a copy.

The results of the study will also be used in Hannah Macfarlane’s EdD thesis.

Expenses and payments

This research is taking place on University premises and no availability of payment or reimbursement of expenses.

Who is funding the research?

There is no funding for this study.

Who is organising this study and acting as data controller for the study?

Aston University is organising this study and acting as data controller for the study. You can find out more about how we use your information in Appendix A.

Who has reviewed the study?

This study was given a favorable ethical opinion by the Aston University CBS Research Ethics Committee.

What if I have a concern about my participation in the study?

If you have any concerns about your participation in this study, please speak to the research team and they will do their best to answer your questions. Contact details can be found at the end of this information sheet.

If the research team are unable to address your concerns or you wish to make a complaint about how the study is being conducted you should contact the Aston University Research Integrity Office at research_governance@aston.ac.uk or telephone 0121 204 3000.

Research Team

Chief Investigator: Hannah Macfarlane h.l.e.macfarlane@aston.ac.uk 0121 2043954
Supervisor: Dr Julian Lamb j.lamb1@aston.ac.uk 0121 2045223

Thank you for taking time to read this information sheet. If you have any questions regarding the study please don’t hesitate to ask one of the research team.

Aston University takes its obligations under data and privacy law seriously and complies with the General Data Protection Regulation ("GDPR") and the Data Protection Act 2018 ("DPA").

Aston University is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study. Aston University will process your personal data in order to register you as a participant and to manage your participation in the study. It will process your personal data on the grounds that it is necessary for the performance of a task carried out in the public interest (GDPR Article 6(1)(e). Aston University may process special categories of data about you which includes details about your health. Aston University will process this data on the grounds that it is necessary for statistical or research purposes (GDPR Article 9(2)(j)). . Aston University will keep identifiable information about you for 6 years after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally identifiable information possible.

You can find out more about how we use your information at www.aston.ac.uk/dataprotection or by contacting our Data Protection Officer at dp_officer@aston.ac.uk.

If you wish to raise a complaint on how we have handled your personal data, you can contact our Data Protection Officer who will investigate the matter. If you are not satisfied with our response or believe we are processing your personal data in a way that is not lawful you can complain to the Information Commissioner's Office (ICO).

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Appendix 6 – Participant information sheet for interviews

Aston University

Exploring mental illness stigma and its contribution to the preparedness of MPharm students to work with people who experience mental illness (Phase 2)

Participant Information Sheet

Invitation

We would like to invite you to take part in a research study.

Before you decide if you would like to participate, take time to read the following information carefully and, if you wish, discuss it with others such as your family, friends or colleagues.

Please ask a member of the research team, whose contact details can be found at the end of this information sheet, if there is anything that is not clear or if you would like more information before you make your decision.

What is the purpose of the study?

People who experience mental illness may be less likely to ask for help from healthcare professionals, such as pharmacists. This might then be associated with worse outcomes for people experiencing mental illness, such as their illness not being treated well enough.

The purpose of this study is to talk to recent graduates from Aston Pharmacy School their experiences of working with people with mental illness and how they relate this to their experiences as an undergraduate. We would also like recent graduates to help us make sense of the attitudes and beliefs of current undergraduates towards people who experience mental illness.

To fully understand these things, we think we will need to talk to around 10 people.

The information that we collect will be used in combination with the findings of the first phase of the study to inform the future design of the pharmacy curriculum. By understanding the attitudes and beliefs of pharmacy students at Aston, we hope to develop a more student-focused approach to mental health education within the course.

Why have I been chosen?

You are being invited to take part in this study because you are a recent pharmacy graduate of Aston University.

What will happen to me if I take part?

If you decide to take part, then you will be asked to participate in one interview. The interview will be organised for a time convenient to you. Interviews will be conducted online using software such as MS Teams.

The interview is likely to last up to one hour and will be recorded. A voucher for light refreshments will be provided.

Before the recording begins you will be asked to complete a short survey of demographic information. This is just so that we can report on the range of people who took part in the study.

How will the conversation during the interview be recorded and the information I provide managed?

With your permission we will audio record the interview and take notes.

The recording will be typed into a document (transcribed) by a transcriber approved by Aston University. This process will involve removing any information which could be used to identify individuals e.g. names, locations etc. which will be done as soon as possible.

Audio recordings will be destroyed as soon as the transcripts have been checked for accuracy.

We will ensure that anything you have told us that is included in the reporting of the study will be anonymous.

You of course are free not to answer any questions that are asked without giving a reason.

How will the video recordings made during the study be managed?*

The video recordings will be destroyed as soon as the research team have analysed the information in them to answer the research question.

We will ensure that anything from the analysis of the videos that is included in the reporting of the study will be anonymous.

*only relevant to focus groups conducted online (e.g. Skype, WhatsApp, MS Teams) which will be recorded using inbuilt software which captures video and audio simultaneously. Only the audio data will be used in the analysis.

Do I have to take part?

No. It is up to you to decide whether or not you wish to take part.

If you do decide to participate, you will be asked to sign and date a consent form. You would still be free to withdraw from the study at any time without giving a reason. If you change your mind after the interview, you will need to let Hannah know (by email or phone) if you no longer want your data to be used. You must make this decision within 2 weeks of the interview.

Will my taking part in this study be kept confidential?

Yes. A code will be attached to all the data you provide to maintain confidentiality.

Your personal data (name and contact details) will only be used if the researchers need to contact you to arrange study visits or collect data by phone. Analysis of your data will be undertaken using coded data.

The data we collect will be stored in a secure document store (paper records) or electronically on a secure encrypted mobile device, password protected computer server or secure cloud storage device.

To ensure the quality of the research, Aston University may need to access your data to check that the data has been recorded accurately. If this is required, your personal data will be treated as confidential by the individuals accessing your data.

What are the possible benefits of taking part?

We hope that you will find engaging in this research interesting. However, there are no direct benefits to you of taking part in this study.

The data gained will be used to inform future curriculum design for the pharmacy course. The aim of this is to ensure that Aston pharmacy graduates feel well-prepared to work with people who experience psychosis when they leave university.

What are the possible risks and burdens of taking part?

Taking part in this study is expected to be low risk. However, for some people, it may be stressful to have conversations about mental health, even though we are not going to ask you for any personal experiences.

You will be able to take a break if you need to or stop the interview at any point. At the end of the interview, you will be given the opportunity for debriefing and you will be able to ask any questions that you might have. I will provide you with sources of further advice and support.

The burden to you will be to commit about 1 hour of your time to take part in the interview.

What will happen to the results of the study?

The results of this study may be published in scientific journals and/or presented at conferences. If the results of the study are published, your identity will remain confidential.

A lay summary of the results of the study will be available for participants when the study has been completed and the researchers will ask if you would like to receive a copy.

The results of the study will also be used in Hannah Macfarlane's EdD thesis.

Expenses and payments

No payment is available for participating in an interview.

Who is funding the research?

There is no funding for this study.

Who is organising this study and acting as data controller for the study?

Aston University is organising this study and acting as data controller for the study. You can find out more about how we use your information in Appendix A.

Who has reviewed the study?

This study was given a favorable ethical opinion by the Aston University CBS Research Ethics Committee.

What if I have a concern about my participation in the study?

If you have any concerns about your participation in this study, please speak to the research team and they will do their best to answer your questions. Contact details can be found at the end of this information sheet.

If the research team are unable to address your concerns or you wish to make a complaint about how the study is being conducted you should contact the Aston University Research Integrity Office at research_governance@aston.ac.uk or telephone 0121 204 3000.

Research Team

Chief Investigator: Hannah Macfarlane h.l.e.macfarlane@aston.ac.uk 0121 2043954
Supervisor: Dr Julian Lamb j.lamb1@aston.ac.uk 0121 2045223

Thank you for taking time to read this information sheet. If you have any questions regarding the study please don't hesitate to ask one of the research team.

Aston University takes its obligations under data and privacy law seriously and complies with the General Data Protection Regulation ("GDPR") and the Data Protection Act 2018 ("DPA").

Aston University is the sponsor for this study based in the United Kingdom. We will be using information from you in order to undertake this study. Aston University will process your personal data in order to register you as a participant and to manage your participation in the study. It will process your personal data on the grounds that it is necessary for the performance of a task carried out in the public interest (GDPR Article 6(1)(e). Aston University may process special categories of data about you which includes details about your health. Aston University will process this data on the grounds that it is necessary for statistical or research purposes (GDPR Article 9(2)(j)). . Aston University will keep identifiable information about you for 6 years after the study has finished.

Your rights to access, change or move your information are limited, as we need to manage your information in specific ways in order for the research to be reliable and accurate. If you withdraw from the study, we will keep the information about you that we have already obtained. To safeguard your rights, we will use the minimum personally identifiable information possible.

You can find out more about how we use your information at www.aston.ac.uk/dataprotection or by contacting our Data Protection Officer at dp_officer@aston.ac.uk.

If you wish to raise a complaint on how we have handled your personal data, you can contact our Data Protection Officer who will investigate the matter. If you are not satisfied with our response or believe we are processing your personal data in a way that is not lawful you can complain to the Information Commissioner's Office (ICO).

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Appendix 7 – Focus group consent form

Aston University

Exploring mental illness stigma and its contribution to the preparedness of MPharm students for working with people with mental illness (Phase 1)

Consent Form

Name of Chief Investigator: Hannah Macfarlane

Participant ID:

Please initial boxes

1.	I confirm that I have read and understand the Participant Information Sheet (Version 2, 25.9.20) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without my legal rights being affected.	
3.	I agree to my personal data and data relating to me collected during the study being processed as described in the Participant Information Sheet.	
4.	I understand that I am not obliged to answer any question and that I do so of my own free will.	
5.	I understand that I am free to withdraw from the focus group at any time but that once the recording has started, my data will not be removed from the recording and will be used in the analysis.	
6.	I understand that if during the study I tell the research team something that causes them to have concerns in relation to my health and/or welfare they may need to breach my confidentiality.	
7.	I agree to the focus group being audio and video* recorded and to anonymised direct quotes from me being used in any reports, publications or events where the results from the study will be disseminated (shared). *video recording is only relevant when the focus group is conducted online	
8.	I understand that the focus group recording will be transcribed (typed up) by the Chief Investigator or an approved independent transcriber.	
9.	I agree to take part in this study.	

Name of participant ________________ Date ________________ Signature ________________

Name of Person receiving consent.	Date	Signature

Footer to original: REC ID: 205-05-20-Macfarlane, Version 2, 25.9.2020

Appendix 8 – Interview consent form

Aston University

Exploring mental illness stigma and its contribution to the preparedness of MPharm students to work with people who experience mental illness (Phase 2)

Consent Form

Name of Chief Investigator: Hannah Macfarlane

Participant ID:

Please initial boxes

1.	I confirm that I have read and understand the Participant Information Sheet V1 13.03.20 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without my legal rights being affected.	
3.	I agree to my personal data and data relating to me collected during the study being processed as described in the Participant Information Sheet.	
4.	I understand that I am not obliged to answer any question and that I do so of my own free will.	
5.	I understand that I can terminate the interview at any point without giving reason. If I wish the recording to be deleted and not included in the study, then I must inform the Chief Investigator within two weeks of the interview date.	
6.	I understand that if during the study I tell the research team something that causes them to have concerns in relation to my health and/or welfare they may need to breach my confidentiality.	
7.	I agree to my interview being audio and video* recorded and to anonymised direct quotes from me being used in any reports, publications or events where the results from the study will be disseminated (shared). *video recording is only relevant when the focus group is conducted online	
8.	I understand that the interview recording will be transcribed (typed up) by the Chief Investigator or an approved independent transcriber.	
9.	I agree to take part in this study.	

Name of participant ______________________ Date ______________ Signature ________________

Name of Person receiving Consent	Date	Signature

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Appendix 9 – Participant debrief sheet

Exploring mental illness stigma and its contribution to the preparedness of MPharm students for working with people with mental illness

Participant Debrief

Thank you for your participation in this research study.

The results of this study may be published in scientific journals and/or presented at conferences. If the results of the study are published, your identity will remain confidential.

If you change your mind and would like to withdraw from the study then you may request that your interview recording and transcript be deleted by contacting Hannah within 2 weeks of the interview. Note that this is not possible for focus group recordings.

A lay summary of the results of the study will be available for participants when the study has been completed.

If you would like to talk about any feelings or concerns that participating in this study has raised for you, then you can contact Hannah during working hours on h.l.e.macfarlane@aston.ac.uk or 0121 2043954.

You can also contact Hannah's supervisor, Dr Julian Lamb on j.lamb1@aston.ac.uk or 0121 2045223. Current students of Aston University can contact student support services via the Hub: thehub@aston.ac.uk or 021 204 4007.

If you need help or support more urgently, please contact:

Pharmacist Support www.pharmacistsupport.org or 0808 168 2233

Mind, the mental health charity www.mind.org.uk or 0300 123 3393

Samaritans www.samaritans.org or 116 123 (free any time from any phone)

Original footer: REC ID: 205-05-20-Macfarlane, Version 1, 20.03.2020

Appendix 10 – General Pharmaceutical Council learning outcomes for the initial education and training of pharmacists referred to in this research (GPhC, 2021)

Domain	Learning outcome number	Description
Person-centred care and collaboration	**1**	Demonstrate empathy and keep the person at the centre of their approach to care at all times
	2	Work in partnership with people to support and empower them in shared decision-making about their health and wellbeing
	3	Demonstrate effective communication at all times and adapt their approach and communication style to meet the needs of the person
	9	Take responsibility for ensuring that personal values and beliefs do not compromise person-centred care
	10	Demonstrate effective consultation skills, and in partnership with the person, decide the most appropriate course of action
	14	Work collaboratively and effectively with other members of the multi-disciplinary team to ensure high-quality, person-centred care, including continuity of care
Professional practice	**15**	Demonstrate the values, attitudes and behaviours expected of a pharmacy professional at all times
	17	Recognise and work within the limits of their knowledge and skills, and get support and refer to others when they need to
	18	Take responsibility for all aspects of pharmacy services, and make sure that the care and services provided are safe and accurate
	28	Demonstrate effective diagnostic skills, including physical examination, to decide the most appropriate course of action for the person
	41	Effectively make use of local and national health and social care policies to improve health outcomes and public health, and to address health inequalities
	44	Respond appropriately to medical emergencies, including the provision of first aid
Leadership and management	**52**	Demonstrate resilience and flexibility, and apply effective strategies to manage multiple priorities, uncertainty, complexity and change
Education and research	**53**	Reflect upon, identify, and proactively address their learning needs

Appendix 11 – COREQ checklist

Domain 1: Research team and reflexivity

1. Which author/s conducted the interview or focus groups?
   The focus groups and interviews were conducted by Hannah Macfarlane (HM).
2. What were the researcher's credentials?
   HM is a pharmacist experienced in mental health who has also had training in qualitative methods and has completed a research Masters using qualitative methods.
3. What was their occupation at the time of the study?
   HM is a senior teaching fellow in psychiatric pharmacy at a UK university. At the time of the research, she was also working in clinical practice as a mental health pharmacist.
4. Was the researcher male or female?
   HM is female.
5. What experience or training did the researcher have?
   HM is an experienced mental health pharmacist with specific training in qualitative research methods. She has an MSc which used qualitative methods.
6. Was a relationship established prior to study commencement?
   HM did not know any of the participants prior to study commencement.
7. What did the participants know about the researcher?
   The participants knew that HM was a practising mental health pharmacist who also worked in an academic role in the Aston School of Pharmacy. They knew that the research was being undertaken in fulfilment of a Doctorate in Education (EdD).
8. What characteristics were reported about the interviewer?
   HM reported that she was an academic and practising mental health pharmacist who was undertaking the research.

Domain 2: Study design

9. What methodological orientation was stated to underpin the study?
   Constructivism was the methodological orientation underpinning for this study.
10. How were participants selected?
    All participants who expressed interest in participation and who agreed to attend a focus group or interview were selected.
11. How were participants approached?
    Potential participants were approached by email from the lead author and these emails were reinforced/forwarded by key academic staff e.g., personal tutors.
12. How many participants were in the study?
    The final number of participants was 18; 14 in focus groups and 4 in interviews.
13. How many people refused to participate or dropped out?
    Twenty-two expressions of interest were received for the focus groups. Of these, 15 agreed to participate in the focus groups. Of the 7 people who chose not to participate, three dropped out of contact, three cited conflicting concerns with the focus group times available and one stated that participation was 'not worth it'. One

participant dropped out prior to their allocated focus group due to a conflicting appointment. Therefore 14 people participated in focus groups. Four people expressed interest in participating in one-to-one interviews and they all participated.

14. Where was the data collected?
    Data were collected in online focus groups and interviews which were recorded for the purpose of transcription. The location of participants at the point of data collection was not known.
15. Was anyone else present besides the participants and researchers?
    No-one else was present in any of the focus groups.
16. What are the important characteristics of the sample?
    The participants were predominantly female. They were within the age range 21-34.
17. Were questions, prompts, guides provided by the authors? Was it pilot tested?
    The topic guides approved through the ethics are included as separate appendices. The first focus group was treated as a pilot test.
18. Were repeat interviews carried out? If yes, how many?
    No repeat interviews were carried out, but participants were approached by email over matters of clarity.
19. Did the research use audio or visual recording to collect the data?
    The research used digital audio-visual recording to collect the data. Data were transcribed in full.
20. Were field notes made during and/or after the interview or focus groups?
    Field notes were made during and after the focus groups and interviews.
21. What was the duration of the interviews or focus group?
    The focus groups lasted an average of 100 minutes, range 96-104 minutes. The interviews lasted an average of 66 minutes, range 56-80 minutes.
22. Was data saturation discussed?
    Theoretical data saturation is discussed.
23. Were transcripts returned to participants for comment and/or correction?
    Transcripts were not returned to the participants for checking. Themes were discussed between HM and her academic supervisors before they were finalised.

Domain 3: analysis and findings

24. How many data coders coded the data?
    The data were coded by the single researcher: HM.
25. Did authors provide a description of the coding tree?
    No description of the coding tree is provided in this report.
26. Were themes identified in advance or derived from the data?
    The themes were derived from the data.
27. What software, if applicable, was used to manage the data?
    NVivo 12® was used to manage the data.
28. Did participants provide feedback on the findings?
    Participants were not invited to provide feedback on the findings. Recent graduates were instead asked to examine and offer contextual understanding to the themes in the next phase of the research.

29. Were participant quotations presented to illustrate the themes/findings? Was each quotation identified?
    Quotations from participants across all three focus groups were presented to illustrate the findings. Each quotation was identified, except in the stigmatising language section where identifiers were limited as explained in the manuscript.
30. Was there consistency between the data presented and the findings?
    There was consistency between the data and the findings. This was discussed between the researcher and her academic supervisor who had examined coding processes for quality assurance.
31. Were major themes clearly presented in the findings?
    Three major categories were found in the data and these were described in turn in the results section.
32. Is there a description of diverse cases or discussion of minor themes?
    Examples of diverse cases and minor themes are included in the manuscript.