

1 **Mental Health Pharmacists views on Shared**
2 **Decision-Making for Antipsychotics in Serious**
3 **Mental Illness**

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13 **INTRODUCTION**

14 At least one in four people in the UK will experience a mental health problem and up to two
15 percent of the population will be diagnosed with a serious mental illness (SMI) during their
16 lifetime (1). For the purposes of this research SMI is considered to include diagnoses that are
17 treated with antipsychotics, typically schizophrenia and bipolar affective disorder (2). The adverse
18 effects of antipsychotics can decrease adherence rates (3).

19 Adherence, the currently accepted term used for medication-taking behaviour, is defined ‘as the
20 extent to which the patient's action matches the agreed recommendations’ (4). Adherence presumes
21 agreement about the proposed medication, between the prescriber and the person taking the
22 medicine, emphasising the importance of shared decision-making (SDM; 4). A third to a half of all
23 medications for long-term conditions are not taken as recommended, and treatment adherence is
24 one of the biggest challenges in mental health (4,5). Adherence in SMI is very poor; estimated non-
25 adherence rates for people diagnosed with schizophrenia range from 40 to 75% (6,7). Studies have
26 found that 75% of people with chronic schizophrenia discontinue their medication within 18
27 months (8) and non-adherence rates in bipolar disorder ranges between 20 to 60% with a mean of
28 41% (9,10). Antipsychotic prescribing lends itself to SDM, because the adverse event profile is the
29 main factor in the choice of antipsychotics (11).

30 SDM is defined by the NHS as ‘the conversation that happens between a patient and their
31 healthcare professional to reach a healthcare choice together’, where both parties consider what is
32 important to the other when selecting treatment. There are ethical, clinical and economic
33 arguments for SDM (12); it represents a method of healthcare communication that promotes
34 patient-centred care and sharing expertise between clinicians and service users (13,14). The most
35 accepted model is that of Charles and colleagues, which emphasises patient autonomy, informed
36 consent and empowerment (15). SDM is founded on partnership and opposed to a paternalistic
37 model of healthcare (16). A recent Department of Health White Paper stated that ‘care should be
38 personalised to reflect peoples’ needs, not those of the professional or the system’ and patients

39 should be involved in treatment decisions (17). People diagnosed with SMI can be fully engaged
40 with making decisions and seek a more collaborative approach, thus treatment decisions should be
41 made by the service user and the healthcare professional working together and considering both the
42 likely benefits and possible adverse effects of the medication (11,18).

43 SDM has been linked to improved quality of care and service user satisfaction (19,20). However,
44 the evidence base supporting the use of SDM for chronic conditions, notably mental health (21)
45 and the use of SDM for decisions made on multiple occasions over the longer-term is limited.

46 Hamann (2006) found that SDM increased knowledge and perceived involvement in treatment in
47 inpatients with schizophrenia (22). However, SDM failed to show long-term benefits in the same
48 study (23). A Cochrane review found that no conclusions could be drawn regarding the
49 effectiveness of SDM interventions for people with mental health problems and highlighted the
50 urgent need for more research (13). A more recent study found that although a pharmacist
51 intervention based on SDM significantly improved adherence, treatment satisfaction and beliefs
52 about medication in people with depression, it had no significant effect on depressive symptoms
53 (24).

54 Both service users and clinicians appear to support SDM (25). However, only 32% of service users
55 report that their views about treatment were considered 'to some extent' and less than half (43%)
56 were informed about adverse effects, suggesting clinicians are not engaging in SDM (26). The lack
57 of a multi-disciplinary approach and the perceived difficulty of implementing SDM with service
58 users who may lack insight are barriers to SDM across mental healthcare (21,27). In addition, there
59 are structural obstacles to collaborative care in psychiatry which include timely access to relevant,
60 reliable clinical information, and therefore research is vital to understand the practicalities of SDM
61 in practice (21,28,29).

62 Whilst experiences of and attitudes of consultant psychiatrists towards shared decision making in
63 antipsychotic prescribing have been studied, qualitative data on the views of other key groups of
64 healthcare professionals involved in medication management across mental health services,
65 including pharmacists, is lacking (21). This study aimed to understand the views and opinions of

66 mental health pharmacists in the UK who are increasingly developing clinical roles. These clinical
67 roles include; advising prescribers and clinicians on the most appropriate medication after
68 interviewing patients; patient education and advocacy; attending and directly inputting into multi-
69 disciplinary meetings. These roles are generally independent from the prescribing process
70 although a limited number of pharmacists may have a caseload with a prescribing role.

71 **AIM**

72 To elucidate the experiences and opinions of mental health pharmacists about implementing SDM
73 in the process of antipsychotic choice and prescribing in SMI.

74 **ETHICS APPROVAL**

75 The project received approval from the Aston University Ethics Committee.

76 **METHODS**

77 **Design**

78 An exploratory qualitative study design that followed COREQ (Consolidated Criteria for
79 Reporting Qualitative studies) guidelines (30) was employed.

80 **Participant Recruitment and Consent**

81 Mental health pharmacists with a minimum of 12 months experience in mental health pharmacy
82 practice were recruited, on the basis that they are more likely to have an understanding of SDM
83 and be undertaking advanced clinical roles. Participants were recruited from the Midlands region
84 of the UK. Initially convenience sampling was used; known contacts meeting the inclusion criteria
85 were identified (31). Further participants were recruited through active snowballing (32). Potential
86 participants were emailed with the project aims and participation requirements. Written informed
87 consent was obtained prior to participation.

88 **Inclusion Criteria**

89 Mental health pharmacists with a minimum of 12 months experience in mental health pharmacy
90 practice.

91 **Interview Structure and Collection**

92 A semi-structured interview was used to allow the interviews to be participant-led and participants
93 to express their views openly (33,34,35). An initial interview topic guide, based on the literature on
94 research into SDM in mental health, was constructed to focus the interviews (36). This guide was
95 reviewed and amended by the academic supervisor (IM) and two practising mental health
96 pharmacists (NH, DS; see appendix 1 for schedule). The schedule was adapted following each
97 interview, using an iterative approach (37,38). Participants were given a chance to provide
98 feedback and suggest questions to be included in the topic guide. Eleven face-to-face and two
99 phone interviews were conducted; each lasted between twenty and thirty five minutes. These 13
100 interviews were deemed sufficient to provide the necessary identification of themes. The
101 transcripts were reviewed after each interview and data saturation was perceived to have been met
102 as no new themes were identified in the last set of interviews (39). Interviews were audio recorded
103 and a verbatim account produced from these recordings (40). The recordings were checked against
104 the transcripts several times (41).

105

106 **Data Analysis**

107 Thematic analysis, based on the identification of themes, was conducted by MY (34). The
108 transcripts were independently reviewed by IM; any disagreements on the coding scheme were
109 resolved by discussion between IM and MY.

110 The constant comparison method informed by grounded theory was used whereby the data analysis
111 takes place alongside data collection (42,43). Each interview was reviewed before the next
112 commenced to identify emerging patterns in the data and assist structuring of further interviews
113 (33). Coding took place in three stages (35,44), as follows:

- 114 • Open coding was used to identify themes; coding and categories were refined.
- 115 • Axial coding was then used. Extracts were photocopied from the original data and
- 116 arranged with the codes together in files.
- 117 • Selective coding was used; data was analysed and re-organised. Themes were arranged
- 118 according to their relation to the research question.

119 **Reflexivity**

120 Qualitative research as a process necessitates and acknowledges the key role of reflexivity, and the

121 important role played by any researcher's background, perceptions and interests in the topic

122 (72,73). Within this study, the interviews were conducted by a female pharmacy undergraduate

123 student of Indian sub-continent descent. In preparation for the study, the student received training

124 in research methods including qualitative research, supervisory guidance during the development

125 of the interview schedule and support from the research team in relation to the interpretation and

126 analytic process.

127

128 **RESULTS**

129 Fifteen participants were recruited but two interviews didn't take place due to time constraints. Of

130 the 13 participants interviewed the majority were aged between 30 and 40 years old (six of the 11

131 participants who reported this information). Ten participants were female and three were male.

132 Four main themes were identified: attitudes to SDM; barriers to implementation; benefits of SDM;

133 and the role of mental health pharmacists.

134

135 **1. Attitudes to Shared Decision Making**

136 **Pharmacist Attitudes**

137 Almost all the pharmacists felt SDM was a positive concept and supported its use in antipsychotic
138 prescribing.

139 *'I totally support the idea...they're powerful drugs therefore....patients should have the*
140 *opportunity to articulate what factors are most important to them and this should be taken into*
141 *consideration when choosing treatment'. (In01)*

142 The complexity of antipsychotic use was recognised, with reference in particular to side effects and
143 the impact on adherence rates. For these reasons, patient choice was highlighted as being
144 particularly important:

145 *'The choice should be dependent on what the patient will tolerate in regards to side effects'. (In13)*

146 The pharmacists believed that it was important to involve service users in the discussion, even if
147 agreement could not be reached.

148 *'We get that quite a lot. We have involved them in the treatment plan but they might not agree still*
149 *with the decision that we have tried to involve them with'. (In06)*

150 However, some pharmacists viewed SDM as a tool to achieve adherence, to persuade the patient to
151 take the medication, rather than an agreement negotiated between two equal parties.

152 *'A few cases it has helped but we still need to persist in getting them to take their medication so it's*
153 *still an issue. Once they realise that medication is important they feel better then*
154 *hopefully...sometimes when we have given them a lot of choice the patient seems to change their*
155 *mind a lot'. (In06)*

156 **The views of Pharmacists on the Attitudes of Prescribers**

157 Pharmacists believed that attitudes towards SDM amongst prescribers were variable.

158 *'There's a very broad church amongst (prescribers)...some are excellent and some have the view*
159 *the patients should do as they're told'. (In04)*

160 The majority, however, felt that there had been a positive cultural shift, with attitudes moving
161 towards greater service user involvement.

162 *'Attitudes have definitely changed in my 16 years in mental health, early on it was very much...I'm*
163 *the doctor and this is what's right. I think health as a whole has shifted...engaging with the patient*
164 *a lot more. At one time...it was...if you tell patients about side effects they won't take the*
165 *medication'. (In03)*

166 However, some pharmacists felt that SDM was not practised as widely as it should be due to the
167 perceived difficulties in relation to patient engagement:

168 *'I'm not saying...they don't want to involve patients but I think it's because of the difficulty of*
169 *engaging patients'. (In11)*

170 **The views of Pharmacists on the Attitudes of Service Users**

171 The pharmacists also believed that the attitudes of service users towards SDM were variable; some
172 service users were seen to want involvement in the decision-making process whereas others
173 preferred the clinicians to make the decisions.

174 *'Some patients want to be told what to do; other patients want...to make the decision themselves'.*
175 *(In04)*

176 There was, however, a general consensus amongst the pharmacists that service users, particularly
177 younger service users, were increasingly wanting to be involved in the decision-making process
178 and have more choice, partly due to changes in society.

179 *'They crave that involvement and...empowerment...in a largely consumerist society people want*
180 *and expect choice and...more autonomy'. (In01)*

181 **2. Barriers to Implementation of SDM**

182 **Capacity and Insight**

183 A lack of service user insight was seen by the participants as an obstacle to SDM.

184 *'If they don't have insight...it doesn't matter what decision you make or information you give*
185 *(them)...(if they believe that) there's nothing wrong with them they don't need to take treatment.'*
186 *(In04)*

187 Several pharmacists highlighted the fact that when treatment decisions (initiation, dose change or
188 switching) are frequently made, that service users are often acutely unwell and so these are times
189 of difficulty in relation to SDM. Moreover, if they are detained under the mental health act then
190 treatment decisions may be imposed on the service user as being in their best interests rather than
191 attempting to overcome the barriers associated with SDM at these points:

192 *'They might be acutely unwell...they might not be in a position to make a decision they might be*
193 *forced to have treatment against their wishes so in that scenario you're not going to be able to*
194 *provide them with SDM'. (In03)*

195 When medication regimes were working well, there was often hesitancy from clinicians to make
196 changes.

197 *'Switching a treatment when they have been stabilised a long period of time is actually a very*
198 *scary thing to do.'* (In13)

199 However, the majority of pharmacists felt that SDM could be implemented with most of the
200 service users, most of the time:

201 *'If you are flexible in your approach...but nevertheless you can still have some degree of*
202 *conversation to enable them to be a part of the SDM process the vast majority of the time.'* (In07)

203 **Time**

204 Time was a key barrier to SDM. Pharmacists believed that clinicians often did not have the
205 opportunity to speak to service users or time to fully implement techniques of SDM:

206 *'It takes a lot longer than just writing a prescription.'* (In06)

207 Such time pressures were increasingly problematic with services experiencing high demand:

208 *'There's always a demand for beds, it does have an impact on SDM.'* (In05)

209 *'Not having the time in outpatient clinics.'* (In13)

210 **3. Potential Benefits of SDM**

211 **Adherence**

212 Pharmacists felt that if service users were genuinely involved in the prescribing decision, this could
213 improve adherence.

214 *'If they're taking part in the decision they have an interest in the outcome...if you don't involve
215 them and you are imposing something, as soon as they go out of the door they won't actually be
216 interested in continuing with it.'* (In05)

217 Mental health was viewed as similar to any other chronic illness management in that giving more
218 autonomy to service users improved adherence to medication.

219 *'I think it's like any other condition...the more autonomy you give the patient...the more likely they
220 are to comply.'* (In10)

221 Importantly, the absence of SDM was believed to result in non-adherence and high rates of re-
222 admission to hospitals.

223 *'It's not as high as it ought to be otherwise...they wouldn't have so many patients relapsing, we
224 have these revolving door patients that keep coming in again and again, people just don't take
225 their medication.'* (In02)

226 However, there was recognition that those service users who were engaged and interested in SDM
227 could be those who were more likely to be adherent regardless of approach.

228 *'Those patients who can actually engage are more likely I think to actually be concordant.'* (In11)

229 **Service User Satisfaction**

230 Service users were said to respond well to SDM, and appreciate being involved in decisions about
231 their care, improving the therapeutic alliance. One pharmacist who believed that SDM had a
232 positive effect on the therapeutic alliance quoted one service user saying:

233 *'You were one of the few people who saw me as a human being and gave me a choice, when*
234 *everyone else was just telling me what to do.'* (In07)

235 SDM could help service users feel more valued and respected, and work towards removing some
236 of the stigma that is associated with mental health.

237 *'It's huge stigma all around... so if you treat them like every other human being... they're going to*
238 *feel valued and respected definitely ...there's definite improvement, they feel at the centre of their*
239 *care...they will respect you for giving them that rather than being domineering and telling them....*
240 *I know better than you.'* (In02)

241 **4. The Role of the Mental Health Pharmacist**

242 **Service User Counselling**

243 The pharmacists felt that service users were often more open about medication issues with them
244 than other health professionals, particularly about sensitive side effects such as sexual dysfunction.

245 *'I've had a patient discuss sexual dysfunction with myself.....where they didn't discuss it on the*
246 *ward review because they felt embarrassed to talk about it with the consultant.'* (In13).

247 Pharmacists felt they were often seen as an independent person compared to the prescriber and
248 therefore able to have an open conversation with service users about medication.

249 *'I do think we're in a very good position to discuss things because we are....seen as independent.*
250 *(In10)*

251 More research into the impact pharmacists can have upon clinical outcomes such as relapse rates
252 was suggested.

253 *'I think we could reduce (the) relapse rate. Somebody needs to do a study into pharmacist
254 input....and the impact it has on non-concordance.'* (In13)

255 **Multi-Disciplinary Team (MDT) Working**

256 The level of input that mental health pharmacists have in SDM was dependent on the leadership of
257 the MDT, with some clinical teams more collaborative than others, and resourcing within
258 pharmacy services.

259 *'Some of the clinical teams I'm in are very collaborative and very collegiate... I've also worked in
260 teams where there's very little conversation apart from between nurses and doctors, me as the
261 pharmacist has to almost fight to say something.'* (In07)

262 Mental health pharmacists clearly felt that they had more to offer and were often underutilised.

263 *'I think they have a really difficult job, but if they let us help them, a bit more in recognising we
264 have a resource here, that we can actually use that we have the knowledge.'* (In11)

265 Pharmacists believed that a more inter-disciplinary approach with a referral system could support
266 their involvement in SDM.

267 *'Some way of referring patients to a pharmacist clinic....but there's no actual referral process'*
268 *(In13)*

269

270 **DISCUSSION**

271 Pharmacist participants were supportive in principle for SDM, particularly when considering the
272 use of antipsychotic medication, and believed that practising SDM was a key part of stigma-free
273 clinical care. Like previous research, the pharmacists felt SDM increased service user satisfaction,

274 which in turn improved the therapeutic relationship and was key to achieving long term treatment
275 success and positive outcomes by improving adherence to medication (19,45-50).

276 The pharmacists perceived that attitudes of both services users and prescribers to SDM varied.
277 Some pharmacists felt that a minority of service users were happy with the clinician making
278 treatment decisions on their behalf. Other research has also identified this group who believe ‘the
279 doctor knows best’; perhaps because they undervalue their expertise in relation to clinicians and
280 want to be ‘a good patient’ (47,51). Most service users, however, particularly those in younger age
281 groups, were said by the pharmacists to increasingly crave involvement, which is in line with
282 previous research (27,46,52). This change may reflect an increasingly consumerist society, where
283 choice was expected (53-55).

284 A strong, trusting relationship, with health care professionals and service users both accepting an
285 active role, is essential to the success, or otherwise of SDM (47). Yet service users often describe
286 mixed feelings, that they are both helped and misunderstood by healthcare professionals, and
287 commonly report experiencing discrimination (56,57). SDM involves the clinician respecting the
288 right of service users to make treatment decisions, even if they disagree with this decision (58).
289 However, like other research, we found a mixed picture; the pharmacists perceived that some
290 prescribers adopted an authoritative approach, dominating consultations and failing to take into
291 account the views of service users (26,59-62).

292 The participants perceived a lack of service user insight as the main barrier to SDM. Service users
293 suffering from acute illness were said to lack capacity precisely when medication was most likely
294 to be initiated or changed and, therefore, when SDM was important. However, when the illness
295 being treated was well controlled, and the service user may be more likely to be able to be engaged
296 in SDM, the pharmacists perceived that clinicians would be reluctant to change medication due to
297 concerns about the illness becoming less well-controlled.

298 Generally the pharmacists reported that SDM was not possible with service users treated under the
299 Mental Health Act without their consent (63). This act is designed to protect the rights, health and

300 safety of people with a mental health disorder and the safety of others; it covers the circumstances
301 in which someone can be detained for treatment (63). Unlike other studies, some pharmacists in
302 this study did not view capacity in absolute terms (21). They felt more should be done to engage
303 service users and that SDM should be attempted with all service users to varying degrees
304 depending on the level of insight and capacity. This echoes other research, which has found that
305 service users with SMI value the opportunity to collaborate with those providing their care and are
306 prepared to engage with SDM within the current patient-professional relationship (47). SDM can
307 also improve treatment knowledge amongst service users with schizophrenia potentially reducing
308 the risk of medication errors (18,64-66).

309 However, rather than focus on individual barriers, it may be more relevant to consider structural
310 barriers to SDM in mental health practice such as a lack of time, poor communication between
311 clinicians and service users, and limited access to evidence-based information (28,58). SDM can be
312 seen to be a time consuming activity to undertake (22,27). In this research pharmacists reported the
313 lack of time of both pharmacists and prescribers to be a barrier, with pharmacists identifying that
314 other duties were seen to override SDM; other research has found that lack of time is a commonly
315 reported barrier by both health professionals and service users (27,51,59,60).

316 The pharmacists felt they were able to play a vital role in SDM partly because their independence
317 from the prescribing process enabled them to engage in SDM. Previous research has identified the
318 need for an inter-disciplinary approach involving autonomous clinicians to engage service users in
319 SDM (67-70). However, many of the pharmacists felt that they did not always get the opportunity
320 to be involved in the SDM process due to the lack of a structured referral system and multi-
321 disciplinary approach or resources issues within pharmacy departments.

322 **Implications of Study**

323 Services should be structured to support SDM with a more inter-disciplinary approach. This could
324 include a formal referral system to pharmacists or implementation of pharmacist clinics. Training

325 for pharmacists (and potentially other clinicians) should highlight that SDM should be adapted
326 depending on the state of illness at the time, but not abandoned.

327

328 **Further Study**

329 Further qualitative research on SDM, and more specifically the potential role of pharmacy,
330 involving pharmacists, other clinicians and service users is required. Research is also required on
331 the impact of SDM on outcomes including adherence to medication (19,48-50,71). Future research
332 should investigate whether clinicians use SDM differentially depending on various characteristics
333 including how long they have known the service user for and what the medication is being utilized
334 for. It could also cover service users' views on the role of family members as advocates. Previous
335 research has identified a role for healthcare professional 'coaches' not involved in treatment to
336 actively support service users in engaging in SDM (58). Therefore, future research could
337 investigate the impact of 'pharmacy medication management coaches' on key outcomes.

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341 **Limitations**

342 All the participants recruited for the study came from the Midlands region and may not be broadly
343 representative of attitudes and experiences of mental health pharmacists nationally and
344 internationally. Moreover, we cannot be sure how long the participants had worked in mental
345 health for (other than more than one year), whether they have a formal mental health qualification
346 or their area of practice. We relied on convenience and snowballing sampling and relatively small
347 sample sizes; however we found data saturation with consistent themes identified and no new
348 themes identified in the last set of interviews. Additionally, identifying participants via known
349 contacts may have influenced the interview responses in relation to socially desirable responses.
350 This research project only sought the views of mental health pharmacists; a future project should
351 triangulate the data collection methods and also interview other clinicians and more importantly
352 service users. Pharmacists are increasingly becoming prescribers and therefore a future research

353 should also compare and contrast the views and experiences of prescribing and non-prescribing
354 (who are independent from the prescribing process) pharmacists.

355

356 **CONCLUSION**

357 In keeping with previous research in this area, SDM was seen as a positive concept by the mental
358 health pharmacists interviewed. SDM should take into consideration the service user's ability to
359 tolerate adverse effects and their preferences regarding medication. The pharmacists believed that
360 such an approach could improve service users' satisfaction with medication management services
361 and ultimately adherence to medication. The pharmacists perceived that the attitudes of prescribers
362 and service users, although noted as variable, were considered to be increasingly in favour of
363 SDM.

364

365 The pharmacists identified that the use of SDM was limited by barriers, particularly the difficulties
366 perceived by clinicians of engaging people with SMI who lack insight and mental capacity in the
367 process. Greater effort is seen to be needed to work around these issues and try to engage service
368 users as much as possible. Structural issues, such as time pressures may also limit the use of SDM.
369 Pharmacists clearly feel they can play a vital role in SDM but their skills and knowledge in this
370 area being underutilised, limiting their opportunity to contribute. SDM is clearly seen as one way
371 to improve outcomes, and more research on how it be effectively implemented in mental health is
372 required.

373

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378 **Conflict of interest**

379 No conflicts of interest were identified.

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