Seeing the complete picture: A systematic review of mental health consumer and health professional experiences of diagnostic overshadowing

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This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/JOCN.16151

Acknowledgements

Paula Todd, librarian at Monash University, for guidance with formulating search strategies.

Conflict of Interest

The authors have no conflict of interest to declare.

Funding

Nil financial or material support was received

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Article type : Review

Seeing the Complete Picture: A Systematic Review of Mental Health Consumer and Health Professional Experiences of Diagnostic Overshadowing

Abstract

Aim: To systematically identify, explore and synthesise qualitative data related to mental health consumer and health professional experiences of diagnostic overshadowing.

Background: Mental health consumers experience significantly high rates of physical illness, poorer health outcomes and are more likely to die prematurely of physical illnesses than the general population. Diagnostic overshadowing is a complex and life-threatening phenomenon that occurs when physical symptoms reported by mental health consumers are misattributed to mental disorders by health professionals. This typically occurs in general healthcare settings.

Methods: Drawing on JBI methodology for systematic reviews, four scholarly databases and grey literature were searched. Followed by eligibility screening and quality assessment using JBI QARI frameworks, resulting in six studies for inclusion. Findings were synthesised using meta-aggregation. The PRISMA checklist was adhered to throughout this process.

Findings: Five synthesized findings emerged from health professional experience: working in ill-suited healthcare systems, missing the complete diagnostic picture, and misunderstanding the lived experience of mental illness. Two from the mental health consumer experience: not knowing if the cause is physical or mental, and surviving in an ill-suited health care system.

Conclusions: Diagnostic overshadowing is a multidimensional experience of interconnecting factors including systematic healthcare system issues, health professionals limited mental health knowledge and skills, stigmatic attitudes and mental health consumers miscommunicating their physical health care needs. Further research is needed to make diagnostic overshadowing visible and mitigate against this phenomenon that deprives mental health consumers of equitable access to quality healthcare.

Relevance to clinical practice:

Those who govern healthcare systems have an obligation to recognise and address the unique needs of mental health consumers who seek help for physical illnesses to ensure they receive quality and safe care. Forming collaborative partnerships with mental health care consumers in the development of knowledge translation initiatives targeting healthcare policy, practice and education is urgently required.

Keywords: Inequality, stigma, physical illness, mental health consumer, severe mental disorder, cognitive bias, diagnostic overshadowing, healthcare access, systematic review, comorbidity

Introduction

There is growing disparity between the physical health of mental health consumers and the general population. Mental health consumers experience significantly high rates of physical illness, including respiratory and cardiovascular diseases, diabetes, dental problems, and cancer (Irwin, 2019; National Mental Health Commission, 2016). In Australia, more than half of mental health consumers live with a chronic co-existing physical condition; with three in four also living with a second, third, or fourth chronic condition (Harris et al., 2018). This has been attributed to mental health consumers leading more unhealthier lifestyles than the general population, including increased likelihood of smoking, sedentary behaviour, poor nutrition, unsafe sexual practices, and substance misuse (Firth et al., 2019). In addition, mental health consumers are more likely to face socioeconomic disadvantages (Shefer et al., 2014), such as social isolation, poverty, stigma, and discrimination, hindering access to healthcare promotion, screening, and treatment (World Health Organization [WHO], 2018). Together, these contributing factors have led mental health consumers to be more likely to die prematurely of physical illnesses than the general population (Lawrence et al., 2013; Westman & Laursen, 2011).

Despite healthcare equity being a basic human right, mental health consumers often receive different care to the general population. Poor physical health outcomes for mental health consumers are directly related these healthcare inequities, especially the lack of available, high-quality healthcare to meet their needs (Firth et al., 2019). For example, research has shown that the increased incidence of cancer related mortality in mental health consumers is the result of inequities in treatment (Irwin, 2019). Mental health consumers receive less effective care of hypertension (Ayerbe, 2018). Amongst individuals living with diabetes, mental health consumers are less likely to receive overall high-quality diabetes care (Jorgensen, 2017). Given that mental health consumers experience increased risk factors and incidence of these illnesses (Firth et al., 2019), the healthcare inequities present additional risk factors as they contribute to delays in treatment and increases the likelihood of physical deterioration and poorer overall health outcomes in mental health consumers (Shefer et al., 2015).

One explanation for this healthcare inequality is diagnostic overshadowing. Also referred to as ‘clinical blindness' (Yeomans et al., 2014), diagnostic overshadowing occurs when physical symptoms reported by mental health consumers are misattributed to mental disorders by health professionals (Nash, 2013). Diagnostic overshadowing has been linked to clinical reasoning errors caused by health professional’s unconscious negative bias (Stoklosa et al., 2017). However, this explanation has been viewed as “too simplistic” because it does not consider other important factors, including communication, health professionals’ knowledge about mental illness, and level of comfort and attitude toward treating mental health consumers (Jones et al., 2008).

Diagnostic overshadowing is not a new phenomenon. In 2006, it was formally recognised as contributing to the physical health inequalities experienced by people with mental health problems following an inquiry by the Disability Rights Commission (2006). Since this investigation, a growing number of studies exploring diagnostic overshadowing have been undertaken, mostly in emergency departments (ED) using both quantitative (Geiss et al., 2018) and qualitative methods (Shefer et al., 2014; Van Nieuwenhuizen et al., 2013). However, despite these studies, diagnostic overshadowing still remains under investigated and there is a clear lack of visibility of this phenomenon amongst health professionals and mental health consumers in general healthcare settings. Recently, there has been an increased emphasis on exploring mental health consumers' lived experiences, as it represents a different kind of knowledge that Happell and colleagues (2018) assert is fundamental to research and advancing healthcare practice change.

Therefore, in order to see the complete picture, a meta-synthesis was undertaken to understand the complex phenomena of diagnostic overshadowing from both health professionals' and mental health consumers' perspectives. A meta-synthesis was relevant as it seeks to understand phenomena by aggregating and categorising findings from individual studies that explore the same phenomena (Korhonen et al., 2013). Based on this broader understanding, findings from this review can help inform and initiate knowledge translation initiatives to inform patient care and advance nursing practice. To our knowledge, this will be the first systematic review to explore diagnostic overshadowing from the perspectives of mental health consumers and the health professionals who care for them.

Aims

This review aimed to systematically identify, explore and synthesise qualitative studies on health professionals (hereby: HP) and mental health consumers (hereby: MHC) experiences of diagnostic overshadowing by asking the following questions:

1. What are health professionals' experiences of diagnostic overshadowing when caring for mental health consumers who seek help for clinical manifestations of physical illness?

2. What are mental health consumers' experiences of diagnostic overshadowing when seeking help for clinical manifestations of physical illness?

Method

This qualitative systematic review was undertaken in accordance with Joanna Briggs Institute (JBI) methodology (Lockwood et al., 2020) and outlined in advance in a priori published protocol (Molloy et al., 2020). The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) checklist criteria were followed (Page et al., 2021) (See Supplementary File 1).

Inclusion and Exclusion Criteria

Studies using all qualitative research designs were considered for inclusion. Studies published in English from 2004 to 2020 that included the experiences of MHCs and HPs (e.g., nurses, doctors, paramedics) relating to diagnostic overshadowing of clinical manifestations of physical illness were considered. This search time was chosen to correspond with the publication of the Disability Rights Commission (2006) which revealed the issue of diagnostic overshadowing of physical illness in MHCs and resulted in subsequent increase in research on this topic. The aim of including the two years prior to the report was to capture published research that may have prompted the report. Studies from any country conducted in any healthcare facility or service offering care for physical illnesses (e.g., hospitals, general practitioner clinics, emergency services, and community health settings) were considered.

Screening and Study Selection

A three-phased search strategy was undertaken. The first phase involved a limited search of MEDLINE and PsycINFO using the terms "diagnostic overshadowing" and "mental illness" to identify articles on the topic. A full search strategy was developed for PsycINFO using text words in the titles and abstracts of these relevant articles (See supplementary file 2).

Phase two (see Figure 1) involved adapting MeSH and free text terms to search MEDLINE (Ovid), CINAHL (EBSCOhost), PsycINFO (Ovid), Scopus (Elsevier) for published studies (See supplementary file 3). The search for unpublished studies included Google Scholar, Proquest Dissertations and Theses, BASE, MedNar, and Medscape. This search was conducted in August 2020 and yielded 452 articles. Duplicates were removed (n=207), leaving 245 potentially relevant articles. Next, titles and abstracts were screened against the inclusion and exclusion criteria, and 235 articles were excluded. The remaining ten articles were retrieved in full text to re-examine against the eligibility criteria. This phase was undertaken by two reviewers independently (RM and NP). Following full-text review, four articles were eliminated (See supplementary file 4)

Phase three involved hand-searching reference lists of the ten included studies to identify any additional sources. No other sources were identified. A University faculty librarian was consulted throughout all stages of this process.

Insert Figure 1

Quality Assessment

The six eligible studies were assessed for methodological quality by two independent reviewers (RM & NP, RM & IM) using the standard JBI Critical Appraisal Checklist for Qualitative Research (Lockwood et al., 2020) (See supplementary file 5). This checklist is comprised of ten questions related to methodological quality. Reviewers must answer each question as “yes” “no” “unclear” or “not applicable.” Five studies met seven of the ten criteria. The weakest areas were item one (congruency between philosophical perspective and methodology), item six (researcher located culturally or theoretically), and seven (influence of the researcher on the research and vice versa). One study met all criteria.

Data Extraction

Two reviewers independently (RM & NP, RM & IM) extracted qualitative data using the standardized data extraction tool from the JBI-data extraction tool (Lockwood et al., 2020). Extracted data included specific details about the population, culture, context, geographical location, study methods, the study setting, the phenomena of interest, and findings of significance. Findings, as reported by the authors of the individual studies, were extracted with supporting illustrations in the form of participant quotes (See supplementary file 6). There was no disagreement of all authors regarding extracted findings.

Data Synthesis

Findings were pooled using JBI tools (Lockwood et al., 2020). This involved the aggregation of original findings reported in the included studies to generate a set of statements that represent the aggregation. Findings were rated according to their quality and categorizing based on similarity in meaning. These categories were subjected to a rigorous meta-synthesis by the research team. This involved two reviewers (RM and NP) examining and grouping findings into draft categories. The draft categories and their associated findings were re-examined, discussed and refined three weeks later and in consultation with a third reviewer (IM). The grouping of findings into categories was based on similarity in meaning. The first author drafted synthesized findings and these were discussed with the research team (NP, IM, GB) for validation. This process produced five main synthesised findings (Supplementary file 7).

Findings

The six included studies were published between 2013-2019. Only one study stated the philosophical perspective of Hermeneutic analysis (Holm et al., 2014). All studies collected data using semi-structured interviews. Five studies interviewed participants individually (one via telephone and four face to face) (Holm et al., 2014; Nash, 2014; Rivera-Segarra et al., 2019; Shefer et al., 2014; Van Nieuwenhuizen et al., 2013), and one study used face to face focus group interviews (Ewart et al., 2016). Three studies took place in the United Kingdom (Nash, 2014; Shefer et al., 2014; Van Nieuwenhuizen et al., 2013) and one each were conducted in Australia (Ewart et al., 2016), Puerto Rico (Rivera-Segarra et al., 2019), and Norway (Holm et al., 2014). Various healthcare facilities and services were represented, including general hospitals (wards and ED) and outpatient medical centres.

Three studies included health professionals' perspectives (doctors and nurses). Sample size ranged from 11-39 participants (total health professionals n=75). Three studies focused on MHC perspectives, with sample sizes from 7-31 participants (total mental health consumers n=53). In addition to their mental health diagnoses, all participants had accessed health services seeking care for clinical manifestations of physical illness. An overview of the included studies' characteristics is presented in Table 1.

Insert Table 1

Five themes were identified from the meta-synthesis of health professionals' experiences of diagnostic overshadowing: 'working in ill-suited healthcare systems,' 'missing the complete full diagnostic picture,' and ‘misunderstanding the lived experience of mental illness.’ Mental health consumers' experiences of diagnostic overshadowing included: 'not knowing if the cause is physical or mental' and 'surviving in an ill-suited healthcare system.’ Supplementary file 7 presents a more detailed description of the meta-synthesis.

The Health Professional Experience of Diagnostic Overshadowing

Working in ill-suited healthcare systems (from two categories, comprising of six findings). A shared theme across all three studies was that the healthcare system was ill-suited and not conducive to the unique needs of MHCs. Systemic factors impacted HP's practice and their ability to assess, treat and effectively care for MHCs seeking help for clinical manifestations of physical illness (Rivera-Segarra et al., 2019; Shefer et al., 2014; Van Nieuwenhuizen et al., 2013). These systemic factors included environmental characteristics of excessive noise, overcrowding, and the chaotic nature of the Emergency Department (ED), which was the first point of care for MHCs. These factors contributed to MHC’s distress (Shefer et al., 2014; Van Nieuwenhuizen et al., 2013) as illustrated by a psychiatric nurse:

> "It's a terrible environment for people with mental illness. The waiting room is horrific for them to have to wait in that environment. Once they get into the [emergency] department, it's a very busy department and they are having to sit in very busy areas and people coming… it's not good for somebody with a mental health problem to be in there" (Shefer et al., 2014, p. 6).

To limit MHC’s distress and exacerbation of mental illness symptoms, HPs described how they hastily discharged MHCs or, in some cases, initiated early referral (Van Nieuwenhuizen et al., 2013). As a result, physical illnesses symptoms were not completely explored, or comprehensively managed (Shefer et al., 2014; Van Nieuwenhuizen et al., 2013).

The ill-suited healthcare system’s rigid policy and practice also contributed to diagnostic overshadowing. Health professionals referred to a lack of political and financial support needed to promote integrated care approaches between psychiatry and acute care (Van Nieuwenhuizen et al., 2013). Mandated timeframes (4 hrs in

ED) also meant that HPs did not have enough time to conduct a thorough physical examination, leaving HP's feeling forced to prematurely diagnose a medical or psychiatric problem (Shefer et al., 2014; Van Nieuwenhuizen et al., 2013).

Missing the complete diagnostic picture (from two categories, comprised of five findings). Quite often HPs felt they were unable to undertake a thorough health history or physical examination due to common mental illness symptoms such as withdrawal, apathy, disorientation, disorganised thinking, delusions, distraction, and medication side effects making communication with MHC challenging (Shefer et al., 2014; Van Nieuwenhuizen et al., 2013). Similarly, when MHCs were displaying agitation or suspicion, HPs became apprehensive about communicating with MHCs, resulting in less thorough examination. This was particularly true when MHCs refused treatment or displayed challenging behaviour (Shefer et al., 2014; Van Nieuwenhuizen et al., 2013). In some cases, HP acknowledged they did not ask, or MHCs did not voluntarily disclose their mental illness diagnosis until they were explicitly asked (Rivera-Segarra et al., 2019). These factors contributed to HP's missing the complete diagnostic picture and delayed necessary assessment and timely treatment for MHC's physical illnesses.

Misunderstanding the lived experience of mental illness (from two categories, comprised of eleven findings). Health professionals described how MHC seeking help for physical illness were treated differently to the other patients. In some cases, this led to misdiagnosis and/or impeded early recognition of clinical deterioration and their ability to holistically care for MHCs in general healthcare settings. This was highlighted in Shefer and colleagues' study (2014), whereby mental illness diagnosis dominated discussion between HPs, even if MHC specifically presented to ED seeking help for physical illness symptoms:

> "One patient told me [...] that every time he came, someone would say, ''He is a known schizophrenic''[sic]. That is how they would start presenting his case to each other. He didn't like that [...] And he feared, and his fear was true, apparently, according to his experience [with regard to reoccurring abdominal pain], that by saying that there is a mental health problem, people overlook the physical health" (Shefer et al., 2014, p. 6).

Health professionals spoke about their insufficient knowledge of mental illness and lack of skills and experience caring for MHCs. This contributed to MHCs being treated differently from other patients. While there was a shared sense that attitudes toward MHCs had improved over the years, HPs acknowledged that negative perceptions about MHCs remain pervasive in general healthcare settings (Rivera-Segarra et al., 2019; Shefer et al., 2014; Van Nieuwenhuizen et al., 2013). For example, HPs who reported a fear of MHCs displaying violence were more likely to avoid undertaking physical examination (Van Nieuwenhuizen et al., 2013) or intentionally hastening diagnostic processes. This further compounded the neglect of MHCs' physical illness symptoms (Shefer et al., 2014).

These misunderstandings stemmed from HPs' stigmatic attitudes regarding MHCs' potential for recovery, blaming them for their own ill health (Rivera-Segarra et al., 2019) for example being labelled as "frequent attenders" (Shefer et al., 2014; Van Nieuwenhuizen et al., 2013) in the ED. Some HPs attributed these stigmatic attitudes to a lack of knowledge and training in mental healthcare, and limited experience caring for MHCs in general healthcare settings (Rivera-Segarra et al., 2019; Van Nieuwenhuizen et al., 2013). This was described by one HP, a junior male doctor, in the ED:

> "most people unless they have an interest in psychiatric illness. . . may not be adequately prepared to deal with psychiatric issues, at the front line" (Van Nieuwenhuizen et al., 2013, p. 258)

The Mental Health Consumer Experience of Diagnostic Overshadowing

Not knowing if the cause is physical or mental (from two categories, comprised of seven findings). Mental health consumers shared their experiences seeking help for clinical manifestations of physical illness; they spoke about their hospital admission and complications associated with living with mental and physical illnesses. Many MHCs felt uncertain about the origin of their illness experiences, reporting times when a combination of physical and psychological pain manifested as a physical ailment (Ewart et al., 2016; Holm et al., 2014; Nash, 2014). One MHC described this as:

> "living with a sense of impending disaster similar to being in a war zone" (Holm et al., 2014, p. 4).

The uncertainty was further compounded by the physical illness exacerbating their mental illness symptoms and vice versa. This made it extremely difficult for MHCs to articulate whether their symptoms were of a physical or mental origin. As one MHC explained, “You cannot go on, and the emotional pain increases. How can I explain this to another person when I do not understand it myself? My whole body is aching” (Holm et al., 2014, p. 4).

Mental health consumers expressed a need for acknowledgment of and support in managing their physical illnesses. Yet, acknowledgment and support were not offered with HP’s failing to listen, understand, or taken MHCs’ concerns seriously (Ewart et al., 2016; Holm et al., 2014; Nash, 2014). At times, MHCs' active requests for physical investigations were ignored, leaving them concerned about their physical health, even if the HP assured them that they were OK (Holm et al., 2014).

Surviving in an ill-suited healthcare system (from three categories, comprised of thirteen findings). Mental health consumers faced many challenges when seeking help for clinical manifestations of physical illness in general healthcare systems. These include widespread healthcare system deficits, discrimination, and an experience that left MHC with an overall sense of disempowerment. This was further compounded by a lack of integration between general and mental healthcare services (Ewart et al., 2016; Nash, 2014). Mental health consumers felt that the healthcare system was only responsive to their physical complaints, if it reached a crisis point, forcing many MHCs to adopt survival strategies, like keeping their mental illness diagnosis a secret (Ewart et al., 2016). Mental health consumers felt having a “mental illness” label immediately affected how HPs related and responded to their physical complaints. It also impacted the accuracy of assessment, diagnosis, and subsequent care (Ewart et al., 2016; Holm et al., 2014; Nash, 2014).

These labels stemmed from stigmatic attitudes and often resulted in discrimination, with many MHC sharing they were not taken seriously, not believed, and their physical complaints were minimised (Ewart et al., 2016; Holm et al., 2014; Nash, 2014). At times they even felt they were perceived as deviant and different from others, sharing that they felt like their physical symptoms were wrongly recast as symptoms of mental illness (Ewart et al., 2016; Holm et al., 2014; Nash, 2014). In the words of one MHC, “I'm never seen as a whole person; you know there's just parts of me that people deal with” (Nash, 2014, p. 719).

This was in contrast to MHC perceiving themselves as capable of managing their own lives and recovery experiences. However, they felt that this self-determination was not acknowledged and often undermined when they accessed care in general healthcare settings for their physical illness (Ewart et al., 2016).

These experiences compromised their independence and compounded feelings of helplessness (Ewart et al., 2016; Holm et al., 2014) leaving them isolated with no general pathway for support for physical health concerns (Ewart et al., 2016).

Mental health consumers longed to be heard and believed by HPs (Holm et al., 2014); however, previous negative experiences left them feeling pessimistic (Ewart et al., 2016) as they were forced to survive in an ill-suited healthcare system. Mental health consumers hoped for better physical healthcare in the future, expressing their need for more empowering partnerships between MHC and HPs to ensure they received the practical help, support, and education they needed (Ewart et al., 2016; Nash, 2014).

Discussion

Findings from this review present a much-needed combined perspective to how HP and MHC experience diagnostic overshadowing. They also deepen our understandings by providing a more balanced picture of what diagnostic overshadowing ‘looks like’ in general healthcare settings.

Ill Suited Health-Care Systems

Both HPs and MHC agree that ill-suited healthcare systems actively contribute to diagnostic overshadowing and therefore deny MHCs the high-quality, equitable care they deserve. An uncertainty regarding who should act as gatekeepers for physical health matters in mental health (Behan et al., 2015) is echoed worldwide and exacerbated by a lack of integrated person-centred healthcare systems (WHO, 2016). This is supported by growing evidence that integration between physical and mental healthcare systems is the best way to care for MHCs (Behan et al., 2015; Firth et al., 2019). Without integrated healthcare systems, MHCs will continue to be viewed in 'parts' (Nash, 2014) and feel isolated in their experience seeking help for clinical manifestation of physical illnesses (Ewart et al., 2016; Nash, 2014).

Limited Knowledge, Skills and Education

Despite the Australian Commission on Safety and Quality in Health Care (2019) declaring that all HPs, regardless of their specialty, have professional and ethical responsibilities to ensure they provide holistic, person-centred care, this review highlights that HPs' do not have the fundamental knowledge, skills or experiences in mental health to achieve this. This leaves many HPs feeling unprepared to assess, treat, and holistically care for MHCs in the general healthcare setting. This is supported by a recent Australian study exploring nurses' knowledge, skills, and attitudes towards caring for MHCs in an intensive care unit which found nurses were ill-prepared and required education and support to deliver person-centred care for patients with mental illness (Weare et al., 2019).

A lack of HP education on mental illness (Wu et al., 2020) and how to care for mentally ill patients in acute medical settings (Knaak et al., 2017) is a major barrier to the delivery of effective care for MHCs in general healthcare settings (Brunero et al., 2018). Similar to HPs working in general settings recognising a need for further training in caring for MHC, mental health nurses working in mental health settings also recognise a need for further training in physical health (Robson et al., 2013). Interestingly in this review, while MHCs expressed that the current healthcare system was not suitable for their needs, they did not attribute this to HPs' lack of mental illness knowledge and skills. Instead, they attributed this to negative attitudes and stigma, which is in keeping with previous findings (Happell et al., 2016).

Stigma and Discrimination

Within this review, both HPs and MHCs described how stigma contributed to the experience of diagnostic overshadowing. Stigma is one of the greatest challenges faced by MHCs (Wood et al., 2014) and has negative impacts on all aspects of their lives (Groot et al., 2020). These findings align with existing literature that links diagnostic overshadowing to stigma (Nash, 2013) and discrimination (Happell et al., 2016), with some experts referring to diagnostic overshadowing as "stigma in action" (Nash, 2014, p. 719). The intimate relationship between stigma and diagnostic overshadowing may be understood with reference to the seminal work of Goffman (1968), who described each social setting as having "established categories of persons who are likely to be encountered there" (p. 2). When individuals enter a social setting and do not fit the anticipated category (for example, MHC presenting to general ED), they are stigmatised, reducing them from "a whole and usual person to a tainted and discounted one" (Goffman, 1968, p. 3). This was illustrated in Shefer's (2014) paper when HPs made negative comments such as "I should be looking after my own" (p. 6) when referring to caring for MHC in ED settings. According to Goffman (1968), once the person has been stigmatised, discrimination can occur, reducing their life chances (in this instance, chance for a good health outcome). This was seen through HPs hastening assessment and diagnosis, so they could focus care on people they felt ‘belonged’ in the general healthcare setting, clearly illustrating *how* diagnostic overshadowing can manifest as “stigma in action.”

Stigma also played a part in many MHC choosing to keep their mental illness diagnosis a secret from HPs, not out of suspicion caused by mental illness symptoms, but as a survival strategy based on previous healthcare experiences in ill-suited healthcare systems. This is consistent with a recent large-scale Australian study on stigma and discrimination in MHC across various life domains. Of the 1912 MHC who responded to the survey, 64% reported expecting to experience future stigma when seeking help for physical health problems (Groot et al., 2020).

It was clear from this review, that many HPs did not initiate further investigations once physical symptoms were reclassified as relating to mental illness, which previous research has attributed to bias and discrimination (Happell et al., 2016; Nash, 2014). These actions may be understood through the lens of “clinician’s illusion” (Cohen & Cohen, 1984), which suggests HPs can misclassify patients based on previous experience (e.g. severe and persistent presentations) but are not actually representative of the entirety of (mental) illness outcomes. This results in a distorted or pessimistic perception of the illness and cultivates a term known as therapeutic nihilism in HPs (McGorry & Mei, 2020).

From the MHC perspective, HPs’ stigmatic attitudes resulted in minimising, or not believing reported physical symptoms because of their mental illness history. These findings are consistent with a study by Happell and colleagues (2016), who found HPs framed physical illness by MHCs as fictitious, perceiving them to be lacking in insight and competence. In addition, a recent Australian mixed methods study of stigma and discrimination in people with complex mental health issues found 83.2% of MHCs were unfairly treated when seeking help for physical health problems (Groot et al., 2020). Stigmatising attitudes shape healthcare policy and practice, resulting in systems that discriminate against MHCs (Henderson et al., 2014), and prevent HPs from seeing the complete diagnostic picture, subsequently contributing to poorer health outcomes for MHCs (Shefer et al., 2015).

Barriers to seeing the complete picture

Within this systematic review, both HP and MHC identified several key factors that hindered seeing the complete picture. Gathering diagnostic information from the MHC about the nature and history of their physical illness was often hindered by symptoms related to deteriorating mental health state. These dual symptoms also made it difficult for MHCs to communicate whether their health experience had a physical or mental origin. This interplay between physical and mental health, with mental health symptoms, often exacerbating physical health symptoms, and vice versa is well documented (World Health Organization, 2017), and contributes to diagnostic overshadowing.

Finally, this review found that HPs avoided undertaking thorough examinations when MHCs displayed challenging behaviours or when they feared MHCs might react violently. A recent systematic review of nurses' experiences of workplace violence from eight countries found that nurses attempt to keep a safe distance from patients suspected of violence, lowering their work standards to avoid opportunities for conflict (Zhang et al., 2020). This fear and subsequent avoidance are understandable as HPs experience an increased risk of workplace violence worldwide (Nelson, 2014), mainly in mental health wards, ED, waiting rooms, and geriatric units (Mento et al., 2020). These fears may result from previous experiences or hearing stories of violence on mental health wards or mainstream media (Wu et al., 2020). Increasing awareness of diagnostic overshadowing, including the interrelated factors that contribute to this phenomenon, is an essential step in addressing the healthcare inequities MHCs face in general healthcare settings, resulting in poorer overall health outcomes.

Strengths and Limitations

This is the first qualitative systematic review exploring the experience of diagnostic overshadowing from dual perspectives; the HP and MHC. Integrating these two perspectives increased the depth and breadth of findings and is an important first step in making diagnostic overshadowing visible so we can start to address it in general healthcare settings. A strength of this review is that the findings are transferable across multiple healthcare facilities or services where MHC may seek help for physical illness symptoms. However, despite using a peer-reviewed search strategy, some HP or MHC experiences of diagnostic overshadowing may have been missed in studies that did not focus on diagnostic overshadowing specifically. Studies not published in English were also not included. All included studies collected data using semi-structured interviews, which has the potential for findings to be misinterpreted. However, to overcome this, the JBI data extraction tool (Lockwood et al., 2020) was used by two researchers to examine the level of credibility.

Relevance to Clinical Practice

To address diagnostic overshadowing and improve the holistic care of MHC who present with physical symptoms, this review highlights three key points:

First, we need to put diagnostic overshadowing on the agenda as a quality and safety issue. To address diagnostic overshadowing, an integrated healthcare system that recognises MHCs unique needs, including time to communicate with, assess, and provide a thorough examination and targeted treatments, is urgently required. This can only be achieved through increased awareness, training, and support for HP to develop the knowledge, understanding, and skills to holistically care for and work with MHC in general healthcare settings.

Second, while attempts have been made in understanding diagnostic overshadowing, research gaps remain. There needs to be greater awareness and understanding among HPs of how often diagnostic overshadowing occurs, where it occurs, and how it occurs. Future ethnographic research that examines the complex, interrelated factors the impact diagnostic overshadowing in general healthcare setting is needed.

Third, MHC have a fundamental human right to receive unbiased, person-centred, high-quality health care. This requires pre-registration and post-registration HP training that challenges misinformed and/or unexplored beliefs about mental illness and how these beliefs can lead to “clinical blindness,” misdiagnosis and further perpetuates health inequities for the MHC. Recent research on co-designing education with healthcare consumers (Brand et al., 2020), including mental health consumer involvement in health professional education (Arblaster et al., 2015; Happell et al., 2014) is recommended to promote more humanistic models of healthcare.

Conclusion

Diagnostic overshadowing contributes to poorer health outcomes for MHCs, as it impedes the timely assessment, treatment, and holistic care of physical illness symptoms. Findings from this SR build on what was already known; that diagnostic overshadowing is not simply caused by HP unconscious negative bias, it is a multidimensional experience shared by both the MHC and HP with interconnecting contributing factors. These factors are shaped by systemic healthcare system deficits, HP's limited mental health knowledge, and skills, stigmatic attitudes, and challenges MHC face in understanding and communicating their physical healthcare needs. At a time when our general healthcare system is reaching a crisis point, further research is needed to make diagnostic overshadowing visible and mitigate this daily phenomenon that deprives MHC from equitable access to quality healthcare services.

Conflict of interest

The authors declare that there are no conflicts of interests

Supporting Information

Supplementary file 1- Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) Checklist
Supplementary file 2- Search strategy for psycINFO
Supplementary file 3- Search strategy for all information sources
Supplementary file 4- Articles that did not meet eligibility criteria
Supplementary file 5- Assessment of Methodological Quality of Included Studies
Supplementary file 6- List of study findings
Supplementary file 7- Data synthesis

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Impact Statement: What does this paper contribute to the wider global clinical community?

- We have synthesised qualitative evidence related to the dual perspectives of mental health consumers' and health professionals' experiences of diagnostic overshadowing and identified that it is a multidimensional experience with interconnecting contributing factors.
- Collaborative partnerships with mental health consumers is needed to address diagnostic overshadowing and inform healthcare policy, practice and education.
- Research that examines the complex, interconnected factors that impact diagnostic overshadowing in general healthcare setting is urgently needed.

Table 1: Characteristics of Included Studies

Authors/ year	Aims/ purpose	Sample	Design and methods	Setting/Country	Main Findings
Ewart et al. (2016)	To explore the experience of mental health consumers in utilizing health services for physical health needs.	31 participants. All had a mental health diagnosis and experience of accessing mental health services as well as perspectives on seeking, using and forming relationships with services related to physical health.	Qualitative exploratory design. Data was collected via semi-structured focus groups.	The ACT Mental Health Consumers Network venue. Australia.	Three main themes were found: scarcity of physical health care, with problems accessing diagnosis, advice or treatment for physical health problems; disempowerment due to scarcity of physical health care; and tenuous empowerment describing survival resistance strategies utilized. Mental health consumers were concerned about physical health and the non-responsive health system.

Holm et al. (2014)	To deepen the understanding of depressed elderly persons' lived experiences of physical health problems.	15 participants. 2 men and 13 women diagnosed with a depressive or mood disorder who had been referred to community health care during the previous six months.	Hermeneutic analysis, with in depth interviews as the data collection method. Individual interview.	Community mental health centres or participants own home. Norway.	One main theme was identified, living with stigma, as well as three themes; longing to be taken seriously; being uncertain about whether the pain is physical or mental, which included two sub-themes feeling like a stranger and feeling dizzy; a sense of living in a war zone which included the subtheme of afraid of being helpless and dependent on others.
Nash (2014)	To explore mental health service users' experiences of diabetes care.	7 participants. 4 females and 3 males all aged between 18-65 years. All had a diagnosis of diabetes and severe mental illness.	Descriptive qualitative study. Semi-structured telephone interviews.	Telephone interview. United Kingdom	Six main themes emerged: stigma; diagnostic overshadowing; a split between mental health and physical wellbeing; complications; 'if you were a mental health nurse, what would you do differently for someone like you?'; receiving a diagnosis of

					diabetes.
Rivera-Segarra et al. (2019)	To address stigma from the perspective of healthcare professionals.	11 participants. All were practicing healthcare professionals (8 physicians, 3 nurses) who were not in charge of patient's routine mental health care, but rather were focussed on addressing physical health care. They worked in inpatient or outpatient medical institutions.	Qualitative design using semi-structured individual interviews.	Private office within the healthcare service in which participants worked. Puerto Rico.	Three main themes and nine sub-themes related to the stigmatization process: individual level which included the sub-themes of negative perceptions, blaming the patient, inability to recover; interpersonal level which included the sub themes of diagnostic overshadowing, lack of skills, and serious mental illness diagnosis disclosure; Structural level which included the sub themes of lack of training, and health care systems.
Shefer et al. (2014)	To investigate the perceived scope and causes of 'diagnostic overshadowing' – the misattribution of physical	39 participants. All were clinicians (18 doctors, 21 nurses). 19 participants were	Qualitative study using semi-structured interview. Individual	Private offices in the Institute of Psychiatry psychology and neuroscience or in	Interviewees reported various scenarios in which mental illness or factors related to it led to misdiagnosis or delayed

	symptoms to mental illness- and other challenges involved in the diagnostic process of people with mental illness who present in ED's with physical symptoms.	ED staff and 20 were psychiatric liaison team members. All worked in EDs and general hospitals.	participants.	the hospitals where only the interviewer and the interviewees were present in order to ensure privacy and confidentiality. United Kingdom.	treatment with various degrees of seriousness. Factors increasing the risk of misdiagnosis were separated into two groups; direct causes which include complex presentations and medical clearance, frequent attendees, and difficulties in communication and challenging behaviour; background factors which includes the crowded nature of the ED environment, time and pressure targets, stigmatising attitudes.
Van Nieuwenhuizen et al. (2013)	To investigate recognition of diagnostic overshadowing, i.e., misattribution of physical symptoms to mental illness, among	25 participants. All health professionals (including doctor, nurse, nurse-practitioner) with	In depth individual interviews and qualitative analysis using thematic analysis.	Emergency department setting. United Kingdom.	Diagnostic overshadowing was described as a significant issue. Eight categories of determinants of differential care were identified including problems

	emergency medicine professionals; further, to identify contributory and mitigating factors to diagnostic overshadowing.	patient contact in the emergency department. Mental health professionals were excluded.			obtaining a history, problems with examination, clinicians' lack of knowledge about mental illness, environmental problems, labelling and stigma, fear of violence and avoidance, time pressure, lack of implementation of parallel working with psychiatry.

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