

SAVONIA

University of Applied Sciences

THESIS –BACHELOR'S DEGREE PROGRAMME
SOCIAL SERVICES, HEALTH AND SPORTS

NURSES' ROLES IN ESTABLISHING EARLY CONNECTIONS AND INTERVENTIONS FOR ADOLESCENT DEPRESSION

SYSTEMATIC LITERATURE REVIEW

AUTHOR Olatilewa Grace Sokoya

Field of Study Social Services, Health and Sports	
Degree Programme Degree Programme in Nursing	
Author Olatilewa Grace Sokoya	
Title of Thesis NURSES' ROLES IN ESTABLISHING EARLY CONNECTIONS AND INTERVENTIONS FOR ADOLESCENT DEPRESSION – Literature Review	
Date October 27, 2023	Pages/Appendices 51/1
Client Organization Savonia University of Applied Sciences	
<p>Abstract</p> <p>Depression is a prevalent mental disorder that can adversely affect an individual's emotions, cognition, and behavior. Around the world, more than 300 million people of various ages have depression, comprising over 4% of the world's population, with a higher prevalence in adolescents. Depression among adolescents is a critical issue that requires attention from healthcare professionals, especially in primary care settings. Depression is the main reason why adolescents think about suicide, so it is important to identify it early.</p> <p>Nurses play a crucial role in the identification of depression among adolescents in primary healthcare settings. Nevertheless, there is limited understanding regarding the precise responsibilities and techniques employed by nurses to establish an early connection with potentially depressed adolescent client. Therefore, it is essential for nurses to have a comprehensive understanding of depression and its identification to improve their ability to establish an early connection with potentially depressed adolescent clients.</p> <p>Systematic literature review was conducted between December 2022 and October 2023, aiming to uncover nurse's role in establishing early connections with adolescents who may be experiencing depression. A total of ten (10) peer reviewed articles, between 2000 to 2023 and sourced from reputable databases such as CINAHL, PubMed, and ScienceDirect, were meticulously selected for analysis, employing content analysis methods as the research methodology.</p> <p>The result of the review shows the importance of nurses in establishing early connections with potentially depressed adolescents. Nurses play different roles which includes effective communication, creating a safe and non-judgmental environment, providing education to adolescents and their families, building trust, conducting screening and assessments, and engaging in collaborative decision-making. These strategies collectively create an environment conducive to the early identification and intervention of depression.</p> <p>Nursing responsibilities in primary care are not static and change over time as healthcare needs to evolve. As such, there is a need to continually examine the roles of nurse's in establishing an early connection with an adolescent potentially experiencing depression.</p>	
Keywords Depression, Adolescent, Nurses role, Primary care, Connection, Intervention	

CONTENTS

1	INTRODUCTION	5
2	ADOLESCENT DEPRESSION.....	6
2.1	Depression, Types, Symptoms, Risk Factors and Diagnosis.....	6
2.2	Adolescent Depression	10
2.3	Depression and its Relation to Substance Abuse, Self-Harm and Suicides.....	12
2.4	Treatment of Adolescent Depression	13
3	AIMS AND OBJECTIVES	15
3.1	Research Problem.....	15
3.2	Aims of the Study	15
3.3	Research Question.....	15
4	METHODOLOGY.....	16
4.1	Design.....	16
4.2	Inclusion and Exclusion Criteria.....	17
4.3	Identifying Relevant Studies.....	17
4.4	Assessing the Quality of Study.....	21
4.5	Interpreting the Results.....	22
5	RESULTS OF THE REVIEW.....	28
6	DISCUSSION.....	30
7	CONCLUSION.....	32
7.1	Reliability.....	32
7.2	Limitation.....	32
7.3	Recommendation.....	33
7.4	Conclusion.....	33
	REFERENCES.....	35
	APPENDIX: Assessing Quality of Study Using JBI Appraisal Tool	42

LIST OF FIGURES

Figure 1. Process of Systematic Review	16
Figure 2. Process of Articles Selection Using PRISMA Flowchart	19
Figure 3. Process of Content Data Analysis	23

LIST OF TABLES

Table 1. DSM-V (Diagnostic and Statistical Manual of Mental Disorders)	10
Table 2. Inclusion and Exclusion Criteria.....	17
Table 3. Ten Articles Included in Qualitative Synthesis.....	20
Table 4. Content Analysis.....	24

1 INTRODUCTION

Depression stands as the primary cause of global disability, impacting over 300 million individuals. This emphasizes the significant impact that depression can have on individuals, families, communities, and the importance of addressing this public health issue.

Depression is a severe mental disorder that influences an individual's mood, cognitive processes, conduct, daily activities, and their overall quality of life. (World Health Organization, 2023.)

According to a report by the National Centre for Children in Poverty (2009), adolescent depression affects 20-30% of adolescents before they reach adulthood. Untreated depression can lead to significant distress and impaired daily functioning, including poor academic performance, as well as a heightened risk of drug abuse and suicide. (American Academy of Child and Adolescent Psychiatry, 2018.)

Over 60% of adolescents who have depression also experience difficulties with substance abuse. This is because they try to ease their symptoms by using drugs or alcohol because this is a way for them to cope with their depression but unfortunately, this can worsen their depression and even increase their risk of suicide. (National Institute on Drug Abuse, 2020.)

A study of Finnish adolescents found that substance abuse and depression often occur together. Adolescents who are facing both depression and substance abuse are at a higher risk of negative consequences, such as self-harm and an increased risk of suicide. (Antti, 2017.)

Early recognition and treatment of depression is important to prevent severe symptoms and improve the results for adolescent (National Health Service 2020). The role of nurses is vital in both recognizing and managing depression in adolescents as they frequently serve as the first contact for young people seeking primary care services. Adolescents who receive early identification of depression receive more effective treatment and have better outcomes compared to those with a delayed diagnosis. (Centre for Disease Control and Prevention, 2022.)

Therefore, this systematic review aims at improving the comprehensive assessment of depression in adolescents seeking care in primary healthcare settings by providing nurses with resources to improve their ability to establish an early connection with potentially depressed adolescent clients. The goal is to equip nurses with the knowledge and skills necessary to identify signs of depression early, facilitate a proper diagnosis, and provide appropriate care.

2 ADOLESCENT DEPRESSION

2.1 Depression, Types, Symptoms, Risk Factors and Diagnosis.

A. Depression

Depression is a widespread mental health condition that impacts a substantial portion of the global population. It can increase the likelihood of developing other physical illnesses, such as coronary artery disease, among those who experience it. Additionally, individuals with depression have a greater risk of suicide, which is considered the most severe consequence of the condition. (THL, 2014.)

Depression is more than just temporary feelings of sadness or irritability. Depression is a persistent and ongoing condition that can extend for weeks, months, or even years. It is a common but serious mental illness, and it is widely recognized as such by the medical community. It is not a sign of weakness or a character flaw and cannot simply be "snapped out of". (National Health Service ,2019.)

It is estimated that depression affects people of all races, ethnicities, and genders, and it is not limited to any age group. Depression can occur in children, adolescents, adults, and the elderly (Rahn et al., 2019). While depression poses a significant economic burden for Finnish government, it results in significant distress for both the individual experiencing it and their family members. (Stenberg et al., 2013.)

The exact causes of depression are complex and multifactorial, and involve the interplay of genetic, environmental, and biological factors. It affects the levels of specific brain chemicals, such as serotonin and dopamine, which have a part in controlling mood. (World Health Organization, 2023.)

B. Types of Depression

Depression can present itself in various forms, and its manifestation depends on its severity. Depression is often categorized into mild, moderate, and severe forms. The most prevalent types of depression are major depression and persistent depressive disorder, formerly referred to as dysthymia. (Ainsworth, 2000.)

The major depressive disorder (MDD) represents the most common type of depression. It occurs once or repeatedly in a person's life as episodes of intense sadness. To identify MDD, signs need to persist for at least fourteen days with the depressive condition differing noticeably from the person's usual emotional state. (Ainsworth, 2000.)

Dysthymia is another prevalent type of depression, characterized by its milder nature. Dysthymia persists for a longer duration compared to MDD, lasting for at least twenty-four months, making it a severe disorder. People with this type of depression can endure depressive signs for couple of years prior to identification, or they may remain unidentified altogether. (Sansone, 2009.)

C. Symptoms of Depression

Prior to puberty, the occurrence of depression in boys and girls is revise, but it becomes twice as high in girls after they reach puberty (Dopheide, 2006). From the onset of puberty up to their adulthood, females possess a higher risk of experiencing their initial episode of major depression that is 170% to 270% times exceeding that of boys. Research has shown female exhibit higher levels of depression and experience more severe symptoms compared to boys. (Crowe et al. 2006.)

Gender variances emerge in how depressive symptoms manifest clinically. Boys commonly displayed symptoms like crying, exhibit physical rebellious attitude, sadness, and suicidal thoughts. Conversely, girls presented symptoms including suicidal thoughts, self-criticism, self-harm, fear of isolation, fear of failure, feelings of regret and rejection. (Crowe et al. 2006.)

Depression tends to manifest differently in girls, leading to internal symptoms like feelings of isolation, unhappiness, low self-esteem, and frequent crying. The Study also showed that in both adolescent male and female, depression symptoms often connect to relationship challenges (like withdrawing from social situations, being easily irritated, and feeling lonely) as well as struggles with cognitive functions like making decisions and trouble focusing. (Crowe et al. 2006.)

D. Risk Factors of Depression

The period of adolescence is a crucial stage of development because undergoing puberty and experiencing slower growth compared to peers can create substantial physical and emotional stress. In severe cases, this can even lead to more significant and notable mental health disorders. At its most extreme, this can result in the development of severe mental health conditions. (Välimäki et al., 2009.)

Depression is a complex mental health disorder that cannot be attributed solely to one factor or event in an individual's life. A person's upbringing, surroundings, and biological elements collectively contribute to depression, these biological elements are interconnected. Genetics

and puberty predispositions have numerous risk factors that can elevate the chances of depression during adolescence. (Heiskanen et al. 2011; Toivio & Nordling 2013.)

Regarding social relationships, risk factors for depression include experiencing victimization or intimidation, lacking support from friends, and feeling isolated. Relationships outside of the family, particularly friendships, are particularly important. Environmental factors that can contribute to depression are often linked to situations both at school and home. Parents stand as the main influencers, yet financial difficulties can heavily burden adolescents with excessive stress. Within the school setting, the most notable risk factor frequently revolves around bullying and social rejection. (Friis et al., 2004.)

When considering the risks of developing depression, heredity plays a significant role. Family history of depression or whose parents have experienced it themselves carry an increased likelihood of developing depression. According to studies by Toivio and Nordling (2013) and Heiskanen et al. (2011), heredity accounts for approximately 40% of the risk of becoming depressed, other risk factors include the presence of other mental illness, chronic diseases, and concerns about the health of one's parents.

Depression is often linked to various factors such as stress, sleep disorders, substance abuse, lack of support, and academic difficulties. Despite seeking independence, adolescents still require adult support. Although stress by itself does not directly induce depression, it can make adolescents more susceptible to it. Stressors are often linked to interpersonal connections within the home and school settings and academic struggles without support can lead to unbearable stress. Negative events like bereavement, financial difficulties, and family problems, also contribute to stress. Pubertal changes can result in decreased self-esteem and added stress for adolescents. (Heiskanen et al., 2011.)

Depression can sometimes be triggered by negative experiences, such as violence, bullying, or trauma, physical illnesses, and several chronic pain. A single negative life event, like parental divorce or the loss of a relative, can potentially trigger depression in an adolescents. Sexual abuse and domestic violence notably heighten the risk of adolescent's depression. However, it's crucial to recognize that one major event alone might not be the exclusive cause of depression. (Heiskanen et al., 2011.)

E. Diagnosis

The criteria for diagnosing depression in both adults and young persons are similar, the way in which the signs are presented differs according to growth phase of the individual. The diagnosis of depression in these age groups can be challenging due to the related developmental concerns. Some adolescents struggle to identify their internal emotional states, making it difficult to diagnose depression. (Bhatia et al., 2007.)

Research on adolescent depression emerged since 1970s and 1980s, using diagnostic guidelines for depression that were originally designed for adults. However, the research history on depression in adolescent is relatively lower compared to that of depression in adults. (Crowe et al., 2006.)

According to Table 1 below, a diagnosis of depression is made when an individual consistently displays a minimum of five symptoms from the following list almost daily for at least two weeks.

TABLE 1, According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) by Richardson & Katzenellenbogen (2005).

A.	Exhibiting a minimum of one of the subsequent signs: <ul style="list-style-type: none"> • Frequent irritable mood observed or reported by others. • Experiencing a lack of enthusiasm and diminished interest in daily activities.
B.	Manifestation of at least four of underlisted signs: <ul style="list-style-type: none"> • Observable alterations in body weight. • Difficulty falling asleep or excessive sleep on most days. • Frequent restlessness or slowed movements nearly every day. • Persistent fatigue or a lack of energy almost daily. • Feelings of low self-worth. • Reduced capacity to focus or concentrate. • Ideations of death, suicidal thoughts, or suicide attempts.
C.	These symptoms result in substantial distress or hinder one's ability to function effectively in social, academic, and professional aspects of life.
D.	These signs are not attributed to the direct physical effects of substance use or a general medical condition such as hypothyroidism.
E.	These signs are not explained by another mental disorder, such as schizophrenia or bipolar disorder.

2.2 Adolescent Depression

Adolescence is a crucial time in an individual's life, as they navigate through physical, social, and emotional transformations. Depression can significantly impact the development of adolescents and hinder their ability to fully engage in life. Additionally, untreated depression in adolescence can elevate the likelihood of developing depression in adulthood. It is essential for parents, educators, and nurses to identify the symptoms of adolescent depression and to reach out for assistance if needed. Early intervention is crucial in treating depression and can prevent the condition from becoming more severe. (World Health Organization, 2021.)

During adolescence, depression ranks among the most significant health challenges that can result in disabilities among this age group. The changes that occur during this

developmental period, both biological and social-contextual, have been identified as contributing factors to the increase in depression. Puberty changes, heightened stress levels, increased self-awareness and social consciousness, and maturation of brain circuitry are all factors that can lead to depression during adolescence. (Stapinnski et al., 2013.)

Depression is often underdiagnosed among this population, leading to many cases going untreated and leading to long term consequences. Depression can be easily mistaken for normal teenage mood swings and rebellious behaviour. Adolescents are also less likely to seek help due to stigma and the perception that mental health is a sign of weakness. Moreover, many health care providers are not trained to recognize and diagnose depression in adolescents, leading to missed opportunities for early intervention. (Jennifer et al., 2013.)

More than 4% of the global population, particularly adolescents, are suffering from depression (WHO,2017). Among adolescents in Finland, depression represents a prevalent mental health issue. Approximately 9.2% of Finnish adolescents aged 13 to 18 years met the diagnostic guidelines for depression, based on a structured psychiatric interview (Ranta et al., 2007). In Finland, individuals born between 1995 and 2012 have the highest number of recorded depression diagnoses from specialized services among the youth population. (Filatova et al., 2018.)

Depression in adolescents can have severe and long-lasting consequences if not properly treated. Research has shown that adolescent depression is related to negative outcomes such as engaging in violence, substance abuse, an increased risk of suicide, self-harm, getting into physical fights and poor academic performance. (Katherine & Kate, 2022.)

2.3 Depression and its Relation to Substance Abuse, Self-Harm and Suicides

Untreated depression in adolescents can lead to serious consequences, including substance abuse, self-harm, and suicidal behaviour. Suicide among adolescents is a significant public health issue and a national tragedy, as it ranks as the third leading cause of death in this group. (Anderson, 2002.)

Adolescent depression is a significant risk factor for self-harm, substance abuse and suicide. Depression increases the likelihood of self-harm behaviors and suicide attempts. Depression and substance abuse often co-occur, with one disorder increasing the risk of the other (Elisha et al., 2011). One of the most concerning outcomes of depression in adolescents is an increased risk of suicide. Depressed young people are at greater risk of suicidal thought, attempts, and completed suicides. (Jeffrey & Bridge, 2011.)

Suicide ranked the most third common cause of death among individuals between age 15 and 19 years old, and approximately 53,000 young people lost their lives to suicide in 2016. (WHO, 2019). Suicide is also a serious concern for adolescents with untreated depression. Self-harm and thoughts of suicide can be expressions of intense emotional distress and a way for some individuals to try and cope with difficult emotions. It's important to understand that self-harm and suicidal thoughts are serious concerns and should not be taken lightly. (National Alliance on Mental Health, 2023.)

However, many adolescents with depression do not get the necessary treatment for their condition, and as a result, may turn to substance abuse or attempt suicide. This shows the importance of identifying and treating depression in adolescents as early as possible. It is essential for nurses to recognize signs of depression in adolescents and to seek appropriate treatment. Early intervention and clinical care of depression in adolescent can greatly reduce the likelihood of suicide and substance abuse. Adolescents who receive appropriate treatment for their depression are less likely to engage in self-harm behaviors and have better outcomes in terms of mental health and overall functioning. (Joan et al., 2015.)

2.4 Treatment of Adolescent Depression

When an adolescent is diagnosed with depression, it is essential to offer suitable treatment and/or make referrals when necessary. The main treatment for adolescent depression includes pharmacological and non-pharmacological method or a combination of both. (Young et al., 2010). No matter the treatment employed, it is pivotal to re-evaluate the adolescent's response to treatment. Monitoring treatment progress can help identify if adjustments need to be made, additional interventions are necessary, or if referral or hospitalization is needed.

The initial stage in managing depression in adolescents involves evaluating safety and assessing the level of depression severity. Screening tools like the Patient Health Questionnaire (PHQ-9) can aid in this assessment, allowing the healthcare provider to classify depression as mild, moderate, or severe. Mild to moderate depression can frequently be addressed through education, support, and counseling, while severe depression might necessitate medication or a referral to psychiatric specialists. (Cheung et al., 2018.)

It's crucial to note that depression can be complex, and management should be tailored to meet the unique needs and circumstances among each individual. A collaborative approach involving the adolescent, their family, and healthcare providers is essential for optimal treatment outcomes.

A. Pharmacological Treatment of Depression

Pharmacotherapy, or the use of antidepressant medication, is widely considered to be a first-line treatment for individuals with severe and persistent instances of depression. Antidepressant medication, also known as pharmacotherapy, is commonly recognized as the primary treatment option for individuals with persistent and severe depression. Antidepressants are effective in alleviating depression symptoms, especially during acute episodes. (Arroll et al., 2009.)

The use of antidepressants should be approached with caution. It is important to consider all potential benefits and risks when using antidepressant medication. The goal is to use the lowest dose of medication that is effective in relieving symptoms while minimizing the risk of adverse effects. Newer antidepressants may have improved tolerability compared to older drugs, but they should still be used with caution and under the guidance of a healthcare provider. (National Health Service, 2021.)

Antidepressants were successful in treating depression in 60-80% of patients. However, the combined use of antidepressant medication and psychotherapy proved to be more effective in reducing symptoms of depression compared to using either treatment method. (Pim et al., 2014.)

Healthcare providers must carefully observe adolescents who are undergoing antidepressant treatment because of the possible danger of heightened suicidal thoughts and actions. This risk is particularly prominent at the beginning of the treatment or after a modification in the dosage. Adolescents treated with antidepressants could experience unfavorable outcomes like restlessness and suicidal thoughts. (Jeffrey, 2007.)

B. Non-Pharmacological Treatment of Depression

The primary objectives of using non-pharmacological treatment in treating depression is to minimize stress factors, enhance positive activities, establish a routine in daily life, increase awareness of available resources, develop social skills, learn effective problem-solving strategies, alter negative patterns of perception and interpretation, and boost self-confidence and self-esteem. (Mehler-Wex & Kölch, 2008.)

Since adolescents are still reliant on their family, it is crucial to involve the family in the treatment process. Family therapy is an integral part of the treatment plan to achieve a favorable outcome. The primary objectives of family therapy are to address and diminish family conflicts, improve communication within the family, enhance role performance, and foster positive mental health for all family members. (Murphy 2004.)

Cognitive-Behavioral Therapy (CBT) is a psychotherapy that aims to identify and change negative thought patterns and behaviors that contribute to depression. It helps patients develop more positive and adaptive ways of thinking to improve their mood and overall well-being. CBT is effective in reducing symptoms of depression. (John et al., 2010.)

Other than CBT, there are various effective treatment options available for depressed adolescents, such as interpersonal psychotherapy, art therapy, dance therapy, internet-based therapy, lifestyle changes, light therapy, meditation, music therapy, green care, antidepressants, psychosocial interventions, deep brain stimulation, or a combination of pharmacological and non-pharmacological approaches. (Dopheide, 2006.)

3 AIMS AND OBJECTIVES

3.1 Research Problem

My inspiration for conducting this research comes from my personal experiences during my mental health and substance abuse nursing internship. During my internship, I noticed that the mental disorder that appeared most frequently among adolescent patients who were admitted to the ward was depression.

Many of these patients had not been diagnosed with depression prior to admission and were diagnosed with depression during their stay, indicating a late diagnosis. These adolescents also faced various social challenges, including bullying, peer pressure, relationship issues, cyberbullying, substance abuse, cultural and societal differences, academic stress, social exclusion, and other similar issues.

However, despite their struggles, many adolescents were unable to recognize that they were experiencing depression. Even when they attempted to seek help from primary health care services in their municipalities, they were often unable to obtain the necessary aid. As a result, some of them resorted to drug use, self-harming or even suicide.

3.2 Aim of the Study

The aim of this systematic review is to improve the comprehensive assessment of depression amongst the adolescent clients seeking care in primary healthcare settings, by focusing on nursing roles on early connection with adolescent clients. This will ultimately assist nurses in identifying depression symptoms earlier, receiving an accurate diagnosis and providing appropriate care to the clients.

3.3 Research Question

What important role do nurses play in establishing an early connection with adolescent who may be having depression?

4 METHODOLOGY

4.1 Design

The method used in this study is systematic review. A systematic review is a type of literature review that involves a rigorous and systematic process for identifying and appraising research studies on a research question to provide answers. The goal of a systematic review is to provide a comprehensive and unbiased summary of the available evidence on a topic, which can be used to inform clinical practice, policy decisions, and future research. (Dewey & Drahota, 2016.)

Systematic reviews have been praised for their ability to provide high quality and transparent evidence, but they have also received criticism. One major criticism is that the process can be time-consuming and expensive, making it difficult to keep up with the latest research. To address this concern, the researcher aims to optimize the utilization of advanced search techniques and tools, along with maximizing access to accessible articles. (Dewey & Drahota, 2016.)

As shown in the Figure 1 below, the search criteria used in a systematic review may exclude relevant studies, leading to a biased conclusion. To address this criticism, the researcher intends to diligently document every stage of the process, thereby enhancing transparency and reproducibility. (Dewey & Drahota, 2016.)

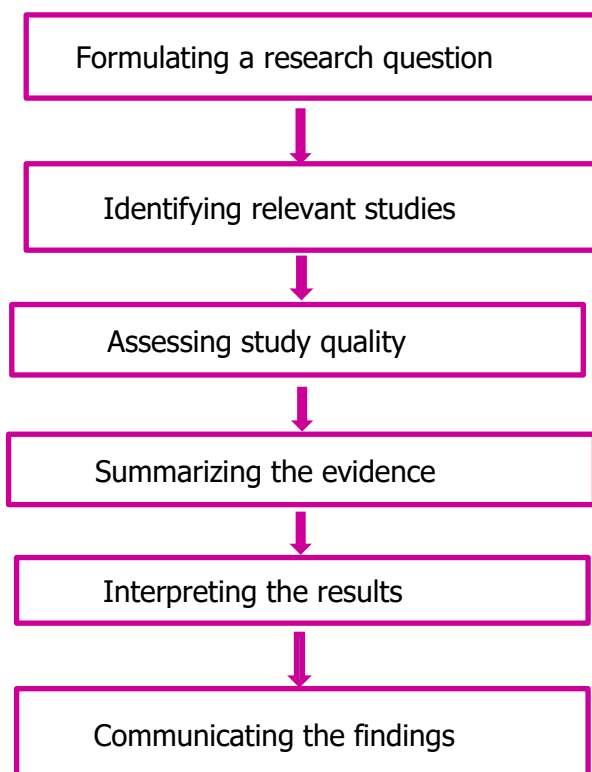


FIGURE 1. Process of systematic review. (Dewey & Drahota, 2016.)

4.2 Inclusion and Exclusion Criteria

This Table 2 below outlines the inclusion and exclusion criteria for this systematic review.

Inclusion Criteria	Exclusion Criteria
Article published between 2000 and 2023 to address the fact that there has been limited research conducted on this topic within the past 5 to 10 years.	Articles published before 2000.
Literature published in the English language is included, given that the primary study for the review is English.	Articles that are not written in the English language are excluded from the study.
Peer-reviewed articles, given that they undergo a rigorous evaluation process by experts in the field before publication.	Non-Peer-reviewed articles.
Only studies that gives in-depth content is included to guarantee that the literature is relevant to the topic of the review.	Studies that do not specifically focus on the literature review.

4.3 Identifying Relevant Studies

Advanced search techniques were used to ensure that the search results were focused and precise. These techniques included Boolean operators such as AND, OR, truncation, and phrase searching. A suitable search strategy was employed to identify relevant studies in all the articles. The sources and resources used in the search were all adequate, ensuring that a comprehensive search was conducted to gather a wide range of relevant articles.

By using the Boolean operator AND, the author was able to narrow down the search results to studies that specifically discussed both "nurses' roles" AND "adolescent depression." Additionally, truncation allowed the author to expand the search to include variations of the search term "nurse", such as "nurses" or "nursing". Phrase searching was also useful in identifying studies that included the exact phrase "nurses' roles in identifying adolescent depression".

The search for this review was conducted between December 2022 and October 2023, using relevant keywords, such as depression, adolescent, nurses' role, primary care, and early connection. Databases such as CINAHL, ScienceDirect, and PubMed were utilized. These databases are reputable sources of academic research and were chosen specifically for their relevant literature.

The PRISMA figure 2 below illustrates how the author obtained the necessary search results of 10 articles. The author searched through various databases, including ScienceDirect (3507 articles), PubMed (785 articles), and CINAHL (18 articles) to identify relevant articles.

A total of 4310 articles were from multiple databases. To maintain the search results' accuracy, the author meticulously removed duplicates, which led to the exclusion of 4050 articles, ultimately leaving 260 unique articles for further consideration.

Following this initial reduction, the author applied inclusion criteria to pinpoint articles most closely related with the research focus. As a result, the selection was further streamlined to include 135 articles that met the specified criteria. 125 articles were excluded based on exclusion criteria.

A subject heading screening process was implemented to further refine the selection. This process excluded 115 records based on subject headings resulting to 20 articles. To improve the selection process, a subject heading screening procedure was implemented. This step resulted in the exclusion of 115 records due to subject headings, ultimately resulting in a final selection of 20 articles.

Following the full-text assessment, 12 studies were excluded because they do not give in-depth content. The author judiciously selected 8 studies that met the specific criteria for inclusion in the review. These 8 studies were deemed to be the most valuable to the research. Among these 8 studies, 5 were initially selected because they provided in-depth meaning beyond their abstracts, while the remaining 3 were chosen based on the full-text assessment, collectively representing the most valuable contributions to the research.

Additionally, the author conducted a hand search of the reference lists of the selected articles, which resulted in the inclusion of 2 more studies. The author assessed the full text of these articles for eligibility and arrived at a result of 10 studies altogether that were included in the review. This process demonstrates a rigorous approach to identifying and selecting relevant studies, which enhances the quality and reliability of the systematic review.

Overall, by utilizing advanced search techniques and relevant databases, the author efficiently identified studies crucial to the thesis on the important role that nurses play in establishing an early connection with adolescent who may be having depression.

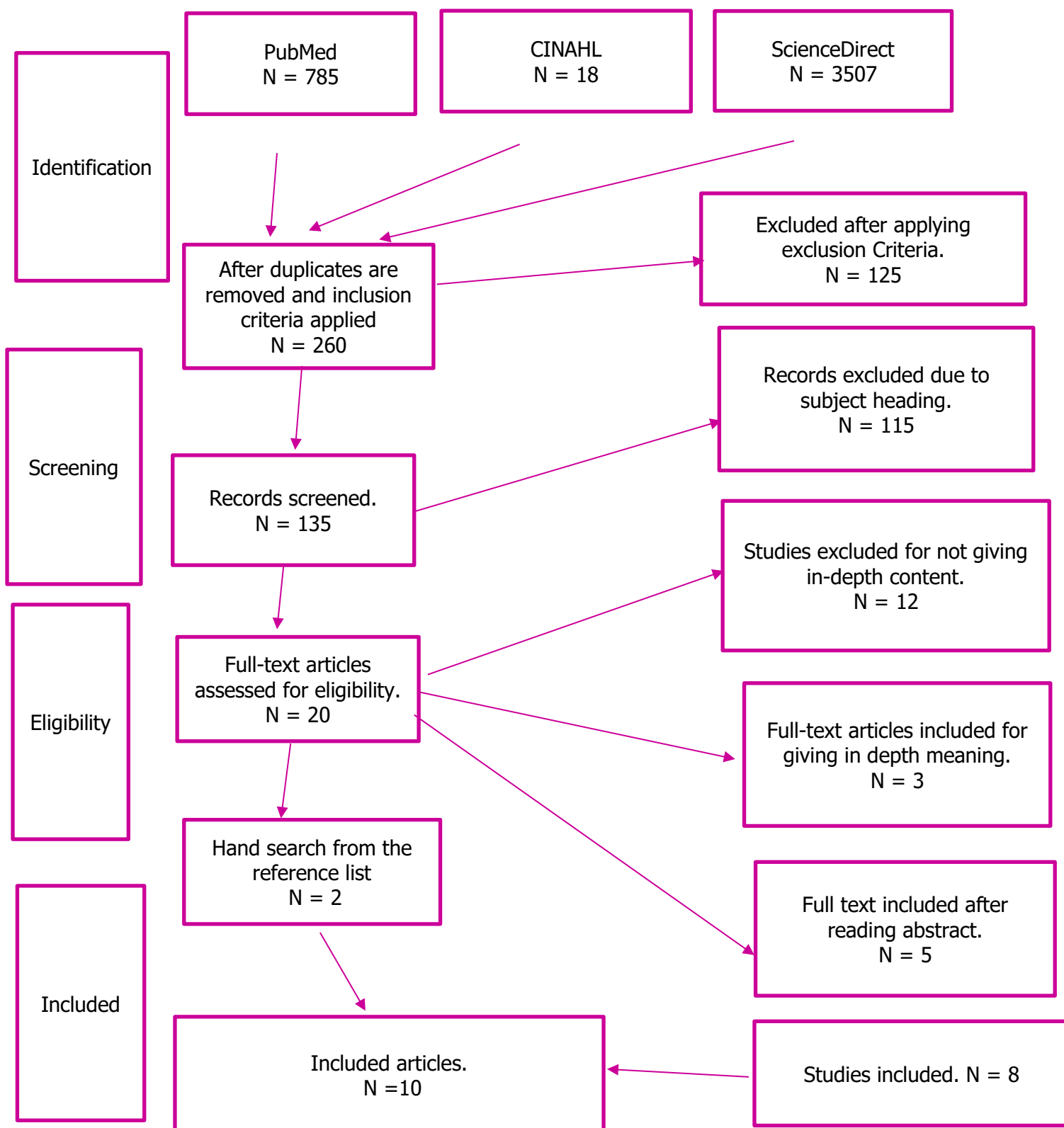


FIGURE 2: Process of Articles Selection Using PRISMA Flowchart (University Libraries, 2020).

The table provided below displays ten articles that have been included in the Systematic review.

TABLE 3. Ten Articles Included in Qualitative Synthesis.

Articles	Aim	Year/Authors
Nurses' roles in changing practice through implementing best practices: A systematic review.	To enhance education, training, collaboration, communication, and feedback of nurse's role.	2022/Ten Ham Baloyi.
Depression in adolescence.	To identify depression in primary care settings through nurses' role, and by educating patients and supporting adolescents.	2003/ Emily J Hauenstein.
Caring for adolescents and families in crisis.	To address unique challenges in adolescent mental health through advanced practice nurses' expertise.	2003/ Cindy Parsons.
Caring for the Mental Health of Youth and Families: What is the Role of the Psychiatric Mental Health Advanced Practice Nurse?	To equip primary nurses in order address unique challenges in adolescent mental health, providing solutions and insight for future care.	2021/ Elizabeth Bonham & Andrea Kwasky.
Improving Adolescent Depression in Primary Care: A Quality Improvement Initiative.	To enhance adolescent depression care and identification in primary care settings through GLAD-PC implementation.	2023/ Banesa Chavez, Jessica Sullivan, Paola Portela.
Role of school nurses in identifying and supporting children and young people with mental health issues.	To explore primary nurses' role in addressing and supporting mental health issues.	2020/ Sara Smith, Ann Bevan.
The patient health questionnaire for	To assess reliability of PHQ-A tool.	2002/ Jeffrey G Johnson, Emily S

adolescents: validation of an instrument for the assessment of mental disorders among adolescent primary care patients.		Harris, Robert L Spitzer, Janet B W Williams.
Supporting Adolescents with Mental Health Problems in Secondary Education: Feasibility of a Supported Education Intervention.	Examine feasibility and effectiveness of support and education for adolescent mental health	2022/ Lindy Beukema et al., 2022.
Active Listening.	Emphasize effective communication in healthcare.	2022/ Karie T. et al., 2022.
Developing patient rapport, trust, and therapeutic relationships	Explore rapport in nurse-patient relationship.	2017/ Bob Price.

4.4 Assessing the Quality of Study

In evaluating the quality of the 10 articles, a careful assessment was done using the JBI (Joanna Briggs Institute) checklist, which is a well-known tool for evaluating how well research articles were conducted (See appendix in page 35-44). The 10 articles were found to be relevant methodologically, indicating that they were conducted using sound and robust research practices. In terms of research methods, seven of the articles employed quantitative research approaches, while the remaining three adopted qualitative methods.

All the articles were clearly and explicitly stated ensuring that the focus of the research was well-defined. The criteria for appraising studies were all appropriate except for two articles because these articles did not sufficiently address the key variables of interest which marked a limitation in their methodology.

The overall quality and relevance of the 10 articles were affirmed and demonstrated a clear and explicit articulation of their research focus. This ensured that the objectives and scope of each study were well-defined.

4.5 Interpreting the Results.

In this review, the main analysis method employed was the inductive content analysis approach. One effective technique for analysing both qualitative and quantitative data is content analysis, which can be performed using either deductive or inductive approaches. Qualitative content analysis is a frequently utilized method in Nursing science research (Elo & Kyngäs, 2008). However, to effectively compress, categorize, and present research materials in literature review studies, the utilization of content analysis becomes essential (Tuomi & Sarajärvi 2018.)

Content analysis can serve as a valuable method for organizing, quantifying, and characterizing the content under review. It provides a means to categorize and describe the subject matter and construct models that can condense and generalize the observed phenomena. To accomplish this, the researcher must engage in a thorough examination of the research materials aligned with the research's objectives. (Kyngäs & Vanhanen 1999.)

The utilization of this method was necessary to merge and synthesize information from various sources and studies that were examined. To address the research questions effectively, the inductive content analysis is conducted in several stages, including data reduction, data grouping, and categorization of the gathered information (Jenna, 2021). The process of content analysis entails several steps, including reading and comprehending the materials, organizing, and integrating the gathered data, and establishing categories and themes based on the differences and similarities found within the materials examined during the review. (Kyngäs et al. 2019.)

The researcher systematically conducted inductive content analysis by sequentially performing data reduction, data grouping, and categorization of gathered information to merge and synthesize information from multiple sources and studies for effective addressing of research question. The data was reduced by condensing and simplifying the information gathered from various sources and studies during the research process to ensure transparency. The researcher selected specific sentences from the main articles as the analytical units for analysis.

After a thorough examination of the materials, the researcher successfully identified the primary themes and information categories within the research articles. To address the

research question, the researcher selected phrases or sentences from the main articles as the analytical units.

The data was organized into groups and information was gathered from the set units which helps in the identification of themes by simplifying and sub-categorizing analytical units from the reduced data, after they were collected and repeatedly studied. The information was then collected by sub-categorizing the data and placing these sub-categorized data into generic categories derived from the research questions.

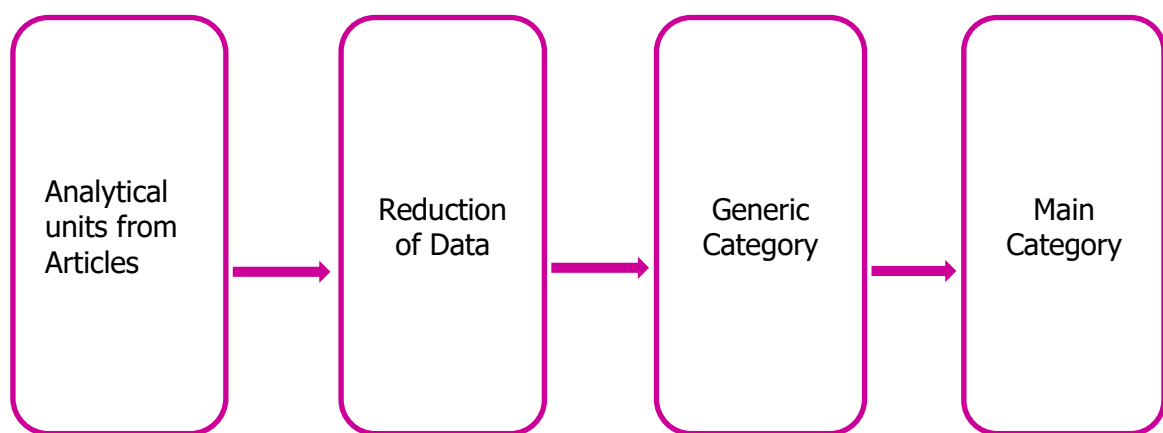


FIGURE 3. The Procedure for Analysing Content Data (Elo & Kyngäs 2008).

TABLE 4: Content Analysis

Analytical units from Articles	Reduction of Data	Generic Category	Main Category
<p>Nurses with active listening and empathetic communication skills create a compassionate and effective healthcare environment that fosters understanding, and patient-centered care. (Karie et al., 2022.)</p> <p>Encouraging open and honest communication with adolescents is essential for understanding their experiences and needs. (Cindy, 2003.)</p>	<p>-Active listening.</p> <p>-Open and honest communication.</p> <p>-Building trust and Rapport.</p>	Foster positive communication.	Effective Communication.
<p>Nurses foster a safe and non-Judgmental environment where adolescents feel comfortable and open to discussing their feelings and concerns. (Emily, 2003.)</p> <p>Nurses create a safe and supportive environment for discussing concerns and seeking help. Their involvement leads to</p>	<p>-Non-judgmental and comfortable atmosphere.</p> <p>-Safe and supportive environment.</p>	Create a safe and non-judgmental atmosphere.	Creating a Safe and Non-Judgmental Environment.

<p>improved outcomes and well-being for adolescents and families. (Cindy, 2003.)</p>			
<p>Primary care nurses actively contribute to promote awareness and reducing the stigma surrounding mental health issues such as depression among adolescents by educating family and young people about depression. (Sara and Ann, 2020.)</p> <p>Nurses play a crucial role in implementing best practices. To enhance their effectiveness in this role, it's essential to focus on education, especially when it comes to educating patients. (Ten Ham-Baloyi, 2022.)</p>	<p>-Stigma reduction.</p> <p>-Promoting awareness.</p> <p>-Educating.</p>	<p>Promotes awareness by educating adolescents and their families.</p>	<p>Educating adolescents and their families.</p>
<p>Nurses establish an early connection with adolescents who may be experiencing depression by fostering trusting relationships. (Sara & Ann, 2020.)</p>	<p>-Fostering trusting relationship.</p> <p>-Building trust and</p>	<p>- Establish trust and rapport.</p>	<p>Building trust.</p>

<p>Developing trust and rapport with adolescents is crucial for establishing a connection. (Bob Price, 2017.)</p>	<p>Rapport.</p>		
<p>Nurses play a vital role in identifying and offering support for adolescents with depression by implementing thorough assessment tools, conducting interviews, and employing their clinical expertise to detect symptoms, thus facilitating timely interventions and appropriate care. (Elizabeth & Andrea, 2021.)</p> <p>The GLAD-PC program enhances nurses' ability to assess and care for depressed adolescents. The initiative recognizes nurses as instrumental in enhancing care for depressed adolescents and promoting early connection. (Banesa et al., 2023.)</p> <p>The PHQ-A enables early identification and</p>	<p>-Using Assessment tools.</p> <p>-Conducting interviews.</p>	<p>-Evaluate and assess.</p>	<p>Screening and Assessment.</p>

<p>intervention, improving mental healthcare delivery and potentially enhancing long-term outcomes for adolescents. (Jeffrey et al., 2002.)</p>			
<p>Nurses can assist adolescents in assessing professional mental health services when needed. (Sara & Ann, 2020.)</p> <p>The significance of decision-making among mental health specialists is paramount for ensuring a thorough evaluation, diagnosis, and treatment of adolescent depression. (Lindy et al., 2022.)</p>	<ul style="list-style-type: none"> - Facilitating access to mental health Services. - Decision making. 	<ul style="list-style-type: none"> - Collaborative mental health decision making. 	<p>Collaborative Decision Making.</p>

5. RESULT OF THE REVIEW

- A. **Effective Communication:** Effective communication is the foundation of building a connection with adolescents, particularly when dealing with sensitive issues such as depression. Nurses should be skilled in active listening and empathetic communication. By being attentive to what adolescents say and validating their feelings, nurses can create an environment where adolescents feel heard and understood. (Karie et al., 2022.) Encouraging open and honest communication with adolescents is essential for understanding their experiences and needs. (Cindy, 2003.)
- B. **Creating a Safe and Non-Judgmental Environment:** Adolescents with depression often fear judgment or rejection. Nurses should strive to create a safe and non-judgmental space where adolescents feel comfortable discussing their feelings. (Emily, 2003.) This environment fosters trust and reduces the stigma associated with mental health issues, making it more likely that adolescents will seek help and share their experiences. (Cindy, 2003.)
- C. **Educating Adolescents and their Families:** Nurses can provide valuable education about depression, its symptoms, and available treatment options to both adolescents and their families. When adolescents and their families have a better understanding of the condition, they are more likely to recognize its signs and seek help early. Nurses need to continuously educate themselves and their patients to provide the best possible care. (Ten Ham Baloyi, 2022.) Primary care nurses actively contribute to creating awareness and reducing the stigma surrounding mental health issues such as depression among adolescents by educating family and young people about depression. (Sara & Ann, 2020.)
- D. **Building Trust:** Trust is a fundamental component of the nurse-patient relationship. By consistently demonstrating empathy, respect, and confidentiality, nurses can build trust with adolescents. When adolescents trust their healthcare providers, they are more likely to disclose their feelings and thoughts. (Sara & Ann, 2020.) Building trust and rapport with adolescents is essential in nursing care, especially when addressing sensitive issues like depression. It creates a safe and respectful environment, allowing for open communication. (Bob Price, 2017.)
- E. **Screening and Assessment:** Nurses have a crucial role in evaluating adolescents for indications of depression. By utilizing standardized screening tools and assessments, nurses can establish a connection to identify symptoms and risk factors linked to depression. (Jeffrey et al., 2002.) Nurses can play a significant role in screening and assessing adolescents with mental health issues such as depression by utilizing comprehensive

assessment tools, conducting interviews, and applying their clinical expertise to detect symptoms, enabling timely interventions and tailored care. (Elizabeth & Andrea, 2021.)

- F. Collaborative Decision Making: In the context of depression, collaborative decision-making involves discussing treatment options with the adolescent and involving them in the decision-making process. This approach empowers adolescents to have a say in their treatment plan, which can improve treatment adherence and outcomes. It also helps build a therapeutic alliance between the nurse and the adolescent. (Lindy et al., 2022.)

6 DISCUSSION

The role of primary care nurses in establishing early connections with adolescents who may be experiencing depression is of paramount importance. The finding that states the importance of effective communication when working with adolescents, especially when addressing sensitive topics like depression. It shows the need for nurses to possess strong skills in active listening and empathetic communication, as these qualities enable the establishment of a trusting and supportive environment. (Karie et al., 2022.)

In practice, this means that nurses must actively engage with adolescents, listen attentively, and validate their feelings to foster a connection and facilitate discussions around their emotional well-being. Furthermore, encouraging open and honest communication is key to gaining insights into adolescents' experiences and needs, which can ultimately lead to more effective care and support.

Establishing a safe and non-judgmental environment is significant when dealing with adolescents facing depression. (Emily, 2003). This approach acknowledges the widespread fear of judgment or rejection among them, which can hinder their willingness to discuss their feelings. By creating such an atmosphere, nurses can nurture trust and diminish the stigma surrounding mental health issues, aligning with (Cindy, 2003). This will promote a more open and candid dialogue and encouraging adolescents to seek support and share their experiences in practice.

Crucial role of nurses in educating adolescents and their families about depression, its symptoms, and available treatment options. (Ten Ham Baloyi, 2022.) This finding indicates that when both adolescents and their families are well-informed about the condition, they are more likely to recognize its signs and seek early assistance, pointing out the need for continuous education among nurses and their patients. Additionally, the active contribution of primary care nurses in raising awareness and reducing the stigma associated with mental health issues, particularly depression among adolescents, through their educational efforts with families and young individuals. (Sara & Ann, 2020.) This suggests practical implications for enhancing mental health support within the community.

The finding that trust is a fundamental component of the nurse-patient relationship holds significant importance in nursing practice. To establish trust, nurses must consistently demonstrate empathy, respect, and confidentiality when interacting with adolescents. (Sara & Ann, 2020.) This trust is crucial because it encourages adolescents to openly share their feelings and thoughts with their nurses. Building trust and rapport with adolescents is vital in nursing care, especially when addressing sensitive topics such as depression. This

approach creates a safe and respectful environment that fosters open and effective communication. (Bob Price 2017.)

The outcome regarding the crucial role of nurses in screening and assessing adolescents for depression is of great significance in nursing practice. (Jeffrey et al., 2002.) This indicates the importance of using standardized screening tools and assessments to establish a connection with adolescents, identify potential symptoms, and assess risk factors associated with depression. It is evident that nurses can play a pivotal role in this process by utilizing comprehensive assessment tools, conducting interviews, and utilizing their clinical expertise to identify symptoms. This approach enables timely interventions and the delivery of tailored care to adolescents with mental health issues such as depression. (Elizabeth & Andrea 2021.)

The finding regarding collaborative decision-making in the context of depression is highly significant for nursing practice. (Lindy et al., 2022.) This engages adolescents in discussions about treatment options and involving them in the decision-making process empowers them to actively participate in their treatment plans. This collaborative approach not only enhances treatment adherence but also improves overall treatment outcomes. Moreover, it plays a pivotal role in fostering a therapeutic alliance between the nurse and the adolescent, which is crucial for effective healthcare delivery.

7 CONCLUSION

7.1 Reliability

The concept of reliability plays a crucial role in assessing the quality of research (Fouka & Mantzourou, 2011). When writing a thesis, it is important to keep these considerations in mind. This review sourced and assessed articles from reputable databases, including CINAHL, PUBMED, and ScienceDirect. The researcher applied rigorous criteria, such as publication dates ranging from 2000 to 2023 and peer-reviewed status in esteemed global publications, to establish the credibility of the chosen articles.

The researcher ensured that all the sources used in the thesis were properly cited and acknowledged in the reference section. This ensures that the original authors' work is recognized and credited, preventing plagiarism. Every stage in this review was executed with the utmost diligence. The review predominantly relied on recent and relatively high-quality review articles pertaining to this subject, making it comprehensive in its coverage of the key research findings on adolescent depression. The author exclusively employed ethically sound, reputable, and well-established databases and literature sources to obtain research materials.

Consequently, this research is considered reliable due to the meticulous documentation of the article selection process. Therefore, the information derived from these articles can be trusted and applied to educate nurses about the role of nurses in establishing early connections with adolescents who may be experiencing depression.

7.2 Limitation

One of the primary limitations to this research is the potential for selection bias. The study is limited to only those adolescents who present to primary health care settings, and thus, it does not capture the prevalence of depression among adolescents who do not access healthcare services.

The thesis also limited its review to studies that focused on adolescent depression's specific conditions, such as types, symptoms, causes, diagnosis, effects, treatment, and nurses' role in establishing early connection and their roles in identifying depression. The researcher acknowledged that other studies may exist on adolescent depression that are not included in this review. Still, the information gathered was sufficient to represent the entire context of the thesis. Additionally, it's important to acknowledge that this is a bachelor's thesis, which inherently comes with a restricted scope.

7.3 Recommendation

This research provides a comprehensive literature review of studies on how nurses can establish a connection with adolescent clients to identify depression at an early stage. Based on the findings of this research, it is recommended that nurses in primary care settings should prioritize the establishment of a connection with adolescent clients to identify depression at an early stage. This can be achieved by developing and implementing training programs for nurses to improve their communication skills.

Additionally, healthcare organizations should provide resources and support for nurses to create a safe and non-judgmental environment for adolescent clients to discuss their mental health concerns. Collaboration with mental health professionals and other healthcare providers is also recommended to ensure that appropriate care and referrals are provided to adolescents with depression.

Finally, additional research is needed to explore the efficacy of these strategies and interventions in establishing an early connection with adolescents with depression in adolescents in primary care settings.

7.4 Conclusion

Nurses in primary care play an important role in identifying potential depression in adolescents through early connections, which includes effective communication, creating a safe and non-judgmental environment, educating adolescents and their families, building trust, screening and assessment, and collaborative decision-making, nurses create an environment conducive to early detection and intervention. The emphasis on creating safe spaces for open expression and fostering collaboration and communication, particularly through active listening, shows the importance of nurses as empathetic and attentive caregivers.

Nurses, through their dedication to providing a supportive atmosphere, enable adolescents to feel comfortable sharing their innermost feelings. This crucial connection between nurses and adolescents facilitates the recognition of emotional struggles that might otherwise go unnoticed. Furthermore, the active involvement of nurses in collaborating with both patients and other healthcare professionals enhances their ability to detect the signs of depression and initiate timely interventions.

Nursing responsibilities in primary care are not static and change over time as healthcare needs evolve. As such, there is a need to continually examine the roles of nurses in

establishing an early connection with potential adolescents experiencing depression. Nurses must remain proactive in refining their approaches. By staying attuned to the latest research, incorporating updated assessment tools, and fostering ongoing professional development, nurses can ensure their practices align with the changing requirements of effectively recognizing and addressing potential depression in adolescents.

REFERENCES

- Aalto-Setälä 2002. Depressive disorders among young adults. Academic dissertation, Department of Mental Health and Alcohol Research, National Public Health Institute, Department of Clinical Medicine, Hospital for Children and Adolescents/Child Psychiatry, University of Helsinki, Finland.
- Ainsworth, Patricia. Understanding Depression, University Press of Mississippi 2000. ProQuest Ebook Central, Created from arcada-ebooks on 2017-11-05 11:15:25. https://books.google.fi/books?hl=en&lr=&id=rhaLAB3UPX8C&oi=fnd&pg=PR5&ots=42H05YKME9&sig=khK6Yuog6JW5ymFKc7a9z6UW724&redir_esc=y#v=onepage&q&f=false . Accessed 2.10.2019.
- American Academy of Child and Adolescent Psychiatry 2018. Depression: Parents' Medication Guide. https://www.aacap.org/App_Themes/AACAP/docs/resource_centers/resources/med_guides/DepressionGuide-web.pdf . Assessed on 06.02.2023.
- American Academy of Child & Adolescent Psychiatry 2018. Depression in Children and Teens. https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/The-Depressed-Child-004. Assessed on 12.02 2023.
- American Nurses Association 2015. <https://www.nursingworld.org/~4af71a/globalassets/catalog/book-toc/nssp3e-sample-chapter.pdf>. Assessed on 7.2.2023.
- Anderson Robert 2002. Deaths: Leading causes for 2000. <https://pubmed.ncbi.nlm.nih.gov/12355905/> . Assessed on 6.2.2023.
- Torikka Antti 2017. Depression and Substance Use in Middle Adolescence. <https://trepo.tuni.fi/bitstream/handle/10024/101793/978-952-03-0470-6.pdf?sequence=1>. Assessed on 06.02.2023.
- Arroll, B., Elley, C. R., Fishman, T., et al. 2009. Antidepressants versus placebo for depression in primary care. <https://pubmed.ncbi.nlm.nih.gov/19588448/>. Assessed on 3.2.2023.

Banesa Chavez, Jessica Sullivan, Paola Portela 2023. Improving Adolescent Depression in Primary Care: A Quality Improvement Initiative.

<https://www.sciencedirect.com/science/article/pii/S1555415522004809>. Assessed on 3.4.2023.

Bhatia, S.K. & Bhatia, S.C. 2007. Childhood and Adolescent Depression. American Family Physician Vol. 75, No.1, 73-80.

Bob Price 2017. Developing Patient Rapport, Trust, and Therapeutic Relationships.

<https://pubmed.ncbi.nlm.nih.gov/28792344/>. Assessed on 6.2.2023.

Centers for Disease Prevention and Control 2022. Mental Health Conditions: Depression and Anxiety. <https://www.cdc.gov/tobacco/campaign/tips/diseases/depression-anxiety.html>. Assessed on 02.01.2023.

Cheung Amy H., et, al. 2018. Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part II. Treatment and Ongoing Management.

<https://publications.aap.org/pediatrics/article/141/3/e20174082/37654/Guidelines-for-Adolescent-Depression-in-Primary?autologincheck=redirected> . Assessed on 23.01.2023.

Choi, H. 2002. Understanding Adolescent Depression in Ethnocultural Contexts.

<https://pubmed.ncbi.nlm.nih.gov/12484642/>. Assessed on 23.01.2023.

Cindy Parsons 2003. Caring for adolescents and families in crisis.

<https://www.sciencedirect.com/science/article/abs/pii/S0029646502000713?via%3Dihub> . Assessed on 23.01.2023.

Crowe, Marie, Ward Nick, Dunnachie, & Roberts Marie 2006. Characteristics of Adolescent Depression. <https://pubmed.ncbi.nlm.nih.gov/16499786/>. Assessed on 13.02.2023.

Dewey, A. & Drahota, A. 2016. Introduction to systematic reviews: online learning module Cochrane Training <https://training.cochrane.org/interactivelearning/module-1-introduction-conducting-systematic-reviews> . Assessed on 17.04.2023.

Dopheide, J.A. 2006. Recognizing and treating depression in children and adolescents.

<https://pubmed.ncbi.nlm.nih.gov/16434782/> . Assessed on 23.01.2023.

Elisha R Galaif, Steve Sussman, Michael D Newcomb, and Thomas F Locke 2011.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3134404/>. Assessed on 4.12.2023.

Elizabeth Bonham , Andrea Kwasky 2021. Caring for the Mental Health of Youth and Families: What is the Role of the Psychiatric Mental Health Advanced Practice Nurse? <https://pubmed.ncbi.nlm.nih.gov/34398546/>. Assessed on 15.2.2023.

Elo Satu & Kyngäs, H. 2008. The qualitative content analysis process. <https://onlinelibrary.wiley.com/doi/10.1111/j.1365-2648.2007.04569> . Assessed on 17.5.2023.

Emily Hielscher, Sandra Diminic, Meredith Harris, David Castle, Yong Yi Lee, Jan Kealton, Harvey Whiteford 2018. Impact of the carer on length of hospital stay for mental health: Results from two Australian surveys. <https://onlinelibrary.wiley.com/doi/10.1111/inm.12543>. Assessed on 15.2.2023.

Emily J Hauenstein 2003. Depression in adolescence. <https://pubmed.ncbi.nlm.nih.gov/12685676/>. Assessed on 10.4.2023.

Evered. 2021. Dimensions of bidirectional trust: relationships in nurses' caring for adolescents and emerging adults. https://bmjopen.bmj.com/content/11/Suppl_1/A5.1. Assessed on 15.2.2023.

Farley, Holly 2020. Assessing mental health in vulnerable adolescents. https://journals.lww.com/nursing/Fulltext/2020/10000/Assessing_mental_health_in_vulnerable_adolescents.12.aspx. Assessed on 7.2.2023.

Filatova, S., Upadhyaya, S., Kronström, K., Suominen, A., Chudal, R., Luntamo, T., Sourander, A. & Gyllenberg, D. 2018. Time trends in incidence of diagnosed depression among people aged 5-25 years living in Finland 1995-2012. *Nordic Journal of Psychiatry*, 73(8), 475- 481.

Friis, L., Eirola, R. & Mannonen, Marjatta 2004. Mental health work for children and young people. <https://jyu.finna.fi/Record/jykdok.967823> . Assessed on 7.2.2023.

Heiskanen T., Huttunen M. O. & Tuulari J. 2011. *Masennus*. Helsinki: Kustannus Duodecim.

Jeffrey A. Bridge, Satish Iyengar, Cheryl B Salary, Rémy P Barbe, Boris Birmaher, Harold Alan Pincus, Lulu Ren, David A Brent 2007. Clinical response and risk for reported suicidal ideation and suicide attempts in pediatric antidepressant treatment: a meta-analysis of randomized controlled trials. <https://pubmed.ncbi.nlm.nih.gov/17440145/>. Assessed on 11.1.2023.

Jeffrey G Johnson, Emily S Harris, Robert L Spitzer, Janet B W Williams 2002. The patient health questionnaire for adolescents: validation of an instrument for the assessment of mental disorders among adolescent primary care patients.

<https://pubmed.ncbi.nlm.nih.gov/11869927/>. Assessed on 13.2.2023.

Jenna Crosley 2021. What Is Qualitative Content Analysis?

[https://gradcoach.com/qualitative-content-](https://gradcoach.com/qualitative-content-analysis/#:~:text=Content%20analysis%20is%20a%20useful,use%20language%20to%20express%20themselves.)

[analysis/#:~:text=Content%20analysis%20is%20a%20useful,use%20language%20to%20express%20themselves.](https://gradcoach.com/qualitative-content-analysis/#:~:text=Content%20analysis%20is%20a%20useful,use%20language%20to%20express%20themselves.) Assessed on 11.1.2023.

Jennifer P. Wisdom,^{1,3} Gregory N. Clarke, and Carla A. Green 2013. What Teens Want: Barriers to Seeking Care for Depression.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3551284/>. Assessed on 13.2.2023.

Joan Rosenbaum Asarnow and Jeanne Miranda 2015. Improving Care for Depression & Suicide Risk in Adolescents: Innovative Strategies for Bringing Treatments to Community Settings. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4295487/>. Assessed on 11.1.2023.

John R. Weisz, Michael A. Southam-Gerow, Elana B. Gordis, Jennifer K. Connor-Smith, Brian C. Chu, David A. Langer, Bryce D. McLeod, Amanda Jensen-Doss, Alanna Updegraff, and Bahr Weiss 2010. Cognitive-Behavioural Therapy versus Usual Clinical Care for Youth Depression: An Initial Test of Transportability to Community Clinics and Clinicians.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3010274/>. Assessed on 11.1.2023.

Karie Tennant, Ashley Long, Tammy J., Toney-Butler 2022. Active Listening

<https://www.ncbi.nlm.nih.gov/books/NBK442015/>. Assessed on 6.8.2023.

Katherine Chang & Kate Ryan Kuhlman 2022. Adolescent-onset depression is associated with altered social functioning into middle adulthood.

<https://www.nature.com/articles/s41598-022-22131-1>. Assessed on 13.2.2023,

Kyngäs, H., Mikkonen, K. & Kääriäinen, M. (Eds) 2019. The application of content analysis in nursing science research. Cham: Springer, Nature.

Kyngäs, Helvi & Vanhanen, Liisa 1999. Sisällön analyysi. 11(1), 3-12.

Lindy Beukema, Jacomijn Hofstra, Sijmen A. Reijneveld, Andrea F. de Winter, and E. L. Korevaar 2022. Supporting Adolescents with Mental Health Problems in Secondary Education: Feasibility of a Supported Education Intervention.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9180216/>. Assessed on 8.2.2023.

Mehler-Wex, C. & Kölch, M. 2008. Depression in Child and Adolescents. Review Article. Dtsch Arztebl Int. Vol.105, No.9, 144-55.

Murphy, K. 2004. Recognizing depression. The Nurse Practitioner. Vol.29, No.9, 19-29.

National Alliance on Mental Health 2023. Self-harm. <https://www.nami.org/About-Mental-Illness/Common-with-Mental-Illness/Self-harm> . Assessed on 3.2.2023.

National Centre for Children in Poverty, N. C. C. P 2009. Adolescent Mental Health in the United States: Facts for Policymakers. <https://www.nccp.org/publication/adolescent-mental-health-in-the-united-states-facts-for-policymakers/>. Assessed on 8.2.2023.

National Health Service, N.H.S 2019. Overview - Clinical depression. <https://www.nhs.uk/mental-health/conditions/clinical-depression/overview/>. Assessed on 8.2.2023.

National Health Service, N.H.S 2021. Cautions – Antidepressants. <https://www.nhs.uk/mental-health/talking-therapies-medicine-treatments/medicines-and-psychiatry/antidepressants/considerations/>. Assessed on 6.2.2023.

National Health Service, N.H.S 2020. Depression in children and young people. <https://www.nhs.uk/mental-health/children-and-young-adults/advice-for-parents/children-depressed-signs/>. Assessed on 5.4.2023.

National Institute of Drug abuse 2020. Part 1: The Connection Between Substance Use Disorders and Mental Illness. <https://nida.nih.gov/publications/research-reports/common-comorbidities-substance-use-disorders/part-1-connection-between-substance-use-disorders-mental-illness> . Assessed on 11.2.2023.

Paul Mihos 2023. Qualitative, Multimethod, and Mixed Methods Research. <https://www.sciencedirect.com/topics/social-sciences/thematic-analysis>. Assessed on 1.5.2023.

Pim Cuijpers, Marit Sijbrandij, Sander L Koole, Gerhard Andersson, Aartjan T Beekman, and Charles F Reynolds⁷ 2014. Adding psychotherapy to antidepressant medication in depression and anxiety disorders: a meta-analysis. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3918025/> . Assessed on 15.1.2023.

Rachel A. Zuckerbrot and Peter S. Jensen 2006 Improving Recognition of Adolescent Depression in Primary Care. <https://jamanetwork.com/journals/jamapediatrics/article-abstract/205243> . Assessed on 3.1.2023.

Rahn Kennedy Bailey, Josephine Mokonogho, and Alok Kumar 2019. Racial and ethnic differences in depression: current perspectives

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6390869/> . Assessed on 3.1.2023.

Ranta, K., Kaltiala-Heino, R., Rantanen, P., & Marttunen, M. 2007. Screening for depression in adolescents: Validity of the MDD scale of the PRIME-MD. *European child & adolescent psychiatry*, Vol. 16, No. 5, Page 267-271.

Richardson, L. & Katzenellenbogen, R. 2005. Childhood and Adolescent depression: The Role of Primary Care Providers in Diagnosis and Treatment.

<https://www.sciencedirect.com/science/article/abs/pii/S1538544204001543?via%3Dihub>. Assessed on 4.4.2023.

Samantha Hartley, Tomos Redmond, Katherine Berry 2022. Therapeutic relationships within child and adolescent mental health inpatient services: A qualitative exploration of the experiences of young people, family members and nursing staff

<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0262070>. Assessed on 6.4.2023.

Sansone, R. A., & Sansone, L. A. 2009. Dysthymic Disorder: Forlorn and Overlooked? *Psychiatry (Edgmont)*, 6(5), 46–51.

Sara Smith, Ann Bevan 2020. Role of school nurses in identifying and supporting children and young people with mental health issues. <https://pubmed.ncbi.nlm.nih.gov/32043337/>. Assessed on 5.2.2023.

Stapinski, L. Montgomery, A. Heron, J. Jerrim, J. Vignoles, A. Araya, R. 2013. Depression Symptom Trajectories and Associated Risk Factors among Adolescent in Chile. Vol 8. Iss 10.

Stenberg, J-H., Saiho, S., Pihlaja, S., Service, H., Holi, M. & Joffe, G. 2013. *Irti masennuksesta. Duodecim. Helsinki.*

Ten Ham-Baloyi W. 2022. Nurses' roles in changing practice through implementing best practices: A systematic review. <https://pubmed.ncbi.nlm.nih.gov/35747507/>. Assessed on 5.4.2023.

THL 2014. *Masennus.*

http://www.thl.fi/fi_FI/web/fi/tutkimus/tyokalut/aikalisa/materiaalit/mielenterveys/masennus. Assessed on 3.1.2023.

Toivio, T. & Nordling, E. 2013. Mielenterveyden psykologia. 3rd ed. Helsinki: Edita Publishing.

Tuomi, J. & Sarajärvi, A. 2018. Laadullinen Tutkimus Ja Sisällönanalyysi. Renewed edition. Helsinki: Kustannusosakeyhtiö Tammi.

University Libraries 2020. Creating a PRISMA flow diagram.
<https://guides.lib.unc.edu/prisma>. Assessed on 19.6.2023.

Välimäki, M., Sane, T. & Dunkel, L. 2009. Endokrinologia: Idiopaattinen viivästynyt puberteetti. 2nd ed. Helsinki: Duodecim.

Weissman, M. M., Warner, V., Wickramaratne, P. J., Moreau, D., & Olfson, M. 2006. Offspring of depressed parents: 20 years later.
<https://pubmed.ncbi.nlm.nih.gov/16741200/>. Assessed on 19.2.2023.

World Health Organization 2017. Depression and Other Common Mental Disorders.
<https://apps.who.int/iris/handle/10665/254610>. Assessed on 3.1.2023.

World Health Organization 2019. Suicide. Fact Sheets.
<https://apps.who.int/iris/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf?s> . Assessed on 9.1.2023.

World Health Organization W.H.O 2021. Depression. World Health Organisation.
<https://www.who.int/news-room/fact-sheets/detail/depression>. Assessed on 29.2.2023.

World Health Organization, W.H.O 2021. Adolescent mental health.
<https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>. Assessed on 7.12.2023.

World Health Organization, W.H.O 2023. Depression. World Health Organisation.
https://www.who.int/health-topics/depression#tab=tab_1 . Assessed on 3.1.2023.

Young, J., Miller, M & Khan, N. 2010. Screening and Managing Depression in adolescents.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3916013/>. Assessed on 9.2.2023.

APPENDIX

Assessing Quality of Study Using JBI Appraisal Tool

Reviewer: Ten Ham-Baloyi W., Port Elizabeth.

Date: 25.05.2022

Author: Ten Ham-Baloyi W.

Year: 2022

Record Number: 10.4102/hsag.v27i0.1776

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Emily J Hauenstein

Date: March 2003

Author: Emily J Hauenstein

Year: 2003

Record Number: <https://doi.org/10.1177/0884217503252133>

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the reported data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Cindy Parsons
 Date: March 2003
 Author: Cindy Parsons
 Year: 2003
 Record Number: [https://doi.org/10.1016/S0029-6465\(02\)00071-3](https://doi.org/10.1016/S0029-6465(02)00071-3)

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the reported data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Elizabeth Bonham , Andrea Kwasky

Date: September 2021

Author: Elizabeth Bonham , Andrea Kwasky

Year: 2021

Record Number: 10.1097/NUR.0000000000000620

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the reported data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Banesa Chavez, Jessica Sullivan, Paola Portela.

Date: 27.01.2023

Author: Banesa Chavez, Jessica Sullivan, Paola Portela.

Year: 2023

Record Number: <https://doi.org/10.1016/j.nurpra.2022.11.013>

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Sara Smith, Ann Bevan.
 Date: 11.02.2020
 Author: Sara Smith, Ann Bevan.
 Year: 2020
 Record Number: 10.7748/ncyp. 2020.e1253

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the reported data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Emily S Harris, Robert L Spitzer, Janet B W Williams.

Date: March 2002

Author: Jeffrey G Johnson

Year: 2002

Record Number: 10.1016/s1054-139x(01)00333-0

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the reported data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Paul B. Tchounwou and Cheng-Fang Yen

Date: 31.05.2022

Author: Lindy B et al

Year: 2022

Record Number: 10.3390/ijerph19116754

	Yes	No	Unclear	Not applicable
1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Karie Tennant; Ashley Long; Tammy J. Toney-Butler.

Date: January 2023

Author: Karie Tennant; Ashley Long; Tammy J. Toney-Butler.

Year: 2022

Record Number: <https://www.ncbi.nlm.nih.gov/books/NBK442015/>

	Yes	No	Unclear	Not applicable
1. 1. Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Reviewer: Nurs Stand
 Date: August 2017
 Author: Bob Price. 2017
 Year: 2017
 Record Number: 10.7748/ns. 2017.e10909

	Yes	No	Unclear	Not applicable
1. 1.Is the review question clearly and explicitly stated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Were the inclusion criteria appropriate for the review question?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Was the search strategy appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Were the sources and resources used to search for studies adequate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Were the criteria for appraising studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Was critical appraisal conducted by two or more reviewers independently?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Were there methods to minimize errors in data extraction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Were the methods used to combine studies appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Was the likelihood of publication bias assessed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Were recommendations for policy and/or practice supported by the reported data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Were the specific directives for new research appropriate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>