

## CPPI Practice Forum

# Pharmacists' roles in mental healthcare: Past, present and future

Sarira EL-DEN<sup>id</sup>, Jack C. COLLINS<sup>id</sup>, Timothy F. CHEN<sup>id</sup>, Claire L. O'REILLY<sup>id</sup>.  
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### Abstract

Mental illnesses cause significant disease burden globally, with medicines being a major modality of treatment for most mental illnesses. Pharmacists are accessible and trusted healthcare professionals who have an important role in supporting people living with mental illness. This commentary discusses the role of pharmacists in mental healthcare, as part of multidisciplinary teams, the current evidence to support these roles, and the training, remuneration and policy changes needed to recognize these roles and embed pharmacists as core members of the mental healthcare team.

### Keywords

Pharmacists; Professional Role; Pharmacy; Pharmaceutical Services; Mental Health; Mental Health Services; Suicide; Psychotropic Drugs; Evidence-Based Pharmacy Practice

### Introduction

Pharmacists are well-placed to contribute to the mental health and psychological wellbeing of the individuals and communities they serve. However, their contribution to and impact on mental healthcare has often been "anecdotal" – known and discussed, but not measured, analysed and disseminated in published scientific literature, due to a lack of funding for research in this area as well as the difficulties in exploring effectiveness given the diverse services and interventions pharmacists provide.<sup>1</sup> In recent years, this has started to change with key pharmacy bodies including the International Pharmaceutical Federation, the United Kingdom's Royal Pharmaceutical Society and the Pharmaceutical Society of Australia publishing reports and frameworks highlighting pharmacists' roles in mental healthcare, which can include early detection of mental illness, supporting access to mental health services and optimizing therapies.<sup>2-4</sup>

### Mental health pharmacists and multidisciplinary mental healthcare teams

The second half of the 20<sup>th</sup> century brought a shift in the treatment of people living with mental illness in many countries around the world, with a transition from institutionalisation to outpatient care. This transition created the need for multidisciplinary teams to optimise care for people living with mental illness and the role of the mental health or 'psychiatric' pharmacist as a specialised

area of practice has been described since at least the early 1970s.<sup>5</sup> Early descriptions of the role of these specialised pharmacists include working with nurses and physicians in community mental health centres to optimize drug therapy, in addition to their roles in dispensing and providing education regarding medicines.<sup>6</sup> These roles have continued into the 21<sup>st</sup> century, making mental health pharmacists key players in clinical management within in-patient and outpatient settings.

As the role of mental health pharmacists expands, sub-niches of practice have developed. Examples include pharmacists working in pharmacist-led clozapine clinics, administering injections in long-acting injectable antipsychotic services, and supporting students' mental health in psychiatric pharmacist services at tertiary education campuses.<sup>7-9</sup> The role of independent prescribing pharmacists in the care of people living with mental illness is another emerging area, with studies reporting on positive outcomes relating to pharmacist-led prescribing, such as significant reductions in psychiatric emergency service visits, demonstrating pharmacists' ability to expand their roles and potentially relieve pressure on health systems.<sup>1,10</sup> Furthermore, mental health pharmacists may also be well-placed to educate other members of the healthcare team. These sub-niches allow pharmacists to use their expertise in pharmacotherapy to play integral, yet diverse, roles in caring for people living with mental illness.

Pharmacists can also play an active role in mental healthcare through the provision of pharmaceutical care interventions.<sup>11</sup> Pharmaceutical care interventions can include medication review services, such as the Home Medicines Review program in Australia, which involve pharmacist-led medication review in collaboration with general practitioners and provide another avenue for the contribution of pharmacists to multidisciplinary healthcare, including mental healthcare.<sup>12-14</sup> Pharmacists have demonstrated their ability to conduct medication reviews for community-based mental healthcare patients.<sup>14</sup> Moreover, a meta-analysis of pharmaceutical care interventions has shown a positive effect on the mental health domain of the SF-36 quality of life instrument.<sup>11</sup> A key facilitating factor for pharmacist involvement in mental

**Sarira EL-DEN.** School of Pharmacy, Faculty of Medicine and Health, University of Sydney. Sydney, NSW (Australia). [sarira.el-den@sydney.edu.au](mailto:sarira.el-den@sydney.edu.au)

**Jack C. COLLINS.** School of Pharmacy, Faculty of Medicine and Health, University of Sydney. Sydney, NSW (Australia). [jack.c.collins@sydney.edu.au](mailto:jack.c.collins@sydney.edu.au)

**Timothy F. CHEN.** School of Pharmacy, Faculty of Medicine and Health, University of Sydney. Sydney, NSW (Australia). [timothy.chen@sydney.edu.au](mailto:timothy.chen@sydney.edu.au)

**Claire L. O'REILLY.** School of Pharmacy, Faculty of Medicine and Health, University of Sydney. Sydney, NSW (Australia). [claire.oreilly@sydney.edu.au](mailto:claire.oreilly@sydney.edu.au)

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healthcare is a consumer-centred communication approach. For example, pharmacists' engagement in a shared decision-making approach has been shown to aid the implementation of professional pharmacy services that can promote and support psychotropic medication adherence.<sup>15-17</sup> Hence, consumer-centred communication is critical to achieving optimal outcomes in mental healthcare.<sup>14</sup>

### **Evidence reviews – is pharmacist-led mental healthcare effective?**

Current evidence demonstrates positive impacts of pharmacists' roles in mental health, including improvements in prescribing practices and satisfaction among people living with mental illness.<sup>1</sup> However, evidence is often of low-quality and there is a need for well-designed randomised controlled trials (RCTs) demonstrating not only the effectiveness, but also the cost-effectiveness of pharmacist-led mental healthcare across community, hospital and other healthcare settings.<sup>1,18</sup> Nonetheless, there has been research to demonstrate that pharmacist-led interventions that have largely focused on education and monitoring are effective in improving antidepressant medication adherence.<sup>19,20</sup> Furthermore, research exploring pharmacist-led screening for mental illnesses is also emerging, with exploratory research being conducted in the areas of perinatal depression screening as well as pilot studies demonstrating the feasibility of depression screening within community pharmacy.<sup>21-24</sup> A recent systematic review of community pharmacist-led depression screening for adults found that while pharmacists could use screening tools to identify people living with undiagnosed depression, there was a need for more robust, high-quality research in this area to demonstrate cost-effectiveness and clinical implications.<sup>25</sup> There has been less research comprehensively exploring pharmacists' roles in supporting people living with severe and persistent mental illness; however, evidence in this area is emerging, with a recent systematic review highlighting pharmacists' roles in monitoring metabolic health among people living with severe mental illness and the need for further research to investigate the impact of these roles on clinical outcomes.<sup>26,27</sup>

### **Generating evidence from practice: paving the way for mental health services in community pharmacy**

As outlined by reviews of the literature, there has been recognition for the need for well-designed studies to evaluate the impact of pharmacist-led care for people living with mental illness.<sup>1,18,25</sup> In recent years, pharmacy researchers have been successful in obtaining funding to develop and evaluate models of pharmacist-led mental healthcare in community pharmacies. For example, in Nova Scotia, Canada, the Bloom Program was "designed to enhance pharmacists' care of people with lived experience of mental illness and addictions".<sup>28</sup> The Bloom Program was evaluated through a 27-month demonstration project, illustrating that pharmacists have important roles to play in medication optimization, education and supporting people to navigate the health system.<sup>29</sup> Specifically, the Bloom Program resulted in the resolution or improvement of 78% of medication issues, including but not limited to adverse effects, inappropriate polypharmacy and medication withdrawal.<sup>30</sup> Importantly, satisfaction with the Bloom

Program was high, as evidenced by 89% of consumers indicating that it was "excellent to very good".<sup>30</sup> The Bloom Program is now funded by the Nova Scotia Department of Health and Wellness, Government of Nova Scotia, demonstrating that with the appropriate remuneration and training, pharmacists can provide services beyond those that are traditionally expected (i.e., medication management) and practice to their full scope to provide other services which are greatly valued by people living with mental illness, including but not limited to social support, referral and follow-up.<sup>28,31</sup>

In Australia, research funding by the Australian Government through Community Pharmacy Agreements has allowed for three multi-state projects exploring pharmacist-led care for people living with mental illness. The findings of a pilot study funded through the Fourth Community Pharmacy Agreement highlighted the need to develop mental health training for pharmacists, as well as to explore techniques through which pharmacists can further promote medication adherence and improve the continuity of medication support across public mental health services for people living with mental illness.<sup>32</sup> As part of the Fifth Community Pharmacy Agreement, a feasibility study demonstrated that a community pharmacy-based intervention for people prescribed medications for common mental illnesses led to significant improvements for a range of self-reported outcomes, including but not limited to medication adherence, mental health related quality of life and illness perceptions.<sup>33</sup> Following on from this, through the Sixth Community Pharmacy Agreement, an ongoing multi-site RCT entitled "Bridging the Gap Between Mental and Physical Illness in Community Pharmacy – *PharMIbridge*" was funded. The *PharMIbridge* RCT is being co-led by two Australian universities and aims to evaluate an individualized, flexible and goal-oriented pharmacist-led support service for people living with severe and persistent mental illness, such as schizophrenia and bipolar disorder, with a primary outcome measure of adherence to antipsychotic and mood stabiliser medication(s).<sup>34</sup> As per the *PharMIbridge* RCT clinical trial registration (ANZCTR12620000577910), the *PharMIbridge* service is being offered in participating community pharmacies across four Australian regions and involves pharmacists working closely with participating mental health consumers over six months to support physical and mental wellbeing.<sup>35</sup>

### **Education and training: current state and future directions**

It is evident that the growing role of pharmacists in mental healthcare is not restricted to those that specialize in psychiatry, but also includes community pharmacists who are among the most accessible healthcare professionals. Community pharmacists are well-placed to identify people at risk of mental health crises, screen for mental illness, run mental health promotion campaigns, and provide education to people living with mental illness and their carers. As the profession moves away from traditional dispensing roles and starts to place more emphasis on service delivery and disease state management, pharmacists can continue to cement their place as integral members of the mental healthcare team by contributing to broader public health priorities. The higher rates of morbidity and mortality among people living with mental

illnesses are often attributed to poor physical health among this population, often a result of the adverse effects of medications (e.g., weight gain with antipsychotics), as well as the symptoms of the illness itself. Furthermore, smoking rates are much higher among people living with mental illness, also contributing to lower life expectancy for this population. Hence, pharmacists can provide important services such as nicotine replacement therapy and weight management, supply medicines once restricted to hospital settings such as clozapine, as well as administer mental health medicines such as long-acting antipsychotics.<sup>7,8,36</sup> However, to take on these roles, community pharmacists' roles in mental healthcare need to be recognized and supported, not only through remuneration but also through appropriate education and training.

Adequate training is needed to equip the pharmacist workforce with the necessary skillset to support the management of mental health problems and crises within their scope of practice. Well-trained pharmacists can also contribute to the reduction of stigma against people living with mental illness, as well as promote awareness of and access to mental health services, all of which are often barriers to seeking mental healthcare. There is a growing body of evidence relating to mental health education incorporated into pharmacy curricula for pharmacy students, as well as continuing professional education for pharmacists. One training program, Mental Health First Aid (MHFA), has gained international recognition as a relevant and necessary training for frontline healthcare professionals, including pharmacists, and has been taught to pharmacy students and pharmacists alike.<sup>37</sup> The evidence pertaining to MHFA training in pharmacy dates back to 2011, when a controlled trial conducted on Australian pharmacy students demonstrated improved self-reported knowledge, confidence, attitudes and behaviours among MHFA-trained pharmacy students.<sup>38</sup> Over the last decade, other studies involving pharmacy students in the United States and Australia have also demonstrated improved learning and behavioral outcomes.<sup>39-41</sup> A recent systematic review exploring MHFA training and assessment in university curricula, generally, reported that a considerable proportion of studies exploring integration and evaluation of MHFA training were among pharmacy students in the United States and Australia, and we are increasingly seeing MHFA being taught within healthcare and other curricula internationally.<sup>42</sup> While MHFA training is not uniformly offered to all pharmacy students or pharmacists, there has been support by researchers and pharmacy associations to embed it within pharmacy education.<sup>43-45</sup>

Programs such as MHFA are needed for pharmacists as they commonly interact with people experiencing mental health problems and crises. As far back as 1972, Gibson and Lott outlined the role of the pharmacist in suicide prevention.<sup>46</sup> Today, 50 years later, the role of the pharmacist in suicide prevention continues to be important; however, it is not yet well-articulated, with a lack of established referral pathways to primary and specialist services, low uptake of mental health crisis training by pharmacists and minimal mental health promotion within pharmacies, as evidenced by some reporting that they have never considered pharmacists' roles in this area.<sup>47,48</sup> Nonetheless, these and other

barriers, including but not limited to lack of time and private areas within pharmacies to have mental health-related conversations, have not stopped pharmacists from providing suicide care.<sup>47</sup> Studies from the United States, Australia and Canada have demonstrated that pharmacists frequently interact with people experiencing suicidal thoughts and behaviours, with evidence from Australia and Canada indicating that up to 85% of pharmacists have cared for a person at risk of suicide at least once and approximately 10% of pharmacists have done so more than 10 times.<sup>49-51</sup> However, pharmacy-based reports such as those published by the International Pharmaceutical Federation, the Pharmaceutical Society of Australia and the United Kingdom's Royal Pharmaceutical Society between 2013-2018, fail to clearly articulate pharmacists' roles in this area.<sup>2-4</sup> Means restriction, including limiting access to medications, is identified as an important intervention in the approach to suicide prevention and approximately one in five pharmacists have reported being asked about lethal doses by consumers.<sup>50,52</sup> However, broader mental health policy also often overlooks the role of the pharmacist in caring for people at risk of suicide.<sup>53</sup> For example, the Australian Mental Health Productivity Commission Inquiry Report did not recognize pharmacists' roles in this area.<sup>54</sup> Nonetheless, pharmacy organisations seem to be committed to changing this and it is promising to see that the Pharmaceutical Society of Australia's response to the Report did recommend the integration of "pharmacists in suicide prevention strategies".<sup>55</sup> Furthermore, the 2021 Live Life document from the World Health Organisation recognizes general health workers as key stakeholders who can be involved in suicide prevention, but specifically highlights the role of pharmacists due to their accessibility and access to means.<sup>56</sup>

As further literature, policies and reports are published in this area, it is likely that pharmacists' roles in suicide prevention will increasingly be recognized. Hence, there is a need to upskill the frontline pharmacy profession in suicide prevention, intervention and postvention, especially as studies have found that a minority of pharmacists and pharmacy staff have completed suicide prevention or mental health crisis training, ranging from 8.8% in the United States, 12% in Canada and 29% in Australia.<sup>50,51</sup> It is evident that suicide education is often lacking from healthcare, including pharmacy, curricula – an issue noted in the 1970s and confirmed again in 2019 as per the findings of a systematic review.<sup>40,46</sup> Mental illness and suicide prevention are public health priority areas, globally, and their omission from pharmacy curricula may stem from the lack of public health education in pharmacy curricula, more generally.<sup>57</sup> Mandatory, standardized basic mental health crisis education and training is needed for pharmacists to contribute to the public health response to suicide prevention and mental healthcare. While such training is not currently mandatory for most pharmacy professionals, a minimum standard of mental health education for pharmacy may be on its way, with the State of Washington already mandating Suicide Prevention Training for pharmacists.<sup>58,59</sup>

## Conclusion

Pharmacists have a significant role to play in supporting people living with mental illness in their communities.



However, further work is required in demonstrating the clinical outcomes and cost-effectiveness of these roles to allow pharmacists to be embedded into mental healthcare teams routinely across various practice settings. In addition, standardized, mandatory mental health and crisis first aid training is required for all pharmacists to ensure they are able to confidently and appropriately care for people living with mental illnesses and experiencing crises, thereby becoming integral to mental healthcare teams and the public health response to suicide prevention.

## CONFLICT OF INTEREST

None to declare.

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