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Review

An integrative review of primary health care nurses' mental health knowledge gaps and learning needs

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ABSTRACT

Background: The global COVID-19 pandemic has escalated the prevalence of mental illness in the community. While specialist mental health nurses have advanced training and skills in mental health care, supporting mental health is a key role for all nurses. As front-line health care professionals, primary health care (PHC) nurses need to be prepared and confident in managing mental health issues.

Aim: To critically analyse and synthesise international literature about the knowledge gaps and learning needs of PHC nurses in providing mental health care.

Design and methods: An integrative review. The quality of papers was assessed using the Mixed Methods Appraisal Tool. Data were extracted into a summary table and analysed using narrative analysis.

Data sources: CINAHL, Ovid MEDLINE, Web of Science and EBSCO electronic databases were searched between 1999 and 2019. Papers were included if they reported original research which explored mental health education/training of nurses working in PHC.

Findings: Of the 652 papers identified, 13 met the inclusion criteria. Four themes were identified: preparedness; addressing knowledge gaps, education programs, and facilitators and barriers.

Discussion: Despite increasing integration of physical and mental health management in PHC, there is limited evidence relating to knowledge gaps and skills development of PHC nurses or their preparedness to provide mental health care.

Conclusion: Findings from this review, together with the global increase in mental illness in communities arising from COVID-19, highlight the need for PHC nurses to identify their mental health learning needs and engage in education to prepare them to meet rising service demands.

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PHC, Primary health care; GPN, General practice nurse; GP, General practitioner.

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Summary of relevance

Problem or issue

PHC has seen an increasing focus on the integration of mental and physical health care provision, resulting in PHC nurses requiring new or expanded skill sets to meet clients' needs.

What is already known

There are disparities in the education / training and skills of nurses working in PHC settings, which has traditionally focused on the provision of physical health care.

What this paper adds

Evidence that there is a dearth of recent literature about mental health knowledge and skills development of nurses working in PHC. Nurses report feeling inadequately prepared to provide mental health care, and lack access to appropriate training and support.

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mental health, mental illness, mental disorder, psychiatric illness
AND
primary health care, general practice, family practice
AND
training, education, professional development
AND
nurs*

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Fig. 1. Search strategy.

1. Introduction

Mental health is defined by the [World Health Organization, 2018](#) as “a state of well-being in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.” In contrast, mental illness consists of a health challenge that significantly impacts how someone feels, thinks, behaves, and interacts with those around them. A diagnosis of mental illness is made according to standardised criteria and are a broad spectrum of disorders ranging in severity and duration ([American Psychiatric Association, 2013](#); [World Health Organization, 2019](#)). Internationally, the true prevalence of mental health disorders remains poorly understood. However, around 1 in 7 people globally are estimated to have one or more mental or substance abuse disorder ([Institute of Health Metrics & Evaluation IHME, 2018](#).) In 2017, it was estimated that 1 in 5 (20%) adult Australians experienced a common mental illness in the previous 12 months ([Australian Institute of Health and Welfare, 2020](#)). Of those who sought medical assistance, some 70.8% consulted a general practitioner ([Australian Institute of Health and Welfare, 2019](#)). Increasingly, evidence of the co-existence of physical and mental health issues suggests that people presenting with physical health issues may also have associated mental health issues ([Das, Naylor, & Majeed, 2016](#)). Social isolation, job losses, health concerns, and increased drug and alcohol consumption during the COVID-19 pandemic have further escalated levels of distress, fear and anxiety within communities ([Bäuerle et al., 2020](#); [Rahman et al., 2020](#); [Usher, Durkin, Gyamfi, Bhullar, & Jackson, 2020](#)).

Despite the complex interrelationship between physical disorders and mental illness, physical and mental health services have historically largely functioned independently from one another ([Anderson, 2019](#); [Australian Institute of Health and Welfare, 2020](#)). Internationally, however, the move towards models of care that deliver integrated physical and mental health care in PHC settings are reporting positive outcomes ([Das et al., 2016](#); [Perkins, 2015](#)). Additionally, the complex co-existence of both physical and mental health concerns suggests that some people may not seek help for their mental health concerns but may present with physical health issues. At such encounters opportunistic assessment and management of mental health can provide important early intervention. This means that the responsibility for supporting mental health needs to be shared across the multidisciplinary health workforce, requiring skilled clinicians to deliver these services in diverse clinical settings ([Shah et al., 2020](#)).

While nurses are the biggest group of health professionals providing primary mental health care, they are often inadequately prepared for this role ([World Health Organization, 2007](#)). The

PHC nurse's scope of practice varies internationally and is shaped largely by the nature and structure of local PHC services, service funding, and interdisciplinary collaboration ([Halcomb, McInnes, Patterson, & Moxham, 2019](#); [Shah et al., 2020](#)). Further complexities in the provision of primary mental health care are attributed to the variable qualifications, skill level, and education of PHC nurses ([Freund et al., 2015](#); [Halcomb, Stephens, Ashley, Foley, & Bryce, 2016](#)). Additionally, specialist mental health expertise is not generally required in most PHC nursing roles.

The PHC nurse's role in the prevention and management of chronic health conditions is well understood. Despite this, there is little empirical evidence about the PHC nurse's knowledge or learning needs in providing primary mental health care ([Lee & Knight, 2006](#)). This is despite several workforce studies identifying a lack of confidence and/or competence about PHC nurses' mental health education and practice ([Crompton & Hardy, 2018](#); [Secker, Pidd, & Parham, 1999](#)). However, a recent systematic review of the evidence reports a trend towards improved outcomes when PHC nurses are prepared with the knowledge and education to meet community mental health care needs ([Halcomb et al., 2019](#)).

The prevalence of mental illness in the community, and the recent impact of the COVID-19 pandemic on the burden of mental illness, will require a PHC nursing workforce with the skills to undertake mental health screening appropriate to their roles. The growing burden of mental illness has created awareness of the urgent need to assess PHC nurses' mental health knowledge and learning requirements to meet evolving community needs ([Halcomb et al., 2019](#)). It is timely, therefore, to review the literature to address this gap through critically analysing and synthesising the international literature around the knowledge gaps and learning needs of PHC nurses in providing mental health care.

2. Methods

An integrative review method, as described by [Whittemore and Knafl, \(2005\)](#), guided the synthesis and critical review of the empirical literature. Integrative reviews are a robust method to synthesise heterogeneous literature so that a comprehensive understanding of the phenomenon is achieved.

2.1. Search strategy

CINAHL, Ovid MEDLINE, Web of Science and EBSCO electronic databases were searched for relevant literature, using keywords as described in [Fig. 1](#). The reference lists of identified papers were also examined for additional papers.

This search sought papers published between 1999 and 2019 in the English language. This date range was chosen based on the rapidly changing environment of PHC and changes to nursing education/professional development in many countries over time that would make older literature less consistent with more contemporary trends. Papers were included if they reported original research around the learning needs of PHC nurses about mental health. Papers that focussed on PHC nurse education needs in general, or

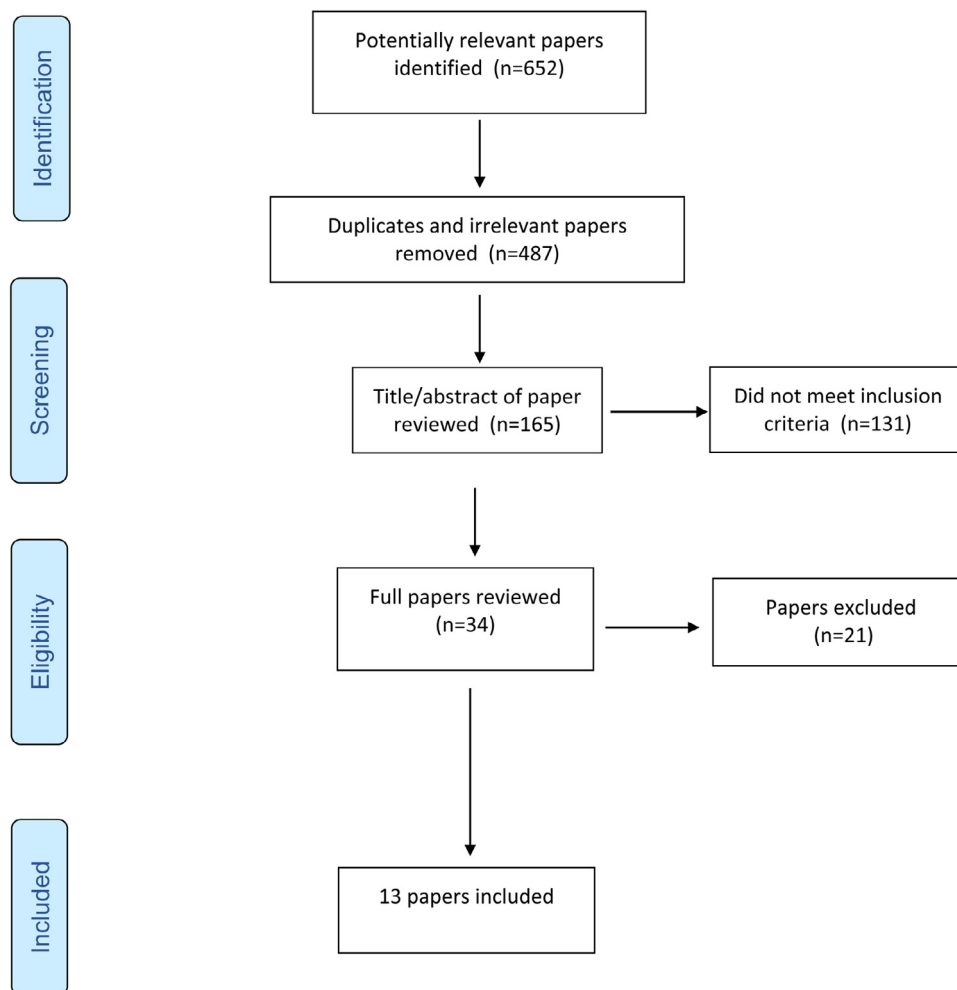


Fig. 2. Process of paper selection.

nurses with specialist mental health qualifications were excluded. Papers were also excluded if findings included other PHC professionals but where data about PHC nurses could not be extrapolated.

The initial database search identified 652 papers (Fig. 2) that were imported into Endnote X8 (Clarivate, 2016). Duplicates and irrelevant papers were removed ($n=487$). The titles and abstracts of the remaining papers ($n=165$) were assessed against the inclusion criteria. Two authors (SM) and (EH) screened the full text of the remaining papers ($n=34$) and excluded a further 21 papers which did not meet the inclusion criteria. All authors reached an agreement about the final 13 included studies.

2.2. Data abstraction and synthesis

Data from each paper were extracted into a summary table by one author (SM) and confirmed by all authors (Table 1). Given the significant heterogeneity of the included papers, thematic analysis provided narrative synthesis of the data (Braun & Clarke, 2006; Whittemore & Knaf, 2005). One researcher (SM) conducted the initial synthesis and identified preliminary themes, with all researchers contributing to the development of the themes until consensus was reached.

2.3. Quality appraisal

Two researchers (SM & AK) independently assessed the quality of included papers using the Mixed Methods Appraisal Tool (MMAT) (Pluye & Hong, 2014). The MMAT is a 19-item checklist suitable for the quality appraisal of qualitative, quantitative and mixed methods research (Pluye & Hong, 2014). This tool has been well evaluated and its validity reported in the health sciences (Pluye, Gagnon, Griffiths, & Johnson-Lafleur, 2009). Only minor quality issues were identified by this appraisal, for example, confounding variables and sampling methods were vague in two papers (Lee & Knight, 2006; Naji et al., 2004). Given the limited literature and minor quality issues, all papers were included in the review (Whittemore & Knaf, 2005).

3. Results

The 13 included papers reported research undertaken in the United Kingdom (UK) ($n=8$), New Zealand (NZ) ($n=3$), Brazil ($n=1$) and South Africa ($n=1$) (Table 1). Five studies used qualitative approaches (Crompton & Hardy, 2018; McKinlay et al., 2011; Secker et al., 1999; Secker, Pidd, Parham, & Peck, 2000; Waidman, Marcon, Pandini, Bessa, & Paiano, 2012), four used quantitative approaches (Haddad et al., 2005; Hardy & Huber, 2014; Lee & Knight, 2006; Naji et al., 2004), and four used a mixed-methods approach (Hardy & Huber, 2014; Maconick et al., 2018; Prince &

Table 1
Summary of included papers.

Reference	Country	Aim	Sample	Method	Outcomes
Crompton and Hardy (2018)	UK	To prepare general practice to improve access for young people with mental health (MH) problems	11 GPNs, 9 GPs and 2 registrars in one general practice	Survey	Template tool found to be useful to document assessment of young people and adaptable for use with adults. Staff education – varying levels of MH knowledge and pre- training. Education program filled gaps in assessment, increased confidence in identifying MH, improved referral processes.
McKinlay et al. (2011)	NZ	To develop GPN roles in caring for people with mild to moderate MH conditions	317 GPN interviews at 18 separate locations	Interviews	GPNs effectively support people with MH conditions, but barriers to maximising role. Supporting at least one GPN per practice to gain enhanced MH skills could be used to incrementally build capacity. GPNs unsure of mandate or ability to undertake MH work. Workforce development required in mild to moderate MH conditions, CBT, brief interventions, lifestyle coaching, stress management, relaxation. Many skills required are generic.
Naji et al. (2004)	UK	To determine GPNs' knowledge, attitudes, education and current practice related to depressed patients.	442 GPNs	Survey	GPNs reported seeing many depressed patients, however, only 17.6% (n=76) felt able to deal effectively with depressed patients. Only 1 in 4 GPNs had post-qualification education in MH. 47.5% (n=199) rated MH education as a lower priority than areas of physical illness.
Prince and Nelson (2011)	NZ	To describe GPNs' MH education needs and to explore their involvement with patients with MH concerns.	52 GPNs	Survey	GPNs are caring for patients on a daily to weekly basis with anxiety and depression. Low use of screening and diagnostic tools (37%, n=19). Confidence in caring generally for MH patients was average (mean 2.8 ± SD 0.90, range 1–4). The GPNs perform a variety of MH interventions such as counselling and advice on medication and have minimal confidence in their skill level. 78% (n=41) of GPNs knew how to access specialist services. However, only 24% (n=12) knew of a process to follow when accessing services and there appears to be no standardisation of this process. Only 82% (n=43) of GPN participants would inform the GP if concerned about the MH of a patient. GPNs expressed learning needs included education on MH conditions including suicidal ideation, all types of depression and bipolar disorder, and of therapies such as cognitive behavioural therapy and family therapy.
Secker et al. (1999)	UK	To describe the MH education needs of PHC nurses.	12 district nurses, 9 health visitors, 5 school nurses, 4 GPNs	Focus groups and interviews	Consistency between groups that a locally focussed approach required for MH education. Identified education required in MH awareness, safe working practices, management of personal/professional and role boundaries, cultural issues, information on services, counselling skills and PN depression. Structured format preferred for delivery. Interdisciplinary supervision and team support required
Secker et al. (2000)	UK	To describe the issues arising from a training needs assessment study relating to MH, conducted on non-specialist general practice staff.	30 GPNs, school nurses and district nurses	Focus groups and interviews	GPNs felt that there were unmet needs among their patients for MH care and that their MH workload was increasing. MH problems were rarely the formal or presenting reason for the GPNs' involvement with patients, largely because MH work was rarely a recognised aspect of their role. GPNs did not undertake tasks such as monitoring patients' psychiatric medication. GPNs encountered a range of 'less serious' problems (eg bereavement, dementia) in patients who came to them for general nursing. Several GPNs stated that patients would choose to talk openly with a nurse rather than with their GP, particularly female patients whose GP was male. GPNs felt they were working on the basis of instinct informed by experience in judging what they could deal with and what should be referred on.
Waidman et al. (2012)	Brazil	To understand GPNs' perceptions of their preparation for assisting people with mental disorders.	17 GPNs	Interviews	Nurses felt under-prepared and uncomfortable working with MH patients due to their lack of MH training. Nurses reported receiving minimal undergraduate MH training. Role for nurses in MH promotion.

(continued on next page)

Table 1 (continued)

Reference	Country	Aim	Sample	Method	Outcomes
Haddad et al. (2005)	UK	To explore the extent of staff contact with MH issues and determine their experience, education and attitudes to such problems.	217 district and community nurses	Survey	<p>Respondents considered 20% (mean value) of patients they had seen had MH problems; 74% (n=161) of Registered Nurse participants had not attended any MH courses. 60% (n=130) of nursing staff had been asked about depression and antidepressant treatment by patients.</p> <p>The most common intervention that staff had delivered was bereavement counselling. If a worthwhile MH course were to become available to them, 50% (n=108) of nurses responded that they would definitely attend, whilst 42% (n=91) would possibly attend. Improved detection of MH problems is the most favoured area for education, with additional knowledge and skills for anxiety, suicide and crisis management also considered to be important.</p>
Hardy and Huber, (2014)	UK	To describe the effectiveness of an accredited training program for GPNs about severe mental illness (SMI)	73 GPNs & 24 MH nurses	Pre and post course survey	<p>Post-training scores were very high and some demonstrated ceiling effects. All nine items on the questionnaires showed highly significant improvements for GPNs (all $p < 0.0005$).</p> <p>Following attendance, GPNs were positive and wanted to take on the role of caring for people with SMI.</p> <p>The course provided an opportunity for MH nurses to support GPN colleagues and make links with primary care.</p>
Lee and Knight, (2006)	UK	To investigate district nurses' involvement with MH issues and to explore their perceptions of education needs.	46 district nurses	Survey	<p>Bereavement counselling (55%, n= 26) was the main intervention that district nurses were involved with in practice, followed by anxiety management (28%, n=13), problem solving (23%, n=11) and alcohol advice (23%, n=11).</p> <p>28% (n=13) of the sample reported no involvement in MH interventions. Participants rated recognition of signs/symptoms of mental disorders (96%, n=44) anxiety management (85%, n=39) and pharmacological treatment of depression (83%. N=38) as priority education needs.</p> <p>District nurses were most likely to be involved with social workers and, to a lesser extent, community psychiatric nurses (CPN), in care of patients with MH problems. District nurses were most likely to direct a referral is the GP followed by the CPN, and their own manager.</p>
Maconick et al. (2018)	South Africa	To develop and evaluate a locally delivered, training program to facilitate MH care in primary care	9 PHC community nurses, 1 correctional nurse, 4 nurses inxxs non-specified PHC roles	Mixed methods: Survey and Interviews	<p>The number of referrals from primary care nurses to the MH nurse decreased following the training program.</p> <p>Referrals received from training participants after training were of high quality and much more considered than before training.</p> <p>The implementation of this model of training in a PHC clinic was well received. Increased confidence in PHC nurses completing program. MH nurses as tutors sometimes lacked confidence and authority in teaching.</p>
Hardy, (2014)	UK	To explore how GPNs perceive their role in managing common MH disorders and the types of training they need.	390 GPNs, 14 GPs, 14 Clinical Commissioning Groups	Mixed methods: Survey & Focus Groups	<p>Identified need for improved knowledge of MH illness, assessment and referral services. Over 82% (n=320) of GPNs have responsibilities for aspects of MH and wellbeing where they have not had training.</p> <p>98% (n=382) of GPNs would like to attend a relevant course in MH. GPNs expressed preference for mixture of face-to-face training in a classroom environment and e-learning (59%, n=230), as opposed to teaching in the workplace (19%, n=74) or e-learning only (21%, n=82).</p> <p>Several barriers to participation identified, with 34% (n=132) noting that gaining agreement from employers presented the greatest hurdle.</p>
Trimmer et al. (2019)	NZ	To evaluate the success of a primary mental health (PMH) education program and refresher program for correctional nurses.	225 correctional nurses (round 1), 173 correctional nurses (round 2), 171 correctional nurses in refresher	Survey	<p>Participants completed a 3 day PMH course and 1 day refresher program 12 months later. Highly significant difference between pre and post workshop measures of confidence. Themes from narratives identified:</p> <ul style="list-style-type: none"> New and improved work practice post course. Skills focussed on patient centred care. Improved assessment skills. Increased knowledge of MH. Increased awareness of MH issues.

Nelson, 2011; Trimmer, Fuller, Kake, & Asbury, 2019). Sample sizes varied from interviews with nine nurses (Maconick et al., 2018) through to 442 nurses completing a survey (Naji et al., 2004). The specific types of PHC nurses and their roles varied across the papers, with most describing participants as PHC nurses, primary care nurses (PCNs) or general practice nurses (GPNs) (Crompton & Hardy, 2018; Hardy, 2014; Hardy & Huber, 2014; Maconick et al., 2018; McKinlay et al., 2011; Naji et al., 2004; Prince & Nelson, 2011; Secker et al., 1999; Waidman et al., 2012), district nurses (Haddad et al., 2005; Lee & Knight, 2006; Secker et al., 2000), school nurses (Secker et al., 2000), and correctional nurses (Trimmer et al., 2019).

Nine (69%) papers specifically explored the learning needs of PHC nurses. The remaining four (30.7%) papers described the delivery and/or outcomes of mental health training programs for PHC nurses (Table 1). Four themes were identified across included papers, namely: preparedness; addressing knowledge gaps; education programs and education considerations.

3.1. Preparedness

Evidencing the growing demand for primary mental health care, several authors noted an increased prevalence of mental health issues within PHC settings (Crompton & Hardy, 2018; Hardy & Huber, 2014; McKinlay et al., 2011; Naji et al., 2004; Secker et al., 1999; Secker et al., 2000; Trimmer et al., 2019). PHC nurses reported frequently encountering people with depression (Haddad et al., 2005; Lee & Knight, 2006; Prince & Nelson, 2011), dementia (Waidman et al., 2012), anxiety (Lee & Knight, 2006), grief and bereavement reactions (Secker et al., 1999; Secker et al., 2000), schizophrenia and bipolar disorder (Prince & Nelson, 2011), psychoses (Lee & Knight, 2006), addiction to prescription medication (Lee & Knight, 2006), and alcohol misuse (Lee & Knight, 2006; Secker et al., 2000). Secker et al. (2000) also noted that post-natal depression, eating disorders, drug and alcohol issues, and self-harm were specifically identified by PHC nurses working in family and school settings.

Several papers explored PHC nurses' preparedness to screen for mental health issues, concluding that many PHC nurses lacked the education, training and confidence to provide mental health care. Both Secker et al. (1999) and Naji et al. (2004) described knowledge gaps resulting from limited exposure to mental health theory or clinical experience in undergraduate or general training programs, with nurses reporting feeling ill-equipped, and expressing 'professional unease' in dealing with depressed people. Similarly, Prince and Nelson, (2011) reported that 21% (n=11) of participants had no confidence in providing mental health care. Those who had experienced mental health placements during their general nursing training tended to display lower levels of 'professional unease' in their attitudes to providing mental health care (Naji et al., 2004). Hardy, (2014) identified that more than 82% (n=331) of participants had not received training for aspects of mental health and wellbeing where they had responsibilities.

The situation was no different in PHC areas where there was more likelihood of mental health issues. Trimmer et al. (2019) confirmed that participating correctional nurses had variable confidence levels and expertise in providing general and targeted mental health care, and Secker et al. (2000) identified that school nurse participants perceived a lack of mental health knowledge and a need to gain skills in specific areas such as counselling.

Despite evidence of lack of preparedness to provide mental health care, two papers found mental health as a training need was not prioritised, citing lack of motivation (Naji et al., 2004) and low levels of confidence when caring for mental health conditions such as dementia (Lee & Knight, 2006). Motivation and capacity

to attend mental health training was addressed by Haddad et al. (2005), whose study of 217 district and community nurses found that that 74% had not completed any mental health training in the preceding five years. This was despite 90% noting they would definitely or possibly attend a relevant course if available. Similarly, in Hardy, (2014)'s study, 98% (n=382) of participants stated they would like to attend relevant mental health training.

3.2. Addressing knowledge gaps

The training needs identified by PHC nurses in the included studies largely aligned with the mental health conditions most commonly encountered. Several papers acknowledged a need for a broad range of training for PHC nurses including basic awareness of mental health, mental health assessment, identification of 'red flags', and training in working safely and defusing difficult situations (Hardy & Huber, 2014; Prince & Nelson, 2011; Secker et al., 2000; Trimmer et al., 2019; Waidman et al., 2012). The management of depression, the most commonly reported condition seen by PHC nurses was also rated highly as a training need (Naji et al., 2004; Prince & Nelson, 2011), in particular increasing knowledge around pharmacological treatments for depression (Hardy, 2014; Hardy & Huber, 2014; Lee & Knight, 2006; Naji et al., 2004). Suicide/suicide ideation (Hardy & Huber, 2014), schizophrenia and post-natal depression (Prince & Nelson, 2011) and anxiety management (Hardy, 2014; Lee & Knight, 2006) were also identified as knowledge gaps that needed to be addressed. Bereavement and bereavement counselling was a notable exception in most studies, with nurses indicating that their experiences of general practice nursing, in particular, had built greater skills in this area.

As well as training relating to specific mental health conditions, Hardy, (2014) identified that nurses working in general practice indicated gaps in their knowledge relating to 'signposting'. That is, referral services and access to these, as well as the need to develop skills in using mental health assessment tools and basic counselling skills. Skills in cultural awareness, behaviour modification and focused training on communication and listening were also perceived as training needs (Lee & Knight, 2006; Secker et al., 1999).

Those studies which explored the methods for addressing learning needs and organisation of training found that structured face-to-face learning was the preferred method of delivering mental health training (Hardy & Huber, 2014; Secker et al., 1999), with small group learning, multidisciplinary learning (Trimmer et al., 2019), and a combination of e-learning and face-to-face learning also scoring highly (Hardy & Huber, 2014; Secker et al., 1999). Hardy (2014) suggested informal small group learning, exploration of case studies, professional reading, and interactive learning would be of benefit in addressing mental health learning needs. However, Secker et al. (1999) indicated that innovative methods of delivery had disengaged some nurses, who found e-learning was overused, and that these approaches were unhelpful unless accompanied by group discussion.

3.3. Education programs

Four papers reported on specific mental health education programs (Crompton & Hardy, 2018; Hardy & Huber, 2014; Maconick et al., 2018; Trimmer et al., 2019). All of these programs included face-to-face teaching, two provided additional on-line supports and resources (Crompton & Hardy, 2018; Hardy & Huber, 2014), and one included ongoing clinical supervision (Maconick et al., 2018). Programs varied in length from single 1

hour sessions (Crompton & Hardy, 2018), 4 hour face-to-face learning (Hardy & Huber, 2014), weekly 1 hour sessions for five months (Maconick et al., 2018) and 3-day workshops followed by refresher programs (Trimmer et al., 2019). All programs were contextually focused on the specific PHC setting.

Each program identified positive outcomes, ranging from increased confidence through to improved knowledge and understanding of mental health issues (Maconick et al., 2018; Trimmer et al., 2019), evidence of changes to practice following attendance (Crompton & Hardy, 2018; Trimmer et al., 2019), and a re-focus on patient-centred care (Trimmer et al., 2019). Other positive outcomes included improvements in the quality of referrals for specialist mental health care (Maconick et al., 2018), increased engagement with specialist mental health teams (Hardy & Huber, 2014) and the fostering of innovation in the PHC setting (Maconick et al., 2018). None of the programs measured a change in patient care or health outcomes.

3.4. Facilitators and barriers

Most included papers discussed the benefits of education programs in developing connections with health professionals experienced in providing mental health care. For some, the establishment of referral processes and contacts was greatly valued (Crompton & Hardy, 2018; Lee & Knight, 2006; McKinlay et al., 2011; Waidman et al., 2012), and the value of interprofessional models of training to establish ongoing links were also identified (Haddad et al., 2005; McKinlay et al., 2011; Secker et al., 1999). Secker et al. (1999) also drew attention to the importance of ongoing group discussions as sources of learning and support, suggesting that regular team meetings allow time for team learning. Participants noted that where meetings were hierarchical or used purely for workload allocation, opportunities to share information and expertise were lost (Secker et al., 1999).

Hardy (2014) discussed the need for GPNs to be given opportunities for supervised mental health practice, ongoing updates and study time. Crompton and Hardy (2018) further emphasised the importance of ongoing learning to maintain skills and to increase mental health knowledge. This was supported by Maconick et al. (2018) who noted that there is little evidence that short intensive learning programs or once-off training in mental health care translates into changes in clinical practice. Integration of mental health care requires changes in clinician attitude, perception and behaviour (Maconick et al. 2018). In their long-term education program, Trimmer et al. (2019) described how contextually based learning was particularly beneficial in providing ongoing peer support within the clinical environment. However, caution was raised by Crompton and Hardy (2018) who drew attention to the technical and managerial difficulties in maintaining support, citing the need for dedicated input to maintain templates, website information and other materials.

Obstacles associated with organising or attending education were described across studies (Hardy, 2014; Hardy & Huber, 2014; McKinlay et al., 2011; Naji et al., 2004; Prince & Nelson, 2011; Secker et al., 1999). McKinlay et al. (2011) described structural, attitudinal and workforce barriers, with others describing difficulties in staff being given leave to attend education (Hardy, 2014; Hardy & Huber, 2014; Prince & Nelson, 2011), financial concerns (Prince & Nelson, 2011), ability to access education due to location or staff shortages (Prince & Nelson, 2011), and ambivalence by GPs to allow GPNs to maximise their roles (Hardy, 2014).

4. Discussion

This integrative review extends and refines the body of knowledge about preparing PHC nurses for the provision of mental health care. While the papers in this review represent a global focus, only four countries had generated research that met the inclusion criteria. This is despite an international escalation of mental health-related encounters in PHC (Berger & Reupert, 2020). Evidence arising from this review highlights the need to prepare PHC nurses to provide mental health care by addressing knowledge gaps and through developing contextual training programs which meet local needs.

Findings support the World Health Organization & United Nations Children's, 2018 21st-century vision for PHC, which identifies the critical role played by PHC nurses in providing mental health care. The impact of COVID-19 on mental health presentations (Dragovic, Pascu, Hall, Ingram, & Waters, 2020) has further demonstrated the importance of having a well-trained PHC nursing workforce with competence and confidence in mental health-related skills and knowledge (World Health Organization, 2007). Being able to recognise mental health issues early and either provide intervention or referral to appropriate therapy is a key step to optimising mental health outcomes (Halcomb et al., 2019).

In recognition of the increasingly prominent role of PHC nurses in mental health, and to support and guide practice in this setting, the Australian College of Mental Health Nurses (ACMHN) published mental health practice standards for nurses in Australian general practice (Australian College of Mental Health Nurses, 2018b). These Standards are believed to be world-first for GPNs, and highlight the importance of PHC nurses developing capacity around mental health and mental illness. They also serve to define and articulate the role of the generalist nurse in mental health care, identifying their scope of practice and role in the health system. To address mental health knowledge gaps, an eLearning program was developed to support PHC nurses to increase their understanding, skills and confidence in mental health (Australian College of Mental Health Nurses, 2018a). Potentially, this program could provide a model to introduce in countries with a comparable situation to Australia concerning primary health care nursing and mental health.

This review also highlights the ongoing impact of limiting exposure to mental health care during undergraduate nursing education (Schwartz, 2019). In some countries such as Australia, the move to university education has seen mental health content severely diminished even though undergraduate nursing education comprises a 3-year program, aimed to prepare new graduates for beginner-level practice in diverse settings, including mental health (Happell, 2009). This diminution of mental health theory and practice leads to fewer graduating students wanting to work in the area of mental health (Cregan et al., 2016; Henderson, Happell, & Martin, 2007) and negatively impacts the skills and confidence of graduates working in all clinical settings to effectively care for people living with mental illness. A means to address this knowledge gap could be an appropriate and supportive work-integrated learning experience, such as Recovery Camp. This immersive experiential undergraduate clinical placement has demonstrated its capacity to increase nursing students' clinical confidence and competence in mental health nursing (Patterson et al., 2018). Nursing accreditation bodies need to consider these issues and ensure that undergraduate curricula contain mandatory mental health theory and practical components to ensure that graduates are prepared to provide safe and effective nursing care for people living with mental illness.

The issues around ongoing professional development for PHC nurses that were identified in this review have been previously re-

ported, and are not confined to mental health education. The nature of employment in PHC settings that are small businesses or non-government organisations creates challenges in terms of access to paid leave and funding for ongoing professional development (Halcomb, Ashley, James, & Smythe, 2018; James, Halcomb, McInnes, & Desborough, 2021). Additionally, there is often limited reward in terms of career progression or additional remuneration for PHC nurses who engage in professional development or develop knowledge and skills in a particular area of practice (Halcomb et al., 2018). To promote the sustainability of any educational programs for PHC nurses both employers and nurses must appreciate the value of the program to their practice and patient outcomes.

5. Limitations

Despite conducting a comprehensive systematic search of the international literature, only 13 studies from 4 countries were found to be appropriate for inclusion. It is feasible that studies relevant to this review have been published in non-English speaking journals or that there may be publication bias since this area of research is not well covered by clinical trial registries. The low number of studies in our review is also indicative of the low priority often placed on mental health education. While our review did not originally seek to explore specific mental health education programs for PHC nurses, they have provided clarity and highlight improved confidence and competence in providing primary mental health care.

6. Conclusion

It has long been established that integrating mental health services into primary care is a viable method of ensuring that community mental health needs are met. As COVID-19 restrictions ease, and the burden of mental illness increases within our communities, it will be essential to ensure that PHC nurses are adequately prepared with education programs that meet their mental health learning needs. Such programs need to address issues of preparedness, knowledge gaps and support as identified in this study. It is only by having appropriately skilled, competent and confident PHC nurses that we will optimise mental health outcomes within our communities.

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Ethical statement

As a review paper an Ethical Statement is not applicable.

Conflict of interest

The authors declare there is no conflict of interest concerning this research, authorship and/or publication of this article.

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