



REVISIONES

Face-to-face and online psychoeducational nursing interventions for anxiety management: an integrative review of the literatura

Intervenciones de enfermería psicoeducativas presenciales y on-line, para el manejo de la ansiedad: revisión integradora de la literatura

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ABSTRACT:

Objective: To analyze the evidence found in the scientific literature of the impact of psycho-educational interventions on anxiety management, carried out online or in person with the participation of nursing professionals.

Method: Narrative and integrative review of scientific literature by searching for publications in the main metasearch engines and in the indexed articles of the SciELO, MEDLINE and LILACS databases.

Results/Discussion: The search for articles based on online psycho-educational interventions for anxiety management and nursing, provided 4,295 publications, of which, after the three stages of reading and filtering, only 11 were selected: two systematic reviews, eight RCTs and one quasi-experimental study. The psycho-educational aspect is transversal in each publication, being effective for the management of anxiety in various clinical situations. Although there are several studies that show the realization of face-to-face psycho-educational interventions led by nursing, we did not find any specific investigation or research carried out by nurses in an entirely online format.

Conclusion: The intervention modalities, strategies and psycho-educational programs that take advantage of the ease of use and impact provided using ICT should be evaluated from the perspective of the clinical field in a more exhaustive way, since these tools facilitate the incorporation of psychoeducation into the clinical routine. The lack of evidence on the efficacy of these interventions when they are designed and implemented entirely by nurses makes it necessary to propose research that evaluates the results.

Key words: Internet-Based Intervention, Telepsychology, Anxiety Disorders, Community Health Nursing.

RESUMEN:

Objetivo: Analizar las evidencias encontradas en la literatura científica sobre el impacto de las intervenciones psico-educativas en el manejo de la ansiedad, desarrolladas en línea o presenciales con participación de profesionales de enfermería.

Método: Revisión narrativa e integradora de literatura científica mediante la búsqueda de publicaciones en los principales metabuscadores y en los artículos indexados de las bases de datos de SciELO, MEDLINE y LILACS.

Resultados/Discusión: La búsqueda de artículos basados en intervenciones psico-educativas en línea para el manejo de la ansiedad y enfermería, aportó 4.295 publicaciones que, tras las tres etapas de lectura y filtrado, sólo 11 fueron seleccionados: dos revisiones sistemáticas, ocho ECAs y un estudio cuasiexperimental. El aspecto psico-educativo es transversal en cada publicación, siendo efectivo para el manejo de la ansiedad en diversas situaciones clínicas. Aunque hay diversos estudios que evidencian la realización de intervenciones psico-educativas presenciales lideradas por enfermería, no se encontró ningún estudio o investigación específica desarrollada por enfermeras íntegramente en formato on-line.

Conclusión: Las modalidades de intervención, estrategias y programas psico-educativos que aprovechan la facilidad de uso e impacto que aporta el uso de las TICs, deben ser valorados desde el ámbito clínico de forma más exhaustiva, ya que estas herramientas facilitan la incorporación de la psico-educación en la rutina clínica. La falta de evidencia sobre la eficacia de estas intervenciones cuando son diseñadas y desarrolladas íntegramente por enfermeras hace necesario plantear investigaciones que evalúen sus resultados.

Palabras clave: Intervención basada en la Internet, Telepsicología, Trastornos de Ansiedad, Enfermería en Salud Comunitaria.

INTRODUCTION

When dealing with anxiety disorders, it's important to differentiate between two concepts that can seem similar: fear and anxiety. The first one is an emotional response to a real or perceived imminent threat, whereas anxiety is defined as an anticipation of a future threat. An essential aspect in the study of these disorders is the differentiation between the type of objects or situations that induce fear, anxiety or avoidance, with the associated cognitive ideation ⁽¹⁾.

Among the most commonly adopted approaches when managing anxiety disorders, we can find psychoeducation. This methodology is based on a behavioral treatment, as well as informing the patient about the nature of the disorder. This psycho-educational process can be applied to structured groups or individual programmes, and has a multidimensional scope, including family, social, biological spheres and the possibility of pharmacological intervention. Therefore, in most psycho-educational programmes for the management of anxiety disorders, information, support and management strategies are provided ⁽¹⁾.

With regards to the different formats of psycho-educational intervention programmes, there are numerous types: group versus individual intervention, peer-led versus professional-led, family-led (with or without the participation of the patient), and more recently; face-to-face versus web-based or online. In any case, it is important to emphasize the recent appearance of a growing pool of evidence that emphasizes the need of individualizing the treatments. In many cases, formats such as reading self-help material or the use of digital and online tools can be more effective for some patients. For others, a few sessions of psycho-educational group therapy or a few sessions of individual meetings can lead to better results. In short, having a variety of clinic tools can be advantageous. These tools should promote the effortless

incorporation of psycho-education into the practical clinical routine of nursing professionals ⁽²⁾.

Among the most innovative tools for the management of anxiety disorders, we can find those that use the new Information and Communication Technology (ICT) as a support. Ever-increasing amounts of research has tested their effectiveness for different problems: anxiety disorder (panic), simple phobias, social phobia, obsessive-compulsive disorder, post-traumatic stress disorder, generalized anxiety disorder and stress management ^(1,2,7). The majority of these ICT treatments include gradual exposure to the fear-inducing stimuli (sometimes through virtual reality), behavioral cognitive orientation with relaxation techniques and breath control and/or cognitive restructuring.

Nowadays, cybertherapies, understood as psychological interventions carried out through the use of the internet, represent a complementary treatment and alternative to traditional care. However, more research and reviews that synthesize the available evidence are needed ⁽³⁾, It is generally recognised that these types of therapy produce relevant symptomatic improvement, even in cases in which the evidence comes from research with weak methodological designs (lack of clinical diagnosis, lack of control group, small sample sizes, lack of follow-up, amongst others) ^(4,5).

An aspect which has been scarcely studied until now in the use of these types of therapies using digital or on-line media, is the professional that carries out the intervention.

In the field of the nursing, the interventions aimed at dealing with anxiety have proven their efficiency in different fields of care: oncology ⁽²⁾, psycho-educational nursing interventions aimed at the family members of mental health patients ⁽⁶⁾, depression and anxiety treatment through online computerised cognitive-behavioral therapy ⁽⁷⁾. Despite everything, we are still unaware of whether there is research that shows the effectiveness of interventions carried out by nurses aimed at diminishing anxiety using the online format.

Throughout this literature review, the goal is to locate, analyse and synthesize the available high-quality evidence of the efficacy of interventions aimed at the management of anxiety, realised with online or face-to-face support in the ones led by or with the participation of nursing professionals.

RESOURCES AND METHODOLOGY

A narrative and integrative literature review was carried out to show the current state of the research in this area. The synthesis technique was used to identify the components of online psycho-educational intervention.

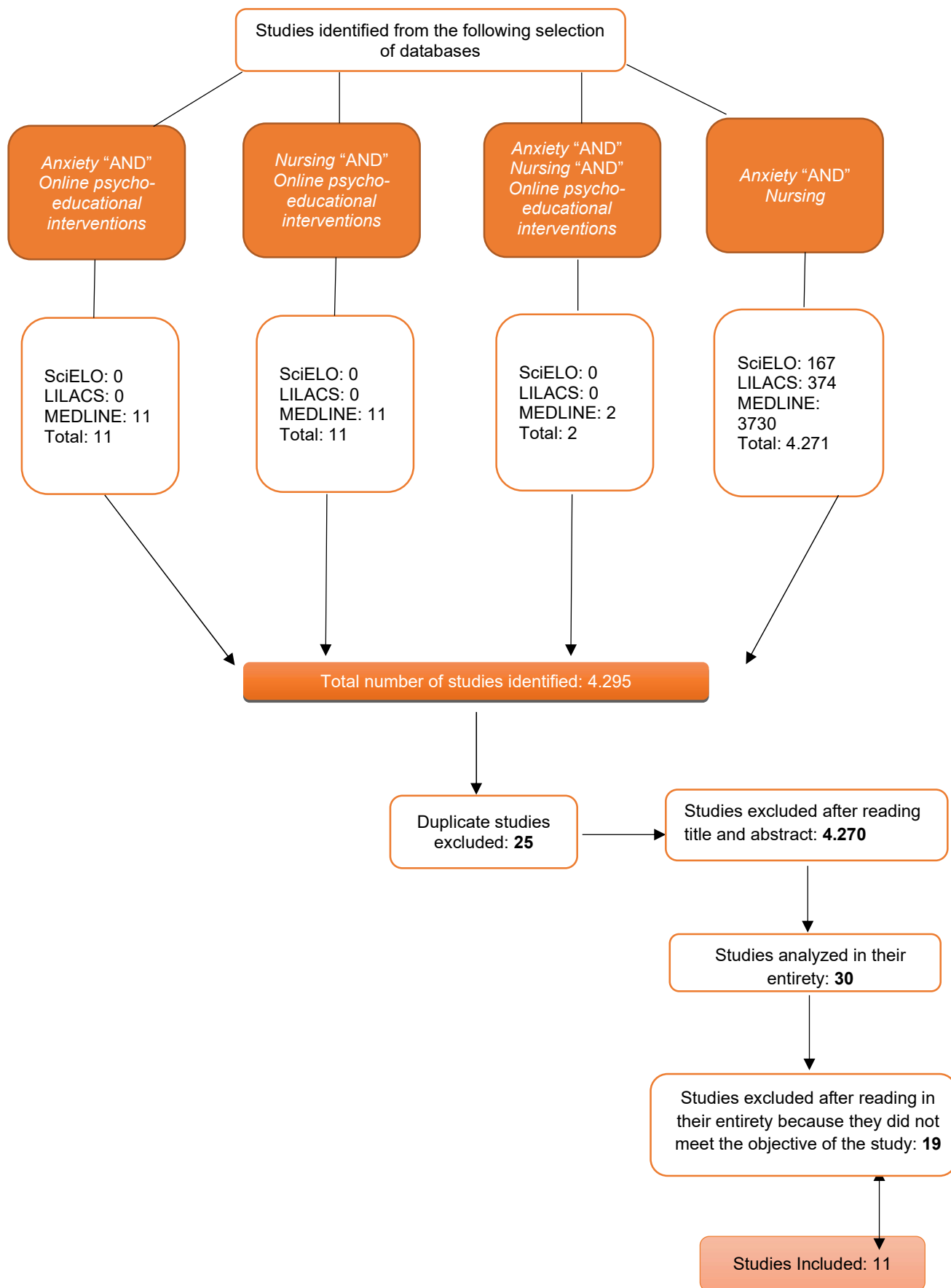
Regarding inclusion criteria, the articles selected were those published in Spanish and English between January 2017 and December 2020. These articles include quantitative designs or mixed methods studies, with a quantitative design component. These components express or measure the effect of the intervention: experimental, quasi-experimental studies and systematic reviews.

In terms of the format, studies or research with only summaries of conferences, letters, editorials, reviews, accounts of experiences, dissertations, theses, monographs, and summaries published in events' annals were all excluded from the literature review.

The bibliographic review was conducted in April and May of 2021. The main meta-search engines were the following: the bibliographic index of Latin American and Caribbean Health Sciences Literature (LILACS), the Scientific Electronic Library Online (SCIELO), and through the meta-search engine Virtual Health Library (VHL), through the website www.bvsalud.org. The database MEDLINE is included here. The research was concluded with the Google Scholar Search Engine.

We searched for studies that focused on the treatment of anxiety disorders through the use of online nursing interventions, which are designed to support patients that suffer from anxiety, or their relatives including home caregivers. The terms used for the search: "Anxiety"; "Nursing", "Telepsychology", "Internet-Based Interventions", "Anxiety Disorders", belonged to Health Sciences Descriptors (DeCS) of the VHL. Furthermore, they were searched for through natural language using the term: "online psycho-educational interventions". As a strategy of combining descriptors, the Boolean operator "AND" was used, in the following form: Anxiety AND Online psycho-educational interventions; Nursing AND Online psycho-educational interventions; Anxiety AND Nursing AND Online psycho-educational interventions.

For a first reading, studies that included in the headings and in the summary, the subject of the review were selected. For the reading of the summary of the selected publications, the chosen strategy was to order and assess the degree of relevance, in relation with the topic under investigation. The process of identification, selection and inclusion of the studies were conducted in three stages. In the first phase, the duplicate articles were deleted. With this criteria, 25 of the 4295 articles found were excluded. In the second stage, after reading the title and the summary, 30 articles were chosen. This was because they addressed with specificity, the subject of review. In the third stage, an in depth reading of each of them was carried out, through which 11 articles were selected. These were the ones that had a closer approximation to the goals in the present review. Below, an illustration of which in the following graph:



Source: Own Work

FINDINGS

The search for articles, based on online psycho-educational intervention for the management of anxiety, by nurses in the last five years led to the result of 4,295. After the three stages of reading and filtering, only 11 were selected as relevant.

The main reasons for exclusion were the following: i) no psycho-educational interventions were evaluated ii) the effect of the intervention was not assessed or was not clearly expressed, and iii) the publications did not meet the inclusion criteria. Finally, after analyzing the full text of the nine publications, two were discarded. This was because both the methodological section or design were not clearly defined.

Regarding the characteristics of the studies chosen, the eleven of them comprised: two systematic reviews: Wang et al. ⁽⁵⁾; Rodríguez et al. ⁽¹⁾, one quasi-experimental investigation: Shereda et al. ⁽⁶⁾, and eight randomized controlled trials (ECA): Schofield et al. ⁽²⁾; Rollman et al. ⁽⁷⁾; Goes Salvetti et al. ⁽⁸⁾; Watson et al. ⁽⁹⁾; Hudson et al. ⁽¹⁰⁾; Sharif et al. ⁽¹¹⁾; Chow et al. ⁽¹²⁾; Stanciu et al. ⁽¹³⁾. The studies were conducted in Portugal (n = 1), China (n = 1), Australia (n = 2), Sweden (n = 1), Brazil (n = 1), United Kingdom (n = 1), Egypt (n = 1) and the USA. (n = 1).

The bibliographic review focused on the search for studies in which psycho-educational interventions were conducted an online format as well as on psycho-educational interventions in which nursing professionals participated. The participation of nurses in this type of intervention was either in a leadership role or as part of an interdisciplinary team that carried out the intervention in a more traditional format: face-to-face visits, telephone contact, etc. None of the selected publications included both conditions: telematic format and full development (design, implementation, etc) by nursing professionals.

In the systematic review with meta-analysis and qualitative evidence synthesis by Wang et al. ⁽⁵⁾, 7 studies were selected where RCT was conducted. These involved 1200 participants in which the efficacy of Internet-based psycho-educational interventions of patients who suffered from cancer was analyzed. The interventions of the selected publications used three interventions tools: website programs (n = 5), e-mail counselling (n = 1) and psycho-educational intervention of single-session (n = 1). The results of the review show that the internet-based psycho-educational interventions had a significant effect on the decrease of depression and fatigue. However, no effect was seen in terms of anxiety and quality of life (QoL). The evidence reported in this synthesis is of moderate quality. The authors conclude that internet-based psycho-educational interventions reduce fatigue and depression in patients with cancer. Studies with larger samples and in which a long-term follow-up takes place to determine the effect of these interventions are recommended ⁽⁵⁾.

Rodríguez et al. ⁽¹⁾ carried out a systematic review centered on psycho-educational interventions in adults with anxiety disorders. The efficacy of this technique was evaluated with regards to diminishing the severity of the anxiety symptoms, distress, depression, pain, and improving the quality of life. The majority of the interventions tested in the studies included in the review used a face-to face format. Interventions based on the internet and on the phone were included too. All protocols included an educational component and management skills for anxiety symptoms. The authors

conclude that psychoeducation improved psychological distress, pain and the quality of life of patients with anxiety disorders. These effects were maintained following up the 3-, 6- and 9-month of the post-intervention. Therefore, this intervention proved to be useful and effective for patients with anxiety disorders given that a significant improvement in anxiety and depression-related symptoms was achieved. Nonetheless, it is suggested that further research into ECAS would be prudent as well as more investigation into the efficiency of the psycho-educational interventions that employ psychotherapy ⁽¹⁾.

Shereda et al. ⁽⁶⁾ analyzed, through a quasi-experimental study, the effectiveness of psycho-educational nursing intervention. This was aimed at families of patients with a first episode of psychosis to overcome the feelings of stress, guilt, stigma, loss of control, as well as to promote the recovery of patients with that type of episode. The objective of the study was to evaluate the effect of the nursing intervention for outpatients on mental and psychiatric health. There was a convenience sample of 50 caregivers. The results showed that on the one hand, there was a significant clinical improvement in the level of knowledge and perception of illness of caregivers assigned to the psycho-educational intervention post. On the other hand, the level of expressed emotion improved after the psycho-educational intervention by nurses. The authors conclude with recommending psycho-educational nursing intervention to improve the level of knowledge, the perception of the illness and expressed emotion ⁽⁶⁾.

Four clinical trials were also selected. Schofield et al. ⁽²⁾ assessed the impact of a psycho-educational intervention on psychological distress following radiotherapy in gynaecological cancer patients. The intervention evaluated was led by nurses and peers in the field of psychology. In it, the effect on distress, quality of life, psychosexual function, unmet needs and vaginal stenosis was assessed. Women included in the research had a confirmed diagnosis of gynaecological cancer. Radiotherapy was scheduled for them with a curative intention. They were randomly assigned, one by one, to four consultations led by nurses. In addition, four telephone sessions led by peers were designated or, alternatively, using usual care. The primary outcome was the assessment of psychological distress, which was measured by the Hospital Anxiety and Depression Scale. This showed that differences between the research groups were trivial and small in size, even when notable effects were found on secondary outcomes such as preparing for the treatment and mastering specific needs (sexuality and health system needs). It is therefore concluded that there was no evidence that an intervention conducted by nurses and peers had a beneficial effect on distress when compared to the usual care ⁽²⁾.

The clinical trial by Rollman et al. ⁽⁷⁾ assessed the effect of collaborative care on depression and anxiety. The clinical trial combined an Internet support group with online, computerised cognitive behavioural therapy. This was provided through collaborative care, for the treatment of depression and anxiety, compared to usual care. As the main finding, they reported that, in the experimental group, there was improvement in quality of life after six months in relation to health. Also, this was seen in the mood and the symptoms of anxiety of the patients, if we compare it to the group of participants receiving the control treatment ⁽⁷⁾.

Another randomized clinical trial conducted by Goes Salvetti et al. ⁽⁸⁾ evaluated the effects of psycho-educational intervention. It was led by nursing staff and was about quality of life (QoL) among cancer patients. The RCT included 107 outpatients

undergoing chemotherapy or radiotherapy for cancer. Participants were randomly assigned to either the control group (treatment as usual) or the intervention group (psycho-educational intervention), with assessments at baseline and at the end of the intervention in both groups. The main results were that in the experimental group, there was a significant improvement in terms of appetite ($p= 0.002$)⁽⁸⁾.

Watson et al.⁽⁹⁾ analysed, in their RCT, the acceptability, feasibility and effectiveness of psycho-educational intervention led by nurses in survivors of prostate cancer. Research participants were randomly assigned to a group who received the psycho-educational intervention plus usual care, or to another group who received only usual care. Quality of life, self-efficacy, unmet needs and psychological morbidity were assessed both at baseline and after nine months. As the main finding, the authors report that psycho-educational intervention led by nurses in primary care settings is feasible, acceptable and potentially useful for patients who have survived prostate cancer⁽⁹⁾.

Hudson et al.⁽¹⁰⁾ conducted an RCT in which they carried out a psycho-educational intervention for family caregivers of palliative patients. There was a control group and an intervention group. In the control group, participants received the stipulated palliative care, and the intervention group received in addition to the above, a psycho-educational intervention by palliative care nurses, carried out in two visits. The Hospital Anxiety and Depression Scale (HADS) was used to measure the effectiveness of the intervention. The results indicated a significant reduction in anxiety in the intervention group, which demonstrated the effectiveness of this study⁽¹⁰⁾.

Sharif et al.⁽¹¹⁾ conducted an RCT in which they evaluated the effectiveness of intervention to reduce patient symptoms and family caregiver burden through family psycho-education. The control group received only routine care, while in the intervention group, family caregivers participated in a 10-session psycho-educational programme for 5 weeks. It was conducted by a nurse or psychiatrist, and participants received treatment with antipsychotic medication. The Brief Psychiatric Rating Scale (BPRS) was used to assess depressive and anxiety symptoms. The results of this RCT showed that the intervention group saw a significant reduction in the severity of anxiety symptoms immediately after the intervention, as well as after one month of the intervention⁽¹¹⁾.

Chow et al.⁽¹²⁾ conducted an RCT examining the effects of an intervention on a cohort of Chinese patients with gynaecological cancer. Patients in both the intervention and control groups received 4 visits from a nurse. In the control group, only general advice was given, while in the intervention group, additional information on disease progression, hygienic-dietary measures, relationship with caregivers or expression of feelings was included. For this purpose, the Hospital Anxiety and Depression Scale (HADS) was consulted, and it was found that the control group obtained a greater reduction in anxiety than the intervention group⁽¹²⁾.

Finally, the study by Stanciu et al.⁽¹³⁾ conducted another RCT evaluating the effectiveness of psycho-educational intervention led by a nurse, whose aim was to improve self-care in survivors of prostate cancer. This RCT lasted 36 weeks and during which, some of the participants received usual care (control group), and the others received the same usual care as well as additional nursing support. In it, the patients' needs were comprehensively assessed, individual personalised follow-up

appointments were made, and a psycho-educational intervention was provided (intervention group). In order to do so, The Hospital Anxiety and Depression Scale (HADS) was used, and it was found that anxiety was reduced in the intervention group when compared to the control group ⁽¹³⁾.

Here below, a summary table of the eleven articles described (Table 1). It has an explanatory and summarizing purpose. Therefore, for each publication, the authors, the year of publication, the research design, the title, the objectives and the relevance of the research are presented.

Table 1. Summary of the relevance of the selected studies

AUTHORS, YEAR OF PUBLICATION AND TITLE	RESEARCH DESIGN AND OBJECTIVE	RELEVANCE OF THE RESEARCH
<p>Wang et al. ⁽⁵⁾ <i>Effects of Internet-based psycho-educational interventions on mental health and quality of life Among cancer patients: a systematic review and meta-analysis</i></p>	<p>Systematic review with meta-analysis and synthesis of qualitative evidence.</p> <p>-Evaluation of the benefits of internet-based psycho-educational interventions in cancer patients.</p> <p>In the seven studies covered by this review, Internet-based psycho-educational interventions were carried out by several professionals, including nurses.</p>	<p>7 RCTs were identified. They registered n=1220 participants using 3 intervention tools: website programmes, email counselling and a single psycho-educational intervention.</p> <p>It represents the most up-to-date review of the effect of online psycho-educational interventions on mental health issues patients with cancer. These ones have shown to be effective in these patients. It demonstrates the need for future further studies, with larger samples and where a follow-up takes place in the long-term.</p>
<p>Rodríguez et al. ⁽¹⁾ <i>Psychoeducation for anxiety disorders in adults: A systematic review of its effectiveness</i></p>	<p>Systematic review.</p> <p>-Conducting a comprehensive assessment of the psycho-education in adults with anxiety disorders, evaluating the efficacy of this technique to reduce the severity of symptoms of anxiety, distress, depression and pain.</p>	<p>It represents an up-to-date review of the role of psychoeducation in the management of anxiety, with emphasis on aspects of its effectiveness. Psychological distress, pain and quality of life were improved, maintaining these effects in the following 3, 6 and 9 months. This demonstrated its efficacy in anxiety disorders. The authors note the paucity of articles with SCAS that evaluate the efficacy of these interventions.</p>
<p>Shereda et al. ⁽⁶⁾ <i>The effectiveness of a psycho-educational nursing intervention</i></p>	<p>Development of a quasi-experimental study.</p>	<p>It provides moderate quality evidence on the use of psychoeducational interventions, with a sample of n=50 caregivers, by nursing staff when assisting patients with alterations in their</p>

<p><i>on illness perception, knowledge and expressed emotion of caregivers of patients with first episode psychosis</i></p>	<p>-Evaluation of the effect of psycho-educational nursing intervention for families of patients with a first episode of psychosis.</p>	<p>mental health. It was shown that the intervention improved the level of knowledge, perception of the illness and the emotion expressed.</p>
<p>Schofield et al. (2) <i>A nurse-and peer- led psycho- educational intervention to support women with gynaecological cancers receiving curative radiotherapy: The PeNTAGOn randomized controlled trial- ANZGOG 1102</i></p>	<p>ECA. -Evaluation of the impact of a psycho-educational intervention led by nurses and peers from the field of psychology. It covers the psychological distress generated by radiotherapy applied to patients with gynaecological cancer.</p>	<p>The RCT provides empirical evidence against the existence of a beneficial effect of cognitive-behavioural support offered by nurses on the adverse effects of gynaecological cancer. The intervention that registered n=158 participants and with n=160 assigned to usual care, was led by nurses and peers in the field of psychology. Differences between groups were small in size, so there was no significant evidence between the two groups.</p>
<p>Rollman et al. (7) <i>Effectiveness of online collaborative care for treating mood and anxiety disorders in primary care: a randomized clinical trial</i></p>	<p>Three-arm FFS. -To examine the effectiveness of combining an internet support group with online computerised cognitive behavioural therapy delivered through collaborative care for the treatment of depression and anxiety, compared to its usual care.</p>	<p>Comprehensive assessment of the possibilities offered through the online world using cognitive behavioural therapy, with strong results on its benefit in the experimental group for the treatment of anxiety and depression, compared with participants who only received the control treatment.</p>
<p>Goes Salvetti et al. (8) <i>Psychoeducational nursing intervention for symptom management in cancer patients: A randomized clinical trial</i></p>	<p>RCT -To determine the effects of a psycho-educational intervention led by nurses, on QoL control among patients with cancer.</p>	<p>The study registered n=107 participants, two assigned groups were randomly determined, an intervention and a control group, evaluating both at the beginning and at the end of the intervention; presenting good results and obtaining a significant improvement in the experimental group.</p>
<p>Watson et al. (9) <i>Supporting prostate cancer survivors in primary care: findings from a pilot trial of a nurse-led psycho-educational intervention (PROSPECTIV)</i></p>	<p>ECA. -To study the acceptability and feasibility of a psycho-educational intervention led by nurses for survivors of prostate cancer.</p>	<p>The research included one group that received the psycho-educational intervention plus usual care, and another group that received only usual care. The evaluation carried out at the beginning of the study and after nine months determined that it is feasible to apply it to Primary Health Care settings where nurses play a key role for these patients.</p>

<p>Hudson et al. ⁽¹⁰⁾ <i>A Psycho-Educational Intervention for Family Caregivers of Patients Receiving Palliative Care: A Randomized Controlled Trial</i></p>	<p>RCT</p> <p>-Evaluation of a psycho-educational intervention for the family caregivers of patients that die of cancer at home.</p>	<p>In the control group, participants received standard home palliative care services, and the intervention group received this service plus psycho-educational intervention. The psycho-educational intervention led by nurses was conducted over two visits. A caregiver's guide and an audiotape were used to supplement the nurses' interactions. Among others, the Hospital Anxiety and Depression Scale (HADS) was used to measure the effectiveness of the intervention. The intervention group achieved a reduction in anxiety from 7.65 (3.68) to 6.96 (4.02).</p>
<p>Sharif et al. ⁽¹¹⁾ <i>Effect of a psycho-educational intervention for family members on caregiver burdens and psychiatric symptoms in patients with schizophrenia in Shiraz, Iran</i></p>	<p>RCT</p> <p>-The study explored the effectiveness psycho-education of the family in reducing patients' symptoms and the burden of the family caregiver.</p>	<p>In the control group, the patients received only routine care (treatment with antipsychotic drugs) while, in the experimental group, caregivers who participated in a psycho-educational programme of 10 sessions (5 weeks) . This ones were developed by a nurse or a psychiatrist, whereas patients received treatment with antipsychotic drugs. The Brief Psychiatric Rating Scale (BPRS) was used to assess depressive and anxiety symptoms. Compared to the control group, the case group showed a significant reduction in symptom severity.</p>
<p>Chow et al. ⁽¹²⁾ <i>A theory-driven psycho-educational intervention programme for gynaecological cancer patients during treatment trajectory: A randomised controlled trial</i></p>	<p>RCT</p> <p>-To assess the effects of an intervention programme in a cohort of Chinese patients with gynaecological cancer.</p>	<p>Patients in the control and intervention group received 4 visits from a nurse. In the control group, only general advice was given, while the intervention group included information about the course of the disease, its causes, the impact of treatment, body image, sexuality, relaxation, diet and exercise, relationship with caregivers, communication with friends and family and expression of feelings. The Hospital Anxiety and Depression Scale (HADS) - Anxiety subscale. In this study there was a greater reduction in anxiety detected in the control group than in the intervention group.</p>
<p>Stanciu et al. ⁽¹³⁾ <i>Trial of personalised care after treatment— Prostate cancer: A randomised feasibility trial of a nurse-led psycho-educational intervention</i></p>	<p>RCT</p> <p>-Evaluated the effectiveness of a psycho-educational intervention led by a nurse aimed at improving the self-care of survivors of prostate cancer.</p>	<p>For 36 weeks, participants received either usual care (control) or usual care and additional nursing support (intervention), comprehensive needs assessment and as many personalised follow-up appointments as appropriate, where individualised psycho-educational intervention was developed. The Hospital Anxiety and Depression Scale (HADS) was used. In the intervention group anxiety decreased after the intervention from a score of 3.9 (3.2-4.6) to 3.5 (2.8-4.2).</p>

Source: Own Work

DISCUSSION

When analyzing the variety of psycho-educational interventions carried out in the selected publications, we can highlight the participation of nursing professionals. The latter organized, planned and led the interventions. The most common format has been face-to-face. These activities were carried out alone ^(6,8-10,12,13), or with other professionals in the field of mental health, with whom they organize psycho-educational activities. In them, cognitive-behavioral support tends to be carried out ^(2,11). On the contrary, in interventions with telematic support, nursing participation is rare ⁽⁵⁾.

The selected publications analyse the benefits of psycho-educational therapies in a range of different patients' or caregivers' profiles. The largest publications are the ones related to cancer and palliative care ^(2,8-10,12,13), followed by those that address the management of anxiety in the field of mental health ⁽⁶⁻¹¹⁾.

Interventions where a follow-up or post-evaluation has been offered have shown efficacy in the following months, in the short, medium and long term. In general, the selected studies have shown an improvement in participants of the experimental groups, with the exceptions of the studies by Schofield et al. ⁽²⁾ and Chow et al. ⁽¹²⁾. Here, the intervention did not show efficacy in reducing anxiety levels. In the majority of the studies, the improvement of the patient goes far beyond anxiety, achieving all or parts of the suggested goals. It can either be an improvement in the level of the knowledge of the disease or an increase in the perception of such, a progression in the expression of the emotions, an improvement in the QoL of the patient or their family. In the same way, beneficial results are found in the experimental groups for both anxiety and depression. However, these results contrast with the ones from Bonoso and the Pino. In the meta-analysis of the results, they found an effect in favor of psychoeducation on the depressive symptoms, but not for anxiety in the case of caregivers of people with dementia ⁽¹⁴⁾.

The psycho-educational aspect is transversal in all of the publications chosen, being beneficial for the general management of mental health problems and topics, as it is shown in the systematic review by Hudson et al. ⁽¹⁰⁾. This study refers to psychoeducation as a relevant element in psychosocial interventions, which are aimed at the family and caregivers in the context of palliative care. The positive effects on the preparation, competence, rewards and needs of the caregivers are especially true for those caregivers whose family members present chronic physical illnesses or mental illnesses. In the case of caregivers of people with dementia, the evidence in favor of psychoeducation is clear, and is documented in 3 reviews ⁽¹⁴⁻¹⁶⁾.

In the field of mental health, when interventions are oriented toward family members, the reduction of anxiety symptoms in the aforementioned may even benefit the patients themselves ⁽¹¹⁾. The meta-analysis by Hartmann et al. ⁽¹⁷⁾ shows similar results and affirms that psychosocial and psycho-educational interventions aimed at the families of people with chronic illnesses produce significant improvements in the health of caregivers, their relatives and the patients themselves.

In the field of mental health, internet-based therapies, e-health, have shown promising results. There are numerous publications on the subject ^(18,19), however, nursing

professionals tend to consider ICT as a scarcely relevant method of therapy. Although some studies report nursing initiatives in this field ⁽²⁰⁻²²⁾, none of the publications found had an experimental design nor were they centered on the management of anxiety through psychoeducation.

If the leadership of nursing professionals in face-to-face psycho-educational interventions has shown efficacy in the reduction of anxiety on patients, it is likely that it will also do so in online interventions. Trujillo Hernandez et al. ⁽²³⁾ stated the importance of nursing professionals in the improvement of the mental health of the population. In a context in which mental illnesses have increased in the population during the pandemic during COVID-19, it is necessary to carry out additional research which evaluates the acquisition of new abilities that stimulate the educational support of patients from new approaches. The use of ICT opens up a field to develop our competencies that are required to be explored.

Finally, we conclude by pointing out that, although all the studies included in the review have an experimental or evidence-synthesis design, neither a screening nor a quality assessment has been executed for their selection. The conclusions found in this literature review should be complemented with studies, with more exhaustive designs that allow us to locate more literature about the subject and to synthesize and combine the results to draw firmer conclusions.

CONCLUSIONS

Psycho-educational interventions carried out telematically have enabled anxiety to be handled in a personalized and effective way in a wide range of patients. These are patients with chronic health problems, cancer patients, mental health patients and/or the main caregivers of the aforementioned.

The analysis of the current status of the effectiveness of psycho-educational interventions in a face-to-face and online format, reveals that interventions led entirely by nurses have been carried out in a mainly face-to-face format. No results have been found with regards to experimental studies related to the management of anxiety which were carried out either partially or entirely online.

The interventions methods, strategies and psycho-educational programmes led and run by nursing professionals, that take advantage of the current ease and impact that ICT provide, should be evaluated. This evaluation should be done through studies with designs that can provide a high level of evidence.

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