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# Psychosocial Risks and Job Satisfaction: A Meaningful Relationship for Oncology Workers\*

**Theme:** Promotion and prevention.

**Contribution to the discipline:** This manuscript is the result of the concern of researchers in Occupational Health Nursing, being an unpublished study that raises unpublished information about the diagnosis of the situation of psychosocial risks and its relationship with job satisfaction, based on Imogene King's theoretical support, which reinforces the analysis of the results obtained, making the contribution of the nursing discipline to safety and health at work visible.

## ABSTRACT

**Objective:** To determine the relationship between psychosocial risk factors and professional satisfaction of workers working in oncology and palliative care units in a region of Chile. **Material and Method:** Non experimental, cross-sectional, correlational study with quantitative approach. In the last semester of 2016, the census of health workers was carried out, using an instrument composed of three parts for data collection: a) bio-sociodemographic history, b) SUSEO-ISTAS 21 questionnaire for psychosocial risks, and c) for work satisfaction. International bioethical principles were respected throughout the research. **Results:** There is a relationship with statistical significance ( $p \leq 0,05$ ) between psychosocial risks and job satisfaction at work, the dimension of psychosocial risk with higher risk is psychological demand ( $\bar{x}$ : 11,24; DP: 3,06) and dual presence ( $\bar{x}$ : 3,23; DP: 1,90) and the factor in which less satisfaction is perceived is the physical work environment ( $\bar{x}$ : 4,32 DP: 1,77). **Conclusion:** With the results obtained, it can be affirmed that the workers who work in oncologic units and perceive greater psychosocial risk at work present less satisfaction at work, which can impact on the quality of assistance.

## KEYWORDS (SOURCE: DeCS)

Occupational risks; occupational health nursing; health personnel; oncology service, hospital; job satisfaction.

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# *Riesgos psicosociales y satisfacción laboral: una relación significativa para los trabajadores de oncología\**

## RESUMEN

**Objetivo:** determinar la relación entre los factores de riesgo psicosocial y satisfacción laboral de los trabajadores que se desempeñan en unidades de oncología y cuidados paliativos de una región de Chile. **Material y Método:** estudio no experimental, transversal, correlacional con abordaje cuantitativo. Durante el último semestre 2016, se realizó un censo a 110 trabajadores sanitarios, usando para la recolección de datos un instrumento que consta de tres partes: a) antecedentes biosociodemográficos, b) el cuestionario SUSES-ISTAS 21 para riesgos psicosociales y c) S20/23 para satisfacción laboral. Durante toda la investigación, se respetaron principios bioéticos internacionales. **Resultados:** existe relación con significancia estadística ( $p \leq 0,05$ ) entre riesgos psicosociales y satisfacción laboral en el trabajo, la dimensión de riesgo psicosocial con mayor riesgo es exigencias psicológicas ( $\bar{x}$ : 11,24; DE:3,06) y doble presencia ( $\bar{x}$ : 3,23; DE:1,90) y el factor en que se percibe menor satisfacción es el ambiente físico de trabajo ( $\bar{x}$ : 4,32 DE:1,77). **Conclusión:** con los resultados obtenidos se puede afirmar que los trabajadores que se desempeñan en unidades de oncología y perciben mayor riesgo psicosocial en el trabajo tienen menor satisfacción laboral, lo que podría impactar en la calidad de la atención.

## PALABRAS CLAVE (FUENTE: DeCS)

Riesgos laborales; enfermería del trabajo; trabajadores de la salud; servicio de oncología en hospital; satisfacción en el trabajo.

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\* Se contó con el financiamiento del proyecto interno regular UCM434194, sublínea PMI-Oncología, de la Universidad Católica del Maule, Chile, denominado "Intervención en riesgos psicosociales para la mejora de la calidad de vida del equipo de salud de oncología".

# ***Riscos psicossociais e satisfação profissional: uma relação significativa para os trabalhadores da oncologia\****

## RESUMO

**Objetivo:** determinar a relação entre os fatores de risco psicossocial e a satisfação profissional dos trabalhadores que atuam em unidades de oncologia e cuidados paliativos, em determinada região do Chile. **Materiais e método:** estudo não experimental, transversal, correlacional de abordagem quantitativa. No último semestre de 2016, foi realizado um censo com 110 trabalhadores da área da saúde. Para a coleta de dados, foi utilizado um instrumento que apresenta três partes: a) antecedentes biossociodemográficos; b) questionário SUSESO-ISTAS 21 para riscos psicossociais e c) S20/23 para satisfação profissional. Durante toda a pesquisa, foram respeitados os princípios bioéticos internacionais. **Resultados:** existe relação com significância estatística ( $p \leq 0,05$ ) entre riscos psicossociais e satisfação profissional no trabalho; a dimensão de risco psicossocial mais prevalente são exigências psicológicas ( $\bar{x}$ : 11,24; DP = 3,06) e presença dupla ( $\bar{x}$ : 3,23; DP = 1,90); o fator em que é percebida menor satisfação é o ambiente físico de trabalho ( $\bar{x}$ : 4,32 DP = 1,77). **Conclusão:** com os resultados obtidos, pode-se afirmar que os trabalhadores que realizam atividades em unidades de oncologia e percebem maior risco psicossocial no trabalho têm menor satisfação profissional, fato que impacta na qualidade da atenção.

## PALAVRAS-CHAVES (FONTE: DeCS)

Riscos profissionais; enfermagem do trabalho; trabalhadores da saúde; serviço de oncologia em hospital; satisfação no trabalho.

\* Financiamento de projeto interno regular UCM434194, sublinha PMI-Oncologia, da Universidad Católica del Maule, Chile, chamado "Intervenção em riscos psicossociais para melhorar a qualidade de vida da equipe de saúde de oncologia".

## Introduction

The conditions inherent to the work are related to the type of organization and the content and execution of the task, which affect the health and well-being of the worker. They are called psychosocial risks of work (1) and are affecting many people around the world. There are countless studies that show the level of risk in the various locations, but most are descriptive and are not associated with other variables of interest such as job satisfaction (2-5), defined as an attitude or set of attitudes developed by the person in relation to his or her work situation that can be referred to the work in general itself or to its facets (6).

This association is relevant to nursing given the theoretical relationship between job satisfaction and quality care (7,8). Experts postulate that a healthy working environment is an important factor that improves job satisfaction and care for people. In addition to the above, it is important to point out that precarious working conditions generate exposure to psychosocial risks, work overload and imbalance between family and professional life, which affects productivity and care provision (9). On the other hand, the characteristics of work and dissatisfaction compromise the efficiency of work, causing errors, problems in exercise and depersonalization in providing care to users and family members, which in turn generates dissatisfaction and discontent (10). Working conditions with high demands, little control and emotional support would result in what Herzberg's model states, which points to external causes as the root of dissatisfaction at work (11), however, no empirical evidence was found to support such a statement.

The World Health Organization (WHO) states that work environments with higher psychosocial, quantitative, emotional and dual presence demands (work-family conflict) are associated with lower job satisfaction and lower quality of assistance provided (12). At the national level, since the 2013, psychosocial risk protocol evaluated their presence, however, no studies were carried out that show the importance of relating them to performance. For all these reasons, this document arises with the objective of determining the relationship between the two variables in oncology units and palliative care in a region of Chile, which will contribute to the strengthening of the nursing discipline since Imogene King's Interaction Systems Model (ISM) was used as theoretical support (13). This model is composed of three systems: personal, interpersonal and social. This author highlights that each system is open and interrelated, showing that any change in one of them can impact the others through processes of action, reaction, interaction and transaction (13).

## Material and method

A non-experimental, cross-sectional and correlational study was performed, with a quantitative approach (14). In the last semester of the year 2016, 110 health professionals (professionals, technicians and administrators) from the oncology and palliative care units of the Maule region, Chile, were registered, corresponding to 91.66% of the total population. The participants of the study should meet the following *inclusion criteria*: be a member of the health team and work in oncology and palliative care units of health institutions. The following *exclusion criteria* were considered: being on medical leave, legal holiday or administrative permission during the data collection period.

A self-applicable tool was applied in the work environment, accompanied by the responsible researcher, to solve doubts and questions. This instrument was composed of three parts: 1) biosociodemographic factors, elaborated by the research team; 2) the work satisfaction scale for which the S20/23 (15) was used, validated in Chile and with global Cronbach's alpha of 0.92 and factors that vary between 0.76 and 0.89. This has five factors that allow us to evaluate the intrinsic satisfaction with the work, with supervision, with the physical environment, with participation in decisions and with participation in general. It is answered using a Likert seven point scale format (from 1 = very unsatisfied to 7 = very satisfied). The last part is the SUSESO-ISTAS 21 (16) questionnaire, adapted and validated in Chile in 2008 by the School of Public Health of the University of Chile. It is a multidimensional instrument that allows identifying and measuring the existence of psychosocial risk, its use is public for the summarized version, it is composed of 20 questions and evaluates five dimensions: psychological demands  $\alpha$ : 0.86; active work and development of skills  $\alpha$ : 0.86; social support in the company and quality of leadership  $\alpha$ : 0.92;  $\alpha$ : 0.83 and compensations of double presence  $\alpha$ : 0.64. For the descriptive analysis of the data frequencies, intervals, means and measures of central tendency were used and to determine the relationship between S20/23 and psychosocial risk factors, Pearson's correlation was used. This research was approved by the Scientific Ethics Committee of the Catholic University of Maule, Chile (approval certificate Num. 10/2015) and by the Scientific Ethics Committee of the Health Service of Maule, Chile (08th October 2015 minutes). It is indicated that all ethical aspects were duly considered in order to guarantee the anonymity of the participants and the secrecy of the data obtained in this research.

## Results

In the data analysis, the SPSS version 23 for Windows XP and the Kolmogorov-Smirnov (*K-S*) test were used to evaluate the normality of the data. Regarding the descriptive data, it was obtained that the mean age of the workers participating in the study was 38 years (SD: 11.66) with variation from 22 to 65 years; 75.45% correspond to women, 73.63% have a partner and 58.18% have children; Regarding the degree of schooling, 61.81% have university education (doctors, nurses, psychologists, among others) and 38.18% have non-university education (nursing and administrative technicians); finally, 48.18% had medical habilitation and 68.18% consulted a doctor in the last twelve months.

**Table 1.** Perception of psychosocial risk by dimension in oncology and palliative care workers (*n* =110).

Factors	Mean	Standard deviation	Risk level
Psychological demands	11.24	3.06	High
Active work and skill development	5.66	2.48	Average
Social support in the company and quality of leadership	5.34	3.05	Average
Compensation	3.70	2.51	Average
Double presence	3.23	1.90	High

Source: Own elaboration based on the research data, 2017.

Table 1 shows the results regarding the psychosocial risk perceptions of health professionals participating in the study. It is observed that the workers report perception of high exposure to psychosocial risks in the dimensions *psychological demands* and *double presence* and medium perception of exposure to risks in the other dimensions.

**Table 2.** Oncology workers work satisfaction perception (*n* =110).

Work satisfaction factors	Score Half	Standard Deviation	Satisfaction level
With supervision	5.24	1.37	A little bit satisfied
With the physical work environment	4.32	1.77	Indifference
With decision making	5.08	1.36	A little bit satisfied
Intrinsic to their work	6.87	1.44	Very satisfied
With recognition	4.34	1.56	Indifference

Source: Own elaboration from survey data, 2017.

Table 2 reports the results regarding health care workers satisfaction perception participating in the study of each dimension of the scale. The intrinsic work satisfaction factor is the one that presents the highest satisfaction with 6.87 mean (SD: 1.44). On the other hand, the satisfaction factor with the physical work environment is the lowest with 4.32 mean (SD: 1.77)

In the table 3 shows correlations with statistical significance ( $p \leq 0.05$ ) between the perception of psychosocial risk and work satisfaction. Psychological demands, whether emotional, sensory or related to the amount of work, the necessary knowledge or the need to hide emotions (1), are related to *satisfaction with recognition*.

The dimension of *active work and the competencies development* are correlated with *decision making satisfaction* and with *recognition satisfaction*. On the other hand, there is an association between the social support dimension *in the company and the quality of leadership with recognition satisfaction, satisfaction with supervision, satisfaction with the physical working environment and satisfaction with decision making*.

The dimension of *remuneration* is related to *recognition satisfaction, satisfaction with superiors, satisfaction with decision making and work satisfaction*. Regarding the double presence dimension, no correlations of statistical significance with *job satisfaction* factors were observed.

## Discussion

To answer the objective, the results obtained will be discussed with other studies published in health workers and with the Imogene King's Interaction Systems Model (ISM) which proposes that it is the responsibility of nursing professionals to use their knowledge and skills to help individuals to face their existential problems and to know the different ways of adapting to the daily life changes (13). Another of their proposals is that each system is in balance and exchange and what can affect each of them, in this case, is the perception of the psychosocial environment.

In this sense, within the psychosocial occupational risks, it is evident that the *psychological demands* (quantitative, emotional and cognitive) are the product of experiences related to making difficult decisions and working with users of poor prognosis such as oncologic patients and, likewise, to the *double presence* that is evident when the concerns of the home plus those of work fall on

**Table 3.** Pearson's correlation between psychosocial risk factors and work satisfaction of health workers who work in oncology units (*n*: 110).

Items	Satisfaction with recognition	Satisfaction with supervision	Satisfaction with the physical work environment	Satisfaction with decision making	Intrinsic to work
Psychological demands	-.189*	-.065	-.132	-.144	-.142
Active work	-.247**	-.043	-.064	-.223*	-.168
Social support	-.272**	-.563**	-.198*	-.260**	-.153
Compensation	-.326**	-.297**	-.053	-.369**	-.295**
Double presence	-.084	-.019	.094	.008	.017

\* $p \leq 0,05$  \*\* $p \leq 0,01$ .

Source: Own elaboration from research data, 2017.

the same person (5, 17). Both dimensions are those that the workers participating in the study perceive as the greatest exposure to psychosocial risk. As mentioned, this high level of risk is usually due to the service to oncologic users, who, due to their complexity, are generators of high physical and psychological demand (2). A similar result was reported in a study conducted in Cuba where interaction with patients with poor prognosis and critical attitude towards the team, associated with cognitive demands such as healing injuries and facing clinical situations specific to the oncology specialty, increase psychological demands. Similarly, ISM states that high demands can affect interaction and transaction, since it is necessary for the nurse and patient to perceive a coherence of roles that contributes to the achievement of care objectives (13). On the other hand, specialists indicate that the oncology worker is exposed to stressful situations that generate diseases that would cause work absenteeism, which is reflected in the high percentage of medical consultations in the last twelve months that have caused absenteeism due to medical leave (5).

Another study conducted in Chile reported absenteeism due to medical leave in 57.8% of the workers (17). Some authors state that absenteeism should be considered as a consequence of low satisfaction, because it is associated with the overload of employees who are in replacement, which leads to lower performance, lower satisfaction and lower care quality (10,18). It is relevant to deal with high work demands, since specialists indicate that these may be associated with work accidents and occupational diseases. In this sense, the Pan American Health Organization and the World Health Organization (PAHO/WHO) propose a strategic plan for the health and well-being of health professionals, whose ob-

jective is to develop programs for the identification and control of dangerous agents and risk conditions (19). It is relevant for organizations to understand the interaction systems proposed by King's ISM (personal, interpersonal and social) to facilitate transactions and decision-making with common interests (13).

On the other hand, it is indicated that, due to their characteristics, this group of workers are more likely to perceive high exposure to psychosocial risks of *double presence*. In general, high percentages are women (75.45% in this study). Due to cultural and gender aspects, domestic work and child care in Latin America are the responsibility of independent women, so they have a double workload that causes fatigue and a feeling of guilt for the lack of attention to children, family and friends (20). Being aware of this, the World Health Organization (WHO), concerned about the problem, recommends the reduction of working hours and flexible working hours (18), however, due to the characteristics of health work, this solution is still pending, limiting the possibility of greater participation in social and family activities (21). It is relevant to think about the future and not only increase time flexibility, but also propose public, national and international policies focused on education, in order to reduce patriarchal structures present in the education of children and to be able to grow up in equal conditions (22).

As previously indicated, job satisfaction presents the best levels in the perception of intrinsic job satisfaction, which refers to performance in what you like and what stands out; similar results were reported in Brazil, where the main motivation was to work as a specialist in oncology (23), a situation that is repeated in

Spain with people working in a university hospital (24). On the other hand, the lowest reported satisfaction is presented with the working environment conditions; this result coincides with the perception of Peruvian and Mexican nurses, who express dissatisfaction with the space and physical conditions (25,26). Similar results are evidenced in a Chilean study in which it is stated that the few or sometimes non-existent spaces assigned, without natural lighting, with regular ventilation and annoying noises caused by the equipment (27), generate dissatisfaction at work. According to the open interaction systems model, personal experiences that include concepts of self-perception, space and time, affect the process of action, reaction, interaction and personal transaction, because they must be in balance to provide care (13).

In relation to the correlational analysis, the bibliographical survey shows few studies that relate the variables of psychosocial risk factors and job satisfaction in workers who work in oncology and palliative care units, which includes different groups of workers (doctors, nurses, nursing technicians and psychologist, among other professionals).

By observing the results, one can affirm that workers exposed to greater psychosocial risk perceive less satisfaction at work, which coincides with the assumption made. Specifically, some studies show that the greater the *psychological demands*, the lower the *satisfaction at work with recognition*. In this sense, it is proposed that the low satisfaction at work is related to characteristics of the organization such as inequality in work overload, lack of recognition (28), cognitive psychological demands and work characteristics, which compels the development of specific skills and competencies in providing care (29). This could increase the cognitive and emotional demands of workers, who also experience painful experiences of the user and suffer from stress, causing emotional wear and tear (30).

According to ISM, if nurses with specific knowledge and skills convey the appropriate information to the people in their care, a transaction proposal and the achievement of the objectives will be presented (13). Moreover, working with insufficient material exposes the professional to make rational use of resources or to improvise, using inadequate inputs and having to resort, occasionally, to looking for them in other sectors, generating waste of time that could be used in the care of users (8). On the other hand, dissatisfaction can be generated in the worker mainly when his/her effort is not recognized by his/her superiors, when he/

she perceives vulnerability of his/her rights when receiving low or unfair remuneration or when he/she works in a work environment with highly hierarchical and conflictive, authoritarian and rigid relationships, producing feelings of dissatisfaction (8).

Another relationship to highlight is that which arises when we perceive a greater exposure to psychosocial risk due to *active work and the development of skills* that include autonomy in terms of working conditions, opportunities for the development of skills, control of working hours and the importance that the company has (1), which report less satisfaction with the recognition and decision making. In this sense, in a study conducted in Brazil, nurses attach great importance to autonomy in decision making because they consider they have the knowledge and technical-scientific skills necessary for a more independent performance that allows them to make decisions with clinical judgment in benefit of the user; this generates great satisfaction with the care provided (23,31). Other authors point out that to achieve this behavior requires an effort by the organization, since nursing professionals must be trained in specialized technical competence in order to be committed to the management process in order to facilitate the achievement of institutional objectives (32). Today, the training of these professionals is fundamental (33), considering that, due to the COVID-19 pandemic, the health organizations presented deficiencies in their effective support and the health institutions have few specialists to attend the users in critical units such as oncology, emergency and intensive care.

The *social support dimension in the company and the quality of leadership* speak of the demands of support from colleagues and superiors and the clarity of the role at work (1) and correlate with almost all dimensions of *job satisfaction* (recognition, superiors, physical conditions and decision-making), which shows the importance of an organizational culture that generates collaborative interdisciplinary relationships. This result shows that workers who perceive less psychosocial risk in the *social support* dimension have greater satisfaction at work with superiors and with the task. Karasek and Theorell suggest that social support acts as a buffer and indicate that it has two components: socio-emotional support, which is related to integration and trust between co-workers and supervisors, and socio-instrumental support, which is related to additional resources to help in work tasks between colleagues and supervisors (34). Similar results were reported by nurses in Portugal who pointed out that having social support (from supervisors and colleagues) generated



positive feelings and emotions regarding their work, producing an efficient interaction and communication between doctors and nurses, which translates into providing safe care to the user (35). On the other hand, there is the social support relationship that facilitates the expression of negative feelings, minimizing feelings of loneliness and suffering and that works as a protector of the work environment. Therefore, it is necessary that health professionals allocate financial and managerial resources in the training of supervisors for the development of competencies in this sense (management, advisory and supervision) (36). In a study conducted in Colombia, with heads of five health centers, it was found that all levels of intra-occupational psychosocial risks lead to non-participatory leadership styles that do not favor the motivation of the subordinates, making it difficult to face the work day and producing problems in customer service (37). In addition to the above, workers who perceive insecurity regarding their employment contract and fear of the probability of not continuing perceive less satisfaction with the recognition (promotion opportunity, training and salary); this result coincides with the perception of nurses in a hematological hospital that they report few promotion opportunities (38).

Finally, the results report that the participating workers who perceive greater exposure to risk in the dimension of *remuneration* also perceive less satisfaction with their work and with their superiors. This may be related to the lack of professional rewards related to the organization of work, which require preventive measures to reduce the burden, since these workers are in permanent contact with death and suffering. Studies in Spain, Portugal, and Brazil, show that health professionals often receive compensation only when they interact with their patients, who often report pain and struggle to avoid death (36,39), and receive no economic reward or recognition from their co-workers or superiors (36,37). On the other hand, Brazilian nurses express the few opportunities for promotion and the scarce endowment versus the number of users, which creates an imbalance in the effort-reward relationship and causes professional dissatisfaction, emotional exhaustion and difficulty to give assistance in a holistic and quality manner (37), affecting the interaction and transaction between nurses and patients (13).

## Conclusions

The results obtained in this research allow us to affirm that there is an association between the perception of psychosocial risk and job satisfaction, showing that the greater the exposure to psychosocial risks, the greater dissatisfaction is perceived by oncology workers, which affects work environments. This highlights the importance of a nursing professional capable of managing development and promotion activities, for which there are different theoretical models of nursing, as the open systems of interaction of Imogene King.

This research contributes to the identification of psychosocial risks such as high *psychological demand* and *double presence*, which reinforces existing knowledge and provides evidence for nurses responsible for care management to take preventive measures, such as the development of intervention programs in vulnerable groups through interaction, communication and transaction. On the other hand, determining the factors that generate greater job satisfaction will help nursing care managers, along with the organization, to favor conditions that increase intrinsic job satisfaction and the relationship with superiors.

As a recommendation of the research team, it is suggested to broaden the analysis from a qualitative approach, from which workers can present their own experiences or meanings when working in these units. As a limitation of the study, it is recognized the difficulty of generalizing the results of the research to other latitudes or work contexts, since it is only evident the reality of the workers of oncology units that work in the public services with characteristics of work different from private and other clinical units.

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**Conflict of interest:** None declared.

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