Review

Nursing Process Addressing the Focus "Anxiety": A Scoping Review

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Abstract

The aim of this review was to map the body of literature on data, diagnoses and interventions addressing the nursing focus "anxiety." A scoping review methodology was employed. The Joanna Briggs guidelines for scoping reviews and PRISMA checklist for scoping reviews were followed. Electronic database searches (MEDLINE, CINAHL and Web of Science) located 829 articles. From the total of articles located, 165 were included. The nursing diagnosis "anxiety" can be considered a parent diagnosis, from which other children diagnoses are derived. Data that lead to nursing diagnoses in the anxiety domain can be divided into cognitive and somatic data. Some interventions, such as educational and music-based interventions, seem to be useful to address nursing diagnoses in the anxiety domain. The findings of this review can add substantial value for systematising the nursing process related to the focus "anxiety." Therefore, reaching consensus regarding this nursing process seems highly relevant.

Introduction

Anxiety disorders are one of the most prevalent mental disorders. They are associated with significant health care costs and a high disease burden. According to large population-based surveys, up to 33.7% of the population are affected by an anxiety disorder during their lifetime (Bandelow & Michaelis, 2015). However, anxiety, as a symptom, is not exclusive of anxiety disorders. For example, clinically significant levels of anxiety symptoms co-occur in approximately half of the major depressive disorder (MDD) population (Gaspersz et al., 2018). A national survey involving 36,309 adults in the United States of America, demonstrated that the lifetime prevalence of MDD was 20.6% and the anxious/distressed specifier characterised 74.6% of MDD cases (Hasin et al., 2018). These findings allow to conclude that anxiety can be currently considered as a worldwide problem.

Nurses seem to play an important role in reducing anxiety as a symptom, that is, the "feeling of threat, danger or distress," represented, for instance, on the focus and the diagnosis axes of the International Classification for Nursing Practice® (ICNP®) (International Council of Nurses [ICN],

2019). Also, the efficacy and effectiveness of nursing interventions addressing anxiety have already been evaluated in several studies (e.g., Hyun et al., 2020; Sampaio et al., 2018), mostly with positive results. However, while some research has been conducted to evaluate the efficacy and effectiveness of nursing interventions addressing the nursing focus "anxiety," no literature was identified which summarised those interventions. The knowledge gap is amplified when

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considering the nursing diagnoses that derive from the focus "anxiety," as well as the data that can lead to those diagnoses. Thus, although some efforts have been made to fill that gap (such as the publication of the book "NANDA International nursing diagnoses: Definitions and classification 2018–2020") (Herdman & Kamitsuru, 2017), the available literature is still bereft of evidence. For example, "NANDA International nursing diagnoses: Definitions and classification 2018 to 2020" comprise 70 diagnoses with no level of evidence (Herdman & Kamitsuru, 2017), which include the nursing diagnosis "anxiety," with no level of evidence, including on its definition, defining characteristics and related factors. In view of this reality, further research in this field needs to be carried out.

Throughout this research, anxiety was always approached as a nursing focus. In order to better understand this term, a nursing focus can be defined as an area of attention which is relevant to nursing (ICN, 2019), the principal element or the fundamental and essential part of the nursing diagnosis (Herdman & Kamitsuru, 2017). Thus, while in medicine, anxiety is approached as a psychiatric disorder (e.g., generalized anxiety disorder), in nursing, anxiety is approached as a symptom, which can be found in several psychiatric or non-psychiatric disorders, or even in the absence of a medical disorder. Furthermore, while anxiety as a medical diagnosis does not change as long as the disorder is present, anxiety as a nursing diagnosis can change daily as the patient's response to illness changes (Harrington & Terry, 2009). Hence, we decided to approach anxiety as a symptom, that is, as a nursing focus, with the aforementioned definition.

By summarising each step of the nursing process addressing the focus "anxiety," in order to systematise the body of knowledge in this domain, this review can open the way to further determine a clinical data model comprising the elements of the nursing process centred on the nursing focus "anxiety," that is, a set of data, diagnoses and interventions addressing "anxiety" and the linkages between them (Gonçalves et al., 2019). This work can provide a solid foundation for nurses' decision-making in clinical practice, leading to more evidence-based practice.

Nursing Process

The nursing process is a critical thinking model used to promote a competent level of care, it encompasses all significant actions taken by nurses, and underlies the decision-making process. It comprises five phases: (a) assessment, (b) diagnosis, (c) planning, (d) implementation, and (e) evaluation (Alfaro-LeFevre, 2014).

In the first phase (assessment), nurses need to collect all the information essential to predict, detect, prevent, and manage actual and potential health problems. In the second phase (diagnosis), nurses analyse the gathered data, draw conclusions, and determine whether there are actual or potential health problems requiring nursing management. In the third and fourth phases (planning and implementation), nurses determine interventions (nursing actions) and to put the plan into action (Alfaro-LeFevre, 2014).

Each phase of the nursing process should be conducted using a standardized nursing language since the use of common terminology is crucial to present nursing practices (ICN, 2019). Despite the nursing process has been broadly explored in nursing literature, a standardized language is yet to be fully adopted, to the exception of some ICNP® catalogues (e.g., Liu et al., 2017).

The Nursing Process Addressing the Focus "Anxiety"

As already mentioned, assessment constitutes one of the essential phases of the nursing process, in which a comprehensive data collection that leads to a rigorous diagnostic identification is recommended. Some efforts have been carried out to compile the relevant data leading to a nursing diagnosis in the anxiety domain, such as the presentation of the anxiety defining characteristics proposed by Herdman and Kamitsuru (2017). Notwithstanding, we consider it is relevant to perform an additional search in the most recent literature to find potentially relevant data that can lead to nursing diagnoses in the anxiety domain (often presented by the assessment tools, which should also be identified).

At the level of the nursing diagnoses that derive from the focus "anxiety," the ICNP® proposes the following diagnoses: anxiety (10000477) and death anxiety (10041017) (ICN, 2019). Likewise, Herdman and Kamitsuru (2017) propose the same two nursing diagnoses. However, some studies point out the efficacy of nursing interventions in other types of anxiety, such as preoperative anxiety (e.g., Labregue & McEnroe-Petitte, 2016), which lead to some uncertainties about the possible nursing diagnoses in the anxiety domain.

Finally, work has been conducted to compile the nursing interventions, which can be carried out to address diagnoses in the anxiety domain. The Nursing Interventions Classification, authored by Butcher et al. (2018), is the most widely accepted and includes interventions such as the calming technique, anxiety reduction or relaxation therapy addressing the focus "anxiety." Nevertheless, some of the related procedures are too unclear and, for some of them (e.g., calming technique), no literature was found which evaluates its efficacy. Thus, it seems to be relevant to identify nursing interventions which address the nursing focus "anxiety," such as the use of music, which efficacy and/or effectiveness have been assessed in clinical studies (Song et al., 2018). Also, we consider important to perform an additional search in the most recent literature to find potentially relevant nursing interventions addressing diagnoses in the anxiety domain.

Some studies have been carried out to systematise the nursing process related to nursing foci. Two recent examples are the scoping reviews conducted by Gonçalves et al. (2019,

2020) addressing the focus "hallucination" and "delusion". However, no studies were found in the literature which aimed to systematise the nursing process related to the focus "anxiety."

Aims

This scoping review aimed to address the following research questions:

(1) What are the nursing diagnoses that derive from the focus "anxiety"?
(2) What data can lead to those diagnoses?
(3) What nursing interventions positively address nursing diagnoses in the anxiety domain?

The specific objectives of this review were:

(1) To map the literature on nursing diagnoses that derive from the focus "anxiety."
(2) To map the literature on the data which can lead to those diagnoses.
(3) To map the evidence on nursing interventions that have presented positive results in improving nursing diagnoses that derive from the focus "anxiety."

Methods

Research Design

The scoping review methodology was employed. A scoping study framework uses a systematic approach with five distinct steps as detailed below and does not limit the review to only primary research papers (Arksey & O'Malley, 2005; Peters et al., 2017). This method enables the review to extract divergent data and develop it in a meaningful, transparent and systematic way (Grant & Booth, 2009). The Joanna Briggs guidelines for scoping reviews and PRISMA checklist for scoping reviews were followed (Peters et al., 2015; Tricco et al., 2018). The five essential steps comprise (1) identifying the research question(s), (2) identifying the relevant studies, (3) study selection, (4) charting the data, and (5) collecting, summarising and reporting the data. These methodological options are in line with a scoping review previously carried out by the authors which addressed another nursing focus (Gonçalves et al., 2019).

Inclusion and Exclusion Criteria

The eligible criteria included published quantitative, qualitative studies and systematic reviews providing information about nursing diagnoses; diagnostic activities; and interventions addressing the focus "anxiety," published between January 2014 and October 2019. Due to the significant amount of existing primary information, we considered that

the most appropriate methodology was to search for studies published in the last five years. Importantly, including the most recent studies, that are more likely to portray the world's current reality, was also crucial to our decision. The last five years' focus considers that scoping reviews are an essential link between the results of health research and evidence-based health decision-making. To be helpful, reviews must be valid and reliable. This requires that the methods employed be trustworthy, and reviews should reflect all relevant research results, including the most recently published data (Brooker et al., 2019).

We decided to include studies only in English, Portuguese or Spanish languages, considering the proficiency language level of the reviewers, enabling good quality of evidence selection and data extraction. Furthermore, according to the JBI Manual for Evidence Synthesis (Peters et al., 2020), the guidelines that were followed for this review, it is highly recommended that there should be no restrictions on source inclusion by language since our study aimed at mapping all the available evidence on the topic.

Quantitative designs include any experimental study designs (including randomised controlled trials, non-randomised controlled trials, or other quasi-experimental studies, involving prior and following studies) and observational designs (descriptive studies, cohort studies, cross-sectional studies, case studies and case series studies). Qualitative designs include any studies that focus on qualitative data such as but not limited to, phenomenology, grounded theory and ethnography designs. Systematic reviews include meta-analysis and meta-syntheses.

Conversely, the exclusion criterion was papers reporting children or adolescents with anxiety. Thus, the population of this scoping review were adults aged ≥18 years. We decided not to include children or adolescents in this review as they perceive the world differently from adults. This is because children and adolescents cognitive functioning is not fully developed, potentially leading to different manifestations of anxiety (such as enuresis, thumb-sucking, baby talk or conduct disorders) (Beesdo et al., 2009). In fact, there are age-specific considerations to be accounted for the psychiatric nursing intervention in infant, child and adolescent patients (Shives, 2008).

Search Strategy

The review was undertaken in October 2019. Before identifying relevant papers, the authors determined keywords based on the research questions. In this way, electronic databases including MEDLINE Complete (via EBSCOhost), CINAHL Complete (via EBSCOhost) and Web of Science Core Collection (via Web of Science) were searched using these terms to locate papers that met the inclusion criteria: "anxiety" (TI) AND "nurs*" AND ("diagnos*" OR "intervention*") NOT ("child*" OR "adolescen*"). The process was documented in detail to enable replication (Table 1).

Table 1. Search Strategy.

MEDLINE Complete, searched on October, 2019: 416 results

Search	Query
S1	TI anxiety
S2	Nurs*
S3	Diagnos*
S4	Intervention*
S5	S3 OR S4
S6	S1 AND S2 AND S5
S7	Child* OR adolescen*
S8	(S1 AND S2 AND S5) NOT (child* OR adolescen*)
S9	Limiters: English; Portuguese; Spanish, from 2014.01.01 to 2019.10.31

CINAHL complete, searched on October, 2019: 158 results

Search	Query
S1	TI anxiety
S2	Nurs*
S3	Diagnos*
S4	Intervention*
S5	S3 OR S4
S6	S1 AND S2 AND S5
S7	Child* OR adolescen*
S8	(S1 AND S2 AND S5) NOT (child* OR adolescen*)
S9	Limiters: English; Portuguese; Spanish, from 2014.01.01 to 2019.10.31

Web of Science Core Collection, searched on October, 2019: 255 results

Search	Query
S1	TITLE: (anxiety)
S2	TOPIC: (nurs*)
S3	TOPIC: (diagnos*) OR TOPIC: (intervention*)
S4	TOPIC: (child*) OR TOPIC: (adolescen*)
S5	#3 AND #2 AND #1
S6	#3 AND #2 AND #1 NOT #4
S7	(#3 AND #2 AND #1 NOT #4) AND LANGUAGE: (English OR Portuguese OR Spanish) AND Timespan = 2014–2019

This literature review investigated the nursing focus "anxiety" regardless of the underlying clinical picture. Articles discussing any type of diseases, as long as anxiety was present, were also included.

Study Selection

All identified records were loaded and processed (duplicates removed) through Endnote X8 Software (Clarivate Analytics, PA, USA). The articles were reviewed by two independent reviewers to assess the relevance according to title, abstract, and full-text information. If the reviewers failed to reach consensus at any stage of the selection process, this was settled through discussion or analysis of a third reviewer.

First, the relevance analysis of the studies was performed using the information of titles and abstracts. The full-text article was retrieved for all studies that met the inclusion criteria of the review and for those who raised doubts as to their relevance according to title and abstract. Only accessible full-text studies were accepted. The two reviewers independently examined the full-text of the articles to confirm they met the inclusion criteria.

A total of 829 papers were identified. Of this number, 238 papers were duplicates. After removing the duplicates, a total of 591 papers were reviewed considering the inclusion criteria by reading their titles and abstracts. Finally, 165 papers were considered suitable for inclusion in the final dataset after full-text reading and analysis guided by the review questions. The steps of the scoping review process are depicted in the PRISMA flow diagram (Figure 1).

Extraction of Results

A quality appraisal was not conducted, as the goal of this scoping review was to map the state of the existing literature (Peters et al., 2017). A table, based on the Joanna Briggs' model instrument for extracting details, characteristics and results of the studies (Peters et al., 2017), was developed for data extraction that included study information (title, author[s], year of publication, country of origin, type of study, goal[s]), nursing diagnoses deriving from the focus "anxiety," diagnostic activities/data that lead to the diagnoses, and interventions addressing the focus "anxiety"). These detailed findings are displayed in Appendix 1. One of the objectives of the review was to investigate what data could potentially lead to nursing diagnoses deriving from the focus "anxiety," however, we also decided to search for diagnostic activities, such as assessment tools, as they are validated tools that enable extraction of valuable data leading to diagnoses.

Results

A total of 165 papers were reviewed. Concerning the type of articles identified, the analysis pointed to a combination of literature reviews, quantitative, and mixed studies, with quantitative designs accounting for 80.61% of the total number of articles analysed. As for participants, most studies focused on patients suffering from physical disorders, such as chronic obstructive pulmonary disease, chronic renal disease and cancer disease; and patients submitted to surgery or diagnostic procedures. Clinical studies were mainly performed in Iran (36.17%), Turkey (12.77%), and Taiwan (9.57%). The theme most frequently identified in the papers was "Diagnoses" ($n = 163$), followed by "Diagnostic activities" ($n = 152$), and "Interventions" ($n = 117$).
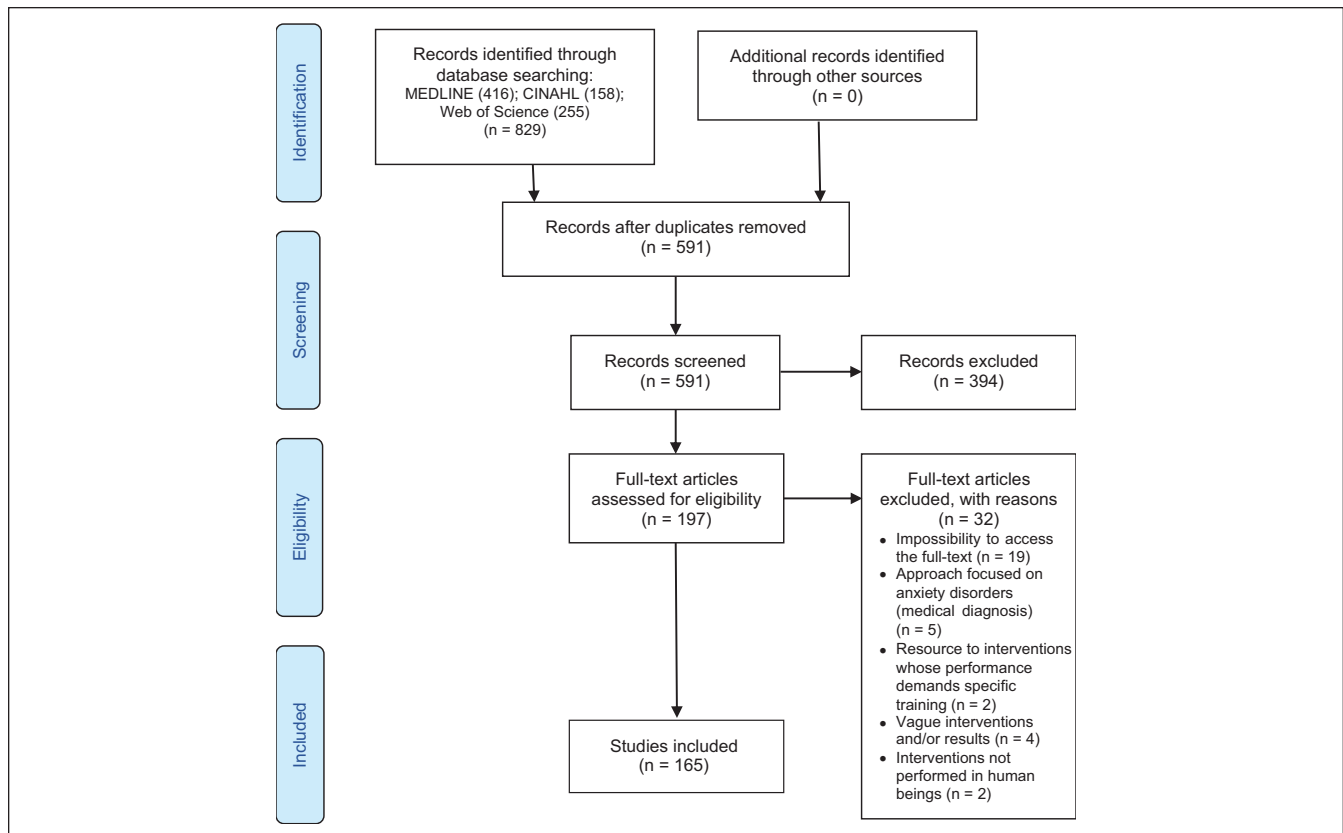
Figure 1. PRISMA flow diagram of the scoping review process.

Nursing Diagnoses

Concerning the nursing diagnoses deriving from the focus "anxiety," results were obtained according to types of anxiety. At this level, the following types of anxiety were identified: "pregnancy-related anxiety," "perinatal anxiety," "preoperative anxiety," "periprocedural anxiety," and "death anxiety." However, "anxiety," with no other specification, was the nursing diagnosis most frequently found in the literature (85.28%) and, according to the ICNP® tree-structure, it can be considered the parent diagnosis. A parent diagnosis can be defined as a diagnosis from which some others, more specific but related to that one, are originated—children diagnoses.

Data leading to the Diagnoses

As previously referred, considering that assessment tools are composed by items with content validity to assess the construct, and additionally to data leading to the diagnoses, these tools were also searched and data were extracted leading to nursing diagnoses in the anxiety domain.

The assessment tools most frequently showing relevant diagnostic activities related to nursing diagnoses in the anxiety domain were the State-Trait Anxiety Inventory, the Depression Anxiety Stress Scales (anxiety subscale), the Hospital Anxiety and Depression Scale (anxiety subscale),

and the Beck Anxiety Inventory. Also, some assessment tools which aim to assess some specific types of anxiety were identified, for example, the Death Anxiety Scale which assesses the death anxiety, and the Amsterdam Preoperative Anxiety and Information Scale to assess the preoperative anxiety.

According to the aforementioned, data that lead to diagnoses in the anxiety domain were mainly obtained through item analysis of the anxiety assessment tools. The symptoms of anxiety referred in the assessment tools can be divided into two domains, cognitive and somatic. However, assessment tools tend to focus more on cognitive symptoms rather than somatic symptoms. Thus, being worried, feeling frightened, feeling close to panic and finding it difficult to relax are the cognitive data leading to a nursing diagnosis mostly reported in the anxiety domain. On the other hand, the somatic data such as feeling tense, experiencing breathing difficulty, and experiencing trembling of the hands were the most commonly found.

Nursing Interventions

Finally, some nursing interventions that can help resolve or diminish the diagnoses that derive from the focus "Anxiety" were identified. The following set of interventions evidence some of the most commonly identified in this review: music-based interventions (22.22%); educational interventions
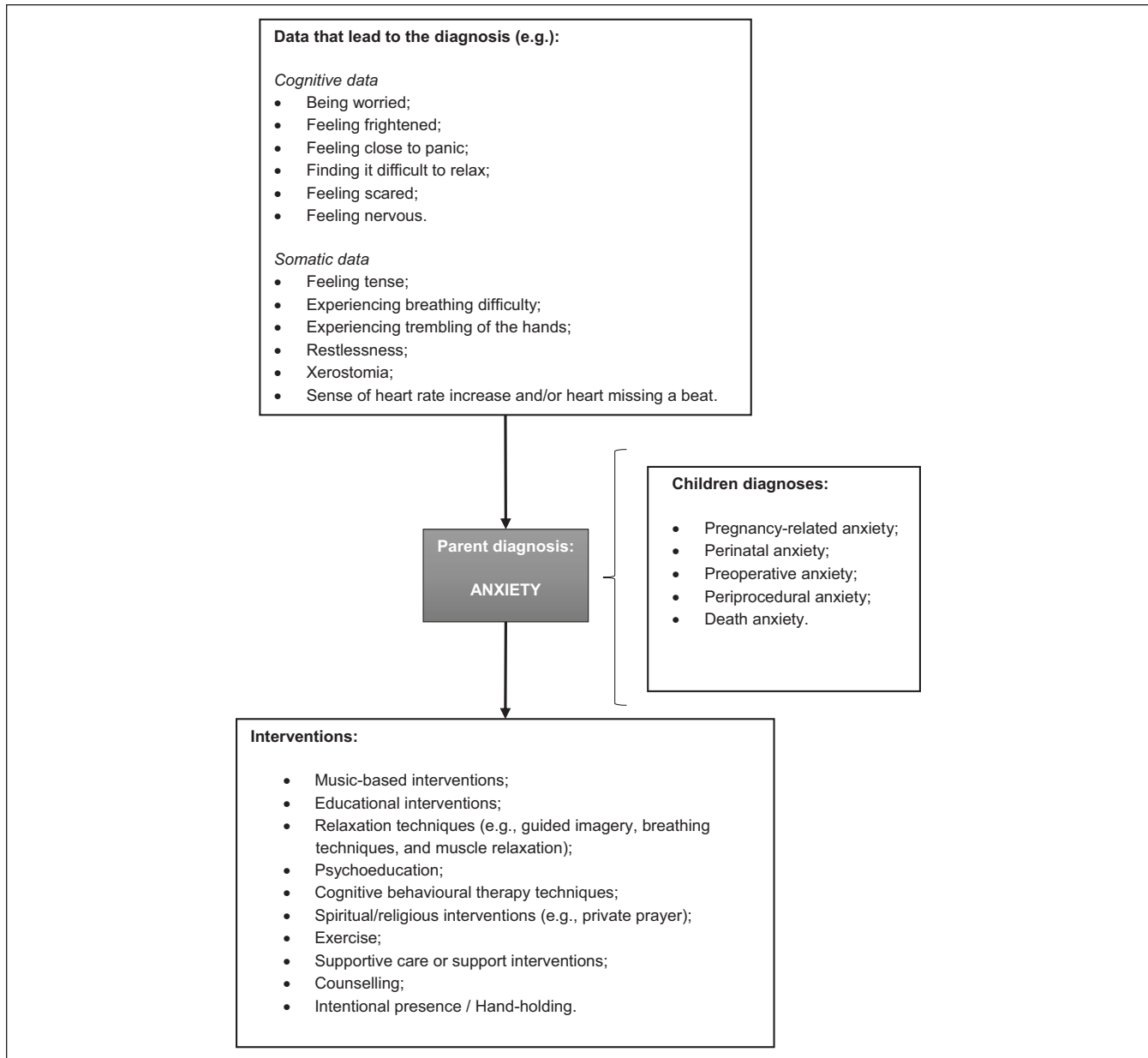
Data that lead to the diagnosis (e.g.):

Cognitive data
- Being worried;
- Feeling frightened;
- Feeling close to panic;
- Finding it difficult to relax;
- Feeling scared;
- Feeling nervous.

Somatic data
- Feeling tense;
- Experiencing breathing difficulty;
- Experiencing trembling of the hands;
- Restlessness;
- Xerostomia;
- Sense of heart rate increase and/or heart missing a beat.

Parent diagnosis:

ANXIETY

Children diagnoses:

- Pregnancy-related anxiety;
- Perinatal anxiety;
- Preoperative anxiety;
- Periprocedural anxiety;
- Death anxiety.

Interventions:

- Music-based interventions;
- Educational interventions;
- Relaxation techniques (e.g., guided imagery, breathing techniques, and muscle relaxation);
- Psychoeducation;
- Cognitive behavioural therapy techniques;
- Spiritual/religious interventions (e.g., private prayer);
- Exercise;
- Supportive care or support interventions;
- Counselling;
- Intentional presence / Hand-holding.

Figure 2. Summary of the results.

(17.95%); relaxation techniques (e.g., guided imagery, breathing techniques, and muscle relaxation) (11.97%); psychoeducation (4.27%); cognitive behavioural therapy techniques; spiritual/religious interventions; and exercise.

In order to summarise the information of this review, Figure 2 presents a schematic summary of the results.

Discussion

To the best of our knowledge, the current scoping review is the first to explore the nursing process addressing the focus "anxiety." In this way, information about nursing diagnoses

that derive from the focus "anxiety," data can lead to those diagnoses, and nursing interventions that positively address nursing diagnoses in the anxiety domain have been described, to answer the review questions.

Nursing Diagnoses

At the level of the nursing diagnoses that derive from the focus "anxiety," some of the findings, like "anxiety" and "death anxiety," are in accordance with the diagnoses which are presented in nursing classifications such as the ICNP® (ICN, 2019) or the NANDA International, Inc. (Herdman &

Kamitsuru, 2017). However, some additional diagnoses were identified, such as pregnancy-related anxiety (Derya et al., 2018), perinatal anxiety (Ahmed et al., 2018) or periprocedural anxiety (Ayasrah & Ahmad, 2016). These specific diagnoses point out to factors which can cause anxiety, such as pregnancy or surgery. Nevertheless, despite no such diagnoses were found in this review, the potential existence of other factors leading to anxiety and additional nursing diagnoses in this domain cannot be excluded.

Beyond "anxiety" and "death anxiety," the most commonly referred diagnosis was "preoperative anxiety" (e.g., Gómez-Urquiza et al., 2016; Turzáková et al., 2019). Indeed, preoperative anxiety is not an uncommon phenomenon. A study carried out by Aust et al. (2018) highlighted that most adult patients scheduled to undergo elective surgery experience preoperative anxiety. Moreover, the study concludes that many patients report high levels of preoperative anxiety and that the level of anxiety about surgery is higher compared to the level of anxiety about anaesthesia. Considering that some studies have proved the existence of nursing interventions that can be performed to address this diagnosis and with positive results, such as music interventions or relaxation exercises (Ertuğ et al., 2017), this seems to be a relevant nursing diagnosis to take into consideration in the anxiety domain.

Data Leading to the Diagnoses

Considering the existence of several assessment tools to assess the patients' anxiety levels, with content and construct validity, we assumed that data leading to nursing diagnoses in the anxiety domain should be extracted from these tools. Moreover, since there are assessment tools which specifically assess some particular types of anxiety (e.g., death anxiety), we decided to extract data only from the assessment tools which aim to evaluate anxiety in a more general way, that is, from anxiety as a parent diagnosis (according to the ICNP® tree-structure).

Although several assessment tools have been identified, four of them are the most frequently used to assess anxiety: the State-Trait Anxiety Inventory (STAI) (Spielberger, 1983), the Hospital Anxiety and Depression Scale (HADS) (anxiety subscale) (Zigmond & Snaith, 1983), the Depression Anxiety Stress Scales (DASS) (anxiety subscale) (Lovibond & Lovibond, 1995), and the Beck Anxiety Inventory (BAI) (Beck & Steer, 1993). Furthermore, only the Beck Anxiety Inventory divides the assessment of anxiety into two factors: cognitive symptoms and somatic symptoms. These tools are all used to screen for anxiety, not to diagnose anxiety disorders, which supports the idea that they can be useful to assess anxiety as a symptom and not as a psychiatric disorder.

The most commonly referred cognitive data leading to a diagnosis in the cognitive domain were: being worried; feeling frightened; feeling close to panic; finding it difficult to relax; feeling scared; and feeling nervous. On the other hand,

the most commonly referred somatic data leading to a diagnosis in the anxiety domain were: feeling tense; experiencing breathing difficulty; experiencing trembling of the hands; restlessness; xerostomia; and sense of heart rate increase and/or heart missing a beat. Overall, these findings seem to be in line with the literature. A study carried out by Park and Kim (2020), which aimed to estimate the network of depression and anxiety symptoms that was developed based on a sample of MDD patients, highlighted that the seven anxiety symptoms that were identified as the most central nodes within a network of anxiety symptoms were faintness or light-headedness, feeling of choking, feeling scared, fear of the worst happening, nervousness, inability to relax, and feeling shaky.

Importantly, the four assessment tools from which data that lead to a diagnosis in the anxiety domain aim to assess anxiety symptoms, and not anxiety as a disorder (e.g., generalized anxiety disorder). Thus, these data seem to be adequate to lead to a nursing diagnosis.

Nursing Interventions

Finally, the reviewed literature pinpointed some nursing interventions which positively address diagnoses in the anxiety domain. Some of the most commonly referred were educational interventions (e.g., Chien et al., 2014), music-based interventions (e.g., Chuang et al., 2019), psychoeducation (e.g., Bains et al., 2014), relaxation techniques (e.g., guided imagery, breathing techniques, and muscle relaxation) (e.g., Klainin-Yobas et al., 2015), cognitive behavioural therapy techniques (e.g., Tyrer et al., 2015), spiritual/religious interventions (e.g., private prayer) (e.g., Anderson & Nunnelley, 2016), exercise (e.g., Norman et al., 2019), and supportive care or support interventions (e.g., Obadina et al., 2014). We found no papers that approached the "risk of anxiety,", that is, anxiety as a potential problem. In all the papers included in the present review, anxiety was assumed as a problem-focused diagnosis, so all the aforementioned nursing interventions can be included in the treatment domain.

Educational interventions appear to be particularly relevant to diminish anxiety levels since the lack of information is usually the cause of anxiety symptoms. A systematic review carried out by Strøm et al. (2018), which aimed to identify factors associated with symptoms of anxiety and depression in adults both before and after undergoing spinal surgery, concluded that one of the interacting factors that influenced symptoms of anxiety and depression was the lack of information.

Music-based interventions also presented very promising results in diminishing anxiety levels. The mechanisms of change that lead to these results are not clear, but a randomised controlled trial conducted by Ortega et al. (2019), hypothesised that effect is achieved by modulation of anxiety on an emotional-affective dimension at a central level.

Finally, some relaxation techniques, such as guided imagery, breathing techniques and muscle relaxation, have also delivered positive results in diminishing anxiety levels. According to Hayes-Skelton et al. (2012), relaxation techniques lead to clinical improvement in anxiety through mechanisms of change such as mindfulness, decentring, and acceptance.

Study Limitations

Some limitations to this study need to be acknowledged. Firstly, access to full-text articles was not possible in some cases, despite all attempts. Secondly, the proficiency language level of the reviewers imposed restrictions on the selection of articles, to guarantee the quality of the review. Thirdly, the included studies had a time constraint, due to the high amounts of papers related to the topic and the need to identify the most recent data. Moreover, although the methodological option is justified by those facts, relevant studies may have been left out because they did not meet these criteria.

There are also some limitations which are inherent to a scoping review approach: (1) the considerable amount of data generated; (2) the absence of synthesis, as a scoping review does not synthesise; and (3) not having been considered for the analysis, variables such as age or gender, which can somehow influence the results. Data leading to a nursing diagnosis in the anxiety domain can be different according to factors such as age, gender, the presence of physical disease or being a parent of a child with psychiatric or physical disease. Nevertheless, we decided not to consider this population in the analysis since the aim of a scoping review is to cover the body of literature on a given topic and give a broad overview of its focus (Munn et al., 2018). Furthermore, the absence of a systematic evaluation of the quality of the articles included in this review prevents recommendations for practice to be issued. This option was based on the inclusive nature of the review, and our strong belief that this approach would be important to provide a wide view of the study topic.

These review findings stress the need to improve nursing taxonomies as some of the diagnoses and interventions cannot be recorded by nurses due to the absence of the terms (e.g., psychoeducation). Also, some of the nursing interventions which can help resolve or diminish anxiety are psychotherapeutic (e.g., cognitive behavioural therapy techniques); however, in some countries, nurses are not allowed to perform them.

Conclusion

The findings of this review provide substantial contribution to systematise the nursing process related to the focus "anxiety," such as the diagnoses that derive from the focus "anxiety," data that can lead to those diagnoses, and interventions which positively address nursing diagnoses in the anxiety domain.

Some assessment tools, such as the STAI, the HADS (anxiety subscale), the DASS (anxiety subscale) or the BAI, can be used by nurses to help diagnose anxiety. However, even in the absence of assessment tools, certain characteristics of anxiety, such as the cognitive and somatic data, should be assessed. Some children diagnoses that derive from the parent diagnosis "anxiety," may be identified by nurses, such as preoperative anxiety or death anxiety. Finally, some interventions appear to be particularly relevant for patients with anxiety, such as educational or music-based interventions.

Future studies should consider the need for consensus on the nursing process related to the focus "anxiety" since that is not the aim of a scoping review. For example, by using a Delphi method it would be relevant to evaluate if an extended group of experts agree with these review findings, more specifically, with the diagnoses that derive from the focus "anxiety," data that can lead to those diagnoses, and interventions which positively address nursing diagnoses in the anxiety domain. This could potentially create an opportunity for reflection and eventually generate more data, diagnoses and/or interventions.

Relevance to Clinical Practice

By mapping the literature regarding data that can lead to nursing diagnoses in the anxiety domain, it was possible to summarise those data. By doing so, a dataset is now available for use by nurses in clinical practice. That is particularly relevant as it helps a clearer identification of the diagnoses (e.g., when different nurses use the same data to lead to the same diagnoses, it enhances the comparability of nursing practices). Moreover, this dataset may allow nurses to improve their diagnostic process by helping them collect data which lead to the diagnosis in a more systematised and evidence-based manner.

Likewise, this scoping review identified nursing interventions which have proved, through clinical studies, to be efficacious in improving nursing diagnoses in the anxiety domain. Thus, by summarising that information, it was possible to identify a set of evidence-based nursing interventions that nurses can use in their clinical practice, to address diagnoses in the anxiety domain.

The systematisation of the nursing process related to the focus "anxiety" is also an important baseline for further development of a clinical data model addressing the same focus. The development of nursing clinical data models provides evidence-based data elements related to nursing care and allows structuring all the information related to a given concept. Therefore, a nursing clinical data model allows the systematisation of the connections between the elements of the nursing process—data, diagnoses and interventions—for a given nursing focus.

A high level of uniformity is necessary when collecting information to enable its later use, in particular regarding the production of health indicators that can reveal the contribution of nursing care for the populations' health. Thus, the wide application of a clinical data model addressing the nursing focus "anxiety" (to be developed) may contribute to the advancement of nursing information systems and, consequently, to the production of nursing-sensitive indicators.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

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