

The Experiences of School Nurses in relation to their Management of Mental Health Problems in Children and Adolescents: An Integrative Synthesis Review

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## Abstract

Childhood mental health problems are common, with statistics showing that 1 in 4 children in the United Kingdom require support for symptoms of a mental health problems. Further to this, an estimated 1 in 5 girls have self-harmed at age 14, in the UK. This is an important health issue affecting children in the UK, which school nurses are well placed in schools and communities to address and support.

Whilst research has identified that school nurses have a central role in managing mental health problems in children and adolescents, there is limited research exploring their experiences of mental health work. Thus, this integrative synthesis review will analyse current research studies and synthesise their collective findings to explore school nurses’ experiences of managing mental health problems in children and adolescents.

This integrative synthesis review was guided by the PRISMA Checklist, to ensure the methodologies used were systematic and reported transparently. The Thematic Synthesis Framework (Thomas and Harden, 2008) has been used to synthesis the findings from thirteen primary qualitative and mixed-methods research papers.

The synthesis produced three analytical themes which produced an in-depth understanding of the complexities of managing mental health in children and adolescents, from the perspectives of school nurses. These were their individual experiences, their experiences of organisational factors, and finally, their experiences of interprofessional working.

The findings from this review have found that school nurses have the skills which enable them to effectively support children and adolescents with mental health problems through identification, interventions and signposting to other professionals and agencies within the mental health field. However, there are several barriers which limit their practice, which produce recommendations for practice development.

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## Chapter 1

Introduction

This review will present the methods, methodologies and findings of an integrative synthesis, which used qualitative and mixed-methods primary research studies to explore the experiences of school nurses in managing mental health problems in children and adolescents.

Mental health problems occurring in childhood are common (JCPMH, 2013), with half of all mental health problems showing symptoms before the age of 14 years (Kessler et al., 2005; WHO, 2018). The effects of mental health problems have been found to extend from childhood into adulthood, causing adverse and often long-term consequences (HM Government, 2011; WHO 2018). Public health policy has come to focus on mental health problems, particularly in childhood (Department of Health (DH), 2009; DH and NHS England, 2015; DH and PHE, 2014; HM Government, 2011; JCPMH, 2013; The Mental Health Task Force, 2016) and look at the preventative and support structures which are available to the young population in the UK. School nurses are well placed within communities and schools to deliver mental health services and identify and support children and adolescents with mental health problems (DH, 2009; DH and PHE, 2009; RCN, 2017).

Whilst research supports that school nurses play an important role in supporting mental health in children and adolescents, within the school environment (Bartlett, 2015; Haddad et al., 2010; Moen and Skundberg-Kletthagen, 2017; Ravenna and Cleaver, 2016; Stephan and Connors, 2013; Turner and Mackay, 2015), little is known about their experiences of this area of their practice. Recent statistics on the current well-being and mental health status of children and adolescents in the UK present some worrying findings, such as the high rates of self-harm in school children (The Children’s Society, 2018; Patalay and Fitzsimons, 2018). At a time when rates of funding for healthcare is slowing causing service provisions to endure increased pressures to meet budgets (Kingsfund, 2016), the delivery of mental health provisions by the school nurse is an important topic of interest. Therefore, this integrative synthesis will explore this topic through the experiences of school nurses, to enable a better understanding of their practice and produce further insight into potential research and practice developments.

I undertook the Specialist Community Public Health Degree in school nursing, where it quickly became apparent that child and adolescent mental health was a dominant area of the practice. This resonated with my previous experiences of mental health in the paediatric acute settings. The types of mental health problems that were seen in practice were vast and required a variety of interventional techniques and an extensive knowledge of mental health. However, I found that I was often actively researching new skills and interventions to appropriately manage these cases.

The course structure of the Specialist Community Public Health Degree provided minimal theoretical opportunities to develop this area of practice. However, I was given the opportunity to undertake an optional module as part of the course in mental health to develop my knowledge and skills. Unfortunately, this module was not specific to paediatric mental health, but was broad and covered mental health across the lifespan. Whilst the module was valuable in some respects, I felt that it had not effectively enabled me to develop enough skills and knowledge to carry forward into practice as an independent practitioner.

I therefore developed an interest in paediatric mental health through independent learning and practice development. However, low resources in the Child and Adolescent Mental Health Services meant that waiting lists were long, referral criteria high and I was required to have a level of confidence to effectively convey my concerns about children and adolescents to specialists. This often meant that children and adolescents with mental health conditions remained on my case load for prolonged periods of time, despite feeling that I had exhausted my capabilities.

The following chapter will present a background of information relating to the topic of this review. This will be followed by Chapter 3, which will discuss the chosen methodologies and methods used in this review. Chapter 4 will explore the findings, generated from the integrative synthesis analysis used in this review. Followed by chapter 5, which will present a discussion of the findings in context with the wider knowledge of research and policy. This final chapter will also present the limitations of this review, and a conclusion.

## Chapter 2

Background

This chapter will present the findings obtained from the scoping process of this review, alongside current practice and policies. This will be followed by the rationale for undertaking an integrative synthesis review in this area of research.

### 2.1 The Scoping Process

Scoping the evidence is the initial stage of the review process, enabling the author to gain a broad understanding of the research available within the topic area (Arskey and O’Malley, 2005, as cited in Norman and Griffiths, 2014, p. 2). It involves multiple test searches, which assist the author in developing focused, systematic strategies that will be applied to the review’s methods (University of York, Centre for Reviews and Dissemination, 2009). These include the development of the search terms which will be used in the review’s systematic searching method, using the PICOS Framework (Figure 4 in Chapter 3; Methley et al., 2014) and the inclusion and exclusion criteria which is applied to the searching methods to obtain the most relevant research available (Butler et al., 2016). In addition to these, the scoping process also enables the author to define a focused research question which will be addressed in the review.

### 2.2 Mental Health in Children and Adolescents

Statistics have found that 1 in 4 children present symptoms of mental health problems requiring support and 1 in 10 children and adolescents in the United Kingdom (UK) have a diagnosed mental health problem (JCPMH, 2013; ONS, 2016; Young Minds, 2018). The World Health Organization (2018) estimates that 10-20% of children and young people experience some form of mental illness. As mental health problems commonly show symptoms before the age of 14 (Kessler et al., 2005; WHO, 2018), this is an important health problem affecting childhood. Mental health is defined as:

*“not simply the absence of disorder but a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.” (WHO, 2014)*

The above definition encompasses the vast effects that poor mental health can have on a person’s life, which are found to cause adverse and long-term consequences in adulthood. These include negatively impacting on their development, education and their ability to reach full potential in life (HM Government, 2011; WHO, 2018). Furthermore, children affected by mental health problems are faced with challenges such as discrimination and stigma, as well as poor access to health care and education facilities (WHO, 2018).

Statistics reporting on children’s wellbeing in the UK is reported by The Children’s Society through the annual Good Childhood Report (2018). This report analyses statistics from a cohort study with over 65,000 children over the last 13 years, providing an insight into the trends of childhood wellbeing. The most recent report has also reported on findings from the Millennium Cohort Study (MCS) (Patalay and Fitzsimons, 2018), a longitudinal study following the lives of 19,000 children born in 2000-2001 in the UK. The MCS explores many aspects of children’s lives, however, the sixth stage of this study, conducted when children were aged around 14 years, has produced valuable information on children’s wellbeing, depressive symptoms and emotional and behavioural difficulties. The findings of the most recent Good Childhood Report (The Children’s Society, 2018) has highlighted some worrying statistics about the current state of children’s wellbeing and mental health in the UK. Key figures from these findings can be seen in Figure 1.

Figure 1 – The Good Childhood Report 2018 – Key findings

* Almost half of children reporting low overall happiness with their life also showed signs of depression (47%)
* Low wellbeing was linked with higher depressive symptoms in girls and higher emotional and behavioural problems in boys
* Children who were attractive to the same or both genders were more likely to be depressed and 46% of them reported self-harming
* More than one fifth of girls (22%) compared with 9% of boys had self-harmed in the year prior to the survey
* Children living in low-income households had higher rates of emotional and behavioural difficulties
* Gender gaps are widening with respect to levels of happiness with life; girls are significantly less happy than boys.

The Children’s Society (2018)

The statistics found on the rates of self-harm amongst children at aged 14 years, coincide with a reported increase by 14% of children being hospitalised with self-harm from 2013-2016 (NSPCC, 2016), which is a great cause for concern.

Several factors have been found to increase the risk of developing mental health problems in childhood, which can be seen in Figure 2. These depict the range of children and young people at high risk of developing mental health problems, emphasising the importance for surveillance for mental health symptoms in public health settings.

**Figure 2 – Risk Factors for the Development of Mental Health Problems in Childhood**

• Living with a long-term physical illness or disability

• Children and young people with intellectual disabilities are at increased risk of developing additional mental health problems

• Children and young people with autism spectrum disorders are also more likely to develop a co-morbid mental health problem

• Children and young people who are looked after by a local authority (often because of family breakdown) have much higher rates of mental health problems

• Children and young people who have experienced abuse and neglect

• Children and young people in contact with the criminal justice system • having a parent with a mental health problem

• Having a parent in prison

• Being from low-income households, families where parents are unemployed, or where parents have low educational attainment

• Being a refugee or asylum seeker

• Being from traveller communities

• Young people who are lesbian, gay, bisexual or transsexual (LGBT).

**JCMPH (2013), Guidance for Commissioners of Child and Adolescent Mental Health Services, p. 8**

The World Health Organization (2013) defines a child as a person under the age of 19 years, and an adolescent as a person aged 10 to 19 years. However, within this review, the term ‘child’ will be used to describe a person of primary school age, from 5 – 11, and an adolescent to describe those attending secondary school, up to age 19 years, as these are the ages school nurses are involved with (DH, 2009).

### 2.3 Current Practice and Policies

In the UK, school nurses are nurses or midwifes who have undertaken additional training, through a post-graduate degree, in specialist community public health (NHS Health Careers, 2018). School nursing practice is primarily guided by the ‘Healthy Child Programme 5-19 years old’ (DH, 2009) alongside ‘Maximising the school nursing team contribution to the public health of school-aged children’ (DH and PHE, 2014), to provide a universal service to children and adolescents in front-line public health settings. These incorporate many aspects of physical, mental and social care through the promotion of health and wellbeing, enhancing outcomes and reducing inequalities within their localities. Both pieces of guidance highlight the importance of school nurses improving the outcomes of childhood mental health through promotion, early interventional support and referrals to specialists when necessary.

More recently, the ‘Future in Mind’ report (DH and NHS England, 2015), undertaken by the Mental Health Task force, addresses the need for mental health services for children and adolescents, as well as their parents and carers, to be more easily accessible. This was followed by the Mental Health Task Force (2016) release of ‘The Five Year Forward View for Mental Health’ for NHS England. This national strategy identifies the growing concern for mental health problems across the lifespan and establishes the greater need for proactive and preventative measures within services, to improve the mental health outcomes of the population. Surprisingly, the latter report, does not specifically mention the involvement of the school nurse.

Currently, child and adolescent mental health services (CAMHS) are delivered through a four-tiered network of professionals; with tier 1 services including universal services including the school nurse, up to tier 4, which include highly specialised professionals, mainly in acute settings (JCPMH, 2013).

### 2.4 Background research

The scoping process revealed many studies within the field of child and adolescent mental health. However, it was evident that research within this topic relating to the school nurse’s involvement, and more specifically, from the school nurses’ perspectives, was limited. What is apparent from the research, is that managing mental health problems is a central part of the school nursing role (Bartlett, 2015; Haddad et al., 2010; Moen and Skundberg-Kletthagen, 2017; Ravenna and Cleaver, 2016; Stephan and Connors, 2013; Turner and Mackay, 2015).

Research to date has explored the extent of the school nurses’ involvement with mental health care in schools, primarily through quantitative research. Haddad et al. (2010) and Moen and Skundberg-Kletthagen (2017) investigated school nurses’ involvement and attitudes towards mental health work. Haddad et al. (2010) reported that school nurses valued the mental health aspects of their work and found it rewarding, whereas Moen and Skundberg-Kletthagen (2017) found that this was challenging for school nurses, and they required support and supervision to effectively carry out mental health work in schools.

Another quantitative study by Stephan and Connors (2013) explored the competence of school nurses in addressing mental health problems in schools. They found that school nurses reported low confidence in identifying mental health problems in children and providing interventions. Also exploring the school nurse’s competence in identifying mental health problems is an integrative review by Bartlett (2015), through an analysis of UK-based research of multiple designs. Bartlett concluded that school nurses were required to spend time with children and adolescents, to build trusting relationships enabling them to identify mental health problems, however, this was largely dependent on their capacity and service provisions.

Turner and Mackay (2015) was another review identified during the scoping process, which explored whether school nursing interventions had an impact on mental health. They found a high number of positive outcomes in relation to the school nurses’ roles, which improved access to services and improved the emotional health of young people. They also reported on the inconsistencies of training being offered to school nurses, and that those who had received training and support, were able to deliver more effective care when compared to those who hadn’t; this was supported by Bohnenkamp et al. (2015) and Stephan and Connors (2013). This was supported in other research studies that found that low confidence when working with children and adolescents with mental health problems, was linked to poor training and education in paediatric mental health (Haddad et al., 2010; Stephan and Connors, 2013).

Turner and Mackay (2015) also found that recipients’ satisfaction of school nursing interventions was linked to reports that school nurses are caring, non-judgemental and have good listening skills. This is supported by a piece of research by Shattell et al. (2006) who explored mental health patients’ experiences of being understood by healthcare professionals. Although not specific to children and adolescents, it highlighted important factors, from patients’ perspectives, which facilitated the feelings of being understood. Primarily, this was found through active listening skills, where the professional listened with intent to make suggestions, provide feedback and demonstrate that they had really listened to what had been said. This helped the patient to feel that they were important, make a connection with the professional and empathy.

Other research was identified, which explored the experiences of other professionals during their involvement with mental health care with children and adolescents. Thomas (2017), Higson et al. (2017) and Vallières-Noël et al. (2016) explored paediatric nurses’ experiences in acute settings. Connelly et al. (2008) explored the experiences of school teachers and found that they viewed their role as important in supporting children and adolescents with mental health problems, through emotional support and enabling students to access the relevant specialists for additional support, which highlights the importance of mental health support for children and adolescents being available in schools. This study identified school nurses as an important professional for bridging the gap between schools and mental health services. Juszczak et al. (2003) found that school-based health centres in America, enabled difficult to reach groups of adolescents, including males and ethnic-minority groups, to access health care. But more importantly, they found that adolescents were more likely to access support for their mental health through a school-based health centre, in comparison with community health centres.

Only two studies were identified which explored adolescent’s views of accessing mental health services. DeFosset et al. (2017) sought to gain an understanding of students’ access to mental health support, when they struggled to maintain attainment at school. Only half of the participants received services to address their mental health problems for a variety of reasons, including, their mental health problems not being identified, services not being offered to the student, poor relationships between themselves and staff leading to the belief that no one could help them, and not wanting to participate in services. Kidger et al. (2009) explored how students and school staff viewed emotional health support in schools. They found that emotional health was inadequately addressed during health topic lessons and students wanted more content on emotional health. Their findings identified key factors which support students in receiving support when experiencing emotional distress, which included having someone to talk to, in a confidential, safe environment. The barriers identified included support being difficult to access, not being taken seriously, the future stigma linked with discussing mental health, emphasising the need for a confidential service, and the trustworthiness of the support service.

### 2.5 Rationale for undertaking an Integrative Synthesis Review

Whilst quantitative studies have produced important data about the school nurses’ involvement, competence and attitudes towards mental health care in schools, they provide little depth into the understanding of the school nurses’ experiences in this area of their practice. A recent scoping review (Ravenna and Cleaver, 2016) was also identified, investigating school nurses’ experiences of managing adolescents’ mental health problems, using multiple research designs. However, despite a number of existing reviews, there were none that focused on school nurses’ experiences of managing mental health problems in both children and adolescents. It was therefore considered necessary to undertake an integrative synthesis, including both qualitative and mixed-methods research designs, to gain a deeper understanding of school nurses’ experiences.

### 2.6 Conclusion

This chapter has presented the findings of the scoping process in context of current school nursing practice and policy in the UK. It has also justified the reasoning for executing an integrative synthesis review to explore the experiences of school nurses in relation to their management of mental health problems in children and adolescents. The following chapter will present the chosen methodologies and methods used in this review.

## Chapter 3

Search Design: Methodology and Methods

### 3.1 Introduction

This chapter will present the research question, aims and objectives of this systematic review. This will be followed by a detailed discussion of the chosen methodology and methods used to conduct this review.

### 3.2 Aims, Review Question and Objectives

#### 3.2.1 Aims

The aims of this review are:

* To explore the experiences of school nurses working with children and adolescents with mental health problems
* To identify factors which influence the management of children and young people with mental health problems
* To identify topics for further research which may influence this area of practice in school nursing

#### 3.2.2 Review Question

With systematic and rigorous methods, this review will identify and appraise qualitative and mixed-methods primary research studies. The review question is:

* What are School Nurses’ experiences of managing children and adolescents with mental health problems?

#### 3.2.3 Objectives

To explore the experiences of school nurses’ management of children and adolescents with mental health problems, an integrative synthesis of primary qualitative and mixed-methods research was undertaken. The Thematic Synthesis Framework (Thomas and Harden, 2008) was used to generate a thematic synthesis to explore the collective findings, providing new insight into this area of school nursing practice in Western countries, and to make recommendations for future research within this topic.

### 3.3 Methodology

After conducting scoping searches, it was decided that an integrative synthesis would best answer the research question, as there was a dearth of qualitative research available specific to this research question. As such, mixed-methods research papers were included. Therefore, this is an integrative review, which will report on wider range of research including qualitative and quantitative research. Integrative reviews enable the inclusion of qualitative and quantitative research to produce the broadest form of research review, which aims to gain a deeper understanding of a phenomenon. This has been identified as a comprehensive method of understanding research in health care and nursing (Whittemore and Knafl, 2005).

#### 3.3.1 PRISMA Statement

The methodology of this integrative review will be guided by the PRISMA checklist, which was developed to support the authors of systematic reviews and meta-analyses to report on all the available primary research fully and transparently, in particular, reporting on healthcare intervention research (Liberati et al., 2009). Previously, systematic reviews were criticised for reporting the findings from primary research poorly, which potentially reduced the application of their findings (Liberati et al., 2009). This led to the development of the QUOROM (QUality of Reporting Of Meta-analyses) Statement, which is a reporting guideline for meta-analyses. However, this set of guidelines was specific to meta-analyses of randomised-controlled Studies (Moher et al., 1999). Therefore, the QUOROM statement was expanded to form the PRISMA Statement which encompasses guidelines which were applicable to a wider variety of reporting methods, including non-randomised research in systematic reviews (Liberati et al., 2009). The PRISMA Statement includes a checklist comprising of twenty-seven items (Appendix 1) and a four-stage flow chart. This flow chart has been adapted for use in this review and will be discussed later in this chapter, in section 3.4.4.

By undertaking an integrative synthesis, this review aims to gain a deeper understanding of the experiences of school nurses when managing children and adolescents with mental health problems. By bringing together both qualitative and quantitative research specific to this topic, it can be used to better inform public health practice for school nurses, by understanding how they experience this area of their practice (Thomas and Harden, 2008; Seers, 2015).

While this review is an integrative synthesis, it is important to note at this stage that the collective findings are predominantly qualitative. Out of a total of 13 research papers identified in the search strategy, only 3 were mixed-methods studies. For this reason, the Thematic Synthesis framework, developed by Thomas and Harden (2008), will be used in this integrative synthesis to guide the author in synthesising the findings of both the qualitative and quantitative data, to identify and develop themes (Ring et al., 2011; Thomas and Harden, 2008).

The following section will outline the Thematic Synthesis Framework generally as the framework has guided the theoretical approaches and paradigms of this review. However, it’s specific application to this synthesis, will be detailed later in this chapter in section 3.5.2.

#### 3.3.2 The Thematic Synthesis Framework

The thematic synthesis framework is a three-stage method (Figure 3), which was developed for its use in systematic reviews which address research questions concerning the appropriateness, acceptability and need for public health interventions, whilst adhering to the principles expected when carrying out a systematic review (Barnett-Page and Thomas, 2009).

Figure 3 – The Thematic Synthesis Framework (Thomas and Harden, 2008)

The first of this three-stage approach is ‘*free line-by-line coding’* (p. 4) of each primary research paper. This process involves the reading and re-reading of the findings from each of the primary research papers and extracting the information, within its context, to produce ‘codes’. This stage takes places simultaneously with the second stage, the *‘development of descriptive themes’* (p. 4). As the primary research is read, findings are extracted, and codes are formed, which are described close to their presentation in the original research, producing descriptive codes. These descriptive codes are then translated between each of the primary research papers, which starts the process of synthesis, collectively linking the findings from all the research papers into a combined body of findings. These stages are commonly completed by multiple reviewers independently, and their interpretations and codes are discussed and compared between one another to improve consistency in their methods and to further develop or adapt the codes (Thomas and Harden, 2008).

The third and final stage of the thematic synthesis framework is described as *‘generating analytical codes’* (p. 7)*.* This stage is where the author ‘goes beyond’ the findings of the primary research to produce new understandings or concepts that have emerged from the collective findings (Thomas and Harden, 2008). This is a cyclical process where the reviewers individually review and extrapolate the descriptive themes to form analytical themes which were targeted at directly answering the systematic review’s research questions. The reviewers then discussed their interpretations of the descriptive themes and production of analytical themes until a consensus was met (Thomas and Harden, 2008). These processes were replicated in this integrative review. The descriptive themes were presented in a mind-map and they were repeatedly discussed and reviewed between the author and two university supervisors (Appendix 2).

Thomas and Harden (2008) executed their production of codes and themes with the use of the computer software EPPI-Reviewer (p. 5). However, the thematic synthesis for this review was undertaken by ‘pen and paper’ method, with the use of data extraction tools in the form of an electronic document (See section 3.4). This method is considered appropriate for small-scale projects (Elamin et al., 2009). The RefWorks Software (RefWorks, 2018) was used in this review to maintain a comprehensive list of the references accessed throughout the process of this review. This software was used in the final stages to generate a complete reference.

The thematic synthesis framework includes some adaptations of grounded theory and meta-ethnography, two other approaches which commonly used in qualitative synthesis (Barnett-Page and Thomas, 2009). Grounded theory was formulated by Glaser and Strauss in 1967 and involves a multi-phasic approach of methodologically collecting and analysing data, which take place simultaneously, to discover new theories from research data (Glaser and Strauss, 2004; Noble and Mitchell, 2016). It involves theoretical sampling and constant comparison until theoretical ‘saturation’ is met and new theories are identified (Barnett-Page and Thomas, 2009; Glaser and Strauss, 2004). The similarity between grounded theory and the thematic synthesis framework can be seen in their inductive approaches to develop themes or concepts, through constant comparison (Barnett-Page and Thomas, 2009). This is evident in stages two and three of the thematic synthesis framework.

Meta-ethnography was developed by Noblit and Hare (1988) as a method of synthesising research in education. This method combines and contrasts qualitative interpretive data using three methods. Firstly, the *‘reciprocal translational analysis’* (p. 38-48) involved the translation of concepts between individual research papers. This method is similar or the development of descriptive themes in the Thematic synthesis framework (Barnett-Page and Thomas, 2009). This is followed by finding explanations for contradictions between findings in the individual studies, a method they describe as *‘Refutation synthesis’* (p. 47-62). Finally, the *‘Lines-of-argument synthesis’* (p. 62-76)method, where the synthesis is presented creating a whole picture of the findings (Barnett-Page and Thomas, 2009; Noblit and Hare, 1988). Noblit and Hare (1988) cited Strike and Posner’s definition of synthesis in their original work:

*“Synthesis is usually held to be an activity or the product of an activity where some set of parts is combined or integrated into a whole… [synthesis] involves some degrees of conceptual innovation, or employment of concepts not found in the characterization of the parts as means of creating the whole.”* (p. 16)

This definition emphasises the defining characteristic of synthesis of taking the original findings of individual primary research and advancing them to identify new understandings of the collective findings from multiple pieces of research (Thomas and Harden, 2008). This process is crucial in the thematic synthesis process which will be undertaken in this integrative review.

Grounded theory, meta-ethnography and the thematic synthesis framework fall into the interpretivist paradigm (Barnett-Page and Thomas, 2009; Glaser and Strauss, 2004; Goulding, 2005; Noblit and Hare, 1988; Thomas and Harden, 2008). The interpretivist paradigm includes research which is ‘grounded’ in the lives of people and seeks to gain explanation for social events by exploring peoples’ experiences and views (Noblit and Hare, 1988). This is relevant to this integrative review’s question, which aims to explore the experiences of school nurses when caring for children and adolescents with mental health problems. In comparison, the opposite paradigm in social sciences, positivism, is predictive and focuses on generalised theories and aims to deduce hypotheses and test their probable truth (Noblit and Hare, 1988).

### 3.4 Search Strategy Methods

#### 3.4.1 PICOS Framework

Throughout the scoping process of this study, the key terms arising from relevant articles were used to help define this review’s research question. This helps to avoid bias in the search by not limiting the search terms to those held by electronic databases or the author (Bettany-Saltikov, 2012). To support the author in organising these terms into concepts and the development of a robust search strategy, the PICOS framework was used to support the collection of relevant concepts and search terms, which would be used in the searching process (Methley et al., 2014). The PICOS framework also helped the author to clearly define the boundaries of this review’s research question and aided the initial development of the inclusion and exclusion criteria (This will be discussed further in section 3.4.3). The PICOS Framework for this review can be seen in Figure 4.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Figure 4 - PICOS Tool and Search terms used | | | | |
|  | | | | |
| **Population** | **Intervention** | **Comparison** | **Outcome** | **Study Type** |
| Child\* Mental Health | School Nurs\* | Experience\* | Management | Qualitative |
| Adolescen\* Mental Health | School Health Nurs\* | View\* | Service Delivery | Mixed-method |
| Mental Health | School Health Services | Perspective\* |  |  |
| Mental Illness\* | Community Nurs\* | Attitude\* |  |  |
| Mental Disorder\* | Community Health Nurs\* | Opinion\* |  |  |
|  | Public Health Nurs\* |  |  |  |
|  | Public Health Practitioner |  |  |  |
|  | Specialise Public Health Practitioner |  |  |  |
|  | Nurs\* |  |  |  |

The PICOS tool is an adaptation of the commonly used PICO (Population, Intervention, Comparison, Outcome) tool, where ‘Study type’ is added to focus results on qualitative and mixed-methods studies found in the searching process (Methley et al., 2014). An alternative to the PICOS search tool is the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation and Research type) which was developed by Cooke et al. (2012). Cooke et al. (2012) stated that the SPIDER tool was more effective in identifying qualitative and mixed-methods research in reviews in comparison with the PICO tool which focuses on quantitative research methods. However, Methley et al. (2014) states that this issue is overcome in practice by adding the ‘Study type’ section, forming the PICOS tool. The PICO tool was deemed to be ineffective in synthesising qualitative evidence for a systematic review by Cooke et al. (2012), however, in a comparison study of these by Methley et al. (2014), the SPIDER tool was found to significantly reduce the number of eligible studies found in the search process. Whilst the number of results was also reduced by using the PICOS tool, it was concluded that this adaptation was suitable for studies with limited resources, like this review (Methley et al., 2014). Therefore, it was decided that the adapted PICO tool (PICOS) would be used in the search methods of this review.

#### 3.4.2 Electronic Database Searches

The identified search terms were used to form complex search strings within the electronic databases to identify eligible research papers for this review. International electronic databases were ascertained as being suitable for use, based on the focus of their published research subjects. It was important that unsuitable databases were not utilised, to reduce the number of inappropriate results (Butler et al., 2016). Such as, Maternity and Infant Care, a database providing access to research relating to Midwifery (University of Surrey, 2018). The selected databases provided access to research journals covering a range of subjects relevant to this systematic review’s topic, including nursing, psychology, public health and medicine. A Summary of these can be seen in Figure 5.

|  |  |  |
| --- | --- | --- |
| Figure 5 - Databases (University of Surrey, 2018) | | |
|  | | |
| **Database** | **Platform** | **Description** |
| **CINAHL** (Cumulative Index to Nursing and Allied Health Literature) | EBSCOhost | Health and nursing research database |
| **Embase** | Elsevier | Database of pharmaceutical and biomedical journals, including subjects in Public Health |
| **Medline** | EBSCOhost | Biomedical database from the National Library of Medicine |
| **PsychINFO** | EBSCOhost | Psychology and linked subjects database |

Electronic databases have thesauruses of Index or MeSH Terms which are linked to all pieces of published research, to enable them to be categorised by the databases (Aveyard, 2010). The thesaurus of each of the databases used in this systematic review, were accessed to search for Index Terms which were relevant to each concept within the PICOS tool. This was then followed by searching for the PICOS tool’s key terms in the Titles and/or Abstracts of research papers. Truncations of these key terms using ‘\*’ were used to widen the searches to include a variety of spellings and suffixes. For example, the term nurse was searched using ‘nurs\*’ to retrieve results containing the single, plural and present participle forms of the term nurse. The Boolean term ‘OR’ was then used between each of the Index Term and key terms within one concept group, to widen the search to include as many relevant research papers as possible. The ‘AND’ Boolean Term was then used between each of the concept groups’ search strings, to combine the searches together. This narrowed the results to research papers which were relevant to all the concepts (Bettany-Saltikov, 2012).

For this systematic review, the same search strings were used for CINAHL, Medline and PsychINFO as they were all accessed via the EBSCOhost database and therefore, used the same thesaurus for categorisation. However, a different variation of the search string was used for Embase as this was accessed through Elsevier, which uses a different thesaurus. The search strings used can be seen in Appendix 3.

Finally, limits were applied to the searches once the search strings had been compiled and combined. The limits used were English language, human studies and a time limit. Originally, an 18-year time limit was applied to the searches, to assess the scale of the available research. On completion of this, it was found that many of the studies were published within the past 10 years and were sufficient in addressing the review question. Therefore, in the final searches, a 10-year limit was applied.

#### 3.4.3 Inclusion and Exclusion Criteria

Inclusion criteria were developed during the scoping process to support the author in eliminating research papers, which were not suitable in addressing the review’s question. While the predefined criteria create limits for the review by predefining what can be included, they reduce author bias by ensuring research papers are included based on their relevance and not whether they are of personal interest to the author (Butler et al., 2016). The Inclusion criteria used for this review can be seen in Figure 6.

|  |  |
| --- | --- |
| Figure 6 - Inclusion Criteria | |
|  | |
| **Criteria** | **Justification** |
| Published between the years 2008 and 2018 | Research papers published before 2008 will be excluded to ensure that the most recent research is included to efficiently examine the current practices and experiences of school nurses. |
| Examines the experiences of school nurses and their existing practice | This review will focus on the experiences of school nurses involved in the care of children and adolescents with mental health problems. |
| Reports on the management of mental health problems in children and adolescents | This review will include research papers which explore the management of mental health problems in children and adolescents. Therefore, research papers which report on the school nursing input on other health problems will be excluded. |
| Primary qualitative and mixed-methods research | Qualitative data is most appropriate in addressing the reviews question of the school nurses’ experiences. Qualitative data from mixed-methods research papers will also be included to add to the body of research available. |
| Research must have been conducted in a westernised country | This review is being conducted in the UK, therefore, to best inform current UK school nursing practice, the research which this review reports on, must have been conducted in a country with a comparable health system and socio-economic situation. |
| Published in the English Language | The author is unable to understand languages other than the English language. Due to limited resources for this review, translation of research papers in other languages would not be possible. |

#### 3.4.4 Selection of Primary Research Papers

For each search, the abstracts and titles of the research papers were reviewed by the author. Those that presented relevance to the review’s question initially, had their full texts reviewed and the exclusion criteria applied to them by the author.

Relevant research papers can be missed from comprehensive database searches. Therefore, to further develop the search strategy, a snowballing process was used to hand-search the reference lists of relevant research papers found in the electronic database searches. This process created an opportunity to identify relevant papers, which may be published but not categorised or available on the electronic databases used in the review (Bettany-Saltikov, 2012). The same exclusion criteria were applied to the papers found during this process.

A summary of the research papers which had their full-texts reviewed during the search process can be seen in Appendix 4, which will also show the origin of the papers from the search strategy and rationale for their exclusion, when applicable.

|  |
| --- |
| Figure 7 - Examples of research topics not meeting this review’s criteria |
|  |
| **Examples of topics of the research studies found which did not meet the inclusion criteria for this systematic review** |
| Views of adolescents in accessing mental health support from the school nurse |
| Experiences of Paediatric nurses in caring for mental health patients in acute settings |
| Experiences of Teachers and School staff |

Some research papers found were relevant to the topic of child and adolescent mental health but did not meet the inclusion criteria for this study. Examples of these can be seen in Figure 7. However, these were useful in providing an extended knowledge of the topic and used to support the background and discussion chapters.

Figure 8 is a representation of the search process, using the four-stage flow chart from the PRISMA statement (Liberati et al., 2009). The flow chart depicts the numbers of results at each stage. Full results of the search strings from each electronic database search can be seen in Appendix 3.

Figure 8 - Search Flow Chart (Adapted from Liberati et al., 2009)

Records identified through database searching  
(n = 1,247)

## Screening

## Included

## Eligibility

## Identification

Additional records identified through other sources  
(n = 16)

Records after duplicates removed  
(n = 1,252)

Records screened  
(n = 1,252)

Records excluded  
(n = 1,218)

Full-text articles assessed for eligibility  
(n = 34)

Full-text articles excluded, with reasons  
(n = 22)

- Quantitative Studies (n=6)

- Not Primary Research (n=9)

- Study participants were not School Nurses (n=3)

- Location of study was not in a western country (n=1)

- Conference Abstract (n=1)

- Summary of full research paper (n=1)

Studies included in qualitative synthesis  
(n = 13)

#### 3.4.5 Quality

Each of the research papers which satisfied the inclusion criteria, received a quality appraisal by the author. This was undertaken in the form of a checklist which was included as part of the data extraction tool (See section 3.5 and Appendix 5). The purpose of appraising the quality of each individual research paper is to assist the author in assessing the rigour of the methodologies used in individual pieces of research and the credibility of their findings. This supports the author in addressing whether the research is robust enough to produce findings which are close enough to the truth, and therefore inform the research question of the review (University of York, 2009). Poor rigorous methodologies can influence bias within the research. This can cause poor conduct by the research in data collection, analysis, interpretation or reporting of the data (University of York, 2009). Therefore, detection of bias in the research papers is a key aspect of quality appraisal. However, only reporting on high quality papers can produce bias within the review. Therefore, all the identified articles were included and reported on in this review irrelevant of their quality score. The quality of the studies will be taken into consideration in the presentation of the synthesis findings, with low quality scoring findings being reported with caution (University of York, 2009).

Quality appraisal tools come in many formats and each is appropriate for certain types of methodologies (University of York, 2009). Therefore, it is crucial that the chosen quality appraisal tool is appropriate for the included study designs. As both mixed-methods and qualitative research papers were included in this systematic review, the decision was made to combine both the Critical Appraisal Skill Programme (CASP) checklist and the Mixed-Methods Appraisal Tool (MMAT) (CASP, 2018; MMAT, 2011).

The Critical Appraisal Skills Programme (CASP) (2018) comprises a variety of quality appraisal tools, in the form of checklists, which are specific to different research designs. CASP checklists provide healthcare professionals with a systematic and user-friendly method of critically appraising the methodological validity of research, the importance of the results and their usefulness (CASP, 2018; Hannes et al. 2010). It enables novice researchers to read and make sense of research, to reach their own judgements and act on the evidence (CASP, 2018; Spittlehouse et al., 2000). While CASP provides a range of checklists specific to research methodologies, it does not have one specific to mixed-methods research. Therefore, the Mixed Methods Appraisal Tool (MMAT) (2011) was incorporated into the appraisal process for this integrative review. The MMAT (2011) was developed to appraise qualitative, quantitative and mixed-methods studies in the appraisal processes in systematic reviews. However, in comparison to CASP (2018) checklists, the MMAT requires the user to have experience and knowledge of all research types (MMAT, 2011).

While MMAT can be utilised for all forms of research, the CASP checklists provided alternative questions which deepened the author’s understanding of the research. Therefore, both were combined in the quality appraisal stage of this systematic review; this can be seen in the data extraction tools used (Appendix 5). To provide an overall scoring of the quality of a paper, the MMAT score was used. These scores were converted into letters for clearer representation; ‘A’ being the highest possible and ‘D’ being the lowest. For continuity, these scores will be represented as letters throughout this review. Figures 9 and 10 present the MMAT scoring for each of the 13 research papers included in this systematic review. Appendix 5 provides examples of completed quality appraisals.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Figure 9 - MMAT Quality assessment – Qualitative Methodology | | | | | | | | | | | |
|  | | | | | | | | | | | |
|  | Clausson, E.K. et al. (2015) | Dina, F. and Pajalic, Z. (2014) | Garmy, P. et al. (2014) | Jönsson, J. et al. (2017) | Membride, H. et al. (2015) | O'Kane, D. et al. (2012) | Pryjmachuk, S. et al. (2012) | Sherwin, S. (2016) | Skundberg‐Kletthagen, H. and Moen, Ø.L. (2017) | Spratt, J. et al. (2010) |
| Ref. No. | 1 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Origin | Sweden | Sweden | Sweden | Sweden | UK | UK/Australia | England | UK | Norway | Scotland |
| Clear research question? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Does the collected data allow for the research question to be addressed? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Are the data sources relevant to address the research question? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Is the analysis process relevant to answering the research question? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Have appropriate considerations been given to how the findings relate to the context? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Have appropriate considerations been given to how the findings relate to researchers’ influence? | Yes | No | No | No | No | No | Yes | No | Yes | Yes |
| **MMAT Score\*** | **A** | **B** | **B** | **B** | **B** | **B** | **A** | **B** | **A** | **A** |
| Adapted from MMAT (2011) | | | | | | | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Figure 10 - MMAT Quality appraisal – Mixed-methods Methodology | | | |
|  | Clausson, E.K. et al. (2008) | Cooke, E. and James, V. (eds.) (2009) | Wilson P. et al. (2008) |
| Ref. No. | 2 | 3 | 13 |
| Origin | Sweden | UK | Scotland |
| Clear research question? | Yes | Yes | Yes |
| Does the collected data allow for the research question to be addressed? | Yes | Yes | Yes |
| Is the mixed-methods methodology relevant to addressing the qualitative and quantitative aspects of the mixed-methods research question? | Yes | Yes | Yes |
| Is the process for analysing qualitative data relevant to address the research question? | Yes | Yes | Yes |
| Have appropriate considerations been given to how the findings relate to the context? | Yes | Yes | Yes |
| Have appropriate considerations been given to how findings relate to influence from the researcher(s)? | No | No | Yes |
| Are quantitative measurements appropriate? | Yes | Yes | Yes |
| Was there an acceptable response rate? (60% or over) | Yes | No | No |
| Has the integration of the qualitative and quantitative data been relevant to addressing the research question? | Yes | Yes | Yes |
| Have appropriate considerations been given to the limitations of integrating qualitative and quantitative data in the chosen method? | No | No | No |
| **DEF Score** | **B** | **C** | **B** |
| Adapted from MMAT (2011) | | | |

### 3.5 Data Extraction and Synthesis

#### 3.5.1 Data Extraction

Once the search strategy had been completed and all the relevant research papers had been identified, a data extraction tool (DET) was used to extract data from the research papers and critically appraise their quality. The DET was a detailed form on Microsoft Word, which was provided by the University of Surrey and adapted by the author. The use of DET’s allows the reviewer to use a logical and simple format for extracting all the relevant information from the primary research papers and allow for summarisation and analysis of this data. This assists authors in conducting a consistent process of data extraction from each of the included research papers, helping to increase the validity, reliability and reduce bias in the process (University of York, Centre for Reviews and Dissemination, 2009). For small studies with few resources, such as this review, the use of a data extraction tool in the form of an electronic document, is considered appropriate (Elamin et al., 2009). An example of a completed DET used in this review can be seen in Appendix 5.

The information from the DET’s has been used to create a summary of each piece of research included in this review. This can be seen in Appendix 6.

This review’s data extraction tool included 5 sections; background information, the study’s design, participants, findings of interest and the quality appraisal. The DET’s assisted the author in systematically reading and understanding each piece of research and extracting all their findings which would contribute to answering this integrative review’s questions. It also began the process of synthesis, as described in the first and second stages of the Thematic Synthesis Framework (Thomas and Harden, 2008). *‘Free line-by-line coding’,* where the author read and re-read the pieces of research to understand and extract the findings; and *‘development of descriptive themes’,* where the author described the findings based of their original presentation, to produce codes.

#### 3.5.2 Data Synthesis

Within this review, the descriptive themes were translated, or compared between all the research papers’ findings, until all the data had been coded and no new codes were produced (Thomas and Harden, 2008). This was a cyclic process, which involved the author reviewing and revisiting the original research to ensure that all the findings were coded and retained their contextual meaning, to ensure there was consistency in the authors extraction process.

To present and further develop the descriptive themes at this stage, the author utilised the MindView 7.0 software programme to produce detailed mind-maps (MatchWare, 2018). This allowed the author to organise their thoughts and begin to group the codes into larger themes. This also provided an opportunity to re-organise themes so that they did not overlap, providing a structure for the analysis and presentation of the collective findings in this integrative review. Additionally, the author used a numerical coding system, where each research paper was assigned a number between 1 and 13 (the papers were organised alphabetically by author, and first paper assigned number 1). These numerical codes were then used on the mind-maps to identify which papers provided findings for each theme. These Mind-maps were developed over three stages and can be seen in Appendix 2. The results of the mind-maps will be discussed in Chapter 4.

The author presented the findings of the descriptive themes to their supervisors at the university. Following discussion, the generation of analytical themes occurred. This process involved advancing from the original findings to process new understandings and were focused on answering the research question of this review (Thomas and Harden, 2008). It became apparent that the descriptive themes produced three analytical themes; *Individual experiences, experiences linked to the organisation* and *experiences of interprofessional working*. On further discussion with the supervisors, the interpretation of the analytical themes began to present in what could be described as concentric circles. They were all common to the centre, the review’s question, but the further away from the centre they were, the less focused it became on the child and adolescent mental health problem and more about the functioning of school nursing practice in mental health. This will be discussed in more detail in Chapter 4.

### 3.6 Conclusion

This chapter has detailed the methodologies and methods used within this review to obtain primary research specific to this review’s question and execute an integrative review. The limitations of the chosen methodologies and methods will be discussed in Chapter 5. The following chapter will present the identified themes and findings from the integrative synthesis.

## Chapter 4

Presentation of the Findings

### 4.1 Introduction

This chapter will firstly review the quality and limitations of the included research papers. The characteristics of each of these studies will then be presented. This will be followed by a presentation of the themes, which were identified through the synthesis process of this review. The findings within each theme will be then be presented and analysed.

### 4.2 Research Quality and Limitations

Thirteen research papers were identified and included in this review. A full summary of each of these, can be seen in Appendix 6. As previously discussed in Chapter 3, each of these papers had their quality assessed using two quality appraisal tools, CASP (2018) and MMAT (2011). The MMAT scoring system was used to give each of the research papers a quality score. This can be seen in Figures 9 and 10 in Chapter 3. All the identified research papers were included in this review regardless of their quality score. Figure 11 provides a summary of the quality score and limitations for each of the research papers.

### 4.3 Characteristics of the Research

A total of 685 participants were represented across the 13 research papers; of these, 599 were school nurses. The remainder 86 included health visitors (n=70), School social workers (n=13), Teachers (n=2) and a School psychologist (n=1). There were only 3 male school nurses represented from all the papers (Wilson et al. 2008), indicating that the profession is predominantly female. Seven of the papers presented the participants number of years of experience as a school nurse, which ranged from 0 to 41. One paper reported on the years of professional experience (1 to 22 years) of the participants, however they were not all school nurses (Garmy et al., 2014). This review will report only on the data from school nurse participants where possible; this is not possible in one research paper (Garmy et al., 2014).

The included research papers reported on studies which took place in a variety of countries, all of which were undertaken in westernised countries, as specified in the predetermined inclusion and exclusion criteria (please refer to Figure 4 in Chapter 3) to increase the transferability of the findings from this review to British school nursing

|  |  |  |  |
| --- | --- | --- | --- |
| **Figure 11 – Summary of Research Limitations** | | | |
| Ref No. | Reference | Quality Score | Limitations |
| 1 | Clausson et al. (2015) | **A** | - Long data collection period  - Possible Bias because all the researchers were nurses  - Transferability questioned due to Swedish Law enabling health records to be viewed by Parents, professionals and insurance companies easily. |
| 2 | Clausson et al. (2008) | **B** | - Content analysis prevented in-depth interpretation of the data  - Data collection took place in 2005  - Researchers’ reflexivity was not considered |
| 3 | Cooke & James (2009) | **C** | - Small sample size (n=9 questionnaires; n=4 interviews)  - Response rate below 60% (42.9%)  - Researchers’ reflexivity was not considered  - Limitations to integrating qual. & quant. Data not considered  - Reported training needs from questionnaires represented only n=4 participants and possible bias from self-reporting nature of questionnaires. However, triangulation of this data with interview data helped to reduce this. |
| 4 | Dina & Pajalic (2014) | **B** | - Researchers’ reflexivity was not considered  - Small Sample Size |
| 5 | Garmy et al. (2014) | **B** | - Not all the participants were School Nurses  - No Male tutors were represented in this study  - Focus Group design may have caused participants to withhold information which was difficult to discuss.  - Transferability reduced as participants had varying levels of experience of course delivery |
| 6 | Jönsson et al. (2017) | **B** | - Research Reflexivity was not considered |
| 7 | Membridge et al. (2015) | **B** | - Small Sample size  - Represented one NHS board in the UK, reducing transferability  - Researchers’ reflexivity was not considered |
| 8 | O’Kane et al. (2012) | **B** | - Small sample size  - Location of the study was not clear  - Researchers’ reflexivity was not considered |
| 9 | Pryjmachuk et al. (2012) | **A** | - Small samples - however represented two different English cities  - Purposive sample included school nurses who had an interest in paediatric mental health  - Focus groups facilitated by different researchers, reducing consistency in the methods |
| 10 | Sherwin (2016) | **B** | - Small sample size  - Analysis of data included the construction of poems. Only two were published, so some of the interview data was not presented.  - Researcher reflexivity not considered  - No independent checking of the findings was reported, reducing the rigor of the study |
| 11 | Skundberg-Kletthagen & Moen (2017) | **A** | - Researchers questioned transferability to other countries as research took place in Norway |
| 12 | Spratt et al. (2010) | **A** | - Small study  - Participants were School Nurse managers  - Study took place at a time of service restructuring, causing the findings to no longer be transferable to current Scottish school nursing practice |
| 13 | Wilson et al. (2008) | **B** | - Data collection took place in 2002/2003  - Exact response rate is not definite as it is not known how many questionnaires were received by professionals (response rate below 60%)  - The limitations to integrating qual. & quant. Data were not considered  - Low response rate to the questionnaire’s final questions, possibly because it was too long/fatigue |

practice. Six of the included studies took place in the United Kingdom (UK); one in England, two in Scotland and three which did not specify their location in the UK. One study was undertaken in Norway and five in Sweden. One of the studies included was not specific about the location in which it was undertaken (O’Kane et al., 2012); it received ethical approval from an Australian University, however, in the searching process of this review, an ‘in-brief’ version of this research paper was found, which stated the research took place in the UK (O’Kane, 2011).

There were three mixed-methods studies included in this review, the remainder ten studies were qualitative study designs. Semi-structured interviews were used in six studies and unstructured interviews used in one. There were three studies using semi-structured focus groups and three using questionnaires. The quantitative data from the mixed-methods studies were used to provide descriptive statistical analyses and supported by the qualitative data. A summary of these characteristics can be seen in Appendix 7.

#### 4.3.1 Types of Mental Health Problems in children and adolescents identified in the research

Of the 13 identified research papers, 10 of these reported on the types of mental health problems encountered by the school nurse participants. These are presented in Figure 12.

Self-harm was reported most frequency amongst the research papers (Clausson et al., 2008; Cooke and James, 2009; Dina and Pajalic, 2014; Membridge et al., 2015; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010; Wilson et al., 2008). Self-harm was found by Membridge et al. (2015) and Wilson et al. (2008) as the highest reported mental health problems in children and adolescents, amongst their participants, with Membridge et a. (2015) reporting 90% of their participants supporting secondary school-aged children with self-harm and/or suicide. Self-harm was also reported as the condition which caused most concern amongst school nurses; this was alongside depression, substance misuse, eating disorders, arson and violence (Pryjmachuk et al., 2012; Wilson et al., 2008).

Wilson et al. (2008), a mixed-methods study, was the only study to collect data specific to the diagnosed mental health problems encountered by their school nurse participants. They referred to *‘other’* mental health problems within this data (p. 451), however, this was not explored in any more detail. It is possible that this data included a range of mental health problems but space did not allow for the presentation of each of these conditions.

### 4.4 Presentation of Themes and Findings

Through the synthesis process, using the Thematic Synthesis Framework (Thomas and Harden, 2008), descriptive codes from the original research data were used to undertake a further analysis and produce analytical themes. The descriptive themes were extracted from the research papers using Data Extraction Tools (DETs) (Appendix 5). In Appendix 6, which provides summaries of the included research papers, descriptive coding words have been highlighted in bold, to represent the origin of the descriptive codes. These descriptive codes were grouped and organised into mind maps by the author, which can be seen in Appendix 2. Discussions between the author and university supervisors, enabled these descriptive codes to be further organised and analysed. This produced three analytical themes *Individual experiences, experiences linked to the organisation* and *experiences of interprofessional working*, with multiple subthemes. As previously discussed, the analytical themes were interpreted as concentric circles, with the centre representing the research question and the outer circles representing the analytical themes. This is presented in Figure 13.

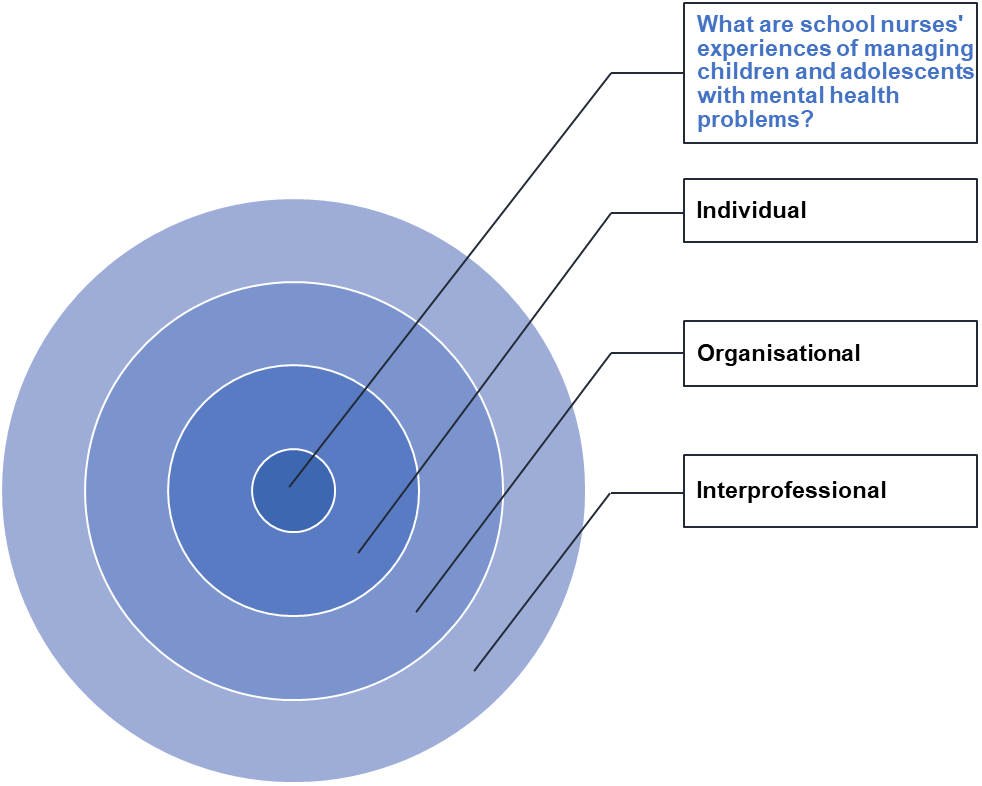


Figure 13 – Concentric Circles – Presentation of Analytical Themes

There was a vast number of findings from the collective research, as can be seen across the mind maps (Appendix 2). Further analysis of the findings within the analytical themes, enabled the findings to be grouped into broader sub-themes (Figure 14).

A discussion of the findings from each of the themes detailed above, will be presented in the following sections. Figure 14 provides the readers with the themes and the order of which they will be discussed in this chapter.

|  |  |  |  |
| --- | --- | --- | --- |
| **Figure 14 – Themes** | | | |
| **Analytical Themes** | Individual | Organisational | Interprofessional |
| **Sub-Themes** | - The visibility of the school nurse  - Trust | - Feeling powerless  - Time Constraints  - Mental Health Training for School Nurses | - Working with other professionals |

### 4.5 Individual

The variety of mental health problems in children and adolescents reported in the research, as previously described, shows the extent and diversity of this health problem. This emphasised the expectations of the school nurse to have the ability to assess, identify and support a variety of mental health problems in children and adolescents. This was apparent across the research reviewed, with reports that school nurses felt they played a key role in supporting children and adolescents’ mental health (Garmy et al., 2014; Jönsson et al., 2017; Pryjmachuk et al., 2012; Sherwin, 2016; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010). There was a wide range of positive words used within the findings, in relation to the school nurses’ views of their roles within this area of practice, these are presented in Figure 15. This emphasised that school nurses perceived this as an important and fundamental part of their role that they wanted to do justice.

The findings in the *‘individual’* theme revealed how school nurses viewed their own competence in managing mental health problems in children and adolescents. To fulfil this aspect of their role, their visibility to children and adolescents and trust were essential. These will be discussed in the following sections.

****

**Figure 15 – Word Cloud**

#### 4.5.1 The Visibility of the School Nurse

The visibility of the school nurse was a prominent theme across the research. The school nurses’ ability to work within schools was a key factor contributing to them increasing their visibility and managing mental health problems in children and adolescents (Cooke and James, 2009; Dina and Pajalic, 2014; Garmy et al., 2014; Jönsson et al., 2017; Membridge et al., 2015; Pryjmachuk et al., 2012; Sherwin, 2016; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010).

*“It is so important to be in your schools and visible to them, so they recognise you and say “Hi Jo” when they see me in school. That means a lot to me.” (Sherwin, 2016, p. 31)*

School nurses reported that their visibility in schools enabled them to detect mental health problems at an early stage (Jönsson et al., 2017; Skundberg-Kletthagen and Moen, 2017). Early identificationof mental health problems by school nurses, provided opportunity for minor issues, such as sleep problems, problems with their social interactions and feelings of low mood, to be supported and resolved with just the support of school nursing interventions (Skundberg-Kletthagen and Moen, 2017). In addition to this, being visible in schools enabled students and teachers to know about the school nursing service and approach the school nurse directly with their concerns (Cooke and James, 2009, Membridge et al., 2015; Sherwin, 2016). It was reported that school nurses are often the first health professional approached by students and teachers, specifically about self-harming concerns (Cooke and James, 2009). Similarly, Membridge et al.’s participants (2015) reported that students were the main source of their referrals, through self-referral, followed by parents/carers and teachers, emphasising the importance of being visible to students, parents, carers and school staff.

To increase their visibility, school nurses reported on a variety of activities and practice techniques. Speaking at school assemblies, working closely with teachers and school staff, walking around their schools at lunchtimes, putting up posters about the school nursing services and being in the playground when parents collected their children (Sherwin, 2016). The use of drop-in clinics in schools was a service reported to increase the school nurses’ visibility (Sherwin, 2016; Spratt et al., 2010), which enabled students to access support for mental health problems.

*“I run a drop-in clinic in school, it’s brilliant, I am getting to know the young people.” (Sherwin, 2016, p. 32)*

The school nurses’ involvement in the delivery of preventative mental health programmes and teaching sessions on health topics, was also reported to improve the visibility of the school nurse. By increasing the school nurses visibility, these activity were highlighted as having several benefits, including building relationships with children and adolescents (Membridge et al., 2015), providing opportunity for the school nurse to identify vulnerable children and initiate early intervention (Garmy et al., 2014; Membridge et al., 2015), as well as enabling the children and adolescents to recognise the school nurse and identify them as an adult that is happy to talk about concerns which may be difficult to speak about (Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010).

*“I think we might be seen as the ones that talk about difficult subjects such as sex education, things like that which… I think they probably even at a young age feel they can come and talk to… things that affect themselves.” (Wilson et al., 2008, p. 137)*

Schools were reported to limit the visibility of the school nurse at times, by providing them with poorly located rooms to work from. This could reduce their visibility within the school or the room provided was unsuitable for providing therapeutic care (Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010). Dina and Pajalic (2014) emphasised the latter by reporting on the importance of having a quiet environment to work in schools to successfully support children with mental health problems. Poor visibility within schools was also said to limit the success of services, such as drop-in clinics and running an open-door policy (Spratt et al., 2010).

*“…poorly adapted facilities, sitting in a storage room with no access to data. I must do all the documentation when I return to the public health clinic.” (Skundberg-Kletthagen and Moen, 2017, p. 5047)*

Despite this, it was argued by Skundberg and Moen (2017) that individual school nurses must be proactive in raising their profileand visibility within schools, to ensure that their services are known and accessed by students.

#### 4.5.2 Trust

The ability to build trusting relationships with children and adolescents was found to be a crucial aspect of the school nurses’ practice facilitating the management of mental health problems (Dina and Pajalic, 1014; Membridge et al., 2015; Sherwin, 2016; *Skundberg-Kletthagen and Moen, 2017;* *Spratt et al., 2010*).

*“Well school nurses are […] the only health professionals that are in schools that are accessible to children, that children trust, they build up relationships with children because they are seen about the school.” (Spratt et al., 2010, p. 137)*

*“If they build up a rapport with the children […], the children feel they can approach them. And… particularly when they are working with the feeder primary schools, the children have known them, you know, from early on. So before they hit secondary stage, it’s a known face and somebody that they can trust. So I think… and I suppose consistency too and continuity.” (Spratt et al. 2010, p. 137)*

The last extract raises the importance of continuity in practice, to enable relationships to be built between school nurses and students, which was reported elsewhere (Sherwin, 2016; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010). This was also found to be beneficial when supporting the mental health of children and adolescents, through improving their resilience (Skundberg-Kletthagen and Moen, 2017).

*“It is important to be able to consistently work with young people […] If you say I am going to see you next Thursday at 1pm that’s what they expect.” (Sherwin, 2016, p. 32)*

The importance of continuity in the care of mental health problems, was further supported by one participant’s story of a child who met regularly with the school nurse for 12 months before disclosing that they had an eating disorder (Sherwin, 2016).

To enable children and young people to develop trusting relationships, the research highlighted the importance of providing the therapeutic space and time for the child to disclose the mental health concerns. To facilitate this, school nurses demonstrated the use of good listening skills (Cooke and James, 2009; Dina and Pajalic, 2014; Jönsson et al., 2017; Pryjmachuk et al., 2012).

*“…Be responsive, if the child starts to talk, that you then take the time to listen… most often it’s the person who knows the child the best so they can open themselves…” (Dina and Pajalic, 2014, p. 4)*

Participants also described the unique role of the school nurse, as a factor contributing to their ability to build trusting relationships with children and adolescents. In addition to the benefits of working in schools, as previously discussed, Spratt et al. (2010) reported on the value of “not being a teacher” (p. 138). Working collaboratively with the schools was found to be important to enable an effective school nursing service, remaining separate from the school systems was found to benefit school nurses in building relationships with students:

*“It’s difficult to tell your geography teacher that you are purging yourself with laxatives, when you know the next day they may well be giving you a ticking off for not doing your homework.” (Spratt et al., 2010, p. 138)*

Furthermore, Spratt et al. (2010) also reported that providing a confidential service is a factor which contributes to the school nurses’ ability to build trusting relationships and is one of the reasons a student may choose to access the school nursing service.

*“So I think there is that confidentiality sometimes, something that is… that gives them a bit of comfort, they don’t want everybody to know and they… if they start to build up a trust they know that this is not something that everybody is going to know about.” (Spratt et al., 2010, p. 137)*

### 4.6 Organisational

The previous theme, *‘individual’*, presented findings that expressed the school nurses' views on their abilities to manage mental health problems in children and adolescents. However, the 'organisational' theme's findings expose adverse experiences in relation to how factors within the organisation can limit the school nurses' abilities to effectively deliver mental health support to children and adolescents. This led to feeling powerless, which will be discussed in the next section. This will be followed by discussions about the time constraints and mental health training for school nurses.

#### 4.6.1 Feeling powerless

There were several factors discovered throughout the findings which indicated that school nurses were limited in their practice to effectively manage mental health in children and adolescents.

Participants reported feelings of being powerless, as they felt that the resources being made available to them were not enough to cope with the rising number of cases of mental health problems in children and adolescents (Cooke and James, 2009; Jönsson et al., 2017; Membridge et al., 2015; Sherwin, 2016; Spratt et al., 2010; Wilson et al., 2008).

*“Many young people identified on a weekly basis at pupil support group meetings. I can only work with a few and often feel frustration that there are so many.” (Wilson et al., 2008, p. 452)*

Sherwin (2016) reported on the influence of commissioning and organisational objectives, which constrict the services that school nurses can deliver. Frustration was expressed by the participants as it was felt that they had the abilities to provide more services and support but were unable to. However, these participants also raised the importance of their role in influencing commissioning decisions but feared that their small workforce was unable to make a substantial difference. Similarly, Cooke and James (2009) found that funding of school nursing services was a limiting factor:

*“There’s far more we can do if we had the funding to do it.” (p. 266)*

Staffing levels within the school nursing teams were found to be insufficient, causing increased workloads for individual school nurses (Spratt et al., 2010):

*“There are supposed to be one nurse to 1700 pupils. We are currently sitting at one nurse to 4500 pupils.” (p. 139)*

Further to this, the low availability of specialist services directly impacted on the school nurses’ workloads and the amount of time they had to spend with each child, as they took on the workload of other professionals. Difficulties accessing specialist services caused feelings of frustration and increased stress levels amongst the participants, as children and adolescents were unable to receive the appropriate specialist care they needed (Jönsson et al., 2017; Spratt et al., 2010; Wilson et al., 2008). This lead to school nurses providing a support service, whilst patients were on long specialists’ waiting lists, and feeling out of their depth in the abilities to support them (Cooke and James, 2009; Jönsson et al., 2017; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010).  Wilson et al. (2008) expressed their concern for this issue as it was reported by 22% of their participants:

*“There should be a service for these young people who have been abused and need immediate help. I felt a sense of failure that once a young person had the confidence to speak out, nothing happened.” (p. 452)*

Some participants felt that their service was not enough to influence big changes in child or adolescent’s mental health (Dina and Pajalic, 2014).

Time constraints and lack of mental health training were the predominant sub-themes found within the ‘*Organisational*’ findings, which also limited the school nurses’ capacity to deliver a service to children and adolescents with mental health problems. These sub-themes will be explored in more detail in the following sections.

#### 4.6.2 Time Constraints

Time was a common theme across eleven of the research papers. Predominantly, a lack of available time in practice to work with children and adolescents with mental health problems, was reported by school nurses due to large workloads (Cooke et al, 2009; Dina and Pajalic, 2014; *Jönsson et al., 2017;* Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010; Wilson et al., 2008). This was supported with quantitative data in Wilson et al.’s study (2008), which found that 28% of their school nurse participants reported that lack of time negatively impacted on their ability to deliver an effective service to young people with mental health problems.

*“…I think probably a lot of us would like to do this [mental health work] more but we are so busy that we just dip in and dip out really and don’t ever do it justice.” (Pryjmachuk et al., 2012, p. 855)*

This contradicts findings from the previous discussion about school nurses providing children and adolescents with time, through regular and consistent consultation, to build trusting relationships and support them with mental health problems. However, it was also found that mental health problems can, at times, be prioritised over other areas of work in the school nursing service:

*“She would have to make a clinical decision. Does she scrap the health promotion talk that she is going to do that day? If a young person comes along and says “I have been self-harming and, by the way, I think I’m pregnant”, I know where my priorities would lie on that day. And anything else can wait. So, it’s very much a clinical decision you make at that time.” (Spratt et al., 2010, p. 140)*

Clausson et al. *(2015)* and Clausson et al. (2008) exclusively reported on the experiences of school nurses in documenting health and psychosocial health problems respectively. Their findings found that the documentation of mental health problems was time consuming, as school nurses found verbalisation of their concerns of mental health problems more difficult, when compared with those associated with physical health.

*“I’m writing more and more about mental health, but it takes time for me to find the right words… so you think more than once before you sign the note; it makes it quite clear.” (Clausson et al., 2015, p. 208)*

Lack of time in practice was also found to restrict school nurses from accessing supportive services for themselves, through mental health consultation, a form of clinical supervision, as exclusively explored by O’kane et al. (2012):

*“Time is always a problem. We all have really heavy workloads, are overstretched and they want us to attend a meeting that may or may not be useful to us. I don’t think so.” (p. 6)*

However, they also found that attendance of mental health consultation acted as a valuable learning process for mental health problems in children and adolescents. In the long term, this enabled school nurses to manage future cases more effectively and improve their time management.

#### 4.6.3 Mental health training for school nurses

Concerns about the lack of paediatric mental health training amongst the school nurse participants was widely reported (Clausson et al., 2015; Clausson et al., 2008; Cooke and James, 2009; Jönsson et al., 2017; Membridge et al., 2015; O’Kane et al., 2012; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010; Wilson et al., 2008). School nurses’ training needs were not being matched to the increased number of paediatric mental health cases (Jönsson et al., 2017; Membridge et al., 2015; Wilson et al., 2008).

*“I knew that mental health problems are increasing among children and adolescents, but I was not prepared for how I would react when standing there. I wasn’t prepared that it could be real damn hard. There’s a frustration that comes, and you are not prepared for it.” (Jönsson et al., 2017, p. 3)*

This caused school nurses to feel unprepared when managing children or adolescents with mental health problems, due to lacking the necessary knowledge, skills and experience, causing an overall feeling of low-confidence in this area of practice (Jönsson et al., 2017; Membridge et al., 2015; O’Kane et al., 2012; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010; Wilson et al., 2008).

This was supported by Wilson et al.’s (2008) findings, that 17% (17/100) of school nurse participants experienced a lack of confidence and felt inexperiencedwhen supporting mental health problems in children and families:

*“Lack of my training needs to deal more appropriately with situations, I read literature etc. but this does not compensate for lack of training within mental health for children/young people.” (p. 451)*

Fears were also expressed as lack of training caused school nurses to worry that their practice was not right and may cause more harm than good (Membridge et al., 2015; O’Kane et al., 2012; Pryjmachuk et al., 2012).

*“I don’t think we’re worried about doing it; I think we’re worried about doing it wrong and we’re worried about doing it badly; no qualms about doing it.” (*Pryjmachuk et al., 2012, *p. 854)*

Lack of training was also reported to hinder appropriate identification of mental health problems and referrals to the suitable specialists or services (Membridge et al., 2015; Spratt et al., 2010). It was also found to negatively impact on school nurses’ ability to document mental health issues (Clausson et al., 2015; Clausson et al., 2008). Clausson et al.’s (2008) highlighted that the documentation systems used had an emphasis on Physical Health, causing uncertainty on what and where to document mental health information. However, it is not possible to ascertain whether these findings are applicable to UK health documentation systems.

Despite these concerns, all of the participants in Membridge et al.’s (2015) study described the importance of recognising their professional competence and limitations when supporting mental health in children and adolescents:

*“I think it is important to know that I am not a mental health trained person and you have to know your limitations.” (p. 21)*

The same study’s participants expressed more confidence when managing low-risk mental health problems and preventative work, but less confidence with mental health problems which were higher risk, such as, self-harm, depression, eating disorders and substance misuse:

*“…[it’s] the high-end risk of mental health that I would feel most uncomfortable with, so the self-harmers, the people who are depressed, the anxious children – they’re where I’m totally out of my comfort zone.” (p. 854)*

When training had been received, it was viewed as beneficial (Cooke and James, 2009; Garmy et al., 2014; O’Kane et al., 2012; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017). Some participants in Skundberg-Kletthagen and Moen’s (2017) Norwegian study, had undertaken an additional 1-year mental health training course, which was reported as invaluable for working as a school nurse:

*“I see it as a good ballast to have an education in mental health nursing in addition to being a school nurse.” (p. 5048)*

Further to this, the participants in Garmy et al.’s (2014) study received a 3-day training course to enable them to deliver the depression preventative programme to adolescents. They stated that they were equipped with new skills and tools which could be used beyond the training course:

*“You don’t want to be without this way of thinking; you’ve learned a great deal yourself as well.” (p. 27)*

O’Kane et al. (2014) reported that group mental health consultation acted as informal education, enabling school nurses to learn from the cases of their colleagues. However, the participants viewed mental health consultation as an opportunity to develop practical skills from mental health professionals, which would support them in practice.

Despite this, training received by Membridge et al.’s (2015) participants, was inconsistent. Wilson et al. (2008) reported thatonly 30% (30/100) of their school nurse participants had received specific training on Mental health in children and young people. More notably, 94% (89/95) expressed that they would like to receive specialised mental health training, giving emphasis to school nurses’ need for training in this area of practice.

A range of suggestions were made as to what school nurses would like to have included in mental health training. These findings are presented in Figure 16.

Cooke and James’ (2009) participants reported the need for specific self-harm training, however, this paper exclusively explored this, and the reported training needs only represented 4 of their participants.

*“I feel silly telling them alternative strategies…like to hold an ice cube. They seem futile and I feel like I lose credibility. I ask them if there is something they could do like run upstairs and beat a cushion. It seems inadequate – how could it help?” (Cooke and James, 2009, p. 267)*

However, their findings suggesting that mental health training should involve learning new practical skills and tools which can be used in practice, correlates with findings from other research papers (Membridge et al., 2015; O’Kane et al., 2012; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017). These methods were favoured over theoretical training in O’Kane et al.’s (2012) study.

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| --- | --- | --- |
| **Figure 16 – Training Suggestions** | | |
| **Ref No.** | **Reference** | **Suggestions for practical skills and tools to be taught in Mental Health training for school nurses** |
| 3 | Cooke and James (2009) | Theoretical training  Counselling  Raising self-esteem  Knowledge of organisations that can help  Practical tips – Alternative tips and strategies for self-harming  Spending time with the Self-harm Team |
| 7 | Membridge et al. (2015) | Assessment Tools  Counselling Skills  Management care plans for specific mental health conditions  Resources which can be used in practice  Strategy/intervention-based training for promotion, prevention and support |
| 8 | O’Kane et al. (2012) | Assessment tools  Practical Skills |
| 9 | Pryjmachuk et al. (2012) | Shadow mental health professionals to learn practical skills  Theoretical training  Cognitive behavioural therapies  Solution-based therapies |
| 11 | Skundberg-Kletthagen & Moen (2017) | Motivational Interviewing  Building self-esteem  Coping mechanisms  Supporting depression  Online database with mental health information and resources |

*“We have practical problems, we need practical solutions. Something we can do. When have these kids and families crying out for help. We need something we can do with them, not just someone to talk to but someone who can show us what to do.” (O’Kane et al., 2012, p. 6)*

*“It is difficult for some adolescents to put into words what they think is difficult, so we need some tools to help them verbalize.” (Skundberg-Kletthagen and Moen, 2017, p. 5048)*

School nurses reported that they desired training to be delivered by paediatric mental health professionals (Cooke and James, 2009; Garmy et al., 2014; Membridge et al., 2015; Pryjmachuk et al., 2012). Also, receiving training from voluntary agencies who support adolescents with mental health concerns was also identified as being potentially beneficial (Membridge et al., 2015). Cooke and James (2009) and Pryjmachuk et al. (2012) found that their participants would like to shadow mental health professionals in practice, to learn practical skills. Membridge et al. (2015) reported that training needed to be consistent to enable school nurses to continuously remain up-to-date with paediatric mental health.

### 4.7 Interprofessional

Whilst it was evident in the findings that school nurses play a crucial role in the management of mental health problems in children and adolescents, they also worked with a range of other professionals and agencies to effectively deliver care to this patient group. Their interprofessional experiences discussed the professionals and agencies they rely on in practice to manage paediatric mental health cases, as well as the barriers to interprofessional working, which impacted on this area of their practice. This will be explored in more detail in the following section.

#### 4.7.1 Working with other professionals

Working collaboratively with other professionals and agencies was identified as an essential part of the school nurses’ practice, to provide effective care to children and adolescents with mental health problems (Dina and Pajalic, 2014; Jönsson et al., 2017; Membridge et al., 2015; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010). A range of other professionals that school nurses work alongside, were mentioned across the research; these are detailed in Figure 17.

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| --- | --- | --- |
| **Figure 17 – Examples of the professionals and agencies that school nurses work with** | | |
| Ref No. | Reference | Examples |
| 4 | Dina and Pajalic (2014) | School Counsellors, principals and teachers  Special Education Teams  Social Workers  Psychologists  Teachers  Speech therapists  Child and Youth Psychiatrists  Emergency Departments |
| 5 | Garmy et al. (2014) | School social workers |
| 6 | Jönsson et al. (2017) | School staff  Social Workers  Child and Adolescent Psychiatric clinics  Habilitation Clinic |
| 7 | Membridge et al. (2015) | Voluntary agencies who specifically support children and adolescents with mental health problems |
| 9 | Pryjmachuk et al. (2012) | Child and Adolescent Mental Health Services (CAMHS) |
| 11 | Skundberg-Kletthagen and Moen (2017) | School staff  Other school nurses  General Practitioners (GPs) |

Having a good knowledge of the roles and services of other professionals and agencies was considered an important component to the school nurses’ skillset, as this enabled them to signpost children and adolescents to other services and make referrals (Jönsson et al., 2017; Pryjmachuk et al., 2012; Spratt et al., 2010).

*“Knowing that this is my responsibility, now I have done what I can do, and then I can put it forward, it is actually their responsibility. I think that helps me cope with working with children with mental health problems.” (Jönsson et al., 2017, p. 4)*

It was found that collaborative working, enabled school nurses to combine their knowledge and skills with others’, facilitating the school nursing service being delivered (Dina and Pajalic, 2014; Jönsson et al., 2017; Pryjmachuk et al., 2012; 12).

*“I have learned a lot from collaboration. We meet together, the school, the parents, the social workers, child and adolescent psychiatric clinic, we are all there, and then we say: what can you do, what can I do so that the student will benefit the most. And therefore, you feel that you have a better contract, better collaboration, and therefore we are all doing better. And when you are doing a good job, then you feel better, I feel better.” (Jönsson et al., 2017, p. 4)*

The previous quote highlighted that good collaboration between the school nurses and other professionals can result in higher job satisfaction (Dina and Pajalic, 2014; Garmy et al., 2014).

*“When we participated in the training course, I really enjoyed it, and it was largely because we [school social workers and school nurses] did it together. There was a lot [of trainees] I didn’t know very well before, and I think it was also incredibly valuable for our continuing professional work. We’ve met many times since, in different professional settings, and we’ve had a very strong feeling of fellowship since the training, I think.” (Garmy et al., 2014, p. 27)*

On the other hand, poor collaboration caused feelings of frustration, loneliness, and being overworked and out of their depth (Dina and Pajalic, 2014; Jönsson et al., 2017; O’Kane et al., 2012; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017). This was linked to poor communication between professionals, failed referrals and not receiving feedback.

*“There is no actual relationships there between us which I think there needs to be because of the waiting list is 13 weeks that’s quite some time and if they do go to CAMHS, we will never hear what happens afterwards. There’s no feedback.” (Pryjmachuk et al., 2012, p. 854)*

*“We all hopefully are working toward the same goals. It’s just difficult if I don’t understand what the other goal is or what people are talking about. People forget school nurses don’t have any mental health training and yet because we’re in the midst of it on a day-to-day basis its presumed we know all about it.” (O’Kane et al., 2012, p. 5)*

Other professionals’ understanding of the school nurse’s role, was also reported as negatively impacting on effectively working with other professionals (Membridge et al., 2015; Pryjmachuk et al., 2012; Sherwin, 2016; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010). This resulted in school nurses feeling undervalued by other professionals, which inhibited their working relationships (Membridge et al., 2015; O’Kane et al., 2012; Sherwin, 2016). This negatively impacted on the school nurses’ work in schools, as it was reported that teachers did not value the benefit of students seeing the school nurse during lesson times and being provided with poor facilities to work from within the school (Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010).

However, it was felt by some participants that these issues were the responsibility of the individual school nurse to resolve, by being proactive in educating other professionals about their role and services (Pryjmachuk et al., 2012; Sherwin, 2016; Skundberg-Kletthagen and Moen, 2017).

*“Should have more time for an exchange of knowledge and experience in the work with pupils suffering from mental health problems.” (Skundberg-Kletthagen and Moen, 2017, p. 5048)*

Skundberg-Kletthagen and Moen (2017) found that geographical location could limit school nurses from working collaboratively with some specialists. As a lack of resources in other public health services meant that some municipalities in Norway did not have mental health specialists:

*“We have no psychologist in the municipality and the child and adolescent psychiatric outpatient services are far away from here.” (p. 5048)*

The same study raised concerns that they could only get support from specialists when the young person was presenting with mental health concerns that were severe. Similarly, findings in other studies which found that the criteria for referrals to specialist mental health services were high, and referrals to them were often declined (Cooke and James, 2009; *Jönsson et al., 2017;* Pryjmachuk et al., 2012; Wilson et al., 2008). This left school nurses managing mental health cases, which they felt were outside of their capabilities (Cooke and James, 2009; *Jönsson et al., 2017; Wilson et al., 2008*).

*“It didn’t meet the threshold… it was beyond what I could do.” (Cooke and James, 2009, p. 267)*

*“It has to do about when you feel that you are not sufficient for the kids [with mental health problems]. When it does not work then of course you cannot help thinking that our interventions are not sufficient, nor is the collaboration with other health care settings and the child psychiatric clinic or the habilitation clinic.” (Jönsson et al., 2017, p. 3)*

Long waiting lists and delays for specialist services also caused similar feelings amongst participants (Pryjmachuk et al., 2012; Wilson et al., 2008).

### 4.8 Conclusion

This chapter has presented the relevant findings from all thirteen of the research papers identified for inclusion in integrative review, in relation to school nurses’ experiences in managing children and adolescents with mental health problems. These covered findings under three analytical themes and six sub-themes. The following chapter will discuss the findings in context with other research, alongside their relevance to future research and policy development.

## Chapter 5

Discussion

### 5.1 Introduction

This final chapter will present a discussion of the findings of this review in context with other research within this field of research and related policies. This will be followed by a critique of the limitations of the included research and the chosen methodologies and methods used in this review. Finally, recommendation for practice and further research will be discussed before a conclusion.

### 5.2 Discussion

This review question was to explore the experiences of school nurses in managing mental health in children and adolescents and the factors which facilitate and limit this area of practice. Through an in-depth integrative synthesis of ten primary qualitative (Clausson, et al., 2015; Dina and Pajalic, 2014; Garmy et al., 2014; Jönsson et al., 2017; Membride et al., 2015; O'Kane et al., 2012; Pryjmachuk et al., 2012; Sherwin, 2016; Skundberg‐Kletthagen and Moen, 2017; Spratt et al., 2010) and three mixed-methods (Clausson et al., 2008; Cooke and James, 2009; Wilson et al., 2008) research papers, this review’s question has been addressed and new questions have been identified as a result of the findings. The experiences of 599 school nurses were represented across the included studies, providing an extensive understanding of their role within child and adolescent mental health.

The integrative synthesis process identified three analytic themes within the collective findings from thirteen research papers. These were school nurses’ *‘Individual’* experiences; experiences linked to the *‘Organisation’* andexperiences of *‘Interprofessional’ working.*

What was apparent across the studies in this review, is that school nurses have a vital role in identifying and supporting mental health problems in children and adolescents, which is very much a part of their day-to-day practice. Whilst this has been reported in other studies (Haddad et al., 2010; Moen and Skundberg-Kletthagen, 2017; Ravenna and Cleaver, 2016; Stephan and Connors, 2013), this review provided insight into the vast range of mental health problems encountered by school nurses. Although the extent of childhood mental health is not fully understood (Mental health Foundation, 2016), the known long-term and adverse effects it can have on a child’s life and potential (HM Government, 2011; WHO, 2018), emphasise the need for appropriate mental health prevention, support and care to be available to children and adolescents.

This review’s synthesis identified that school nurses’ unique role and position in schools, enables them to offer accessible mental health support to children and adolescents, and they are committed to their role and what they can offer students in relation to mental health. Furthermore, they act as a bridge between education and health, by improving outcomes for mental health and reduce the burden on stretched and underfunded mental health services in the UK (Connelly et al., 2008; Skundberg-Kletthagen and Moen, 2017), through early identification and interventions, which are prominent in school nursing guidance (DH, 2009; DH and PHE, 2014).

There are few studies which explore the needs and experiences of mental health services from the perspectives of children themselves. However, those that have been identified, found that adolescents are more likely to access health services through schools (Juszczak et al., 2003); they would like someone to talk to, who is separate from the school system, in a confidential, safe environment (Kidger et al., 2009); and be able to build trusting relationships with the person (DeFosset et al., 2017). These findings are similar to the evidence reviewed, as it demonstrates how school nurses are well placed to effectively manage mental health problems in schools, with the skills and abilities to build therapeutic relationships with children and adolescents (DH, 2009; JCPMH, 2013).

The current structuring of mental health services, includes the involvement of school nurses in Tier 1, providing universal services to children and adolescents. However, this review reports the extensive involvement of the school nurse, which demonstrates that their support for children and adolescents can go beyond Tier 1 into Tier 2, providing targeted support through counselling and extended involvement (DH, 2009; JCPMH 2013). It is somewhat concerning then, that school nurses’ involvement with child and adolescent mental health care and services, is absent in recent government strategies (Mental Health Task Force, 2016). This could adversely affect how mental health professionals perceive the school nurses’ roles in mental health care, leading to poor understanding of their role and a breakdown of working relationships, as was found in this review.

Whilst there were many positives experiences explored in this review, school nurses’ feelings of powerlessness were apparent in many areas of the research. This was primarily linked with a lack of resources being made available to the school nurses, which limited their abilities to support children and adolescents with mental health problems. The feeling that school nursing resources were not meeting the increasing demands for mental health care, was reported by many studies (Cooke and James, 2009; Jönsson et al., 2017; Membridge et al., 2015; Sherwin, 2016; Spratt et al., 2010; Wilson et al., 2008).

Having limited available time in practice, which was mainly attributed to large and vast workloads, is one of the resources which was found to adversely affect the school nurses’ abilities to support children and adolescents with mental health problems, as well as access to supportive services for themselves through mental health consultation. Ravenna and Cleaver (2016), in their scoping review of school nurses’ experiences of working with adolescents with mental health problems, emphasised that effective support for adolescents with mental health problems, was time-consuming due to the complexities of the cases. These raise questions as to how effective the school nursing services can be to support mental health problems in children and adolescents, due to findings in this review, that the success of the school nurse’s support for children and adolescents, is dependent on their capacity to deliver a regular, consistent service allowing them the time to speak about challenging concerns about mental health. However, Turner and Mackay (2015) explored the impact of UK school nurse interventions on mental health and reported that school nursing services improve access to services and improve the emotional health of school aged children.

A prominent area for concern in this review, was the lack and inconsistency of mental health training received by school nurses. This caused school nurses to experience low-confidence and concern that their practice would cause more harm than good (Jönsson et al., 2017; Membridge et al., 2015; O’Kane et al., 2012; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010; Wilson et al., 2008). These findings are corroborated in other studies (Bartlett, 2015; Bohnenkamp et al., 2015; Haddad et al., 2010; Ravenna and Cleaver, 2016; Stephan and Connors, 2013; Turner and Mackay, 2015). However, this synthesis has also identified the value that mental health training can have on school nursing practice. Not only by enhancing their knowledge and abilities to support children and adolescents, but also improving their job satisfaction (Garmy et al., 2014; O’Kane et al., 2012; Pryjmachuk et al., 2012; SKundberg-Kletthagen and Moen, 2017).

Interventions used to support mental health problems can have significant effects on the outcomes and should therefore be evidence-based (JCPMH, 2013), which is supported with school nursing guidelines in the UK, which state that school nurses should deliver evidence-based, up-to-date care (NMC, 2015). However, this synthesis, raise concerns that school nurses’ extensive involvement with mental health care in children and adolescents, is not appropriately supported with the specific education and training.

As discussed previously in Chapter 2, recent statistics have caused great concern about the current rates of self-harm in adolescents in the UK (The Children’s Society, 2018). The evidence synthesised in this review corroborated this with self-harm being the highest reported mental health problem being encountered by school nurses in practice (Clausson et al., 2008; Cooke and James, 2009; Dina and Pajalic, 2014; Membridge et al., 2015; Pryjmachuk et al., 2012; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010; Wilson et al., 2008).

The analytical theme of school nurses’ experiences of *‘interprofessional’* working, identified that this is an essential aspect of the school nurse’s management of mental health problems in children and adolescents (Dina and Pajalic, 2014; Jönsson et al., 2017; Membridge et al., 2015; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010). However, barriers to effective interprofessional working include poor relationships and poor communication. When good communication and relationships exist, school nurses’ work is facilitated and has a positive effect on the care delivered to children and adolescents, as supported in other research studies (Haddad et al., 2010; Ravenna and Cleaver, 2016; Taylor and Mackay, 2016). Effective interprofessional relationships enables professionals to offer support from a variety of disciplines, all with the same goal of supporting the student and improving their outcomes.

### 5.3 Limitations of the included studies

The research papers included in this review were conducted in a variety of countries, seven of which were outside of the UK. This raises questions as to how generalisable the findings are to UK school nursing practice and the extent of childhood mental health. Despite this, to improve the generalisability of this review’s findings, the predefined inclusion criteria of this review ensured that only research papers from westernised countries were included, as they are likely to have healthcare and socioeconomical situations, which are most comparable to the UK.

Two of the included research papers had a data collection period of over 13 years ago (Clausson et al., 2008; Wilson et al., 2008) and another had a data collection period of 6 years (Clausson et al., 2015); the transferability of these papers’ findings, to current school nursing practice, could be questioned. Also, most of the research papers included were reporting on findings from small samples of participants, with the smallest being n=6 (O’Kane et al., 2012). However collectively they have produced a wide variety and depth of findings to address the research question of this review. Also, it was not possible to extract the views of just school nurses in one study (Garmy et al., 2014).

Whilst three mixed-methods research papers were included in this integrative synthesis, only one (Wilson et al., 2008) provided quantitative data which was relevant to address the research question of this review. However, they all added to the body of qualitative findings used in this synthesis.

It is also important to consider that the findings available in the studies included, may present some bias to this review. As the author only accessed the published versions of the studies, the wider sets of findings may not have been included in these versions, therefore producing publication bias (Liberati et al., 2009). However, the findings that were published, collectively produced a large body of findings for synthesis in this review.

### 5.4 Limitations of the chosen Methodologies and Methods

Whilst integrative synthesis reviews are not considered primary research and ethical approval is not needed for them to be conducted, they are considered a form of research and are expected to be executed with the same rigorous methodology standards used when conducting primary research (Cooper, 1998, as cited in Whittemore and Knafl, 2005, p.548). This review was conducted in line with the PRISMA checklist, to support the author in following a transparent and systematic methodology (Liberati et al., 2009), which helps to protect this review from the potential lack of rigour, bias and inaccuracy associated with synthesising findings from multiple research designs, as such in an integrative synthesis (Gough et al., 2012; Whittemore and Knafl, 2005).

It has been argued that qualitative research is not generalisable and only relevant to the participants, context and time in which the research was conducted (Thomas and Harden, 2008). However, by executing a synthesis of multiple pieces of research, it is thought that the generalisability of the individual findings can be increased through the systematic production of a collective body of findings (Jackson, 1980, as cited in Whittemore and Knafl (2005), p. 547). Furthermore, this review carried out an integrative synthesis, including both qualitative and mixed-methods research papers, which is considered a comprehensive review method for understanding nursing research (Whittlemore and Knafl, 2005).

This review retrieved the eligible primary research papers through the systematic searching of electronic databases, followed by a snowballing method of searching the references lists of these papers. However, it is possible that relevant research papers were omitted during this process. If more time had been available, hand searches of more journals could have been undertaken, which may have revealed other eligible papers. Further to this, the author could have contacted prominent authors via Research Gate (2018), to enquire about any other research publications which may have been relevant to this review. Nonetheless, a total of 1,263 papers were identified through these methods and screened for inclusion. Unfortunately, there was also a language bias to this review as the author only speaks English, which could reduce the transferability of this review (Butler et al., 2016).

The process of developing themes and an analytical synthesis, as described in the Thematic Synthesis Framework, is commonly completed independently by different reviewers before their interpretations finalised collectively, to improve consistency in their methods (Thomas and Harden, 2008). However, due to the size and funding of this project, this process was undertaken exclusively by the author. However, the findings were reviewed and discussed between two university supervisors, who were supporting the author.

### 5.5 Reflexivity

As discussed in the introduction chapter, the author is a qualified school nurse, and this could have influenced some bias in the extraction of data from the primary studies and presentation of the synthesis findings. However, the author was proactive in ensuring that all the findings and the production of themes from the data were presented clearly in this review, to help the reader see clearly how the results had been deduced from the original data. The author was also reflective throughout the process, by rereading the original texts, and reviewing the synthesis findings, which was further supported by the author’s university supervisors.

### 5.6 Recommendations for Future Research

This review has emphasised the dearth of recent qualitative research available, which explores the experiences of school nurses in relation to managing mental health problems in children and adolescents. This is particularly evident within the context of UK school nursing practice. Further to this, the included studies contained small sample sizes, and the largest UK study (Wilson et al., 2008) was based on data collected in 2002. Therefore, it is recommended that further research is done in the UK to explore their experiences in the current healthcare climate.

Demographic characteristics of the studies represented a large proportion of female school nurses, with only 3 male school nurses being represented in one study (Wilson et al., 2008). Whilst this may reflect the female dominated nature of the school nursing profession, it would be interesting to explore male school nurses’ experiences of managing mental health problems in children and adolescents, in comparison to the females.

Although the geographical demographics were not reported on in all the individual studies, one study in this synthesis highlighted the affects that geographical location can have on the services available to children and adolescents with mental health problems. Exploring the differences between the mental health services available to children and adolescents in rural and urban areas, and the affects that these have on their use of the school nursing service, would be useful as this could shape the services offered by school nurses in different localities.

The lack of training and education in mental health was a key finding in this review. It would be beneficial to explore in more depth, what training is currently made available to school nurses in the UK. More specifically, research into what mental health training is provided during the School nursing training programmes in UK universities, as well as training which is provided to qualified school nurses.

Only one research paper in this review reported on the experiences of school nurses in relation to the delivery of a universal preventative mental health programme (Garmy et al., 2014). It is possible that there are more research papers available, which could be identified with more specific search terms for this topic. Therefore, another review would be beneficial to explore what mental health preventative programmes are currently being used in schools, with a view of potentially implementing a preventative programme in UK schools.

### 5.7 Recommendations for Practice Development

This review highlighted several factors which limit the school nurses’ practice in supporting children and adolescents with mental health problems. This has raised several areas for potentially developing and improving school nursing practice.

#### 5.7.1 Improving school nurses’ visibility

The success of the school nursing service offered to children and adolescents, was found in this review to be dependent on how visible school nurses are to children, adolescents, parents, carers and teachers in schools. It is therefore recommended that school nurses view this as an essential part of their practice and are proactive in promoting their services and making themselves known within the school environment. This synthesis has highlighted a number of ways in which school nurses can improve their visibility, through speaking in assemblies in schools, promoting the school nursing services to children, parents, carers and schools with posters, walking around at lunchtimes and at the end of the school day; holding drop-in clinics in well-located areas of schools, being involved with health promotional activities and lessons in schools, as well as having a good relationship with school staff.

#### 5.7.2 Training and Education for School Nurses

The lack of mental health training and education available to school nurses, was a key finding in this review and it resonated with the experiences of the author during her school nursing training. Therefore, a recommendation that there should be a greater emphasis on mental health training during the Specialist Community Public Health degree courses for school nurses in UK Universities. Further to this, regular mental health training should be offered to school nurses, which covers a wide range of theoretic and practical development, which school nurses can apply to their practice. These training sessions should be delivered by professionals who work within child and adolescent mental health services (Garmy et al., 2014; Membridge et al., 2015; Sherwin, 2016; Spratt et al., 2010).

#### 5.7.3 Improving interprofessional relationships

Working with multiple professionals and agencies is crucial to delivering effective mental health care to children and adolescents (Dina and Pajalic, 2014; Jönsson et al., 2017; Membridge et al., 2015; Skundberg-Kletthagen and Moen, 2017; Spratt et al., 2010). However, this synthesis identified that school nurses often felt undervalued by other professionals due to their poor understanding of the school nursing role (Membridge et al., 2015; O’Kane et al., 2012; Sherwin, 2016). Therefore, school nurses must be proactive in promoting their role and developing good relationships with them, to facilitate the services they can offer. This synthesis identified that this was achieved by some school nurses by developing good relationships with school staff members, particularly school health professionals and utilising support services such as mental health consultation.

It is also advised that the school nurses role in mental health care of children and adolescents is explicitly mentioned in UK child and adolescent mental health policies and strategies, such as ‘The Five Year Forward View for Mental Health’ (Mental Health Task Force, 2016), to help inform mental health professionals of how school nurses have a central role in child and adolescent mental health care. This will help for better role recognition amongst professionals, increasing the awareness of the school nurse and improving working relationships.

### 5.8 Conclusion

In conclusion, this review has undertaken an integrative synthesis of evidence exploring school nurses’ experiences in their management of children and adolescents with mental health problems. Though there are identified limitations to this synthesis, it has highlighted a number of factors which facilitate and limit the area of school nursing practice and helped to address other areas for further research and practice development.

The thematic synthesis enabled analytical themes to be deduced from the collective body of research, highlighting that the school nursing role is central in mental health care in children and adolescents. However, whilst management of mental health is only one aspect of the school nursing role (DH, 2009; DH and PHE, 2014), the experiences of mental health problem management are complex, including their individual experiences, the experiences of the organisational aspects of the school nursing service, and the importance of interprofessional working in facilitating their role.

This is the first review to date, that has explored the experiences of school nurses in relation to their management of mental health problems with both children and adolescents. And whilst there were a small number of recent primary studies available, this review has produced a large body of findings which will add to the existing knowledge on this research topic.

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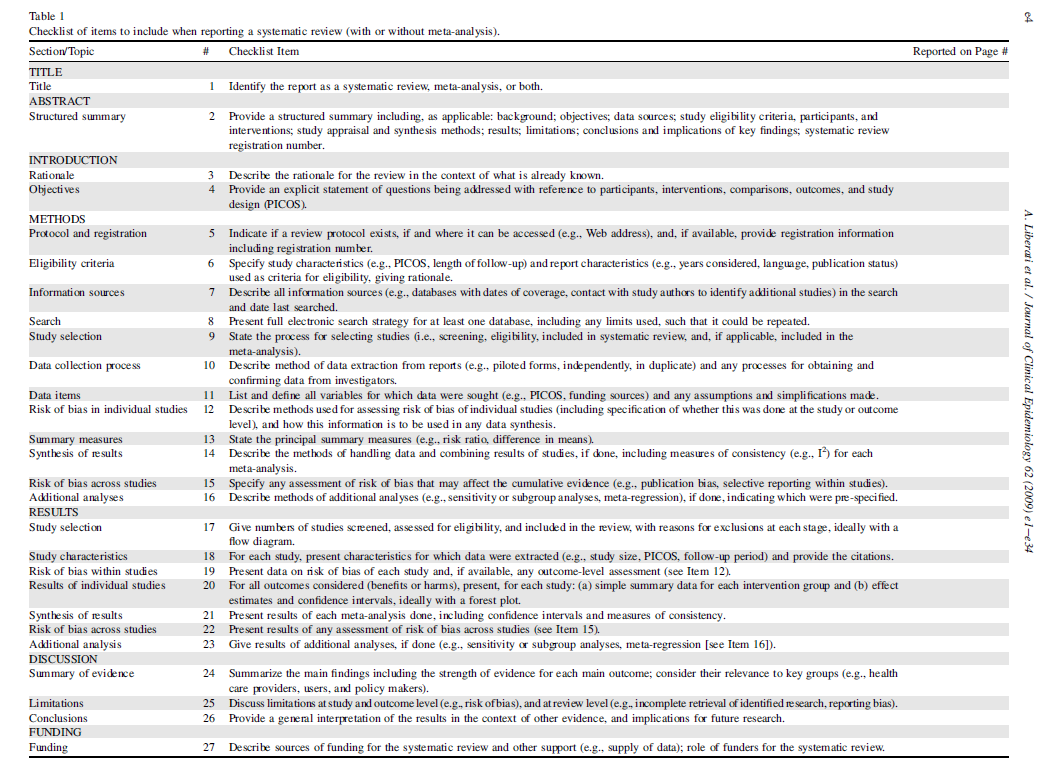
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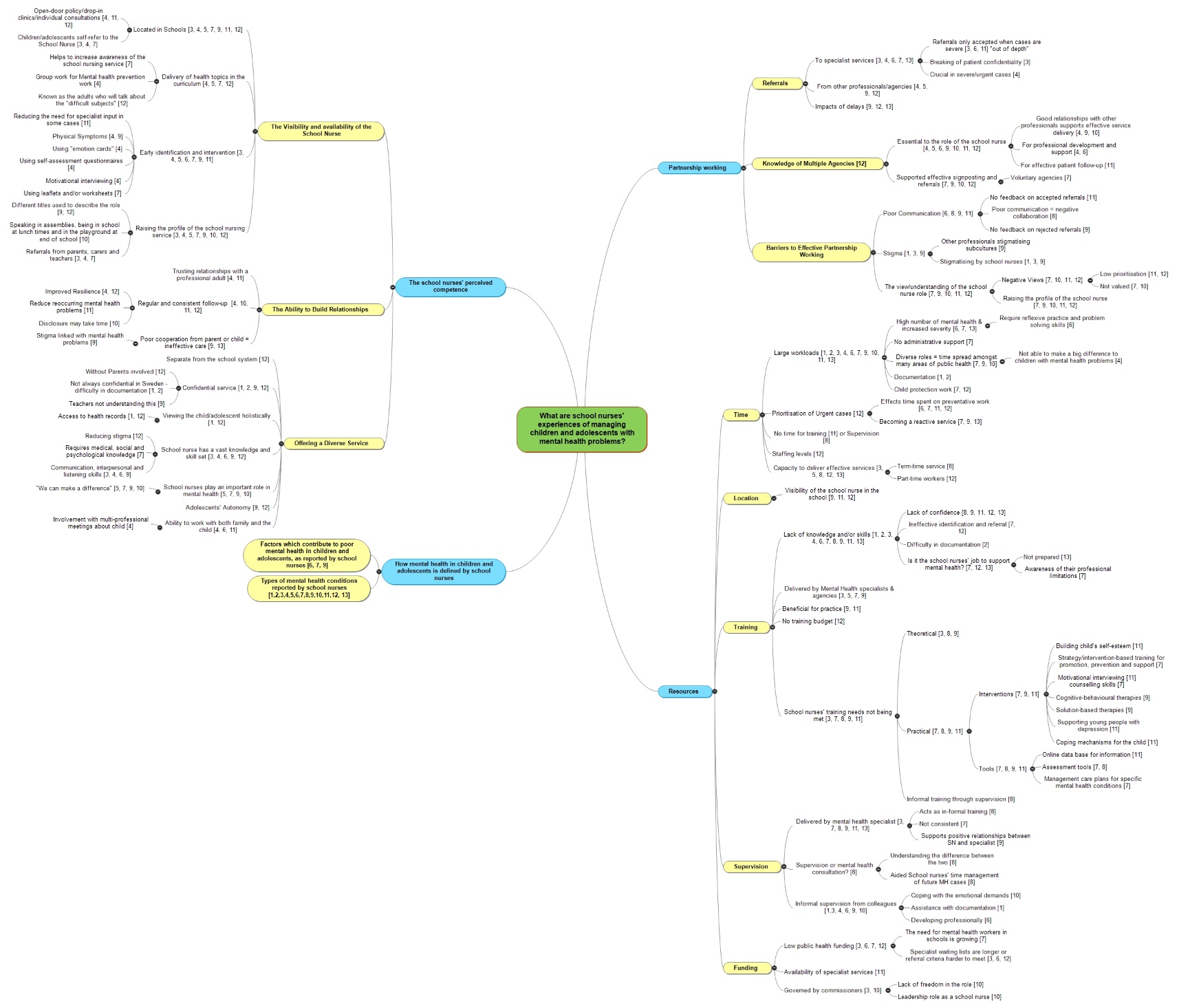
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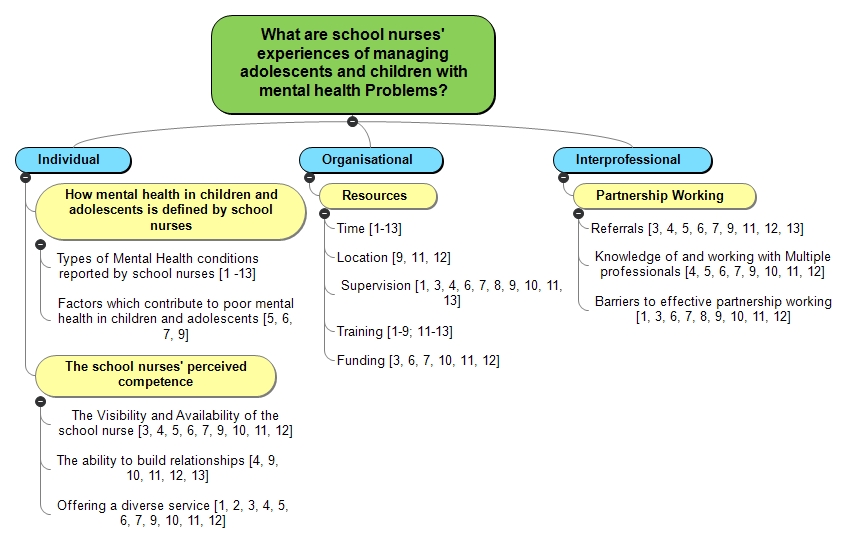
Appendix 1 – PRISMA Checklist **(Liberati et al., 2009)**

## Appendix 2 – Mind Maps

MindMap Stage 1



MindMap Stage 2



MindMap Stage 3

## Appendix 3 – Examples of Search Strings

**CINAHL Search String**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Query | Limiters/Expanders | Last Run Via | Results |
| S29 | S12 AND S21 AND S28 | Limiters - Published Date: 20080101-; English Language; Human  Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 294 |
| S28 | S22 OR S23 OR S24 OR S25 OR S26 OR S27 | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 376,967 |
| S27 | TI Opinion\* OR AB Opinion\* | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 18,660 |
| S26 | TI View\* OR AB View\* | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 68,765 |
| S25 | TI Perspective\* OR AB Perspective\* | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 74,046 |
| S24 | TI Experience\* OR AB Experience\* | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 212,855 |
| S23 | TI Attitude\* OR AB Attitude\* | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 44,065 |
| S22 | (MH "Nurse Attitudes") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 23,270 |
| S21 | S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 91,339 |
| S20 | TI ( (adolescent OR Teen OR Child\*) N5 ("Mental Health" OR "Mental Illness\*" OR "Mental Disorder\*") ) OR AB ( (adolescent OR Teen OR Child\*) N5 ("Mental Health" OR "Mental Illness\*" OR "Mental Disorder\*") ) | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 5,123 |
| S19 | TI ( "Adolescen\* AND Mental Health" ) OR AB ( "Adolescen\* AND Mental Health" ) | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 125 |
| S18 | TI "Mental Disorder\*" OR AB "Mental Disorder\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 5,970 |
| S17 | TI "Mental Illness\*" OR AB "Mental Illness\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 11,624 |
| S16 | TI "Mental Health" OR AB "Mental Health" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 56,213 |
| S15 | (MH "Mental Disorders Diagnosed in Childhood") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 827 |
| S14 | (MH "Mental Disorders") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 32,669 |
| S13 | (MH "Mental Health") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 17,634 |
| S12 | S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 88,306 |
| S11 | (MH "Nursing Role") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 43,321 |
| S10 | TI "Public Health Nurs\*" OR AB "Public Health Nurs\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 2,422 |
| S9 | TI "School Nurs\*" OR AB "School Nurs\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 4,158 |
| S8 | TI "Community Nurs\*" OR AB "Community Nurs\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 4,032 |
| S7 | TI "Public Health Practitioner\*" OR AB "Public Health Practitioner\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 465 |
| S6 | TI "Specialist Public Health Practitioner\*" OR AB "Specialist Public Health Practitioner\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 2 |
| S5 | TI "Community Health Nurs\*" OR AB "Community Health Nurs\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 1,229 |
| S4 | TI "Public Health Nurs\*" OR AB "Public Health Nurs\*" | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 2,422 |
| S3 | (MH "School Health Nursing") OR (MH "Schools, Nursing") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 17,031 |
| S2 | (MH "School Health Services") OR (MH "School Health") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 8,363 |
| S1 | (MH "Community Health Nursing") | Search modes - Boolean/Phrase | Interface - EBSCOhost Research Databases  Search Screen - Advanced Search  Database - CINAHL with Full Text | 22,905 |

**Embase Search String**

|  |  |  |
| --- | --- | --- |
| **#** | **Query** | **Results** |
| #51 | #40 OR #50 AND [English]/lim AND [humans]/lim AND [embase]/lim AND [2008-2018]/py | 713 |
| #50 | #12 AND #39 AND #49 | 2,512 |
| #49 | #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 | 3,874,986 |
| #48 | child\*:ab,ti | 1,577,942 |
| #47 | teen\*:ab,ti | 35,645 |
| #46 | adolescen\*:ab,ti | 303,678 |
| #45 | (young NEAR/1 adult):ab,ti | 32,317 |
| #44 | (young NEAR/1 person):ab,ti | 1,851 |
| #43 | 'young adult'/exp | 221,545 |
| #42 | 'child'/exp | 2,563,680 |
| #41 | 'adolescent'/exp | 1,480,388 |
| #40 | #12 AND #31 AND #39 | 2,386 |
| #39 | #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 | 2,640,196 |
| #38 | opinion\*:ab,ti | 114,412 |
| #37 | perspective\*:ab,ti | 307,911 |
| #36 | experience\*:ab,ti | 1,261,915 |
| #35 | view\*:ab,ti | 520,445 |
| #34 | attitude\*:ab,ti | 157,559 |
| #33 | 'perspective'/exp | 38 |
| #32 | 'attitude'/exp | 665,224 |
| #31 | #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 | 4,514,670 |
| #30 | (adolescent NEAR/5 mental NEAR/1 disorder):ab,ti | 21 |
| #29 | (teen NEAR/5 mental NEAR/1 disorder):ab,ti | 0 |
| #28 | (child\* NEAR/5 mental NEAR/1 disorder):ab,ti | 212 |
| #27 | (adolescent NEAR/5 mental NEAR/1 illness):ab,ti | 51 |
| #26 | (teen NEAR/5 mental NEAR/1 illness):ab,ti | 3 |
| #25 | (child\* NEAR/5 mental NEAR/1 illness):ab,ti | 646 |
| #24 | (child\* NEAR/5 mental NEAR/1 health):ab,ti | 9,606 |
| #23 | (teen NEAR/5 mental NEAR/1 health):ab,ti | 23 |
| #22 | (adolescent NEAR/5 mental NEAR/1 health):ab,ti | 3,608 |
| #21 | (adolescent NEAR/1 mental NEAR/1 health):ab,ti | 2,963 |
| #20 | (mental NEAR/1 disorder):ab,ti | 9,652 |
| #19 | (mental NEAR/1 illness):ab,ti | 29,790 |
| #18 | (mental NEAR/1 health):ab,ti | 142,137 |
| #17 | 'mental function assessment'/exp | 78,179 |
| #16 | 'mental disease assessment'/exp | 134,270 |
| #15 | 'mental function'/exp | 3,192,252 |
| #14 | 'mental disease'/exp | 2,008,850 |
| #13 | 'mental health'/exp | 126,271 |
| #12 | #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 | 20,646 |
| #11 | 'nursing role'/exp | 413 |
| #10 | (community NEAR/1 nurs\*):ab,ti | 3,857 |
| #9 | (public NEAR/1 health NEAR/1 practitioner\*):ab,ti | 1,114 |
| #8 | (school NEAR/1 health NEAR/1 service\*):ab,ti | 770 |
| #7 | (school NEAR/1 health NEAR/1 nurs\*):ab,ti | 125 |
| #6 | (public NEAR/1 health NEAR/1 nurs\*):ab,ti | 5,032 |
| #5 | (specialist NEAR/1 public NEAR/1 health NEAR/1 nurs\*):ab,ti | 1 |
| #4 | (public NEAR/1 health NEAR/1 nurs\*):ab,ti | 5,032 |
| #3 | (community NEAR/1 health NEAR/1 nurs\*):ab,ti | 1,418 |
| #2 | 'school health nursing'/exp | 5,214 |
| #1 | (school NEAR/1 nurs\*):ti,ab | 6,090 |

## Appendix 4 – Inclusion and Exclusion Research Table

|  |  |  |
| --- | --- | --- |
| **CINAHL** | | |
| **Name of Study** | **Included/Excluded** | **Justification** |
| Haddad,M., Butler,G.S. and Tylee,A. (2010) 'School nurses' involvement, attitudes and training needs for mental health work: a UK-wide cross-sectional study', *Journal of advanced nursing,* 66 (11), pp. 2471. | Excluded | Quantitative study |
| Membride,H., Mcfadyen,J. and Atkinson,J. (2015) 'The challenge of meeting children's mental health needs', *British Journal of School Nursing,* 10 (1), pp. 19-25. | Included |  |
| Mfidi,F.H. (2017) 'Mental health issues of school-going adolescents in high schools in the Eastern Cape, South Africa', *Africa Journal of Nursing & Midwifery,* 19 (3), pp. 1-13. | Excluded | Location not a westernised country. |
| O'Kane,D., Barkway,P. and Muir-Cochrane, E. (2012) 'Understanding child mental health consultation from the perspective of primary health care professionals', *Neonatal, Paediatric & Child Health Nursing,* 15 (3), pp. 2-9. | Included |  |
| Powers,J.D., Bower,H.A., Webber,K.C. and Martinson,N. (2010) 'Promoting School-Based Mental Health: Perspectives From School Practitioners', *Social Work in Mental Health,* 9 (1), pp. 22-36. | Excluded | Participants were not School Nurses. |
| Pryjmachuk,S., Graham,T., Haddad,M. and Tylee,A. (2012) 'School nurses’ perspectives on managing mental health problems in children and young people', *Journal of Clinical Nursing,* 21 (5), pp. 850-859. | Included |  |
| Ravenna,J. & Cleaver,K. (2016) 'School Nurses’ Experiences of Managing Young People With Mental Health Problems', *The Journal of School Nursing,* 32 (1), pp. 58-70 | Excluded | A scoping review - Not primary research. |
| Sherwin,S. (2016) 'Performing school nursing: Narratives of providing support to children and young people', *Community Practitioner,* 89 (4), pp. 30-34. | Included |  |
| Skundberg‐Kletthagen,H. & Moen,Ø.L. (2017) 'Mental health work in school health services and school nurses’ involvement and attitudes, in a Norwegian context', Journal of Clinical Nursing, 26 (23-24), pp. 5044-5051. | Included |  |
|  |  |  |
| **Medline** | | |
| **Name of Study** | **Included/Excluded** | **Justification** |
| Atkins, J. (2017) 'Mental Health First Aid: A Useful Tool for School Nurses', NASN School Nurse, 32 (6), pp. 361-363. | Excluded | Journal article - Not Primary Research. |
| Borg, A., Salmelin, R., Kaukonen, P., Joukamaa,M. and Tamminen,T. (2014) 'Feasibility of the Strengths and Difficulties Questionnaire in assessing children's mental health in primary care: Finnish parents’, teachers’ and public health nurses’ experiences with the SDQ', Journal of Child & Adolescent Mental Health, 26 (3), pp. 229-238. | Excluded | Quantitative study |
| Cooke, E. and James, V. (eds.) (2009) ‘A self- harm training needs assessment of school nurses’, Journal of Child Health Care: For Professionals Working With Children In The Hospital And Community, 13 (3), pp. 260-274. | Included |  |
| Clausson, E.K., Köhler, L. and Berg, A. (2008) 'Ethical Challenges for School Nurses in Documenting Schoolchildren's Health', *Nursing ethics,* 15 (1), pp. 40-51. | Included |  |
| Dina, F. & Pajalic, Z. (2014) 'How school nurses experience their work with schoolchildren who have mental illness - a qualitative study in a Swedish context', *Global journal of health science,* 6 (4), pp. 1-8. | Included |  |
| Izmirian, S. & Nakamura, B. (2016) 'Knowledge, Attitudes, Social Desirability, and Organizational Characteristics in Youth Mental Health Services', *The Journal of Behavioral Health Services & Research,* 43 (4), pp. 630-647. | Excluded | Participants were not School Nurses. |
|  |  |  |
| **PsychINFO** | | |
| **Name of Study** | **Included/Excluded** | **Justification** |
| O'Kane, D. (2011) 'A phenomenological study of child and adolescent mental health consultation in primary care', *Journal of psychiatric and mental health nursing,* 18 (2), pp. 185. | Excluded | Summary of full research paper. Full Research Paper found in CINAHL search and included in this review |
| Stephan, S.H. & Connors, E.H. (2013) 'School nurses' perceived prevalence and competence to address student mental health problems', *Advances in School Mental Health Promotion,* 6 (3), pp. 174-188. | Excluded | Quantitative study |
|  |  |  |
| **Embase** | | |
| **Name of Study** | **Included/Excluded** | **Justification** |
| Borg, A., Kaukonen, P., Salmelin, R., Miettinen, S. and Tamminen, T. (2011) 14th International Congress of ESCAP European Society for Child and Adolescent Psychiatry. Helsinki, Finland, 2011-06-11 to 2011-06-15. Finland: European Child and Adolescent Psychiatry. | Excluded | Abstract from conference. Full article not available. |
|  |  |  |
| **Articles found through snowballing of the above articles' Reference Lists** | | |
| Allison, V.L., Nativio, D.G., Mitchell, A.M., Ren, D. and Yuhasz, J. (2014) 'Identifying Symptoms of Depression and Anxiety in Students in the School Setting', *The Journal of School Nursing,* 30 (3), pp. 165-172. | Excluded | Quantitative Data |
| Bartlett, H. (2015) 'Can school nurses identify mental health needs early and provide effective advice and support?', *British Journal of School Nursing,* 10 (3), pp. 126-134. | Excluded | Systematic review - Not Primary Research. |
| Bohnenkamp, J.H., Stephan, S.H. and Bobo,N. (2015) 'Supporting student mental health: the role of School Nurse in Coordinated school mental health care', *Psychology in the Schools,* 52 (7), pp. 714-727. | Excluded | Quantitative Data |
| Bringewatt, E.H. & Gershoff, E.T. (2010) 'Falling through the cracks: Gaps and barriers in the mental health system for America's disadvantaged children', *Children and Youth Services Review,* 32 (10), pp. 1291-1299. | Excluded | Journal article - Not Primary Research. |
| Clausson, E.K., Berg, A. and Janlöv, A. (2015) 'Challenges of Documenting Schoolchildren’s Psychosocial Health', *The Journal of School Nursing,* 31 (3), pp. 205-211. | Included |  |
| Eapen, V. & Jairam, R. (2009) 'Integration of child mental health services to primary care: challenges and opportunities', *Mental health in family medicine,* 6 (1), pp. 43. | Excluded | Journal article - Not Primary Research. |
| Garmy, P., Berg, A. and Clausson, E.K. (2014) 'Supporting positive mental health development in adolescents with a group cognitive intervention', *British Journal of School Nursing,* 9 (1), pp. 24-29. | Included |  |
| Hackney, S. (2009) 'Self-harm in young people: A public health issue', *British Journal of School Nursing,* 4 (1), pp. 34-40 | Excluded | Journal article - Not Primary Research. |
| Heflinger, C. & Hinshaw, S. (2010) 'Stigma in Child and Adolescent Mental Health Services Research: Understanding Professional and Institutional Stigmatization of Youth with Mental Health Problems and their Families', Administration and Policy in Mental Health and Mental Health Services Research, 37 (1), pp. 61-70. | Excluded | Journal article - Not Primary Research. |
| Jönsson, J., Maltestam, M., Bengtsson Tops, A. and Garmy, P. (2017) 'School Nurses' Experiences Working With Students With Mental Health Problems: A Qualitative Study', *The Journal of school nursing : the official publication of the National Association of School Nurses,* , doi:10.1177/1059840517744019. | Included |  |
| Martin, A., Fishman, R., Baxter, L. and Ford, T. (2011) 'Practitioners' attitudes towards the use of standardized diagnostic assessment in routine practice: a qualitative study in two child and adolescent mental health services', *Clinical child psychology and psychiatry,* 16 (3), pp. 407 | Excluded | Participants were not School Nurses. |
| Moen, Ø.L. & Skundberg-Kletthagen, H. (2017) 'Public health nurses’ experience, involvement and attitude concerning mental health issues in a school setting', *Nordic Journal of Nursing Research, 0(0)*, pp. 1-7. | Excluded | Quantitative data |
| Platt, L.M. (2014) 'Identifying Students at Risk for Mental Health Problems', *NASN School Nurse,* 29 (6), pp. 299-302. | Excluded | Journal article - Not Primary Research. |
| Spratt, J., Philip, K., Shucksmith, J., Kiger, A. and Gair,D. (2010) '‘We are the ones that talk about difficult subjects’: nurses in schools working to support young people’s mental health', *Pastoral Care in Education,* 28 (2), pp. 131-144. | Included |  |
| Stevenson, B.A. (2010) 'Evolving roles for school nurses: addressing mental health and psychiatric concerns of students', NASN school nurse (Print), 25 (1), pp. 30-33. | Excluded | Journal article - Not Primary Research. |
| Wilson, P., Furnivall, J., Barbour, R.S., Connelly,G., Bryce,G.*, et al* (2008) 'The work of health visitors and school nurses with children with psychological and behavioural problems', *Journal of advanced nursing,* 61 (4), pp. 445-455. | Included |  |

## Appendix 5 – Examples of completed Data Extraction Tools (Qualitative and Mixed-methods)

|  |  |
| --- | --- |
| **BACKGROUND INFORMATION** | |
| Reviewer: Julia Simpkin | |
| Reference no: 1 | |
| Title: Challenges of documenting schoolchildren’s Psychosocial Health: A Qualitative study | |
| Author(s): Clausson, E.K, Berg, A and Janlöv, A-C. | |
| Year: 2015 | |
| Journal: The Journal of School Nursing | |
| Volume: 31 | |
| Issue: 3 | |
| Pages: 205-211 | |
| **STUDY DESIGN** | |
| Aim(s) of study: To explore school nurses’ experience of challenges in relation to documenting schoolchildren’s psychosocial health. | |
| Setting | Not specified |
| Country | Sweden |
| Study design | Emergent, qualitative design using focus groups to explore the experiences, wishes and concerns of the participants in relation to the topic. |
| Sampling procedure | N=33 school nurses recruited by their head of school nursing. They made up n=6 focus groups (3/3/6/5/8/8) which represented 4 municipalities in Sweden. |
| Inclusion criteria | * Must work as a school nurse * Must provide written consent to participate |
| Exclusion criteria | * Not able to meet the criteria above * 0Not specified in the report |
| Data collection methods | Focus groups lasting approx. 1.5 hours. They were audiotaped and transcribed verbatim by one of the authors. |
| Data analysis approach/ procedure | * Qualitative content analysis * Transcripts were read by each of the authors at each of the 3 stages (see below) * Texts from the 3 stages were combined, read and divided into units of meaning, then coded. * The identified themes and subthemes were discussed between the authors until they agreed. |
| Time point of data collection | Over a 6 year period (2006 – 2012)– justified by a new documentation system being released in 2009.  Stage 1 – 3 focus groups in 2006  Stage 2 – 1 focus group in 2008  Stage 3 – 2 focus groups in 2012 |

|  |  |
| --- | --- |
| **PARTICIPANTS** |  |
| Total no. participants | N=33 School nurse participants in |
| Age range | Mean age in years All 56 years OR Intervention Group 55.1 |
| Females n | All participants 33/33 |
| Males n | None |
| Median years’ Experience as a school nurse | 7 (1-26) |
| Other demographic details (e.g. employment status, location) – please include data from tables/figures | Median age of participants = 52 years old.  Median years of experience as a school nurse = 7 years  Each participant was either specialised in district nursing or paediatric nursing. Worked full time.  Each participant covered approx. 800 students in each service. |
| **FINDINGS OF INTEREST** | **(please include data)** |
| **Copy all relevant text verbatim (identifying themes/subthemes in bold)**  **Summarise areas of findings which you consider irrelevant and explain why (identifying themes/subthemes in bold)** | **Main Themes identified**   1. **Importance of documentation** 2. **Uncertainty of their abilities** 3. **School nurses were unable to document their feelings of intuition or suspicions** 4. **Stigma** 5. **Fears surrounding incorrect documentation** 6. **Clinical supervision (in multiple forms) was seen as useful for school nurses.**   **Having to do one’s duty and being afraid to do wrong**  This was identified as the main theme of the data from the authors and had 3 sub-themes within it.  The **importance of documentation** was highlighted by the participants, stating that it was an essential part of their role and had many benefits to their practice.  *“It is very important - it is part of our profession to document everything.”*  *“I document every single consultation because this makes it possible for me to recognise any changes since our last meeting.”*  This showed the importance of documentation for the benefit of following up with a client – being able to recognise any changes or developments to the child’s health. But also, because it would be difficult to remember every consultation with each child (Possibly referring to School Nurses’ **large caseloads**). It also benefits other professionals who may be involved with that child, allowing safe **sharing of information.**  *“This is important – the content of the record can help others who must deal with it or/and also provide support for one’s own memory…”*  **Sub-theme – ‘Uncertainty related to the nurse’s own ability’**  School nurses expressed concerns that they were **unable to document their feelings of intuition or suspicions** that something was wrong with a child when they showed signs of mental illness. It was more acceptable to document factual information that could be seen or assessed.  While it was discussed that mental health problems were often clearly displayed by children, it was difficult verbalise or write the mental health issues. This was despite school nurses views on the importance to document information from consultation for the benefit of follow up and recognising any changes. Are changes to intuition or suspicions not part of this?  **Sub-theme – Concerns related to future consequences**  Fear of **stigmatising** a child in the future. This fear was mainly described when referring to a family issues – such as domestic violence or child. Both issues that were found particularly hard to document.  *“When the children have seen a parent abuse the other parents – that sort of thing is very sensitive and perhaps they have a number of siblings in school and so you will meet the parents in the second case, then it is very difficult!”*  Misinterpretation was feared, but also making mistakes or phrasing something wrong. This was due to the fear of the possible consequence as a professional of documenting something incorrectly, and the fear of this **incorrect documentation stigmatizing the child or family.**  The author discusses that in Sweden, parents can request to read their child’s health records. So a lot of the fear discussed, were of parents seeing the school nurses’ documentation. This raised concerns, for documenting intuitive feelings, professional judgements, but also confidentiality. **This is not comparative to health record systems in the UK.**  During the data collection period, documentation processes changed from paper-handwritten records, to electronic records. This was seen as a time-consuming process, however it was described as being more “definitive”.  *“It takes longer with the data records to do it, and somehow it feels a bit more definitive than when you ‘just’ wrote the paper records”*  **Sub-theme – Strategies to handle the documentation**  **Time** was highlighted as an issue surrounding documenting mental health. School nurses felt that they were taking more time to write them to ensure they documented using the correct terminology and free from their own views.  *“I’m writing more and more about mental health, but it takes time for me to find the right words…so you think more than once before you sign the note; it makes it quite clear”*  It was noted that **school nurses found support from other professionals useful**, to assist them in understanding, making decisions and to developing their own skills. In reference to documentation, assisting them in knowing what to focus on in their documentation.  *“ You can call the Social Welfare Committee for advice, support and to ventilate a particular case; one does not have to say who it is but you can consult them and discuss whether there’s something you should go ahead with”* |
| **Key conclusions as reported by authors:**   * School nurses find documentation of children’s mental health issues difficult, although their (documentation) importance is recognised. Fear surround the consequences of incorrect documentation or the documentation of sensitive information * Uncertainty of their abilities, hindered school nurses in being able to understand and verbalise the mental health concerns they were seeing in children. This directly affected their abilities to effective document the health care information. * Stigmatisation of the child or family in the future was also something that school nurses feared, and therefore, created reluctance to document particularly sensitive information. * School nurses were afraid to document their intuitive feelings however, the authors conclude that this is an essential aspect of good, reliable documentation. | |
| **Key issues with/limitations of the study (include those reported by the authors and those identified by us, the reviewers)**   * Long data collection period (5 years). However, this was also discussed as a possible strength due to the data results being consistent over time, demonstrating that there was little change to the professional challenges of documenting child psychosocial health. * The authors all have experience of working as a nurse, which was seen as both a benefit (participants felt at ease and happy to discuss their experiences openly) and as a limitation (could have created bias, as the authors understanding of the profession could have lead to them dismissing information which they viewed as ‘the norm’). * International transferability of the data is questioned due to the differences in documentation systems used in other countries. (However, it is noted that the ethical dilemmas of documenting children’s psychosocial health could be a worldwide issue). | |
| **Key recommendations reported by authors in terms of:**   * **research** * **policy** * **practice** * **Research –** Further research to investigate the possible benefits of a VIPS model being used to structure documentation. Further research into the international context of the challenges of documenting children’s psychosocial health. * **Practice –** Regular clinical supervision from other professionals and colleagues was advised as an important aspect of practice to support school nurses. To help build confidence in documenting feelings of intuition, professional competence and ethical competence. | |

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| **QUALITY APPRAISAL – Qualitative Study** | | | | |
| **Adapted from CASP (2018) and MMAT (2011)** | | **Additional comments** | | |
| ***Research design*** |  |  | | |
| Was the aim clearly presented? | **Yes**  No Unclear |  | | |
| Was the rationale clearly presented? | **Yes**  No Unclear |  | | |
| Was a qualitative methodology appropriate? | **Yes**  No Unclear |  | | |
| Was the qualitative design apparent, and consistent with research intent? | **Yes** No Unclear |  | | |
| Was the data collection strategy apparent and appropriate to enable school nurses to express their experiences of managing child and/or young people with mental health concerns? | **Yes**  No Unclear |  | | |
| Was there appropriate consideration given to how the findings relate to the researchers influence? | **Yes**  No Unclear | Both strengths and limitations discussed. | | |
| ***Sampling strategy*** |  |  | | |
| Was the sample and sampling method sufficient? | **Yes**  No Unclear |  | | |
| |  |  |  | | --- | --- | --- | | Study aim: narrow or broad? (a narrow aim would require a smaller sample) | Narrow Broad Unclear |  | | **Narrow** Broad Unclear |  | | |
| Sample specificity: dense or sparse? (specificity = participants who belong to the specified target group) (If dense, it would require smaller sample size) | **Dense** Sparse Unclear |  | | |
| ***Analysis*** |  |  | | |
| Was the analytic approach appropriate? | **Yes**  No Unclear |  | | |
| Were contradictory findings discussed?  What were they? | **Yes**  No Unclear |  | | |
| Was rigor of data analysis evident member checking and/or independent analysis of data by more than one researcher? | **Yes** No Unclear | All authors read the focus group transcripts individually at each stage of the data collection. | | |
| ***Presentation and interpretation of findings*** |  |  | | |
| Was the context described and taken account of in interpretation? | **Yes**  No Unclear | All of the authors have experience in the nursing context – this was discussed clearly, with details of the possible benefits and limitations to this. | | |
| Were appropriate quotes used in the presentation of findings and discussion of findings? | **Yes** No Unclear |  | | |
| Was the interpretation of findings justified by the data that are presented? | **Yes** No Unclear |  | | |
| ***Reflexivity*** |  |  | | |
| Was researcher reflexivity demonstrated? | **Yes** No Unclear |  | | |
| ***Ethical considerations*** |  |  | | |
| Was consideration of ethical sensitivity demonstrated? (e.g in relation to participants) | Yes No **Unclear** | Conducted in accordance with research legislation. Participants had to provide informed written consent to take part in the study. Confidentiality withheld and participants were able to withdraw at any stage of the study. | | |
| ***Relevance and transferability*** |  |  | | |
| Is relevance and transferability evident generally about the study? | **Yes**  No Unclear |  | | |
| **QUALITY SUMMARY SCORE IN LIGHT OF THE APPRAISAL ABOVE** | **(please select one and outline your reasons why)** | | |  |
| A - No or few flaws: The study credibility, transferability, dependability, and confirmability is high | **A**   * **Authors all have nursing experience. Could have created a bias-risk as they may have dismissed data as being ‘neutral’.** * **Long data collection period** * **International transferability is questioned.** | | | |
| B - Some flaws, unlikely to affect the credibility, transferability, dependability, and/or confirmability of the study |  | | | |
| C - Some flaws, which may affect the credibility, transferability, dependability, and/or confirmability of the study |  | |  | |
| D - Significant flaws, which are very likely to affect the credibility, transferability, dependability, and/or confirmability of the study |  | |  | |

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| **BACKGROUND INFORMATION** | |
| Reviewer: Julia Simpkin | |
| Reference no: 3 | |
| Title: A self-harm training needs assessment of school nurses | |
| Author(s): Cooke, E. and James, V. | |
| Year: 2009 | |
| Journal: Journal of Child Health Care | |
| Volume: 13 | |
| Issue: 3 | |
| Pages: 260-274 | |
| **STUDY DESIGN** | |
| Aim(s) of study: To identify, analyse and discuss school nurses’ self-harm training needs using a training needs assessment. | |
| Setting | (n=1) Primary care health trust. Interviews took place at participants work place. |
| Country | UK |
| Study design | Mixed-method design.  A Phenomenological approach was taken to the interviews |
| Sampling procedure | A purposive convenience sample of (n=9) school nurses. Questionnaire and interview consent forms were distributed to school nurses by their head of school nursing. |
| Inclusion criteria | * School nurse * Working in secondary schools * Written, informed consent given |
| Exclusion criteria | * unable to meet the above criteria * Not specified in the report. |
| Data collection methods | Questionnaires featuring open and closed-ended questions, completed by all participants.  Interviews with (n=4) participants; these were semi-structured, focused interviews, which were tape-recorded. |
| Data analysis approach/ procedure | * Descriptive questionnaire analysis – descriptive statistics were calculated for each of the closed-ended questions. * Thematic analysis of open-ended questions was undertaken to find common themes. * Interviews were transcribed. * Transcriptions were read, significant statements were extracted, and meanings were used to form common themes. |
| Time point of data collection | Not specified. |

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| **PARTICIPANTS** |  | | | | |
| Total no. participants | N=9 School Nurses. | | | | |
| Age range | Not Specified | | | | |
| Females n | Not Specified | | | | |
| Males n | Not Specified | | | | |
| Median years’ Experience as a school nurse | Not specified. Range =1-20 years | | | | |
| Other demographic details (e.g. employment status, location) – please include data from tables/figures | Length of time as a Qualified Nurse/School Nurse (respectively)  <1 year n=0/n=1  1-5 years n=1/n=2  6-10 years n=0/n=5  11-20 years n=2/n=1  >20 years n=6/n=0 | | | | |
| **FINDINGS OF INTEREST** | **(please include data)** | | | | |
| **Copy all relevant text verbatim (identifying themes/subthemes in bold)**  **Summarise areas of findings which you consider irrelevant and explain why (identifying themes/subthemes in bold)** | **Main themes identified**   1. **Mental health and self-harm training were ranked ‘most needed’ by School nurses** 2. **Stigma of self-harming** 3. **Lack of understanding of the complexities of self-harm** 4. **Referrals** 5. **Limits to professional capabilities** 6. **Confidentiality** 7. **Lack of resources, including time.**   **Working as a school nurse**  Participants described their work as a school nurse in general. Most participants stated that they enjoyed the variety of their job and having to use their initiative, as well as being an independent practitioner.  *“It’s having the opportunity to use your own initiative. To be and independent practitioners.” (Participant 1)*  However, this coincided with issues raised about their roles having large caseloads and concerns about the impact of the **lack of resources.**  Many school nurses also highlighted their concerns about school nurse funding impacting on the lack of resources.  *“There’s far more we can do if we had the funding to do it.” (Participant 2)*  **Identifying self-harm**  It was raised that School Nurses are often the **first health professional** approached by students and teachers who are concerned about self-harm. One School Nurse also described being approached directed by a self-harming student.  Self-harm was described broadly by School Nurses, including cutting, scratching, overdosing and eating disorders, but also “superficial self-harm”.  *“Most of what I see… is wounding that is superficial and can be easily reversed.” (Participant 1)*  *“I think there are two groups: those who say they’re self-harming, and it’s…probably only superficial scratching or whatever, and I wonder if it’s more attention-seeking or frustration or anything else. And then you get what I call your serious self-harmers that are really abusing or hurting themselves.” (Participant 2)*  This highlighted possible **stigma** about self-harm amongst the school nurses. Also, mostly the physical aspects of self-harm were referred to by the participants, and not the complexities or mental health components of self-harm. When reflecting on their experiences of working with young people who are self-harming, they reported **frustration**, **making assumptions** and being too focused on the physical aspect of self-harming.  **Working with young people who self-harm**  The school nurses described their work with young people who self-harm as offering a counselling and referral service.  *“Just listening and trying to … help them…understand what they’re going through and to try to put some sense or meaning to it.” (participant 2)*  *“I do an assessment first. If it’s superficial or serious, find out the reason behind it. See whether I can deal with it on my own or if I need to consider referring to child protection, CAMHS or telling the parents.” (Participant 1)*  **Referrals** were another area of concern. By accessing specialist services, school nurses were concerned that the trust and **confidentiality** between the themselves and the young person could not be maintained.  *“I think the hardest thing… is the confidentiality thing… where we sort of think…this is being dealt with and we can keep this confidential, and where you think no, this child is too young, not accessing services, whatever.” (participant 4)*  School nurses also felt that the high threshold for **referrals**, which left them working with young people with mental health concerns beyond what they believed they could support.  *“It didn’t meet the threshold … it was beyond what I could do.”*  Frustration was expressed by the participants due to a **lack of time, resources** and feelings of futility.  *“I feel silly telling them alternative strategies…like to hold an ice cube. They seem futile and I feel like I lose credibility. I ask them if there is something they could do like run upstairs and beat a cushion. It seems inadequate – how could it help?” (participant 1)*  *“I’m sure if I had the support or more time, or there was more money in there to support them, they wouldn’t get to serous self-harming… so it’s frustrating, really.” (Participant 2)*  **Supervision** was highlighted as a positive support system. Supervision was received from colleagues and the specialist adolescent unit.  *“I don’t think school nurses as a… whole, are particularly well trained in self-harm … so…supervision, definitely.” (Participant 4)*  All participants expressed the desire to receive **training** on self-harm.  *“Things can get worse… if somebody’s to overdose or do something dreadful then…you’d like to think you’ve dealt with it properly.” (Participant 4)*  Suggestions for what should be included in self-harm training included practical tips, a higher level of knowledge, spending time with the Self-harm Team, and exploring different types of self-harm.  *“You need the theory and some of the evidence and things behind it. But you don’t need so much of that – you just really need to know, what can you try?” (Participant 4)* | | | | |
| **Key conclusions as reported by authors:**   * Self-harm training should be made available to School Nurses and should include both theoretical and practical aspects of supporting young people who self-harm. Training should use both reflection and experimental learning techniques. Issues surrounding confidentiality should also be included. * This study found that school nurses felt frustrated, discomfort and uncertainty when working with young people who self-harm. This lead to them identifying self-harm as a priority training need. | | | | | |
| **Key issues with/limitations of the study (include those reported by the authors and those identified by myself, the reviewer)**  **Limitations identified by the researchers**   * There may have been some participant and non-response bias. * One participant dropped out of being interviewed, reducing 5 interviews to 4. However, common themes were found within the 4 interviews, so the author states that this did not largely affect the results. * The tools used relied on self-report, which is a potential source for bias as participants are inclined to report their perceived need and not their objective need. However, the author states that this was eliminated by the use of a mixed method study, and the triangulation of the results. * Mean ranking of training priorities only represented 4 of the participants and so these findings should be taken with caution. However, findings in the qualitative data reinforce the training needs of school nurses.   **Limitations by the Reviewer.**   * Small study. | | | | | |
| **Key recommendations reported by authors in terms of:**   * **research** * **policy** * **practice** * Future research should address the preferred training and frequency of self-harm training. Future research should also explore the relationships between school nurses and specialist mental health and self-harm teams, with the aim of improving policy and practice to support young people and professionals. Tool validity and reliability could also be improved on in future research by using larger pilots of school nurses. * Recommendations for policy include the implementation of self-harm inter-agency link roles. Human resources, finance and time should also be considered as these factors directly affect school nurses’ confidence and perceptions of effectiveness, and their delivery of services to young people who self-harm. | | | | | |
| **QUALITY APPRAISAL – Mixed-Methods Study** | | | | | |
| **Adapted from CASP (2018) and MMAT (2011)** | | | **Additional comments** | | |
| ***Research design*** | |  |  | | |
| Was there a clear mixed-methods question or objective? | | **Yes**  No Unclear |  | | |
| Was the rationale clearly presented? | | **Yes**  No Unclear |  | | |
| Was a mixed-methods methodology appropriate? | | **Yes**  No Unclear |  | | |
| Was the mixed-methods design apparent, and consistent with research intent? | | **Yes** No Unclear |  | | |
| Was the data collection strategy apparent and appropriate to enable school nurse participants to express their experiences of managing children and/or young people with mental health illness? | | **Yes**  No Unclear | Descriptive statistics from quantitative data were supported by findings from the qualitative data | | |
| Was there appropriate consideration of the limitations associated with integrating qualitative and quantitative data?  What were there? | | Yes No **Unclear** | Although limitations of the study are clearly discussed, there is no direct reference to the limitations of integrating the two forms of data. | | |
| ***Sampling strategy*** | |  |  | | |
| Was the sample and sampling method sufficient to address the qualitative and quantitative aspects of the research question? | | **Yes**  No Unclear |  | | |
| |  |  |  | | --- | --- | --- | | Study aim: narrow or broad? (a narrow aim would require a smaller sample) | Narrow Broad Unclear |  | | | **Narrow** Broad Unclear |  | | |
| Sample specificity: dense or sparse? (specificity = participants who belong to the specified target group) (If dense, it would require smaller sample size) | | **Dense** Sparse Unclear |  | | |
| ***Analysis*** | |  |  | | |
| Was the analytic approach appropriate? | | **Yes**  No Unclear |  | | |
| Were deviant case/contradictory findings discussed?  What were they? | | **Yes**  No Unclear | Incomplete data was presented, and clearly cautioned. Differing views within the qualitative data was clearly discussed. | | |
| Was rigor of data analysis evident in member checking and/or independent analysis of data by more than one researcher? | | Yes No **Unclear** | Independent checking of data is not discussed. Although there was a second author. | | |
| ***Presentation and interpretation of findings*** | |  |  | | |
| Was the context described and taken account of in interpretation? | | **Yes**  No Unclear |  | | |
| Were appropriate quotes used in the presentation of findings and discussion of findings? | | **Yes** No Unclear |  | | |
| Was the interpretation of findings justified by the data that are presented? | | **Yes** No Unclear |  | | |
| ***Reflexivity*** | |  |  | | |
| Was researcher reflexivity demonstrated? | | **Yes** No Unclear | Suggested by awareness of limitations of study. | | |
| ***Ethical considerations*** | |  |  | | |
| Was consideration of ethical sensitivity demonstrated? (e.g. in relation to participants) | | **Yes** No Unclear | Ethical approval noted. Maintaining participants anonymity also noted. | | |
| ***Relevance and transferability*** | |  |  | | |
| Is relevance and transferability evident generally about the study? | | **Yes**  No Unclear |  | | |
| **QUALITY SUMMARY SCORE IN LIGHT OF THE APPRAISAL ABOVE** | | **(please select one and outline your reasons why)** | | |  |
| A - No or few flaws: The study credibility, transferability, dependability, and confirmability is high | |  | |  | |
| B - Some flaws, unlikely to affect the credibility, transferability, dependability, and/or confirmability of the study | |  | | | |
| C - Some flaws, which may affect the credibility, transferability, dependability, and/or confirmability of the study | | **C**   * **Insufficient data in one aspect of the quantitative data presentation.** * **Low response rate; although this is highlighted as being a good response rate for postal questionnaires (42.9%)** * **Small sample size could affect this study’s transferability.** | | | |
| D - Significant flaws, which are very likely to affect the credibility, transferability, dependability, and/or confirmability of the study | |  | |  | |

## Appendix 6 - Research Summary Table

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 1 | Clausson, Berg & Janlöv (2015) (Sweden) | Qualitative study, Focus groups n=6; total n=33 participants; 2006 - 2012 | Study sample represented 4 municipalities in Sweden; Details on settings not further specified | To explore the challenges experienced by school nurses in documenting school children’s psychosocial health | **A** |
| **Findings** | | | | | |
| This study found that the **documentation** of children’s mental health issues was a difficult process for school nurses, although it’s importance was recognised. Feelings of fear emerged from the data surrounding the consequences of incorrect documentation of sensitive information. School nurses expressed feelings of **uncertainty of their abilities** whensupporting children with mental health problems, which impacted negatively on their **skills** in understanding and verbalising mental health concerns, and their ability to document this type of health information. Some of the participants expressed reluctance to **document** some sensitive information due the fear that this would **stigmatise** the child or family in the future. School nurses also described their concerns with documenting their intuitive feelings and only documenting information given directly to them by the child or family. However, the authors concluded that this was an essential aspect of good, reliable documentation. **Time** was an issue that was raised by participants, as they found documenting these types of health problems were more **time** consuming as they spent more time ensuring that they used the correct terminology and that the documentation was free from their personal views. **Support** from other professionals was something that the school nurse participants did when they faced problems with documentation, including assisting them in **understanding,** **making decisions** and **developing their** **skills.** | | | | | |
| **Study Limitations** | | | | | |
| * Long data collection period which was due to the documentation systems used being changed (from written to electronic) * The authors all have experience a nurse, which the authors highlighted could cause some bias in the reporting of data due to them excluding information which they thought to be common practice. * The transferability of these findings to other countries is questionable due to the differences in Sweden’s documentation systems and law, which allow parents, health insurers and other professionals to freely review their children’s health records by request. | | | | | |

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| --- | --- | --- | --- | --- | --- |
| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 2 | Clausson, Kohler & Berg (2008) (Sweden) | Mixed-methods study using postal questionnaires with semi-structured and structured questions; Total number of participants n=129; Data collection took place in 2005. | Participants were not local to one area – a random 10% sample of members of the Swedish National Association of School Health Services were selected (Total n=183 school nurses) | To explore factors influencing school nurses’ documentation in school health services | **B** |
| **Findings** | | | | | |
| **Documentation** was reported as a challenge in practice by the school nurse participants. From the sample, it was identified that 50% reported specific challenges when documenting mental health in children and adolescents (Compared with only 10% of participants reported difficulties when documenting a child’s physical health). Specifically, **self-harm, abuse and suicide** were reported as particularly challenging to document. There were feelings of **fear and uncertainty** when documenting sensitive issues in a child’s health records due to the health records systems, in that parents and insurance companies were able to easily request to read the health records, therefore compromising **confidentiality.** This led to some school nurses withholding information from the health records. These difficulties raised issues of the **ethical** implications to **documentation** of a child’s health. School nurses reported that they sought **professional guidance** at times where they were required to document sensitive information due to working with a “non-secure” system; this was highlighted by the authors as being a necessary aspect pf practice for school nurses to appropriately support them with the surrounding **ethical dilemmas**.  **Time** was highlighted as a practical barrier to documentation by the participants. As well as this, participants reported that **documentation** systems focused on **physical health**, which hindered them in effectively documenting mental and social health.  The authors concluded that this study’s findings were apparent in identifying school nurses’ concerns with documenting mental and social health specifically. They stated that due to the **rise in mental health and social issues in children** in the western world, that this study’s findings may be of interest internationally. | | | | | |
| **Study Limitations** | | | | | |
| * This study enabled school nurses to clearly express their views and represented a randomised, national sample of school nurses, with a high response rate. Findings were also supported with a previous pilot study. However, documentation issues could not be fully explored due to the contents of health records not being examined as part of this study. * The use of content analysis reduced in-depth interpretation of the data by the authors * Data collection took place in 2005, which is outside of the 10-year inclusion for this review, this could reduce the reliability of the findings since systems could have since changed. However, it met the inclusion criteria for this review as its published date was within the past 10 years. * Considerations were not given to the researchers’ reflexivity or the limitations of integrating qualitative and quantitative data. | | | | | |
| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 3 | Cooke & James (2009) (UK) | Mixed-method, Phenomenological design, using questionnaires and semi-structured interviews; Total number of participants n=9 (Of these, n=4 were interviewed); not specified | Participants represented one primary care trust in the UK. Interviews took place at the participants’ work place. | To explore the training needs of School Nurses’ in relation to children who self-harm. | **C** |
| **Findings** | | | | | |
| This study’s participants described their work as school nurses as in general; most reporting that they liked the **variety of their job**, using their **initiative** and **working as an independent practitioner**. However, this coincided with reports of having **large caseloads** and the impacts of having a **lack of resources** on their work. **Funding** was highlighted as a concern by the participants as it impacted on the **lack of resources.**  Participants reported that they were often the **first health professional** approached by school staff and students when concerned about self-harm (this included **self-referral** from self-harming students). The participants described **self-harm as including cutting, scratching, overdosing and eating disorders, as well as “superficial harm”.** The latter highlighted possible **stigma** amongst the school nurses, regarding their opinions of what is **self-harm**. Also, participants often referred to the **physical** aspects of the self-harm and not the complexities of the mental health components of self-harm. When reflecting on their experiences of working directly with adolescents who self-harm, they reported **frustration**, **making assumptions** and focusing on the **physical** aspect of self-harm.  The participants described their work as a **counselling** and **referral service** regarding working with adolescents who self-harm. They raised concerns about the process of making a **referral to specialist services**, reporting that they were concerned that the **trust and confidentiality** between themselves and the adolescent could not be maintained. They also reported that the felt the **threshold for** **referrals** to specialists was too high, which left them working with adolescents with mental health problems beyond what they believed they could support.  Participants reported feelings of frustration in relation to the **lack of time, lack of resources** and **feelings of futility**. **Supervision** was highlighted as a positive support network in practice to support them working with adolescents who self-harm; this was received from **colleagues** and **specialist mental health professionals**. All the participants reported the desire to receive **training** on self-harm. This was to assist them in developing a **higher level of knowledge,** exploring different **types of self-harm** and developing **practical tips**; it was suggested that this be done through **spending time with the self-harm team.**  The participants identified self-harm **training** as a priority need. The authors concluded that self-harm training should be made available to school nurses and should include both **theoretical and practical** aspects to supporting young people who self-harm. The **training** should use both reflective techniques and experimental learning techniques. **Confidentiality** was identified as a key **ethical dilemma** for school nurses, and this should be included and explored during training sessions. | | | | | |
| **Study Limitations** | | | | | |
| * Small sample size. One participant withdrew from being interviewed, further reducing the sample size. However, common themes were still found in the remaining 4 interviews. * The self-reporting sample design in the questionnaires, allowed for potential bias as participants were able to report on their perceived needs and not their objective needs. However, triangulation of the data from the interviews helped to eliminate this. * The mean training priorities only represented 4 of the participants, so these findings should be reviewed with caution. However, the qualitative findings supported the findings of the school nurses’ needs for training. * Considerations as to whether findings were influenced by the researchers were not given. Nor were considerations as to the limitations of integrating qualitative and quantitative data. * There was a response rate below 60% (42.9%) however, authors stated that this is considered an acceptable response rate for postal questionnaires. | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 4 | Dina & Pajalic (2014) (Sweden) | Descriptive, qualitative design using individual semi-structured interviews; Total number of participants n=10; Oct 2012 – January 2013. | Participants worked within 2 municipalities in southern Sweden | To describe how Swedish school nurses experience their work with school children who have mental illness | **B** |
| **Findings** | | | | | |
| Participants reported that they found working with the whole **family** to be beneficial most of the time when supporting children with mental illness, particularly with younger children as **consent** was necessary and their **partnership** was crucial to supporting the child. When conducting meetings surrounding a child with **other professionals**, **parents** were important members. **Parents** were also reported as sources of **referrals**, however this relied on an **awareness** of the school nursing service. **Parents** were also reported to cause some **barriers** to this area of the school nurses work, particularly when the **parents** did not show an **understanding** about their child’s mental health problem.  The participants reported that **individual interviews** and “**health talks**” were useful methods used by school nurses to explore how the child felt and to **identify** mental health problems. Creating **trust** and **confidence** between the child and school nurse was essential in enabling the child to speak openly about their concerns. **Emotion cards** were also reported to be used by the school nurses to support the child in expressing their emotions. These techniques were used alongside **self-assessment questionnaires** about the child’s current emotional state.  All the participants reported that they had **identified mental health problems** amongst school-aged children. Including **depression, anxiety, agitation, self-harm and “others”.** Participants reported that the identification of **self-harm and/or a physical health complaint**, aided them in identifying mental health problems quickly in a child.  **Motivational interviewing** was a skill used by the participants to support children with mental health problems, through the **promotion of** **healthy and positive lifestyles**. **Motivation and confidence (resilience)** building were techniques used to strengthen the **future wellbeing** of these children. **Group work** conducted by school nurses was also reported as a beneficial experience to children with mental health problems, through building **confidence** by “values clarification”.  **Time** was reported as an important aspect to this area of the participants work; giving time to **listen** to the child and their concerns, building of **trust**. Alongside this, an **appropriate and quiet environment** was essential. However, school nurses reported that they had feelings of **powerlessness** and **frustration** because they did not feel they could make big changes to the child’s mental health. This was linked to reports of having a lack of time due to large caseloads. Difficulties were reported regarding referrals from teachers, causing feelings of **large responsibilities** and **not knowing if or how** they could help the referred child. **Teachers** and **students** (**self-referral or a friend raising** **concerns**) were useful sources of referrals. However, this relied on the **awareness and visibility** of the school nurse.  Participants reported the importance of **working with a range of professionals** and the child’s **parent** to successfully support a child with mental health problems. The **school counsellor** was reported as a close colleague to the school nurse; **providing support and shared knowledge**, leading to more effective support for referred children. Attending the “**School Health Team” meeting** regularly was also reported as beneficial, as it enabled **professionals** to **share their concerns** collectively about specific children. In high priority cases, the importance of being able to **refer to social services, child psychiatry and emergency departs** was reported. | | | | | |
| **Study Limitations** | | | | | |
| * The authors did give any considerations to how their findings may have been influenced by themselves * Small sample size * The authors did not discuss any possible limitations to their study | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 5 | Garmy, Berg & Clausson (2014) (Sweden) | Qualitative focus group design using semi-structured interviews; Total number of participants n=22 – of these, n=6 were school nurses; May – August 2012 | Participants worked in Southern Sweden | To explore the experiences of school health professionals in delivering preventative programmes for depressive symptoms in adolescents | **B** |
| **Findings** | | | | | |
| This study looked at the **experiences** of school health professionals in relation to delivering a universal programme to prevent **depressive symptoms** in adolescents. The programme is an adapted version of the American ‘Coping with Stress’ course. It is delivered in Sweden to all adolescents as a **preventative measure** for depression, whereas in America, it is delivered to adolescents who have been identified as showing signs of **depression**. In Sweden, it is called ‘Depression in Swedish Adolescents’ (DISA)  Participants reported that they felt that the programme was beneficial to adolescents and felt that they were **making a difference** to adolescents by teaching them useful skills and techniques for coping with difficult situations. Participants also reported that they felt that post-course, there was better cohesion amongst the groups of adolescents.  Participants had to attend a 3-day **training** course to prepare them for delivering the course. This was reported as very **beneficial** to them as professionals and individuals, as they learnt new **skills** and **tools** for working with adolescents, including **cognitive behavioural techniques.** It was also reported that the **skills** learnt had a **positive impact** on their personal lives. Another positive outcome reported, was that it enabled a greater **appreciation for working with other professionals**, particularly when they delivered sessions of the course with another health professional. This was reported as leading to **better job satisfaction**.  The delivery of the course enabled the health professionals to identify adolescents who may be displaying signs of depression, who are not already receiving support, therefore acting as a source for **referrals.** This increased the chances of **early detection** and **early intervention.** (This also helped to **raise the profile of the school nurse/health professionals**).  Participants reported some disadvantages to the course. These included the dense content of the course, which at times was difficult for the adolescents to grasp. Participants reported that at these times, it required them to be flexible and creative, to adapt the course accordingly, which at times, required them giving up **time** to adapt their sessions. They also reported that the course could be very negative at times and they felt that it was more beneficial to the students to take a more positive approach.  Planning and scheduling of the sessions was another problem raised; they stated that they relied on the **cooperation of the school administrators** to support them in organising the sessions. They also reported that not having enough **time** to plan a session due to sessions being planned last-minute was an issue. **Support from school teachers** was also reported to have a large influence on how the groups engaged during the session. | | | | | |
| **Study Limitations** | | | | | |
| * The participants were from mixed professions; therefore, it was not possible to identify which data was specifically from School Nurses. * Participants had varying levels of experience in delivery of the course; which reduces the transferability of the findings. * No male programme tutors were represented in this study * Disadvantages to the focus groups were that some participants may have been reluctant to discuss certain aspects of the topic, which they may have found difficult or embarrassing. However, authors reported that all of the focus groups were productive, and all participants took part in the discussions. Also, all four groups discussed similar topics and produced similar findings. * All of the authors were involved in the analysis of the data and confirmed each other’s findings, therefore increasing it’s credibility. | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 6 | Jönsson, Maltestam, Tops & Garmy (2017) (Sweden) | Inductive qualitative design using face-to-face interviews with semi-structured, open-ended questions; Total number of participants n= 14; April – August 2016. | Participants worked in five municipalities of southern Sweden; represented both urban and rural areas; private and public schools. Interviews were conducted at the school nurses’ workplaces. | To describe school nurses’ experiences of working with school-aged children with mental health problems. | **B** |
| **Findings** | | | | | |
| The participants reported that their work with children and adolescents with mental health problems was **rewarding** and **meaningful**. They felt that they were able to offer the **time** and **space** they needed to speak **confidentially** about their problems. As well as this, they felt that they were able to **make a difference** to that person’s life. Due to the complexity of the cases, school nurses reported that they had to draw upon their medical, social and psychological **knowledge and skills**, and was therefore seen as area for development. This was done through multiple techniques; **reflective practice**, **problem solving**, **interprofessional working** and **supervision** with colleagues and/or mentors.  Participants reported **negative experiences** when working with child/adolescents with mental health problems. They reported feelings of **worry** due to **concerns** around the **cause for mental health problems** (Problems at home; substance misuse; abuse; bullying). They also expressed feelings of **frustration** that they felt **unprepared** or **did not have the necessary** skills to effectively support children/adolescents with mental health problems; they **doubted their professional competence**. Authors stated that this indicated the need for more specific **training** for school nurses on mental health problems in children and young people. Despite this, participants reported that they were able to **detect** mental health problems at an **early stage.**  Participants reported that working with **multiple professionals** when supporting children with mental health problems was a strategy used to effectively care for them. However, difficulties with making **referrals** to specialist were reported, which lead to them working outside of their **skill/knowledge set.** To successfully **refer,** a high level of **knowledge of other professionals** and **confidence** was necessary.  **Time** and **lack of resources** were reported by the participants was reported; it was felt that the **rise in mental health problems in children** was not being met by an increase of **resources**. They reported that they felt they ran a **reactive service** rather than focusing on **health promotion and** **preventative strategies.** Alongside this, a shortage of other **specialist professionals** directly impacted on the school nurses’ **workloads.** | | | | | |
| **Study Limitations** | | | | | |
| * Having a semi-structured interview guide, meant that all of the participants were asked the same questions. This increased the study’s dependability. * All the authors were involved with the analysis of the study’s data, therefore increasing its credibility. * No male school nurses were represented in this study * The age and amount of experience held by each participant was varied; increasing the strength of the study. * Findings were common amongst all participants, indicating that this study could be transferred to other school nurses in similar settings. * Research reflexivity was not appropriately considered | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 7 | Membridge, McFaden & Atkinson (2015) (UK) | A qualitative, descriptive study design using semi-structured interviews, individual and paired; Total number of participants n=10; April – May 2009 | Participants worked for 3 local authorities within one National Health Service board. | To explore the types of mental health problems encountered by school nurses and to identify whether they are appropriately trained and supported for this area of their work | **B** |
| **Findings** | | | | | |
| The participants reported **several mental health problems** in children and adolescents, which differed between primary and secondary school-aged children. They also reported on some of the **causes for mental health in children and adolescents**. **Feelings of concern** were raised by the participants about the **rise in the number of cases of mental health problems in children and adolescents.**  The participants reported on their current practice in supporting children with mental health problems. These included **initial assessments**, which enabled them to **decide** about the **appropriate interventions** or **referrals** needed. If the child remained under the school nursing service, it was reported that they would be supported on an **individual basis** with the help of **leaflets and/or worksheets.** However, participants reported feelings of **frustration** in relation to the **lack of resources** available them to support children/adolescents with mental health problems.  **Self-referral** was reported as the main source of **referral** to the school nursing service, followed by **parents/carers** and **school staff**. Participants reported that they rely on **voluntary agencies** to also provide support to children/adolescents with mental health problems, through **individual support**, **group workshops** and **support groups**.  **Lack of training** for school nurses on paediatric mental health was raised as a large **concern** by the participants. They felt that this did not match **the rise in paediatric mental health problems**, which **caused feelings of concern**. The reported that they were **worried** about not being able to appropriately **assess** mental health problems in children/adolescents, **leading to misdiagnosis** – this caused them to fear that they practice would **cause more harm than good**. This was linked to participants reporting on the importance of knowing their **professional limitations.**  The reports on the **training** that had been received was varied and inconsistent amongst participants. However, all the participants reported that they had a need for further **mental health training** to enable them to stay up-to-date with paediatric mental health problems. They felt that training should be delivered by **paediatric mental health professionals (CAMHS)** and **voluntary agencies,** who specialise with working with children/adolescents with mental health problems**. Supervision** was reported as a strategy used for their support, however, the frequency of this varied amongst participants from once per month to an ad-hoc basis.  **Frustration** was expressed in relation to them running a **reactive service** rather than a preventative service, despite them acknowledging the importance of **preventative measures**. This was linked to work constraints including **lack of time**, **lack of support** and **lack of training.**  Other challenges that were reported included, **child protection**, as this was **a time-consuming** aspect of their practice; having little or no **administrative support**; having a **lack of skill mix** within the school nursing team, causing them to complete tasks which could be completed by **health care assistants** or **nursery nurses.**  One area of practice which they reported on as **preventative,** was their involvement with the **personal, health and social education lessons** at schools, which enabled them to increase their **visibility** to children and adolescents, **raising the profile** of the school nurse, **build relationships** with young people and to **identify vulnerable children early and** put **early interventions** in place.  Participants reported that they felt that all schools should have **mental health advisors** to support the increased needs of mental health problems in children/adolescents. They also reported the importance of **raising awareness** of the school nursing role as they were still viewed as the ‘nit-nurse’; this caused **frustration** amongst the participants. | | | | | |
| **Study Limitations** | | | | | |
| * Small sample size * It represented only one NHS Health Board in the UK (Limiting its generalisability/transferability) * Considerations were not given as to how findings could have been influenced by the researchers | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 8 | O’Kane, Barkway & Muir-Cochrane (2012) (UK or Australia) | Phenomenological qualitative study using semi-structured interviews; Total number of participants n=6; Dates not specified | Exact location is unclear | To explore the understanding of mental health consultation and how it is used in practice, from the perspectives of primary health care workers, who work with children and young people who experience mental health issues. | **B** |
| **Findings** | | | | | |
| Participants reported that **relationships** between the **service** which provides **mental health consultation** (MHC) (**clinical supervision**) and the receiving service, was a factor which impacted on the **occurrence and frequency of MHC**. **Working with the multidisciplinary team. Poor communication** between the different professionals resulted in a **negative collaboration.** However, the school nurses reported a **misunderstanding of the MHC process** which lead to **negative experiences**. This caused **false expectations** of what to expect from the MHC process and therefore, negative experiences of the process. Further to this, **poor understanding or respect of each professionals’ roles** were common in the MHC process, and left the participants feeling as though they did not want to **preserve their working relationships** with the others. The participants felt that they were often left with work which was **not within their role or skill set,** due to this **misunderstanding of their role.** It was suggested that **role clarification** should be **incorporated into the start of MHC** to enable appropriate **setting of goals and planning of patient’s care.**  The participants reported feelings of **doubt and fear** in relation to their practice in supporting young people and children with mental health problems. They felt that their **lack of knowledge and experience** left them feeling **out of their depth** and were often **worried** that their actions to support young people and children with MH problems, would **do more harm than good.**  This study found that the participants had the expectation that MHC would provide **support in these situations** and help **reduce the stress**, making the **cases more manageable** for the school nurses; this was mainly due to the expectation that with **high-risk cases**, **action on the case would be taken by CAMHS because of the consultation.** However, one participant reported that following one MHC, CAMHS did not **share her concern** for a young person she was **worried** about. Another participant reported that she had used MHC as she was concern about a young person; she was advised to use a **technique,** and although it worked, in hindsight she the **stress** it had caused **worrying** whether it would work, was too great, and she would not do it again.  Participants reported on **constraints in practice** which created challenges which may impact on school nurses being able to access **supervision.** These included **large workloads (Time**), **locations**, **time**, and **funding.** Although this was out of their control, these factors were crucial in enabling the school nurses to access **regular and successful supervision.**  Despite participants reporting on **heavy workloads**, MHC was reported as being **a useful tool** which helped school nurses to have better **time management**. As one participant reported, they had spent a lot of time **reflecting about cases**, after discussing them in MHC, she was better able **to manage future cases** more **efficiently and effectively;** therefore, **opening time** for other work. It was described by other participants as an invaluable **support mechanism,** whilst young people were under their care whilst they were on the **waiting lists** for CAMHS.  **Training** was also raised as being a necessity for effective MHC, to enable school nurses to **develop skills to** **appropriately manage and** **problem solve in cases** of mental health problems in children and young people. As well as **educating** school nurses, providing them with a **risk assessment tool** which would enable them to **risk assess** young people with mental health concerns, to aid them in deciding whether they needed to be **referred** to a specialist service. However, this was contradicted by other participants as it was felt that they did not want to have the **responsibility of risk management** they felt that this was **outside of their remit** and should be undertaken by CAMHS.  Participants expressed their desires to **develop practical skills** to support them in practice when working with young people with mental health problems. This was favoured by some participants over **formal, in-depth education** on specific mental health conditions. However, the findings suggested that group MHC acted as a form of informal education and was more beneficial than individual MHC. This was because it allowed school nurses **learn from the cases** of their colleagues.  Participants reported that their **heavy workloads** can impact on whether they would attend MHC. It was reported that attending MHC was not a good use of their valuable **time,** unless it would result in their case being seen by CAMHS quicker or provide them with a solution to their problems. However, this was linked with a **poor understanding** of the purpose and role of MHC.  There were many expectations of regular MHC raised in this study by school nurses. These included, **receiving support and advice on cases** (**recommendations, suggestions and guidance; encouragement and reassurance that what they are doing to help a young person is correct; support for Skill development; off-loading concerns; increasing the confidence of school nurses.)**  Receiving **support and advice** was raised as the factors which would most likely encourage the participants to access MHC. This was emphasised by the importance of the school nurses having someone to **talk to and listen** to them about their **difficult, complex cases,** as this was beneficial to them **professionally and on a personal level.**  When participants felt supported by MHC, they expressed **feelings of relief, increased confidence, reduced stress and reassurance.** This resulted in them being able to **cope better in their practice,** which positively impacted on their **personal lives** (reported as improved sleep patterns and reduced anxiety) | | | | | |
| **Study Limitations** | | | | | |
| * Small study. No information about participants, except that they all work within the same area. Reduces this study’s generalisability and validity. * Location of the study is not stated. However, ethical approval was granted from an Australian university. A ‘Research in brief’ article from 2011, by the same author was also found. This article contained quotes used in this article, however, it was stated that the study took place in the UK and with n=5 participants, rather than n=6 in this article. * Consideration was not given the researchers’ reflexivity | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 9 | Pryjmachuk, Graham, Haddad & Tylee (2012) (England) | Qualitative focus group design using a topic guide for each focus group; Total number of participants n=33; Not specified | Participants represented two health districts in Greater London and two health districts in Greater Manchester | To investigate the views of school nurses in regard to mental health problems in adolescents and how they are involved in mental health work with this client group | **A** |
| **Findings** | | | | | |
| Participants reported on the mental health problems in adolescents which are of highest concern, which included **self-harm, depression,** **substance misuse and eating disorders**. They also reported on some of the **factors which cause mental health problems,** which included **stresses of life,** **home life, sexual identity and friendship problems**. Participants reported that mental health problems are often detected through the **presentation of physical complaints,** such as **aches, pains or fatigues**, as well as **behavioural problems** such as **aggression.**  It was reported that the participants views of mental health problems in adolescents were **free of judgement, empathetic and explicitly** **positive,** and their role in support was **important** and they displayed a **great commitment to the positive outcome** of this client group. They felt that they played a large role in **encouragement** and **raising the expectations** of the adolescents.  **Schools** were reported as being an ideal **location** for school nurses to carry out mental health work with young people. One issue raised was the **poor distinction between mental health problems and behavioural problems.**  **Parents** were reported as being problematic at times, when support adolescents with mental health problems, as they could be needy or expect instant changes. Also, when **advice** was given to **parents** they did not always follow this, and it was difficult for the parents to see their role in supporting their child. Requiring **parental consent** for a referral was reported to cause **frustration** amongst participants.  Participants reported on the negative impacts of **stereotyping** by schools and the **stigma** connected with **subcultures**. The **stigma** linked to mental health problems was also problematic and was reported to influence young people to **fail to attend appointments** with specialist mental health services following **referrals;** however, this could also be due to having to travel to another location. Participants raised **concerns** about the **stigma** linked to the professional **title of “school nurse”;** they believed that because they were viewed as a **nurse** by young people, that they automatically thought that something was wrong with them. In Manchester, participants preferred the title ‘school health advisor’ as they felt it better represented their role and the services they offer. There was also some **stereotyping** reported amongst the participants, as schools were ‘**branded’** by how they used the school nursing service.  The **relationships** between school nurses and **specialist paediatric mental health teams (CAMHS)** were reported to impact on the health care provided by school nurses**; good relationships** **facilitated the work** delivered by school nurses, whereas, **poor relationships caused feelings of frustration** particularly when **referrals** were rejected **without explanation**, or when there were **long waiting lists.**  **Supervision** **delivered by CAMHS**, and **CAMHS being available to** school nurses on ad-hoc basis, were facilitators of a **good relationship** between them and school nurses. Those who did not received **supervision** formally, stated that they felt **CAMHS should** **provide that service** for them. **Informal supervision** was also sought out by school nurses from their colleagues, as a form of supportive practice. Participants also felt that **training** should be **delivered by CAMHS**; those who had received it, reported that **it was beneficial.** Participants reported that they would like **training**, through **shadowing mental health professionals** and learning **solution-based** and **cognitive behavioural therapy techniques** which they could use in practice.  **Relationships between school staff** was also reported as impacting on the school nursing services. **Problems with communication** or a **poor understanding of the school nursing role** was reported to cause problems. **Frustration** was felt that **referrals** from schools could be vague or more about the **teacher’s concerns** **and not the child’s.** It was also reported that school staff often had a **poor understanding of confidentiality and** the school nurse being unable to discuss health care information with the school. However, one London focus group reported that these issues were the **responsibility of the school nurse to resolve** through **providing education** to the schools about their roles.  More **confidence** was expressed when discussing their work with adolescents with low-risk mental health problems and **preventative work**; less **confident** when working with high-risk mental health problems, such as **self-harm, eating-disorders and substance misuse**. Lack of **confidence** was linked with **feelings of lack of knowledge and training**.  The participants displayed a **wide skill-set** which supported them in working with adolescents with mental health problems. Including **communication, interpersonal and listening skills**. Participants reported that **listening** was a large aspect of their support, as young people wanted to be **taken seriously and given control over their health care**. As well as these, it was reported that being able to **signpost** to **other agencies and services** was a crucial aspect of the school nurses’ work, however, again, **frustration** was expressed due to **failed referrals** to other services.  School nurses reported that their **large workloads** were a challenge due to their **diverse roles** and **vast expectations** causing their **time** to be spread over many services. This was reported as being a **barrier** with mental health work. Also, being a largely **term-time service**, impacted on their available **time.** The delivery of an effective support service to adolescents was reported to also rely on being given access to an **appropriate space** to work from in the **school**. Bad **spaces**, such as rooms which are hidden away, which reduces the **school nurse’s visibility**, or it being inappropriate for **therapeutic work.** | | | | | |
| **Study Limitations** | | | | | |
| * Difficult to generalise due to the small, local sample. However, they sample from two different areas in England, so it is possible that the findings can be transferred to other areas of England * The purposive sample included school nurses who had an interest in mental health work with children and young people. Therefore, those who did not have an interest, were not represented. * Focus groups were facilitated by different authors in London and Manchester, reducing the consistency in methods. However, rigor was improved at the analysis stage, where there was joint checking of findings, followed by an independent review of the findings. | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 10 | Sherwin (2016) (UK) | Narrative Inquiry design using unstructured interviews; Total Number of participants N=12; Dates not specified | Participants represented two Nation Health Service Trusts in the UK – no other geographical information given | To contribute to a better understanding of the ways in which school nurses provide support to adolescents in their day-to-day work, by answering the following questions:  1. What stories do school nurses have to tell about providing support to children and adolescents?  2. What insights do their stories reveal into how they perform school nursing?  3. How can these stories connect with the school nursing community? | **B** |
| **Findings** | | | | | |
| The participants collectively mentioned the importance of being **visible** to young people so that they know how and who to contact. This was reported to impact on whether children and adolescents **accessed** the school nursing service. To improve their visibility, participants reported that they spoke at school assemblies and worked closely with teachers and school staff, walked around schools at lunchtimes, put up posters about the service and being in the playground when parents collected their children from school.  Being able to provide **consistent support** to children/adolescents was raised as an important aspect of their work, as it can take a lot og **time** for children/adolescents to **trust** professionals and feel comfortable to **speak** about their concerns.  It was reported that a common theme amongst the data was that school nurses **felt undervalued** by other professionals, causing feelings of **disempowerment**. **Raising the profile** of the school nurse was reported as an important factor contributing to effectively **working with other professionals,** however it was linked with **feelings of fear** that this would increase their **workload** further.  The **diverse role of the school nurses** meant that that they reported their **time** being divided between many areas of practice. Being present in **schools** as much as possible was raised as important due the difficulties of being there regularly.  **Commissioning and organisational objectives** directly **influenced the services** that school nurses can provide; this caused feelings of **frustration** as they felt that they were able to provide more than what they were **commissioned** to. However, being **leaders**, school nurses reported that they felt they needed to be more **proactive in influencing commissioners** and the decisions being made about their services. However, they also reported that they believed their **small workforce** was a hindrance to this and would be risky – the authors described this as a perceived **lack of freedom.**  The participants reported that they found it difficult to let go of the **worries** they had for some of the children/adolescents who have mental health problems. They reported that they took these **emotions** home with them, which impacted on their **personal lives.** Being able to cope with the **emotional demands** of their jobs was reported as an important factor, and several participants reported that **informal supervision** with **colleagues** was a strategy that they used. However, whilst some organisations offered **formal supervision,** they felt that there needed to be more, particularly for newly qualified school nurses.  The participants felt that they were able to **make a difference** to the lives of children/adolescents with mental health problems, as they were able to provide them with **coping strategies** for difficult situations.  The **use of technology** was reported as a useful tool for enable young people to **learn about and access the school nursing service**. This also provided a platform for **service feedback, and service development.** | | | | | |
| **Study Limitations** | | | | | |
| * Number of participants was not clear (n=11 in abstract and n=12 in the main text). Both being a small sample size. No details about the participants, other than that they were school nurses, was reported by the author. * The analysis process included the formation of poems from the interview transcripts. Only two of them were published. * Researcher reflexivity was not discussed * Did not appear to be any independent checking of the findings – reduces the rigor of the data. | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 11 | Skundberg-Kletthagen and Moen (2017) (Norway) | A cross-sectional study using open-ended questions in a questionnaire; Total Number of School nurse Participants n=157-212; January – February 2016 | Participants represented all municipalities in Norway. This was a nationwide survey. | To explore the experiences and attitudes of school nurses working with young people with mental health problems in school health services | **A** |
| **Findings** | | | | | |
| Participants reported that they believe their role is important when supporting mental health in young people. They reported that their position enabled **early identification** of mental health problems, and with minor issues, such as **sleep problems, problems with their social interactions and feelings of low mood,** could be **supported and solved with just the support of the school nurse intervention**. Working with both the child/adolescent and their **family** was reported as important, particularly with **social and emotion issues** linked with **mental health problems in the family**.  **Lack of confidence** was reported in relation to the **prevention and promotion** of mental health, which coincided with the need more **paediatric mental health training**. When **training** has been received, it was reported as beneficial.  Participants reported that a benefit to their role, is there **availability** to children and adolescents, enabling them to **build trusting relationships** with them. Being well **located** was also linked with this as they can provide **consistent follow-up** and **reduce the possibilities of mental health problems** reoccurring; having an **open-door policy** was reported as important for this. The **types of mental health problems** seen in children/adolescents was reported by participants.  The participants identified the importance of **working with other professionals** including **school staff, other school nurses and GPs,** especially in relation to **following up** on children and adolescents with mental health problems. They felt that there should be stricter requirements for other professionals to adhere to this practice. **Supervision** was highlighted as important, but, that **supervision** should be **delivered by a mental health professional.**  **Geographical** locations were reported as **barriers to working with other professionals**; **lack of resources** meant that some areas so not have specialist services and accessing **specialist services** was only possible when the child/adolescent was considered **high risk**. **Poor communication** between the GP and school nurse was raised as an issue, as the participants felt that following their **referrals** to GPs, they did not receive any feedback meaning they were unaware of care that had taken place, despite the school nurse having to **follow up** with the child at the later date.  Participants reported that there were **negative attitudes** towards the school nurses by school staff. Also, **negative attitudes** **towards mental health problems** was also a problem. It was felt that **collaboration with school staff** should be a requirement. **Barriers** were sometimes apparent when school staff did not enable children/adolescents to be seen by the school nurse during lesson times, **preventing interventions and care.**  **Lack of resources** were reported as negatively impacting on the **preventative work** being done in **primary schools**; they believed that if there was more, it would have a positive impact on the **emotional wellbeing of adolescents in the future**. As well as resources, **a lack of time** hindered the level of service they could provide for mental health problems.  Participants reported their desires to have more **training,** including **training** on **tools and interventions,** which school nurses could **use in practice** to support mental health problems. Also **training** on **motivational interviewing** to build **self-esteem and coping-mechanisms** with depression in **young people**. They also expressed the desire to have an **online database** which could be accessed by school nurses, which was regularly updated, which included useful **resources and information on mental health issues.** | | | | | |
| **Study Limitations** | | | | | |
| * Study took place in Norway; researchers questioned its transferability and states that it must be considered when applying the findings to other countries | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 12 | Spratt, Philip, Shucksmith, Kiger and Gair (2010) (Scotland) | National Survey in Scotland using telephone interviews; Total number of participants n=25; Dates not specified | 13 out of the total 14 health boards in Scotland agreed to take part in this study. | To explore the nurses’ role in schools supporting young people with mental health problems. | **A** |
| **Findings** | | | | | |
| Participants reported on several school nursing services available to young people to support them with their mental health, including **drop-in clinics (and individual consultations),** which their success relied on them being ran **regularly** by school nurses. It was reported that young people mostly attended **drop-in clinics** for **sexual health concerns and advice**, however, participants recognised that there are close links between adolescent **sexual and mental health,** and school nurses would address both at the same time. Having an **open-door** **policy** was crucial when working in schools, but the success of this was dependent on being well **placed within the school** and being **visible** to young people. Participants reported on the importance of school nursing services being **regular and continuous** to enable young people to **build relationships** with school nurses, to improve their **resilience** and **support their mental wellbeing**. **Regular presence in schools** was reported as important in enabling young people to **recognise the school nurse,** this included the participation in **teaching health topics** in schools. This also allowed young people to **identify the school nurse** as a professional/adult who is happy to talk about ‘**sensitive topics’**. However, they also stated that school nurses must be **proactive in raising their profile** with young people and schools to ensure services are known and accessed.  **Different professional titles** were used by the participants **‘school nurse’, ‘public health nurse’ and ‘public health nurse for schools’.**  The participants described the school nursing service as **unique** which could make a **considerable contribution** to the mental health of young people. This was due to their **vast knowledge of health** **and other services/professionals**; being **separate from the school system** (but also being able to **work collaboratively with schools**) and providing **a holistic service** for young people. Also, being able to provide a **confidential service** was raised as a beneficial aspect of their role enabled them to be accessed by young people for **a range of issues**, which reduced the **stigma** that is associated with seeing a professional.  The **school** being the prime **location** was reported as also making the service **unique** and contributing to effecting mental health care for young people. As young people have the **choice** to access a health service **during the school day,** without the knowledge of other (mainly **parents**); reported as improving a young person’s **autonomy** and **independence**, contributing to increased **resilience and self-agency** in young people. This was highlighted as being particularly important for young people in **rural locations,** where distances to other health services could hinder then accessing them. Further to this, school nurses have **access to health records,** enabling them to gain a wider insight and understanding of the young person, including **social issues.**  **Working with other professionals** was reported as an essential aspect of the **school nurses’ toolkit** and were described as the **original interagency worker**. Having a **wide knowledge of other professionals’ roles**, aided them in **signposting** effectively.  It was reported that **referrals** were often received from **other professionals**. One negative aspect of **interprofessional working,** was that there were feelings of the **school nursing role being undervalued** by other professionals which led to them **not being prioritised** by the school and was linked to being placed in **poor locations** in the school and **competing with other school activities.**  The participants reported concerns about how **prepared** they were to deliver mental health support to young people. There were reports of school nurses **lacking the skills and confidence** to deliver mental health support to young people. This was linked to the **lack of available training** on mental health issues – worries were expressed that this hindered the **appropriate identification** of mental health problems in young people. It was also raised that when **training** was made available, there was **no training budget** or did not include the cost of covering the services whilst the school nurse attended **training**, which resulted in short-term loss of cover.  **Staffing levels** varied amongst the health boards; **low staffing-levels** results in **large workloads**, impacting on their **capacity to deliver** the intended extensive services**. Lack of resources** in other agencies was also linked to impacting on the **school nursing resources**, as school nurses acted as a **support service** whilst young people waited on **waiting lists** for specialist mental health input. Having large workloads resulted in **reduced time** with individual patients, **reducing the time** they had the **build the necessary relationships** with young people who did not meet the **criteria for a specialist referral**. **Lack of time** was also linked to reducing time being spent on **preventative work.** Participants also reported that **reacting to urgent cases** during their daily work, also meant that **low-priority** (including **health promotion**) was **not prioritised**.  It was felt that the **limited capacity** of the **school nursing service** caused **prioritisation of reactive services** rather than **preventative services** for mental health problems. There was evidence within the interviews that there was planning towards moving the school nursing service to a **reactive service** to the needs of **individual schools**. | | | | | |
| **Study Limitations** | | | | | |
| * Study took place at a time of service restructuring. The findings from this paper could have changed following restructuring of the school nursing service in Scotland. * Small study which looked at the perspectives of school nursing managers. | | | | | |

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| **Ref. No.** | **Author, Year & Country** | **Study Design, Sample No. & Study Dates** | **Setting** | **Study Aim** | **DEF Quality Score** |
| 13 | Wilson, Furnivall, Barbour, Connelly, Bryce, Phin & Stallard (2008) (Scotland) | Nationwide survey (2006 SNAP CAMH) using self-reported questionnaires; Total number of school nurse participants n=100 (Total n=170, which included 70 health visitors); During 2002 and 2003 | Nationwide in Scotland | To produce a description of school nurses’ and health visitors’ work involving children and adolescents with mental health concerns. To identify the challenges which they face in this area of their work and factors which influence job satisfaction when supporting this area of health. | **B** |
| **Findings** | | | | | |
| 99% of the school nurse participants reported working with children over the age of 5 years. 86% of the school nurse participants worked with children in both **primary and secondary schools**. 46% (46/99) school nurse participants saw between 50 and 99 children per week.  37% (37/100) of the school nurse participants had a caseload involving more than 10 children with psychological problems – one in five of these participants were seeing more than 3 children with **psychological problems** per week. 54% (46/85) of the school nurse participants were working with children with **psychological problems** between 1-4 hours per week.  The **types of mental health problems** encountered by the school nurse participants was reported on. These included the psychological problem in the last case they were involved in, most worrying case and most satisfying case. This is presented in a Graph on Page 451.  **Self-harm** was the highest reported problem for all three categories. The cases that caused the most worry were **self-harm, violence, substance misuse or arson.**  3% (3/100) of the school nurse participants reported that they had not had any worrying cases of psychological problems in children, in the past 3 years. 15% (15/100) of the school nurse participants reported that they had not had any **satisfying cases** of **psychological problems** in children.  22% (22/100) of SN participants reported that they faced **barriers** regarding **referrals**, **delays or troubles in accessing specialist services** and a **lack of specialist services** to support their practice locally. Of this 22%, 20 of the 22 participants reported that their most **worrying cases** consisted of **suicidal thoughts, self-harm, aggressive behaviour abuse and depression**. The authors then reiterate that the **frustration** about not being able to access the appropriate specialist service when **identifying** a **worrying mental health state** in a child/young person, was evident in the data, alongside feelings of **powerlessness.** The authors expressed their **concern** that the nurses who were caring for children with **high risk emotional and behavioural problems**, were having difficulties in receiving the necessary support from **specialist professionals**. 20% (20/100) of SN’s reported on the effects of **large workloads** and lack of **time**. 13% (13/100) reported that poor **cooperation** by the **young person or parent** could act as a **barrier to effective practice.**    17% (17/100) of SNs reported that they experienced a **lack of confidence** and felt **inexperienced** when supporting **mental health problems** in children and families. This was supported with feelings that they **lacked the correct knowledge** and/or **training** to support this area of practice. Only 30% (30/100) of SNs reported that they had received specific **training** on Mental health in children and young people. Comparatively, 94% (89/95) expressed that they would like to receive **specialised mental health** **training** to enhance this area of their practice. School nurses reported that they felt **uncertain** about working with psychological problems in children. Many of the participants expressed feelings of being **overwhelmed** when supporting young people with mental health problems, due to the **high number of cases** and the **severity of the problems** being seen. A lack of **time** was reported as impacting on their **capacity** to deliver an effective service to young people (By 28/100, 28% of SN participants). Similar numbers also expressed their **frustration** that they are unable to **access the other services** for their young people. The desire to receive **supervision** from mental health professionals was expressed by several participants (No specific statistics). This was to receive support and advice for specific cases, as well as receive specific mental health training. | | | | | |
| **Study Limitations** | | | | | |
| * Survey took place in 2002/2003, almost 15 years ago. Findings may no longer be transferable to current practice in Scotland. * Around half of the questionnaires were returned completed but it is not known how many were ever received by professionals in the first instance. However, rich data was obtained nonetheless. * Possibly the lack of responses to the final questions were due to fatigue because of the length of the questionnaire. * Response rate was below 60% * Considerations were not given to the limitations of integrating qualitative and quantitative data. | | | | | |

## Appendix 7 – Summary of Research Characteristics

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| **Ref. No.** | **Authors, Year** | **Location** | **Characteristics of Participants** | **Study design** |
| 1 | Clausson, Berg & Janlöv (2015) | Sweden | **Total n=33**  **Age Range = 32 – 64 years**  **Years’ experience as a school nurse = 1-26**  **Females = 33**  **Males = 0**  All participants were full time, specialised in district or paediatric nursing. Each participant covered approximately 800 students in each service. | Emergent qualitative design using semi-structured focus groups |
| 2 | Clausson, Kohler & Berg (2008) | Sweden | **Total n=129**  **Age Range = 34-65 years**  **Years’ experience as a school nurse = 0-31**  **Females = 129**  **Males = 0**  Participants represented secondary, comprehensive, private and public schools. | Mixed-methods study using postal questionnaires |
| 3 | Cooke & James (2009) | UK | **Total n= 9**  **Age Range = Not specified**  **Years’ Experience as a school nurse = 1-20**  **Females = Not specified**  **Males =** **Not specified** | Mixed-methods design using questionnaires and semi-structured interviews |
| 4 | Dina & Pajalic (2014) | Sweden | **Total n= 10**  **Age Range = 38-61 years**  **Years’ Experience as a school nurse = Not specified**  **Females = 10**  **Males = 0**  N=8 specialist in children’s nursing; N=2 Specialist in District Nursing.  Each participant responsible for 2-7 schools  Each participant responsible for 300-725 students | Qualitative descriptive design using semi-structured interviews |
| 5 | Garmy et al. (2014) | Sweden | **Total n= 22** (n=6 School Nurses; n=13 School social workers; n=2 Teachers; n=1 School Psychologist)  Age Range = Not specified  Years’ Experience as a school nurse = Unknown – **Range of years experience of all participants = 1-22**  Females = Not specified  Males = Not specified  **Years experience of delivering the Preventative Programme = 1-30**  **N=13 taught programme in Compulsory Schools**  **N=3 Taught Programme in Upper Secondary Schools** | Qualitative Focus group design using a semi-structured design |
| 6 | Jönsson, Maltestam, Tops & Garmy (2017) | Sweden | **Total n= 14**  **Age Range = 31-60 years**  **Years’ Experience as a school nurse = 1-20**  **Females = 14**  **Males = 0**  **N=9 specialist in Public Health; N=5 specialist in Child and Adolescent Health** | Inductive qualitative design using semi-structured interviews |
| 7 | Membridge, McFaden & Atkinson (2015) | UK | **Total n= 10**  Age Range =Not Specified  Years’ Experience as a school nurse = Not Specified  Females = Not Specified  Males = Not Specified | A qualitative descriptive study using semi-structured interviews |
| 8 | O’Kane et al. (2012) | UK/ Australia? | **Total n= 6**  Age Range = Not Specified  Years’ Experience as a school nurse = Not Specified  Females = Not Specified  Males = Not Specified | Qualitative design using semi-structured interviews |
| 9 | Pryjmachuk et al. (2012) | England | **Total n= 33**  **Age Ranges = London (31-60) Manchester (23-60)**  Years’ Experience as a school nurse = Not specified  **Range of years Experience = London (5-21) Manchester (10months – 30years)**  **Females = 33**  **Males = 0** | Qualitative design using semi-structured focus groups |
| 10 | Sherwin (2016) | UK | **Total n= 12** (However, reported as n=11 in the Abstract)  Age Range = Not Specified  Years’ Experience as a school nurse = Not Specified  Females = Not Specified  Males = Not Specified | Narrative Inquiry Design using unstructured Interviews |
| 11 | Skundberg-Kletthagen & Moen (2017) | Norway | **Total n= 157-212 were School Nurses)**  **Age Range = 27-67 years**  **Years’ Experience as a school nurse = 0-41**  **Females = 284**  **Males = 0**  **30% of School Nurse participants had undertaken an additional 1 year Mental Health Qualification** | A cross-sectional study using a questionnaire |
| 12 | Spratt et al. (2010) | Scotland | **Total n= 25**  Age Range = Not Specified  Years’ Experience as a school nurse = Not Specified  Females = Not Specified  Males = Not Specified | National Survey Design using semi-structured telephone interviews |
| 13 | Wilson et al. (2008) | Scotland | **Total n= 170 (n=100 School Nurses;** n=70 Health Visitors)  Age Range = Not Specified  Years’ Experience as a school nurse = Not Specified  **Females = 97 (School Nurses)**  **Males = 3 (School Nurses)** | National Survey (SNAP CAMH Survey) using questionnaires |