

PSYCHOLOGICAL INTERVENTIONS FOR MESOTHELIOMA PATIENTS AND THEIR CAREGIVERS

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Abstract

Objective: Malignant Mesothelioma (MM) has a striking impact on the somatopsychic balance of patients and their families, including physical, psychological, and interpersonal problems. The aim of this systematic literature review was to investigate what psychological interventions are offered to patients with MM and their caregivers worldwide. **Methods:** The review was conducted using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses. The literature search led to the identification of 12 articles. Results were categorized into five categories. 1. Individual psychological support, 2. Group psychological support, 3. Cognitive-behavioral group psychotherapy, 4. Brief psychoanalytic groups, 5. Multifamily group. **Results:** The interventions differed in terms of form, duration and resources used. Most of them were group-based and psychoanalytically oriented, although individual and cognitive-behavioral interventions were also described. Despite the differences, the interventions appeared to be fundamental in facilitating the processing of mental pain and anger related to the diagnosis. **Conclusion:** Our study has shown that there are still few psychological interventions available for MM patients and their caregivers. The somatopsychic consequences of MM in patients and caregivers should encourage institutions and healthcare professionals to develop assessment and intervention models that address the different dimensions of their suffering and promote their residual vitality.

Keywords: *Malignant mesothelioma, cancer, caregivers, psychotherapy, interventions.*

1. Introduction

Furuya et al. (2018) emphasized the magnitude of the phenomenon of asbestos-related diseases and referred to an estimated 255,000 deaths per year related to asbestos exposure, of which 233,000 were due to occupational exposure. Asbestos exposure in the workplace is currently considered a leading cause of work-related deaths, with more than half of deaths due to oncologic diseases, including Malignant Mesothelioma (MM) (Ulla-Mari, 2023; Wilk & Krówczyńska, 2021). MM is a rare cancer, accounting for only 0.17% of estimated cancer cases in 2020 (Ferlay et al., 2021). The survival rate of patients with MM is significantly lower than for other cancers (median between 8 and 12 months after diagnosis) (Huang et al., 2023; Marinaccio et al., 2018). In addition, it has a remarkably long latency period, which can typically be 30 to 40 years between the first exposure to asbestos and the onset of the disease (Alpert et al., 2020). Therefore, the diagnosis is usually made at an advanced age (with an average age of around 70 years, with no differences between genders) (INAIL, 2021).

In terms of the experience of MM specifically, the poor prognosis, reduced effectiveness of treatments, occupational etiology, poor quality of life for those in the latter stages of the disease, and advanced age at diagnosis exacerbate the psychological impact and make the experiences of individuals and family members even more problematic (Bonafede et al., 2020; Demirjian et al., 2024; Nagamatsu et al., 2022; Warby et al., 2019). Both patients and their families may experience somatic and psychosomatic symptoms, impaired quality of life, anxiety, depression, fear, and mistrust as well as post-traumatic symptoms (Bonafede et al., 2022; Demirjian et al., 2024; Gonzalez-Ling et al., 2023; Nagamatsu et al., 2022). We strongly believe that an interdisciplinary approach to the treatment of MM is fundamental to restore and promote in both patients and caregivers the ability to tolerate, symbolize, mentalize and narrate the traumatic effects of the disease, but also the vital aspects that live on in them and in their relationships (Granieri et al., 2018). For these reasons, the provision of specialized clinical-psychological interventions for MM patients and their families would be of paramount importance and an important objective of environmental health policies, especially in the areas most

affected by asbestos contamination and where the population is therefore most frequently affected by the diagnosis of MM.

This paper therefore presents the results of a systematic literature review aimed at investigating the provision of psychological and psychotherapeutic interventions for MM patients and their caregivers worldwide.

2. Design

This systematic literature review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Guidelines (Page, et al., 2021).

The studies were identified by searching the following electronic databases: Scopus, Web of Science, PubMed, ProQuest Psychology Journals, PsycINFO, and PsycARTICLES.

We used a combination of the following keywords: (psych*) AND (intervention* OR treatment* OR help OR support OR assistance OR “mental support” OR “psychological service” OR “psychological services” OR “clinical intervention” OR “clinical interventions” OR psychotherapy OR “group therapy” OR “group intervention” OR “group interventions” OR “emotional support” OR counseling OR counselling) AND (mesothelioma OR asbestos).

The articles were retrieved in May 2023, and a new search was conducted on November 15, 2023 to update the results.

Data analysis was performed using a standardized data extraction form that included: (a) general study details (e.g., authors, title, publication source, year of publication); (b) study type; (c) sample characteristics (e.g., age, gender, country, patients vs. caregivers); (d) intervention characteristics (e.g., setting, duration, etc.); and (e) results.

3. Methods

In the electronic database search, 6,327 articles were found, while 3 works were identified manually. After duplicates had been removed, 5,744 articles remained. Of these, 5,689 articles were excluded on the basis of title and abstract and 43 articles on the basis of full text evaluation (Figure 1).

The remaining 12 articles were subjected to data extraction and qualitative analysis. Table 1S summarizes the information on the studies. Results were classified according to the type of intervention offered to patients with MM and their caregivers: 1. individual psychological support, 2. group psychological support, 3. cognitive-behavioral group psychotherapy, 4. brief psychoanalytic groups, and 5. multifamily group.

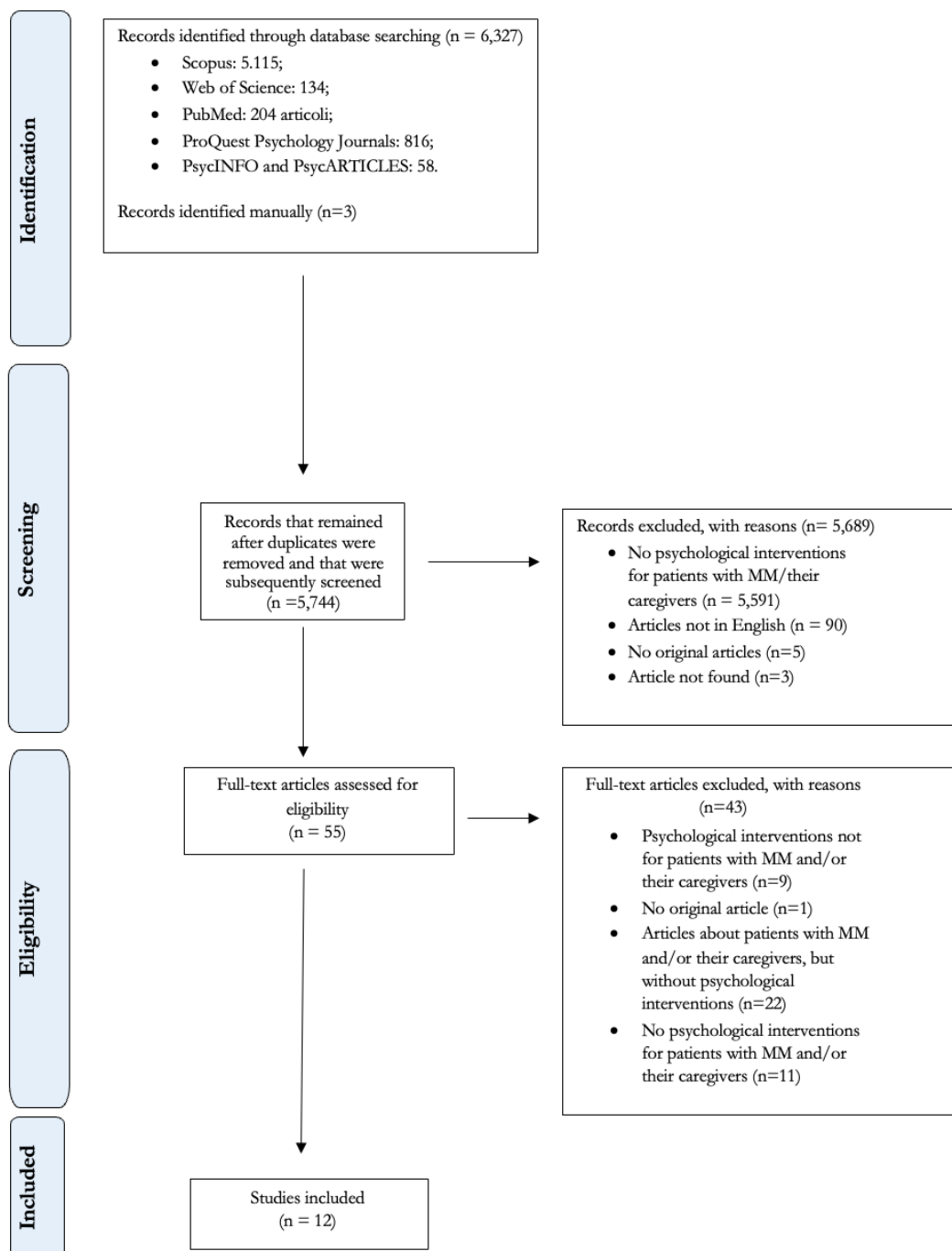
4. Discussion

While previous research on the impact of MM on patients and their caregivers (Gonzales-Ling et al., 2023; Nagamatzu et al., 2022;) shows the importance of integrating psychological interventions into the management of patients and caregivers, as they allow them to work on the somatopsychic balance that can be undermined by the oncologic disease and thus offer an improvement in residual quality of life, our systematic literature review has shown that such interventions are still very rare. We are of course aware that the results of our systematic review are necessarily incomplete, as what is reported at the clinical level is not necessarily published in the form of scientific papers, particularly in English. The lack of studies on psychological interventions for MM patients and their caregivers is a major concern for public health and patient advocacy, as the problem of asbestos-related diseases is still relevant today and can still affect many individuals and families around the world. Although previous research emphasizes that the care experience of cancer patients in general (Karimi Moghaddam et al., 2023; Park et al., 2022) and MM patients in particular (Bonafede et al., 2022; Bonafede et al., 2020; Warby et al., 2019) can also affect the mental health of family members and therefore it is important to also provide interventions for caregivers (Demirjian et al., 2024; Yang et al., 2021), but most of the interventions described in our systematic review did not include caregivers. The results of our systematic literature review confirm that the integration of clinical psychology in oncology is fundamental for both patients and caregivers, as it can activate the egoic resources of each individual, i.e. the ability to tolerate one's own emotions, the traumatic impact of which often lead to dissociation and denial. Promoting the processing, symbolization and signification of emotions related to the impact of the diagnosis allows the recovery of residual aspects of life and health of a body-mind perceived by itself and its environment as sick and dying (Franzoi et al., 2023; Schore, 2021). This also enables greater awareness of one's own clinical condition, which leads to the possibility of more appropriate management of the disease and reducing inappropriate use of local health services (Andermann, 2016; Molina-Mula et al., 2020).

5. Conclusions

Our systematic literature review emphasizes the need and opportunity to integrate psychological interventions into the care of MM patients and their caregivers, and that this goal is currently largely unmet. Efforts still need to be made at the public health level to move towards multidisciplinary care protocols that adequately address the interrelationships between the physical, psychological, and environmental components of the illness experience (Rosen et al., 2018). Integrated multidisciplinary interventions that point in this direction enable the construction of a space in which it is possible for patients and caregivers to deal with the illness and its somatopsychic impact. Through the collaboration of the entire care team, it is thus possible to promote the possibility of not feeling alone and helpless in the face of illness and possibly death, to support and strengthen patients' responsibility for their own health, to increase adherence to treatment and to improve the residual quality of life.

Figure 1. Preferred reporting items for systematic reviews illustrates the study selection process.



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