doi: 10.1111/hex.12179

Australian mental health consumers' and carers' experiences of community pharmacy service

Kathy Knox PhD,* Fiona Kelly PhD,†‡ Amary Mey BPharm,§ Laetitia Hattingh PhD,¶
Jane L. Fowler PhD** and Amanda J. Wheeler PhD††‡‡

*Senior Research Assistant, †Adjunct Research Fellow, **Senior Lecturer, ††Professor, Griffith Health Institute, Griffith University, Meadowbrook, Qld, Australia, ‡Senior Lecturer, School of Pharmacy, University of Auckland, Auckland, New Zealand, §PhD Candidate, School of Pharmacy, Griffith University, Gold Coast, Qld ¶Senior Lecturer, Curtin Health Innovation Research Institute, Curtin University of Technology, Perth, WA, Australia and ‡‡Clinical Associate Professor, Faculty of Medical and Health Sciences, University of Auckland, Auckland, New Zealand

Correspondence
Kathy Knox PhD
Griffith Health Institute
School of Human Services and Social Work, Room 2.16, Building L08
Griffith University
University Drive
Meadowbrook
Qld 4131
Australia
E-mail: k.knox@griffith.edu.au

Accepted for publication
30 January 2014

Keywords: community pharmacy, consumer expectations, mental health, patient-centred care, service quality

Abstract

Background Many Australians with anxiety or depression experience issues accessing pharmacological treatment even though community pharmacies are remunerated to supply subsidized medicines and provide medicine management services.

Objective To obtain insight into the quality of community pharmacy services from the perspectives of mental health consumers and carers.

Methods A computer-assisted telephone interview was used to gauge perceptions of pharmacy service using frameworks of service quality and patient-centred care. A convenience sample of 210 consumers and carers from three Australian states completed an interview comprising rating scales, multiple choice checklists and open-ended questions to explore their experience of pharmacy services.

Results Participants were consumers experiencing on-going mental health condition(s) (n = 172), carers for someone who experienced a mental health condition (n = 15) or both (n = 23). For 60% of participants, medicines were dispensed within ten minutes of arriving at the pharmacy, and 36% received verbal advice. The majority of participants were not asked by pharmacy staff whether they experienced side-effects, and 60% reported rarely or never receiving written medicine information. However, the majority of participants reported that their expectations were met despite the absence of such services. Qualitative data showed that participants valued high-quality services that reflected patient-centred care, and they were inclined to engage with these services particularly if they perceived them as surpassing basic expectations.

Discussion and conclusions Participants clearly valued high-quality pharmacy service yet did not routinely expect it. When service exceeded expectations, community pharmacies were viewed as safe health-care spaces to seek advice on mental health and well-being. This study has positive implications for the role of pharmacists.

© 2014 John Wiley & Sons Ltd

Introduction

The Australian Government subsidized 29 million prescriptions for mental health-related medicines in 2010/2011 at an estimated cost of $846 million.[1] Despite this rate, medicine adherence is often poor, and the majority of Australians with anxiety or depression experience issues accessing treatment.[2–5] Australian community pharmacies are funded to supply subsidized medicines[6] and provide services to facilitate medicine management such as written consumer medicine information (CMI)[7] and dose administration aids.[8] However, there is limited insight into mental health consumers' and carers' experiences and expectations of community pharmacy services, whether their needs are being met and how aspects of service quality impact medicine management and subsequent health outcomes.

Service quality has a number of dimensions.[9] Some models postulate a multidimensional hierarchical structure.[10–13] For the purpose of this study, two dimensions that are common to various service quality models and which have previously been used in Australian community pharmacy evaluation research[14,15] will be the standards against which quality will be measured: *technical quality* and *functional quality*. Technical quality refers to 'what' services were provided and considers the end result or outcome of the service provision encounter.[16] In the community pharmacy setting, technical quality might include whether the correct medicine was dispensed or whether a CMI was provided. Functional quality refers to 'how' a service is delivered to a customer, in other words, 'process quality',[17] and is judged by a customer while the service is being performed.[10,11] In a community pharmacy, functional qualities might include aspects of interaction quality comprising attitudes, behaviours and expertise,[13] such as empathy, politeness of the staff, feeling that the pharmacist understood the customers' specific needs and other perceptions of the customer-employee interaction.[18]

Evaluation of pharmacy services has typically focused on the more tangible technical aspects such as information provision. For example, one Australian study assessed the impact of a national quality standards programme for community pharmacy by surveying 1902 pharmacy users as they exited 84 purposively sampled pharmacies.[14] Although 93% of customers presenting a new prescription reported receiving some information, half of those seeking continuing medicines did not, and pharmacists provided CMI to only 34% of customers.[14] Pharmacists have a professional obligation to supply CMI with subsidized medicines particularly when they are first prescribed, at regular intervals for long-term therapy (e.g. every 6 months), when there is a change to therapy (e.g. dose form) and to consumers with special needs or taking medicines that require reinforcement of precautions.[19] The information provision aspect of technical service is important because it represents an opportunity to reinforce verbal advice, increase consumer satisfaction with service and fulfil consumer preferences for greater levels of information.[14,20–22]

As with most medicines, those medicines prescribed for mental health care have the potential to cause side-effects and are contraindicated in certain situations.[23] Missing the opportunity to provide information when medicines are first prescribed or when consumer needs change might have negative implications given the magnitude of mental health medicines dispensed and reports of poor medicine adherence.[1,2,5] Although these tangible aspects of service quality are easier to evaluate than abstract functional qualities, both are interlinked in service delivery.

Research focusing on the functional qualities of community pharmacy service is less prevalent,[24] but there is evidence of an association between functional aspects of pharmacy services and customer satisfaction. For example, a survey of patrons at 32 Japanese pharmacies revealed that the general attitude of the pharmacists was a significant predictor of overall satisfaction with the pharmacy.[25] In other studies, Australian consumers expressed a preference for friendly and helpful pharmacy staff in

© 2014 John Wiley & Sons Ltd

a pharmacy asthma service,[26] and high levels of satisfaction were reported when pharmacist delivered education enabled consumers to take greater control of diabetes.[27]

Consumer satisfaction has been used to benchmark the quality of a range of pharmacy services.[28–34] However, the credibility of the measure of satisfaction has been challenged, particularly limited use of validated instruments or underlying theory to support measures.[33–35] There has also been criticism of use of patient satisfaction as a proxy measure for service quality.[34] Simply reporting a high level of satisfied expectations provides limited insight and evaluation of service quality, and differentiation between these constructs has been recommended.[34] Approaches that incorporate consumer expectations and preferences have been proposed as more useful alternatives,[33] and these should consider missed opportunities for service delivery as well as qualitative exploration of expectations and experiences such as what consumers 'like' most.

An alternative approach to understanding the functional qualities of service interaction is through the conceptual framework of patient-centred cared. There are many definitions of patient-centred care, and four key elements were described by Morgan and Yoder in a concept analysis.[36] These four elements comprised respectful, individualized, empowering and holistic care. Respectful and individualized care encourages negotiation and offers choice through a therapeutic relationship.[36] Patient-centred care also incorporates holistic care that recognizes and values the biological, social, psychological and spiritual aspects of an individual with the ultimate aim of nurturing consumer autonomy and self-confidence. Individualized treatment and respectful interactions are positively associated with consumer satisfaction and perceived quality of care.[37,38] Mental health consumers are highly sensitive to stigma and require in particular that respectful and empowering care be integrated into service delivery.[39–41]

Measuring service quality needs to adopt a two-pronged approach that incorporates both technical and functional aspects and how these are interlinked. Both are considered in this study. Additionally, the patient-centred care framework is applied to understand the functional quality of community pharmacy service. As part of a longitudinal project, the aim of this study was to explore mental health consumers' and carers' perceptions and experiences of community pharmacy service quality within 72 h of their pharmacy visit.

Method

A computer-assisted telephone interview (CATI) was used to explore consumers' and carers' experiences, expectations and satisfaction with services received at their most recent pharmacy visit. Community pharmacy service quality was conceptualized as technical quality (what services were received) and functional quality (how services were provided). The study was conducted between February and September 2012 with consumers and carers from Queensland, the northern rivers region of New South Wales and Western Australia. Ethics approval was obtained from a university human research ethics committee (PHM/13/11/HREC).

Participants

Community pharmacies in Queensland (n = 161), Western Australia (n = 52) and New South Wales (n = 17) agreed to discretely distribute flyers to potential participants. A total of 210 participants were recruited: 74 through their community pharmacy; 56 via email campaigns; 32 via flyers distributed through mental health consumer or carer groups and clinics; 12 through word of mouth; and 12 by other means such as electronic newsletter. For 24 participants, the means by which they were recruited was unknown. People interested in participating in the study were invited to contact the research team following their next visit to a community pharmacy, at which time they completed the telephone interview.

© 2014 John Wiley & Sons Ltd

Materials

A standardized CATI script was developed based on a similar script used in an earlier study to evaluate health consumer perceptions and experiences of community pharmacy service.[22] The script was informed by the service quality framework comprising technical (i.e. what service is provided) and functional service (i.e. how service is provided). The interview comprised a combination of rating scales, multiple choice checklists and open-ended questions. Three expert consumer and carer representatives considered the content and length of the interview, and revisions were made on the basis of their feedback. The interview was then pilot tested by telephone with eight consumers and carers. The final interview schedule contained 48 rating scales, 38 multiple choice checklists and 19 open-ended questions arranged in ten sections (demographic information, about you and your pharmacy, reason for your visit to the pharmacy, about your pharmacy visit, interactions at the pharmacy, interactions with pharmacy staff, written information, overall pharmacy visit, general use of health and pharmacy services, general comments and suggestions).

Procedure

When contacted by a participant, the research team explained the purpose of the study, the duration of the interview and issues of confidentiality and anonymity. Participants gave their verbal consent to participate. Demographic characteristics were collected prior to commencing the interview when participants elected to provide this information. The standardized interview script was programmed into a web-hosted survey tool. Trained interviewers conducted the interviews over the telephone, using a computer to follow the script and simultaneously enter the data. The CATI procedure was selected to reduce potential measurement error associated with item wording and ordering, interviewers' verbal behaviour and data processing, while preserving confidentiality.[42]

Four researchers conducted the interviews within 72 h of the participants most recent community pharmacy visit. This time frame was established so that participants' memory of their experience was fresh and so that participants who had visited a pharmacy over a weekend would be eligible to be interviewed during standard business hours. Interviews lasted approximately 15 min, but occasionally took up to 35 min if the participant provided additional comments. Interviewers took detailed notes on participants' responses to best reflect the content related. Conversations were not audio recorded through consideration that sensitive information may be revealed from people within a vulnerable population. Additionally, the scope of the project would not allow participant checking of transcripts with project timelines. At completion of the interview, participants were mailed a printed copy of the study information and consent materials and a $10 gift voucher as a token of appreciation.

Data analysis

Quantitative analyses of responses to the questionnaire were conducted using SPSS™ software (IBM SPSS Statistics for Windows, Version 21.0. SPSS: IBM Corp, Armonk, NY, USA). Descriptive statistics including frequencies, percentages, means and standard deviations were computed. Qualitative data were managed using NVivo™ software (NVivo qualitative data analysis software; QSR International Pty Ltd. Version 10, Doncaster, Victoria, Australia). Analysis of the qualitative responses was informed by a general inductive approach.[43] Specifically, three coders read qualitative responses to the open-ended questions and additional comments multiple times to identify key themes. The main thematic content of qualitative responses was categorized according to whether it reflected technical or functional qualities of service. Functional aspects were further categorized according to the four elements of the patient-centred care framework described in the introduction.

© 2014 John Wiley & Sons Ltd

Excerpts from interview transcripts are identified with regard to their source: consumer (C), carer (CR) or both (CC).

Results

Consumer characteristics

Fifteen participants were carers, 172 were consumers (i.e. had experienced an on-going mental health condition requiring treatment, medicine or monitoring), and 23 were both consumer and carer. The majority of participants were women (n = 164, 78.1%), and the mean age was 47 years (ranging from 19 to 80 years, standard deviation 13 years). Participants' language, cultural background and employment status are summarized in Table 1.

Purpose of pharmacy visit

A typical participant saw a general practitioner or health professional monthly and visited a community pharmacy two or three times per month to have a prescription dispensed for continuing medicine. In this study, 196 participants (92.9%) had visited a pharmacy primarily to fill a prescription or purchase over the counter (OTC) medicine. Of those seeking medicine, 184 (87.6%) obtained medicine for themselves, 14 for someone else and nine for both self and other, and data were missing for three cases.

One hundred and fourteen participants (54.3%) collected one or more antidepressant medicines, 47 (22.4%) antipsychotic medicine and 31 (14.8%) anxiolytic/sedative medicines.[1] One hundred and one participants (48.1%) collected one prescription or OTC medicine; 48 (22.9%) collected two, 23 (11.0%) collected three, nine (4.3%) collected four and 24 participants (11.4%) collected five or more medicines. One participant collected ten different medicines at their pharmacy visit.

Table 1 Exit interview participant characteristics (N = 210)

Characteristic	Frequency
Language	
English	183
Other (Dutch, Chinese, Arabic, German)	7
Missing data	20
Cultural background	
Australian (Caucasian)	147
New Zealand/Pacific Islander	13
United Kingdom	9
Aboriginal/Torres Strait Islander	5
Other	10
Missing data	26
Employment status	
Retired/disability pension/pensioner	54
Full time (employed)	39
Part-time (employed)	25
Unemployed	25
Casual (employed)	16
Student	10
Other	12
Missing data	29

Technical quality

To assess technical quality of the service received, participants were asked to report on wait time and whether they had received verbal advice or written information, and if so, the content of advice or information received.

Wait times

Most participants (n = 122, 58.1%) waited less than ten minutes for their medicine to be dispensed, 29 participants (13.8%) waited 10–20 min, eight (3.8%) waited 21–30 min, 41 participants (19.5%) arranged to return to the pharmacy to collect their prescription medicine on another day, and 10 participants did not collect anything from the dispensary. Participants rated their satisfaction with wait times on a ten-point scale ranging from 1 *extremely unhappy* to 10 *extremely happy*. Nineteen participants (9.0%) gave a low response (1–5), and 178 participants (84.8%) gave a high response (6–10). Data were missing for 13 cases (6.2%). Of the 24 participants who picked up five or more medicines, 10 waited < 10 min, eight

[1]These counts and percentages are not mutually exclusive. Some participants reported collecting more than one medication of a given class/group of medications. Some participants collected medications from more than one class/group of medication at their pharmacy visit.

© 2014 John Wiley & Sons Ltd

waited between 10 and 30 min, and six arranged to return to the pharmacy to collect their medicine on another day. All but one of these participants were happy with the wait time.

Verbal advice

Over half of all participants collecting medicines waited inside the pharmacy while their prescription was dispensed (n = 109, 51.9%) providing an opportunity for staff to engage them in conversation and establish relationships with them. However, 126 participants (60.0%) did not speak with staff about their medicine, their prescription or a related health issue. Forty-seven participants (22.4%) spoke to a pharmacist (initiated by the pharmacist in 19 cases and by the consumer in 28 cases), and 28 (13.3%) spoke with a pharmacy assistant or other support staff member (initiated by the staff member in 15 cases and by the consumer in 13 cases). Of the 75 participants who did speak with a staff member, all but two participants reported understanding what had been said. Nine of the 31 consumers presenting a new prescription, and 26 of the 167 consumers collecting prescriptions for continuing medicines received at least one of the counselling points listed in Table 2. The majority of participants collecting continuing medicines reported that a pharmacist *never* (n = 102, 61.1%) or *rarely* (n = 27, 16.2%) queried them about their experience of side-effects.

Of the 24 participants collecting five or more medicines, two-thirds (n = 16, 66.7%) did not speak with any staff member about the medicines, the prescriptions or the related health issue. These 24 participants might have been eligible for a home medicine review (HMR): a clinical pharmacy service that entails the pharmacist interviewing them, reviewing all of their medicines and making recommendations on therapy to their doctor.[44] Four reported having an HMR, and eight reported receiving an in-pharmacy medicines review: a briefer review that aims to facilitate effective use of medicines through emphasis on consumer education and self-management.[45]

The majority of participants who had conversed with staff had no further questions (n = 68). However, when asked whether additional information was sought from any other source, seven participants reported researching on the internet, five spoke to their prescriber or specialist doctor, three discussed the matter further with a friend or family member, and eleven reported another source (e.g. reading the label).

Table 2 Participants receiving medicines counselling

Type of medicine service	Advice or counselling point	*n*
At least one new medicine (n = 32)	Clarified issues relating to medicine dosing	1
	Gave advice on how to take the medicine	4
	Gave advice on possible side-effects/precautions/interactions	1
	Asked about previous use of product	1
	Provided CMI or other relevant written information	1
	Explained medicine indications (what drug is for)	1
Only continuing medicines (n = 167)	Advised of last repeat/need for new prescription	4
	Clarified issues relating to medicine dosing	4
	Offered generic alternative	3
	Gave advice on how to take the medicine	4
	Gave advice on possible side-effects/precautions/interactions	2
	Asked whether any side-effects were/are experienced	1
	Asked about previous use of product	4
	Provided CMI or other relevant written information	1
	Clarified quantity or other PBS-related issue (i.e. accounts)	3
Non-prescription health-related item (n = 12)	Clarified issues relating to medicine dosing	1
	Referred customer to other health professional	1
	Clarified quantity or other PBS-related issue (i.e. accounts)	1

© 2014 John Wiley & Sons Ltd

The technical aspects of service that consumers 'liked' were prompt service, convenience of location and opening hours, the comfort and privacy of the pharmacy, the information received and medicine management services provided (e.g. hold stock, keep prescriptions on file).

Written information
Sixty percentage of participants ($n = 127$) reported they had *rarely* or *never* received a CMI or other written information since commencing medicine. There was a significant association between receiving written information and whether it was a newly prescribed medicine or a continuing prescription; χ^2 ($N = 210$, d.f. $= 4$) $= 160.76$, $P < 0.001$. Significantly more consumers were given written information when collecting a new prescription than what would be expected due to chance. People collecting a newly prescribed medicine were 15.4 times more likely to receive written information than those collecting a continuing prescription. Nine of the 10 participants who did receive written information looked at the information and one discarded it.

Functional quality

Participants were asked to rate or comment on the functional aspects of their service encounter during the pharmacy visit including satisfaction with pharmacy interaction; perceptions of service; what they had hoped would happen; what they liked; and what they felt could have been improved.

Satisfaction with pharmacy interaction
The participants ($n = 75$) rated their conversations with staff on three dimensions: *happiness, satisfaction* and *helpfulness,* on a 10-point scale ranging from 1 *extremely low* to 10 *extremely high*. Ratings on these three dimensions were significantly and strongly positively correlated ($r = 0.71$–0.90, Ps < 0.001); thus, ratings were summed then classified as low (range 3–8), medium (range 9–18) or high (range 19–27). Two participants reported low satisfaction, nine participants reported medium satisfaction, and 64 (85.3%) rated high satisfaction with the conversation between participant and staff.

Participants rated how well they felt their privacy and confidentiality were maintained using a ten-point scale from 1 *extremely poorly* to 10 *extremely well*. Twelve participants reported poor maintenance of their privacy (1–5) and 63 participants (84.0% of those who engaged in some conversation) rated high maintenance of their privacy (6–10). Reasons given for poor ratings included staff calling out the name of the customer and/or medicine, perception that the conversation was overheard by another customer. All of these factors contributed to consumer and carer feelings of being stigmatized, for example:

> The pharmacy assistant had called out my name and said that my diazepam pack was ready. The man standing behind me heard what I was taking. I felt that she [pharmacy assistant] could have handled the situation better with respect to my privacy. C1460

Perceptions of service
When participants were asked to report their experiences and expectations through open-ended questions, their responses revealed the particular elements of service that consumers expected, liked and insights for improving service. Exemplary quotes are shown in Table 3, and themes are described further below. Overall, 83.8% of participants ($n = 176$) reported that their expectations were met. Participants rated their overall experience on a scale from 1 (*extremely poor)* to 10 *(extremely good)*. Over 93% of participants ($n = 197$) gave high ratings (6–10), twelve participants (5.7%) gave low ratings (1–5), and data were missing in one case. These results show that when considering all aspects of their recent pharmacy visit together, participants' expectations were largely met and the experience was positively regarded. The participants who were dissatisfied cited lack of consistency of service (Table 3) and the subtle perception of stigma, for example:

> [I was] hoping for consistency across the number of visits that I had been there –that is a consis-

© 2014 John Wiley & Sons Ltd

Table 3 Exemplary quotes from open-ended interview responses

Overall, what were you hoping was going to happen?	What did you like about this visit to the pharmacy?	Was there anything that could have been done differently to improve your visit?
Wanting people in the pharmacy to be passionate about medicine (and natural therapies) and communicating; to be open about talking about the medicine; having a genuine interest in health and well-being. I fully disclose the fact that I have mental health issues and am quite happy to talk about it. Pharmacists can only do what they can; Doctors are limited in time.	*They address me by name, are aware of my condition, vulnerabilities around self-harms and wanted to know my support workers so they can get the right person to manage that*	*I have had poor experiences in the past but happy with this one, and when I can I go back to this one. There is my local closest if I am really crook the pharmacist spends a lot of time pushing alternative complimentary products holistic probiotics. If I go in with a specific request he questions me all the time (perhaps he thinks it is helpful) I find it condescending. I don't want to feel like that*
I like people to be polite and be smiling; receive good, prompt service. I have problems with my nerves and I need to be served promptly so that I can leave.	*Well I have a bit of an outlier there. This day I had my dog; and they don't challenge me being allowed to take my dog in. Once I explained why I have my dog with me they accept that. He has been there three or four times with me.*	*I am in a wheel chair they normally move all the bits a pieces out of the way*
I was hoping I'd be treated with respect and dignity. Quick service; drugs available and confidentiality. I don't want to feel that the sales staffs discuss me behind my back.	*She was very neutral in conversation. . .I find this useful as she did not display any judgment i.e. the last thing you would want is for someone to feel sorry for you when you are collecting such medicine.*	*When you have been declared mentally ill, people have a different reaction to them. They think your words are not good, that you could be raving on or that you are not with it. That's why you need Webster packing (it turned out to be a complete mistake).*
I wanted to know that new med was going to work and to voice my concern about being taken off the Efexor and to get the reassurance from them about how my body was going to respond to not having any antidepressant over the weekend. Felt reassured by the pharmacist.	*It doesn't matter what I need I feel that I can always talk to them and the pharmacist is always available particularly if I have a new script*	*Keep that pharmacist out the back and put someone nice out the front, someone who can interact with people.*

tent approach of being familiar with me; and addressing me by name; but instead I found different pharmacists on duty and pharmacy assistants I had never encountered before. C498

Those participants whose expectations had not been met expressed a desire for more information and personal service that considered and catered to their individual context:

Generally I use a different pharmacy and they give me more information and ask me how I am. They didn't say anything like that. They were efficient but not overly interested in how you were interacting with medication. C672

What participants hoped would happen

When asked what they had hoped would happen at their visit, participants primarily described technical services in the form of medicine supply and, to a lesser extent, provision of advice or additional services such as storing

their prescriptions at the pharmacy. Although prompt and efficient service was valued, less than a third of the sample (*n* = 59, 28.1%) cited this as a specific expectation. There were fewer references to the functional quality of service, and a key theme to emerge was consumer preference to obtain their medicine with minimal interaction with pharmacy staff or 'no fuss'. Other expectations were friendly, pleasant and/or personal service where consumers or carers were known or acknowledged by name. In a few cases, there was an expectation of a supportive relationship with pharmacy staff, as shown in Table 3.

Participants' expectations were viewed through the Morgan and Yoder framework of patient-centred care, comprising the four elements individualized, respectful, empowering and holistic care as described in the introduction. Mental health consumers and carers expected that pharmacy staff would provide individualized or respectful care rather than holistic or empowering care.[36] Opposing views emerged in relation to holistic care. Some participants appreciated interaction that also encompassed their well-being while others became resentful when the interaction seemed to promote sales of complementary medicines (Table 3).

What participants liked

When participants were asked what they liked about their visit, functional qualities of service featured predominantly and this was described along a spectrum from friendly service (Table 3) to community pharmacy being considered a safe space for mental health consumers/carers. Participants who viewed pharmacy positively described a welcoming atmosphere and more personalized service (i.e. being acknowledged by name). Those who considered pharmacy to be a safe space reported positive relationships with pharmacy staff who would 'take the time' to listen and get to know them and, through knowing them, 'protect' them from harm:

> I've been going there for a long time and I feel very well looked after there. CC614

> I like to go to the same pharmacy; if there are problems I feel comfortable to talk to them because they are a little bit aware of my history and what I am taking. CC1595

> I always feel safe; that they won't steer me in the wrong direction. I feel that they're trust worthy. CC588

Individualized and respectful care was highly valued by participants, particularly in relation to not feeling judged. Some participants felt that individualized care was contingent on pharmacy staff getting to know them and their situation first, that is, holistic care. Empowering care also emerged as important in the context of consumers and carers feeling comfortable to ask questions and voice concerns.

Areas for improvement

Over two-thirds of participants (*n* = 144, 68.6%) reported that their pharmacy visit could be improved, particularly in relation to technical service qualities such as greater information provision or improved efficiency (Table 3). There were few suggestions for improvements to functional qualities or patient-centred care. Some participants emphasized the importance of reducing stigma, describing experiences of disrespectful or disempowering service:

> [There] shouldn't be any facial or mannerism to treat people differently according [to] the drugs they are dispensing for the person. C1022

> They were nervous too; because I [have schizophrenia] and people react badly to that they think I'm going to jump the counter and throttle them! C1456

Some participants recommended changes to the environment to create both additional privacy and a comfortable space to wait for their prescriptions.

Discussion

Community pharmacy participants appreciated high-quality service, although they did not

© 2014 John Wiley & Sons Ltd

always expect it, and many found it challenging to articulate service improvements. Expectations of pharmacy service related primarily to technical service qualities which was not surprising given that most pharmacies demonstrated proficiency in technical service delivery such as efficient medicine supply. However, when participants described what they liked most about their pharmacy visit, functional qualities featured more frequently than technical qualities. Although one-third of participants stated that nothing about the community pharmacy service needed improving, two-thirds of participants did not receive any medicines information which is a professional obligation for supply of medicines.[46]

Consistent with previously reported findings, respondents were highly satisfied in the face of low technical quality,[14] and although technical aspects of service quality were positively evaluated, there were missed opportunities for service delivery especially provision of information. Notably, the majority of participants reported that a pharmacist never or rarely queried their experience of side-effects even though mental health consumers have expressed a need for such information.[47–49] About one-third of participants collecting a new prescription medicine received written information, which is comparable to the available figures for Australian pharmacies regarding service delivery.[14] Only half of the subset of consumers or carers who regularly collected multiple prescription medicines from community pharmacy had experienced a medicine review, which revealed missed opportunities for pharmacists to provide such professional services. Identifying these unmet needs has important implications in the light of recently introduced pharmacy practice incentives which remunerate pharmacists for medicine management services such as medicine use review (i.e. MedsCheck).

The finding that participants were satisfied even when opportunities for service delivery were missed might reflect weak consumer conceptualization of the actual functions of the pharmacist beyond product supply, particularly in relation to medicines management.[50] Findings could also reflect self-selection bias towards more satisfied participants or reaffirm that satisfaction as a measure of pharmacy service quality has limited utility.[35] Alternatively, missed opportunities might reflect the typical pharmacy workflow where participants primarily interact with support staff not trained in mental health unless they specifically request to speak to the pharmacist. Given that more than half of the conversations between staff and participants in this study were initiated by the participants, pharmacy staffs need to become more proactive with respect to information provision.

Although there is no legal obligation to provide CMI to consumers, it is considered an important tool to supplement verbal counselling and support pharmacists to meet their professional obligation to 'provide all necessary up to date information to enable consumers to make informed decisions about their medicines'.[19] Two examples of when provision of CMI is deemed important include new therapy and at regular intervals for long-term therapy.

When participants described what they *liked* most about their pharmacy experience, functional aspects of service quality featured prominently in direct contrast to the emphasis placed on technical quality when discussing their *expectations*. Participants expected technical service as a minimum but valued functional quality and were more likely to entrust pharmacy staff with their mental health care when both were delivered. Anecdotes describing pharmacy staff members who understood and delivered care relevant to consumers' needs provided positive exemplars of how specific elements of patient-centred care are currently provided to mental health consumers and carers in Australian community pharmacies. Various permutations of these elements were described, and individualized and respectful care was valued most highly and was perceived to decrease the experience of stigma.[39] However, another key finding was the expectation that participants would obtain their medicines with 'no fuss' which may reflect previous experience of stigma or lack of respectful care.[47]

© 2014 John Wiley & Sons Ltd

Functional quality was described along a spectrum of varying levels of service such that higher levels of service were attributed to pharmacies that had created a welcoming atmosphere by providing multiple aspects of patient-centred care. It was apparent that some consumers or carers were already receiving quality service in community pharmacies, had subsequently formed relationships with staff and viewed pharmacy as a safe health-care space where they were supported to manage their mental health. The narratives of participants who described the pharmacy as a safe health space also encompassed holistic and empowering care. These encouraging examples of high-quality service contrasted with those pharmacies that met minimum expectations yet still missed opportunities for service delivery. If the latter are in the majority then the potential for community pharmacy as a safe health-care space to promote mental health is unlikely to be realized.

Current findings begin to address the question of what pharmacy service quality means beyond satisfying consumer expectations and have implications for how service delivery is shaped. Initially technical aspects of service such as efficient dispensing could meet consumer or carer expectations, creating a positive experience that encourages repeat patronage and possibly on-going loyalty through integration of the functional qualities of service. If pharmacists want to increase their role in mental health care, effective combination of both aspects of service quality is critical. Even small adjustments to elements of functional quality such as respectful and individualized care might have a powerful impact on consumer or carer experiences, foster relationships with pharmacy staff and nurture mental well-being.[48] Training could delineate these different aspects of service quality and utilize insights from the examples of service described in this study to assist other pharmacy staff to provide support to mental health consumers and carers in a safe health-care space.

A potential limitation of the study was recruitment bias through pharmacy and self-selection of participants. However, the variety of recruitment methods employed is a strength of this research that could mitigate this to some extent. The sample should be considered a self-selected group of individuals who were motivated to enrol into the study and thus might be biased towards high-functioning mental health consumers and carers with high literacy and/or links with community mental health services, higher education or employment within health-related fields. Findings should not be generalized beyond the current sample and will serve as a baseline measure of technical and functional aspects of service quality in the larger parent study.

Conclusion

This work explored the question of what service quality means to mental health consumers and carers and how this impacts their evaluation of service in the community pharmacy setting. Participants clearly valued high-quality pharmacy service yet did not routinely expect it, reporting that service expectations were met even when pharmacy staff missed opportunities for service provision. Missed opportunities for service delivery could have negative implications for mental health outcomes if consumers experience medication related problems and are not advised on how to address these, possibly leading to decreased adherence and return or exacerbation of symptoms. Satisfied expectations were typically associated with the technical quality of service, such as efficient dispensing. When service exceeded expectations, community pharmacies were viewed as safe health-care spaces to seek advice on mental health and well-being. Functional quality featured in such reflections on what consumers and carers liked about their pharmacy visit and provided insights into a potential pathway towards expanding the role of community pharmacy in mental health care. Such insights have positive implications for pharmacy in relation to improved service quality, consumer loyalty and an expanding professional role. There are also positive implications for consumer health outcomes if unmet needs are

© 2014 John Wiley & Sons Ltd

addressed, consumers and carers are equipped with practical medicine management strategies and positive relationships are nurtured with pharmacy staff. These findings reinforce the importance of going beyond quantitative measures of satisfaction as an indicator of service quality to consider the contextual qualitative nuances of individual consumers' experiences.

Funding

This project is funded by the Australian Government Department of Health as part of the Fifth Community Pharmacy Agreement Research and Development Program managed by The Pharmacy Guild of Australia (Canberra, ACT, Australia). This report was produced with the financial assistance of the Australian Government Department of Health and Ageing. The financial assistance provided must not be taken as endorsement of the contents of this report.

Acknowledgements

The authors thank the consumers and carers who participated in this study. We extend gratitude to research team members Jasmina Fejzic, Denise McConnell, Andrew Davey, Rhonda Knights and Bradley McConnachie.

Declaration of conflicting interests

The authors declare no potential conflict of interests with respect to the research, authorship and/or publication of this article.

References

1 Australian Institute of Health and Welfare (AIHW).*Australia's Health 2012*. Canberra: AIHW, 2012; Available at: http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id = 10737422169, accessed 13 August 2012.
2 Andrews G, Hall W, Teesson M, Henderson S. *The Mental Health of Australians*. Canberra: Mental Health Branch, Commonwealth Department of Health and Aged Care, 1999.
3 Pharmaceutical Society of Australia. Mental health in the spotlight at PAC112011. Available at: http://www.i2p.com.au/article/psa-media-release-September-2011?ed = 30, accessed 15 June 2012.
4 Feyer AM, Benrimoj SI, Schulman C *et al. National Trial to Test Strategies to Improve Medication Compliance in a Community Pharmacy Setting*. Canberra: Australian Governement Department of Health and Ageing, The Pharmacy Guild of Australia. 2010; Available at: http://guild.org.au/services-programs/research-and-development/archive—fourth-agreement/2007-08-08, accessed 06 April 2011.
5 Healthcare Management Advisors. *Managing Mental Illness and Promoting and Sustaining Recovery: The Role of Community Pharmacy*. Canberra: Australian Government Department of Health and Ageing, The Pharmacy Guild of Australia, 2010; Available at: http://guild.org.au/services-programs/research-and-development/archive—fourth-agreement/2007-08-07, accessed 06April 2011.
6 Australian Government Department of Health and Ageing. PBS and your prescription medicines 2012. Available at: http://www.humanservices.gov.au/customer/subjects/pbs-and-your-prescription-medicines.
7 Australian Pharmacy Council. CMIs - The patient has the right to know. 2008; Available at: http://pharmacycouncil.org.au/PDF/Media%20Release%20Consumer%20Medicine%20Information.pdf, accessed 13 November 2012.
8 Pharmacy Guild of Australia. *Dose Administration Aids (DAA) - Basics*. Canberra: Pharmacy Guild of Australia, 2012; Available at: http://www.5cpa.com.au/docs/librariesprovider5/public-documents/initiatives-and-programs/ppi/forms-and-factsheets/dose-administration-aids—basics.pdf?sfvrsn = 2, accessed 27 May 2013.
9 Schembri S, Sandberg J. The experiential meaning of service quality. *Marketing Theory*, 2011; **11**: 165–186.
10 Berry LL, Zeithaml VA, Parasuraman A. Quality counts in services, too. *Business Horizons*, 1985; **28**: 44–52.
11 Parasuraman A, Zeithaml VA, Berry LL. A conceptual model of service quality and its implications for future research. *Journal of Marketing*, 1985; **49**: 41–50.
12 Kang G-D. The hierarchical structure of service quality: integration of technical and functional quality. *Managing Service Quality*, 2006; **16**: 37–50.
13 Brady MK, Cronin JJ Jr. Some new thoughts on conceptualizing perceived service quality: a hierarchical approach. *Journal of Marketing*, 2001; **65**: 34–49.
14 Chapman J, Roberts M, Stokes J. Evaluation of the Quality Care Pharmacy Program Final Report 2005.

© 2014 John Wiley & Sons Ltd

Available at: http://www.guild.org.au/services-programs/research-and-development/archive—third-agreement/92001-01, accessed 9 April 2013.
15 Holdford D, Schulz R. Effect of technical and functional quality on patient perceptions of pharmaceutical service quality. *Pharmaceutical Research*, 1999; **16**: 1344–1351.
16 Grönroos C. A service quality model and its marketing implications. *European Journal of Marketing*, 1984; **18**: 36–44.
17 Lehtinen U, Lehtinen JR. Two approaches to service quality dimensions. *The Service Industries Journal*, 1991; **11**: 287–303.
18 Rust RT, Oliver RL. Service quality: insights and managerial implications from the frontier. In: Rust RT, Oliver RL (eds) *Service Quality: New Directions in Theory and Practice*. Thousand Oaks, CA: Sage Publications, 1994: 1–19.
19 Pharmaceutical Society of Australia. *Consumer Medicine Information and the Pharmacist - Guidelines for Pharmacists*. Canberra: Pharmaceutical Society of Australia, 2007.
20 Whitehead P, Atkin P, Krass I, Benrimoj SI. Patient drug information and consumer choice of pharmacy. *International Journal of Pharmacy Practice*, 1999; **7**: 71–79.
21 Ley P. *Communicating With Patients*, 2nd edn. Marcer D (ed.) Cheltenham: Chapman and Hall, 1988: 209.
22 University of South Australia. *Consumer Experiences, Needs and Expectations of Community Pharmacy*. Canberra: Australian Governement Department of Health and Ageing, The Pharmacy Guild of Australia, 2005.
23 National Institute of Mental Health. Mental Health Medications. Available at: http://www.nimh.nih.gov/health/publications/mental-health-medications/complete-index.shtml, accessed 07 May 2013.
24 MacKeigan LD, Lon NL. Development and validation of an instrument to measure patient satisfaction with pharmacy services. *Medical Care*, 1989; **27**: 522–536.
25 Kamei M, Teshima K, Fukushima N, Nakamura T. Investigation of patients' demand for community pharmacies: relationship between pharmacy services and patient satisfaction. *Yakugaku Zasshi - Journal of the Pharmaceutical Society of Japan*, 2001; **121**: 215–220.
26 Naik-Panvelkar P, Armour C, Rose JM, Saini B. Patient preferences for community pharmacy asthma services a discrete choice experiment. *PharmacoEconomics*, 2012; **30**: 961–976.
27 Mitchell B, Armour C, Lee M *et al*. Diabetes Medication Assistance Service: the pharmacist's role in supporting patient self-management of type 2 diabetes (T2DM) in Australia. *Patient Education and Counseling*, 2011; **83**: 288–294.
28 Chen Y-C, Tarn Y-H, Kreling DH. Public views of community pharmacists in Taiwan. *International Journal of Pharmacy Practice*, 2012; **20**: 203–206.
29 Gastelurrutia MA, de San Vicente OG, Erauncetamurgil O, Odriozola I, Fernandez-Llimos F. Customers' expectations and satisfaction with a pharmacy not providing advanced cognitive services. *Pharmacy World and Science*, 2006; **28**: 374–376.
30 Oparah AC, Kikanme LC. Consumer satisfaction with community pharmacies in Warri, Nigeria. *Research in Social and Administrative Pharmacy*, 2006; **2**: 499–511.
31 Villako P, Raal A. A survey of Estonian consumer expectations from the pharmacy service and a comparison with the opinions of pharmacists. *Pharmacy World and Science*, 2007; **29**: 546–550.
32 Xu KT. Choice of and overall satisfaction with pharmacies among a community-dwelling elderly population. *Medical Care*, 2002; **40**: 1283–1293.
33 Naik Panvelkar P, Saini B, Armour C. Measurement of patient satisfaction with community pharmacy services: a review. *Pharmacy World & Science*, 2009; **31**: 525–537.
34 Gill L, White L. A critical review of patient satisfaction. *Leadership in Health Services*, 2009; **22**: 8–19.
35 Attree M. Patients' and relatives' experiences and perspectives of 'Good' and 'Not so Good' quality care. *Journal of Advanced Nursing*, 2001; **33**: 456–466.
36 Morgan S, Yoder LH. A concept analysis of person-centered care. *Journal of Holistic Nursing*, 2012; **30**: 6–15.
37 McMillan S.S., Kendall E., Sav A *et al*. Patient-centred approaches to health care: a systematic review of randomized controlled trials. *Medical Care & Research Review*, 2013; **70**: 567–596.
38 Jayadevappa R, Chhatre S. Patient centered care: a conceptual model and review of the state of the art. *The Open Health Services and Policy Journal*, 2011; **4**: 15–25.
39 Knox K, Fejzic J, Kelly F *et al*. Mental health consumer and caregiver perceptions of stigma in Australian community pharmacies. *International Journal of Social Psychiatry*, 2013. doi: 10.1177/0020764013503149.
40 Lauber C, Nordt C, Braunschweig C, Rossler W. Do mental health professionals stigmatize their patients? 2006.
41 Wahl OF. Mental health consumers' experience of stigma. *Schizophrenia Bulletin*, 1999; **25**: 467–478.
42 De Leeuw ED. To mix or not to mix data collection modes in surveys. *Journal of Official Statistics*, 2005; **21**: 233–255.

© 2014 John Wiley & Sons Ltd

43 Thomas DR. A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 2006; **27**: 237–246.
44 Pharmacy Guild of Australia. Home medicines review. The Pharmacy Guild of Australia. 2011 [April 23]; Available at: http://www.guild.org.au/iwov-resources/documents/QLD_Branch/Home%20Medicines%20Review/HMR%20FAQs%20and%20Information/Information%20about%20HMR.pdf, accessed 23 April 2013.
45 Department of Health and Ageing. *The Pharmacy Guild of Australia. Program Specific Guidelines MedsCheck and Diabetes MedsCheck*. Canberra: Department of Health and Ageing, 2012.
46 Pharmaceutical Society of Australia. *Professional Practice Standards V4*. Canberra: Pharmaceutical Society of Australia, 2010.
47 Black E, Murphy AL, Gardner DM. Community pharmacist services for people with mental illnesses: preferences, satisfaction, and stigma. *Psychiatric Services*, 2009; **60**: 1123–1127.
48 Crump K, Boo G, Liew FS *et al*. New Zealand community pharmacists' views of their roles in meeting medicine-related needs for people with mental illness. *Research in Social and Administrative Pharmacy*, 2011; **7**: 122–133.
49 Mey A, Fowler JL, Knox K *et al*. Review of community pharmacy staff educational needs for supporting mental health consumers and carers. *Community Mental Health Journal*, 2013; **48**: 1–9.
50 Cavaco AM, Dias JPS, Bates IP. Consumers' perceptions of community pharmacy in Portugal: a qualitative exploratory study. *Pharmacy World & Science*, 2005; **27**: 54–60.

© 2014 John Wiley & Sons Ltd