EVALUATION OF SOCIAL ISOLATION AMONG PATIENTS WITH ODOR IN NEOPLASTIC WOUNDS: INTEGRATION REVIEW

ABSTRACT
Objective: to identify the scientific evidence on social isolation among patients with fetid odor in neoplastic wounds. Method: integrative review carried out in the databases LILACS, MEDLINE and COCHRANE with the question << What is the scientific evidence about social isolation among patients with fetid odor in neoplastic wounds? >>. The PICO strategy was used with time horizon from November 2002 to November 15, 2014, in Portuguese, English and Spanish languages. After the selection of the scientific studies, the texts were read and analyzed in their entirety. The information was tabulated in Microsoft Excel program and processed from the central trend measurement strategy with simple descriptive arithmetic mean, absolute and relative frequency. Results: 352 scientific articles were identified in their totality. After applying the inclusion and exclusion criteria, 23 scientific studies were selected. Conclusion: odor is the main symptom that interferes with the psychosocial aspects of the patient, responsible for causing embarrassment, disturbance of body image and difficulty in interacting with the social network. These factors favor social isolation. Descriptors: Palliative Care; Oncology Nursing; Wounds and Injuries; Odors; Social Isolation.

RESUMO
Objetivo: identificar as evidências científicas sobre o isolamento social em pacientes com odor fétido em feridas neoplásicas. Método: revisão integrativa, realizada nas bases de dados LILACS, MEDLINE e COCHRANE com a questão << Quais são as evidências científicas sobre o isolamento social em pacientes com odor fétido em feridas neoplásicas? >>. Foi utilizada a estratégia PICO com horizonte temporal de 2002 a 15 de novembro de 2014, nos idiomas português, inglês e espanhol. Após a seleção dos registros científicos, realizou-se a leitura e análise na íntegra dos textos. As informações foram tabuladas em programa Microsoft Excel e processadas a partir de estratégia de medida de tendência central com a média aritmética descritiva simples, frequência absoluta e relativa. Resultados: identificou-se 352 artigos científicos em sua totalidade. Após aplicação dos critérios de inclusão e exclusão, foram selecionadas 23 evidências científicas. Conclusão: o odor é o principal sintoma que interfere nos aspectos psicossociais do paciente, responsável por causar constrangimento, distúrbio da imagem corporal, dificuldade de interação com a rede social, fatores que favorecem o isolamento social. Descritores: Cuidados Paliativos; Enfermagem Oncológica; Ferimentos e Lesões; Odores; Isolamento Social.
INTRODUCTION

Advances in the area of cancer-fighting therapies have been the cornerstone of a perspective of cure for cancer patients; however, when cure is impossible, palliative care is used as a means to control symptoms and promote quality of life through prevention and relief of suffering with early identification, evaluation of physical, psychosocial and spiritual problems, aiming at reducing physical and psychological suffering and improving the quality of life of the patient and their families.1,2

Numerous assistances are provided for patients with advanced cancer and under palliative care, especially care for neoplastic wounds, which are characterized by the infiltration of malignant cells into the skin's compositions. The tegument integrity breaks down and, as a result of the cellular proliferation, disordered by oncogenesis, there is an evolutionarily exophytic wound.3,5

About 5% to 10% of patients with advanced cancer have this condition, which is usually caused by primary cutaneous neoplasias or metastases, with a higher prevalence in patients between 60-70 years of age.3,6-7 One of the main problems affecting patients with these conditions are the symptoms, which are responsible for negatively affecting the quality of life, since they progressively affect the skin, disfigure the body and become painful, exudative and with a foul smell.4,5

The odor stands out in this context, as it is characterized as a symptom of difficult control and constant presence in the daily life of patients with neoplastic wound. In the literature, it is evidenced that about 10.4% of the patients with neoplastic wounds are affected by the fetid odor.8

With the pathophysiological development of the neoplastic wounds, the occlusion of the blood vessels and consequent hypoxia caused by the growth pressure of the tumor stroma occurs. When this fact occurs, added to the occurrence of contamination by aerobic (Pseudomonas aeruginosa, Staphylococcus aureus) and bacteroid anaerobes microorganisms (Bacteroides fragilis, Clostridium perfringens and Anaerobicos coccii), there is the formation of aggregates of necrotic tumor mass.9,10

The product derived from the metabolism of these microorganisms are volatile fatty acids, such as: acetic, propionic, butyric, isobutyric and caproic acids, besides sulfur, putrescine and cadaverine gases, which are responsible for the characteristic odor present in these lesions.9-10 Such symptom is the main responsible for aggravating the quality of life and the pathological status of the patient, because it adds anguish with the advancement of disease, humiliation, embarrassment and social isolation.9

Social isolation is defined as the lack of interaction, contact or social communication, identified by the psychological, social or physical distancing of the patient from their network of relationships. Therefore, this condition can be experienced through physical, social or psychological separation.11

Thus, multidisciplinary care is of utmost importance, since holistic action can lead to an improvement in the patient's self-esteem and quality of life, since this symptom is closely linked to social isolation.12,13

Taking into account the importance of this theme in the quality of life of patients with neoplastic wounds, this study aimed to identify the scientific evidence on social isolation among patients with foul odor in neoplastic wounds.

METHOD

This is an integrative review based on an electronic bibliographic survey in the following databases of the Virtual Health Library (VHL): LILACS (Latin American and Caribbean Literature in Health Sciences), MEDLINE (Medical Literature Analysis and Retrieval System online) and COCHRANE (Cochrane Database of Systematic Reviews) about the question: what are the scientific evidence on social isolation among patients with fetid odor in neoplastic wounds?

The PICO strategy was used to elaborate the guiding question14, whose acronym represents P = Patient or Problem, I = Intervention, C = Comparison or control, O = Outcomes. It should be emphasized that only P = patients with neoplastic wounds, I = odor and O = social isolation (PIO) were taken into account in this study.

The search strategy was carried out through the Descritores em Ciências da Saúde (DeCs): odores; isolamento social and through the Medical Subject Headings (Mesh terms): social isolation, as well as the palavras-chave and keywords: feridas neoplásicas, feridas tumoriais, malodoros; psychological factors; psychosocial aspects; malignant wound; fungating wound; malignant fungating wound. The absence of specific national and international descriptors for neoplastic wounds made it difficult to select controlled terms, culminating in the cross-referencing between the keywords and the palavras-
chave, connected by the Boolean operator AND.

The steps for selection of scientific papers were performed according to the eligibility criteria adopted: complete texts available online, with study designs (experimental, quasi-experimental, observational and review), with time cut from 2002 to November 15, 2014, in Portuguese, English and Spanish languages, with adherence to the thematic axis. The authors excluded studies that presented experimental design with animals, involving children and adolescents and that portrayed wounds from radiodermatitis. The search in the electronic databases was carried out in November of 2014.

After the selection of the scientific records, the texts were read and analyzed in their entirety. In order to enable the identification of the scientific evidence, the studies were characterized according to the country of research, journal, indexing database/year of publication, type of study and level of evidence, according to the proposal of Melnyk and Fineout-Overholt.15

The information was tabulated in Microsoft Excel® program and processed from the central trend measurement strategy with simple descriptive arithmetic mean, absolute and relative frequency.

RESULTS

A total of 352 scientific articles were identified. After applying the inclusion and exclusion criteria, 23 scientific studies was selected.

![Figure 1. Schematic search flow based on selected articles in database. Niterói (RJ), Brazil, 2015.](image)

Regarding the year of publication, 17% of the articles were published in 2013, 13% in 2012, 13% in 2010 and 13% in 2009. It was observed that 35% of the sample was composed of literature reviews in detriment to the following methodologies: phenomenology (26%), exploratory (13%), case study (9%), randomized (4%), descriptive (4%), systematic (4%) and observational (4%). In addition, it was found that there was more scientific production in England (30%), with most of the research productions occurring in Europe (61%).

Among the selected articles, 95% were indexed in MEDLINE and 5% in Cochrane, thus, there were no Brazilian productions in the collection. On the level of evidence, it was possible to infer that 56% of the sample fit the level of evidence VI, followed by the level of evidence V (9%) and II (5%), as shown in Figure 2.
Figure 2. Distribution of studies included in the integrative review. Niterói (RJ), Brazil, 2015.

The psychosocial aspects affected by odor in patients with neoplastic wounds are diverse, being the most frequent the limitation in attending public places (75%) and altered body image (54%), low self-esteem (37%), personal embarrassment (37%), depression (33%), stress (25%), loss of physical limits (29%), limitation of daily physical activities (25%), anxiety (25%), impaired identity (21%), home confinement (17%), loss of self-confidence (17%), social interaction with the family network (12%), impaired communication (12%) and social interaction with friends network (8%).

The use of instruments or scales that allow the measurement of social isolation related to the odor of these lesions was not identified.

DISCUSSION

The main objective of the treatment of neoplastic wounds is the control of the symptoms, namely pain, bleeding, exudation and bad odor, since they present physiological and psychosocial consequences to the patient. The physiological consequences are characterized by severe pain, excessive bleeding, leakage of exudate, infected wounds and foul odor, which are the most responsible for the negative alteration of body image, culminating in depression and social isolation.16-7

In this sense, the foul odor is the symptom that stands out because it is constantly present in the daily life of the patient and by the difficulty of controlling it in the clinical scope.8 For the nursing staff of palliative care, it is a great challenge to manage the foul odor
in neoplastic wounds, which are the main responsible for situations of distress, social isolation and decline in the patient's quality of life. 13,18

From the pathophysiological point of view, the occlusion of the blood vessels and, consequently, hypoxia, can be observed due to the pressure coming from the growth of the tumor stroma. When this fact is added with the occurrence of the contamination by aerobic and anaerobic bacterioid microorganisms, there is the formation, in its site, of aggregates of necrotic tumor mass. The product derived from the metabolism of these microorganisms are gases responsible for the characteristic and foul odor of these wounds. 9-10,19

A randomized clinical study shows that approximately 42% of the neoplastic wounds present bacteria of the genus Staphylococcus, enteric bacteria in 34%, anaerobic in 16%, Pseudomonas in 10% and hemolytic Streptococcus in 6%. In the total, 25 different species of bacteria, which are responsible for the odor produced, were found. 6

The psychic and social repercussions of the patient have direct relation between the interaction of the odor and the physiological components. Fetid odor is detected by olfactory receptors and processed by olfactory bulbs located in the brain and in limbic and hypothalamic neural systems. In turn, these systems are responsible for the individual’s motivational and emotional behavior. In addition, it can generate involuntary choking triggered by the reflex of the vomit, diminishing the sensation of taste and appetite, affecting the nutritional state. Therefore, the effects of odor can have a devastating impact on the patient’s life, leading to nutritional and psychological stress. 7,10-21

Emotional aspects in dealing with the neoplastic wound can impair the quality of life, highlighting the feeling of shame and guilt that contribute to the patient's flight from the confronting situation. These feelings are fostered by the unpleasant smell of the wound, which is characterized as one of the worst aspects for the patients, culminating in the feeling of being socially isolated due to the loss of self-confidence. 13

In addition, it is possible to observe in studies that the patient may present certain psychological problems, mainly related to anxiety, concern about the perception of bad smell by people with whom they live, impaired body image and feelings of disgust, shame and depression, as well as repercussions such as feelings of exclusion and blockade of social contact. 17 Such problems are often experienced by the fear and anxiety of escape from the wound’s bad odor, culminating in social isolation and difficulties of interaction with the familiar network. 1

The negative impacts of such injuries are numerous and generally include physical, psychological and social aspects. The literature on the subject is extremely scarce, but when explored, symptoms such as odor, leakage of exudate, pain, edema and bleeding are reported by these patients. Emotional problems are often experienced and related to fear and anxiety about the leakage of exudate and the bad smell, which can cause difficulties in relations with relatives and consequently, social support deficit. 22-23

With this, it is perceived that the worsening of the patient’s quality of life and of the patient’s pathological condition, besides conferring a foul odor on the patient and the people on whom with they relate, adds anguish in the progression of the disease, producing a sense of shelter, humiliation, embarrassment, social and family isolation. 4,6,8,22

A study that sought to verify the quality of life of patients with neoplastic wounds through the application of the McGill Quality of Life Questionnaire showed that the factors age, fetid odor, pain problems and psychological issues, together with covariance, determined 87% of the variance associated with quality of life. It can be inferred that the remaining variance in quality of life may be related to other factors, such as the secondary consequences of cancer in patients with neoplastic wounds. 22

Nevertheless, a phenomenological study developed with nine patients with neoplastic wounds in the breast revealed that the wound and the symptoms bring great embarrassment to the individuals, as well as visibility of the progression of the disease and loss of control over the body, which seriously affect daily life. The difficulty in dressing, performing daily activities, the great time needed for the making the dressing and the concern of leakage of odor, exudate and bleeding were characterized as extremely stressful factors that, together, affect social behavior, giving rise to feelings of marginalization and consequently influencing on the patient's well-being. 13

The alteration of body image, the impact of the treatment in terms of dressings and the sensation of failure in personal presentation result in patients’ constant search for excuses.
not to participate in social situations. There is a need for a social support network to enable successful body image adaptation. For many patients, the fact that the social network has little knowledge about the wound triggers a reduction of social support, resulting in feelings of exclusion and isolation.\textsuperscript{24,25}

Social influences, in this context, meet the symptoms that, in general, are unpredictable and highlighted as the main factors that cause feelings of shame. Odor is an event that reduces the patient's socialization, especially in terms of relationships with family and friends. It creates great embarrassment, which leads them to avoid contacts and exchanges with the outside world and limit their daily activities. Such a symptom also promotes constant awareness about the wound and the health status, and from the patient's point of view, it causes the body to be reduced to a decomposing piece of meat, showing itself as a strong stigma that contributes to patients' choice by social isolation.\textsuperscript{13,25-26}

In accordance with the above, many patients make use of perfumes or towels to disguise or reduce the bad smell, and bear a stigma due to their constant odor, which can be compared to rotten meat. This also reflects problems for the family, because even with the washing of all the clothes and even the wound, the stench still remains evident.\textsuperscript{13}

Social support is an important factor in the clinical scenario. Studies indicate that individuals who undergo stressful psychosocial situations and who simultaneously receive more support are more protected from the harmful effects of the disease when compared to those in isolation. The certainty of being supported materially or emotionally prevents the patient from considering a situation as stressful, and it becomes primarily an area of resistance between the individual and the difficult situations of life. It is also mentioned that stress is widely associated with the appearance of diseases, as well as to the impairment of the body, since this causes significant influence in the immune system, acting in several points of the cellular and humoral system.\textsuperscript{27}

The importance of support through relationships, in terms of family, friends, and health professionals, stands out as a consistent facet in the experience of dealing with cancer and with a chronic wound. However, there is little production specifically about the lived experience of the effect of a wound or cancer on relationships, which is distinguished from the consequent effect on social isolation.\textsuperscript{25}

In addition to patients, caregivers also need emotional support to deal with the patient's risk for social isolation. In a phenomenological study, some problems are mentioned by caregivers, such as the lack of knowledge about how to manage odor and other problems that cause emotional distress. They describe how to deal with various emotions such as shock, disgust, nausea towards the odor, and physical aspect that are managed by them and help with daily living activities. However, wound odor had a disgusting effect on caregivers, as well as on patients, and it was responsible for causing nausea, thus damaging their daily lives.\textsuperscript{23}

It is worth mentioning that the anguish related to such symptom also affects the health professional, since the lack of control under the symptoms of neoplastic wounds leads to feelings of guilt or inadequacy of the interventions that can be unsuccessful, often due to little experience or even little knowledge in dealing with this situation.\textsuperscript{12} Thus, there is a clear need for more information to assist the professionals in making correct choices in the management of their patients through guidelines, continuing professional education and specialized knowledge about these injuries. Strategies need to be explored to help understanding the diversity of problems that such conditions may bring, including the physical and psychological aspects.\textsuperscript{16}

For the proper management of neoplastic wounds, one should take into account the odor, while focusing on the management of discomfort and isolation resulting from this condition, in which the patient's comfort and quality of life should be prioritized at this stage. Access to specialized care, modern dressings and reduction of distressing symptoms allow the patient more comfort, less distress and reduction of stigma and isolation due to the adequate administration of this symptom.\textsuperscript{19}

The nurse's role is of utmost importance in the implementation of interventions for social isolation through symptom control, group work, patient re-engagement, by fostering the close relationship between the individual and the caregiver, encouraging social interaction to a level acceptable to the patient and using strategies to promote social interaction. It is worth mentioning that the interventions end up varying according to the particularity and necessity of each patient.\textsuperscript{11}
CONCLUSION

In recent years, there has been a greater concern by researchers in the search of knowledge about neoplastic wounds and the repercussions of its symptoms in the psychosocial aspects of the patient in palliative care. However, the scientific publication of articles, related to the methodologies, presents, for the most part, low level of evidence. Thus, there is the need to promote randomized and quantitative research to give a greater character of evidence to the theme in question.

In addition, there are no studies that have used psychometric scales to quantitatively measure the social isolation of patients with fetid odor in neoplastic wounds, as well as related to the psychosocial aspects derived from this symptom. For this reason, the need to carry out studies using these means of data collection emerges, in order to corroborate the data already obtained in review and phenomenological studies, which can further enrich the notorious field of nursing care to such wounds in palliative care.

Odor is the main factor that provides social isolation in patients with neoplastic wounds, since it causes embarrassment, depression, anxiety, body image disorder, loss of physical limits, social stigma and home confinement.

It is imperative that the nursing team has a theoretical and technical domain in this area of care in order to obtain means to recognize the main factors that favor social isolation. This knowledge may cause these practitioners to act assertively in the core process of these patients, improving their quality of life.

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