



**ORIGINAL RESEARCH PAPER**

**General Medicine**

**PSYCHOSOCIAL RISK ASSESSMENT IN DIALYSIS CLINIC WITH EXPOSURE TO COVID 19 CASES USING THE PSYCHOSOCIAL RISK ASSESSMENT QUESTIONNAIRE OF THE MINISTRY OF LABOR, 2021**

**KEY WORDS:** psychosocial risk, dimensions, covid 19, dialysis, psychosocial risk assessment questionnaire from the Ministry of Labor of Ecuador

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**ABSTRACT** Psychosocial risks affect all work activity even more so in this period of pandemic that we are experiencing worldwide due to Covid 19; hence the importance of its assessment; There are multiple tools designed for this purpose with proven effectiveness. In this study, the psychosocial risk assessment questionnaire of the Ministry of Labor of Ecuador was used to assess psychosocial risks in a dialysis clinic that has exposure to COVID-19. When applying the questionnaire for the evaluation of psychosocial risks of the Ministry of Labor of Ecuador, a low global risk of 89% and an intermediate global risk of 31% were evidenced.

**INTRODUCTION**

The work environment constitutes a determining factor in the worker's well-being. With the events of the pandemic worldwide, psychosocial risk factors have rebounded in the last year and have become a priority as well as a matter of concern for public health and a challenge for the field of health research occupational.

The International Labor Organization (ILO) mentions 5 psychosocial risk groups: environmental and workplace factors, organizational factors, work relationships, job security and career development, and total workload; This means that psychosocial risk factors are a reflection of the way a worker interacts with the environment and demands of the job.

As a result of the greater demand to hear reasons for the pandemic, the stress level of employees in general has been increasing, so there is no adequate correspondence between job demands and the way in which they are expected to be met, which, according to the Basque Institute for Occupational Safety and Health, translates into damage to the physical and mental health of the worker with an increased risk of cardiovascular diseases, gastrointestinal disorders and skin conditions; behavioral alterations and their cognitive and emotional abilities. The worker will experience adversity in interpersonal relationships and the organization will be affected by absenteeism from work, lower performance of workers, lower productivity and increased accidents.

Psychosocial risks have been increasing in all work activities;

According to the Iceberg study, the jobs that have the worst indicators of risk of stress are those with direct care for people who are also at a higher risk of contagion of covid 19.

In Ecuador there are few or no studies carried out on the assessment of psychosocial risks in the work environment and the available bibliography on the determination of this type of risks extrapolated to the health field is even less, despite the "Regulations for the eradication of discrimination in the labor environment", issued by the Ministry of Labor that establishes the evaluation of psychosocial risk factors at work as mandatory. When searching the bibliography, several tools are available for intervention and / or psychosocial risk assessment. One of the most widely used is the Ista21 (CoPsoQ) method, which is a Spanish tool, adapted from the Copenhagen psychosocial questionnaire that is aimed at preventing the worker's psychosocial risk; It is available in three versions, long (used for research purposes, not for risk assessment), medium (for companies with more than 30 workers) and short (for companies with less than 30 workers). On October 23, 2018, the Ministry of Labor of Ecuador presented the first psychosocial risk assessment tool at the national level in order to evaluate in approximately 58 items the conditions that can cause health conditions in workers.

**PSYCHOSOCIAL RISK FACTORS**

The organization of work and health over time have not been related, if not until it became evident that worldwide stress causes a high rate of absenteeism from work in addition to being directly related to the development of somatic diseases.

**Definition**

Psychosocial factors are characteristics of work norms, and above all, of their organization that affect people's health through psychological or physiological mechanisms (Moncada, Llorens, & Kristensen, 2002, p.14).

These are real risks that can occur in the medium or long term, they can also cause accidents and diseases derived from work.

The Institute for Safety and Hygiene at work (2010) according to relevance determined the following psychosocial risks:

**Stress**

It is a state that is characterized by high levels of excitement and anxiety, with the frequent feeling of not being able to cope with the situation (Moncada, Llorens, & Kristensen, 2002, p.14).

**Workplace harassment or "mobbing"**

Behaviors of psychological violence applied between colleagues or between hierarchical superiors with subordinates, whose objective or consequence was to undermine dignity and create an intimidating, humiliating or offensive environment (Moreno & Baez, 2010).

**Violence at work**

Incidents where people are physically or emotionally violated in circumstances related to their work. Labor and sexual harassment, as they are forceful topics, are studied as individual terms (Camacho & Mayorga, 2017).

**sexual harassment**

It is all inappropriate conduct of a sexual nature developed in the work environment, which affects the dignity of men or women (Moreno & Baez, 2010)

**Contractual or employment insecurity**

Feeling of concern about the existence of work in the future, under control over work, low level of protection against unemployment (Moreno & Baez, 2010).

**Family-work conflict or double presence**

The influence of work demands in addition to the rethinking of roles within the family organization due to the entry without distinction of men and women into the world of work, influence the use of personal time, whether family or individual.

**MATERIALS AND METHODS**

**Design and sample**

For the determination and evaluation of psychosocial risks, a descriptive cross-sectional study was designed in which the questionnaire was applied to men and women, under 65 years of age and with at least 3 months in their work at the institution. A total of 28 people were surveyed, including doctors, nurses, nursing assistants, administrative, cleaning and maintenance staff.

Due to the size of the population, the application of sampling techniques was not necessary. All respondents participated voluntarily after being informed of the objectives and importance of the development of this research.

**Instrument description**

The questionnaire for the evaluation of psychosocial risk of the Ministry of Labor of Ecuador was used, which consists of 58 questions distributed in 8 dimensions: work load and rhythm; development of skills; leadership; margin of action and control; organization of work; Recovery; support and other important points. Each question has 4 answer options: disagree; little agreement; partially agree

and completely agree; Depending on the response, a score ranging from 1 to 4 is assigned. Similar to the method previously described, the summation of the score by dimension is performed and compared with reference scores that allow each dimension of psychosocial risk to be classified as: low risk, medium or high. Likewise, the scores for each dimension are added in order to assess the general psychosocial risk of the organization. Table 1

**Table 1. Dimensions of the psychosocial risk assessment tool of the Ministry of Labor**

Dimension	N° questions	Punctuation	Reference values		
			Low risk	Medium risk	High risk
Workload and pace	4		13-16	8-12	4-7
Skills development	4		13-16	8-12	4-7
Leadership	6		18-24	12-17	6-11
Margin of action and control	4		13-16	8-12	4-7
Work organization	6		18-24	12-17	6-11
Recovery	5		16-20	10-15	5-9
Support	5		16-20	10-15	5-9
Other important points	24		73-96	49-72	24-48
Overall result	58		175-232	117-174	58-116

**Statistic analysis**

For the processing and analysis of the data collected in the surveys, the statistical program SPSS in its version 25 for 64-bit Windows was used. The descriptive statistical analysis of the data was carried out to explore the behavior of the dimensions studied. In the questionnaire of the Ministry of Labor, the responses obtained were classified according to the exposure in high, medium and low risk level.

**RESULTS**

A total of 28 workers were surveyed; 25% men and 75% women. 60% of workers are between 25 and 34 years old. 88% of employees hold operational positions and 12% administrative positions. 60% have a third-level degree and 40% have only studied basic education. Table 2

**Table 2. Sociodemographic characteristics of the respondents**

Variable	N	%	
Gender	Man	4	25
	Woman	24	75
age	16-24	2	7
	25-34	14	50
	35-43	6	21
	44-52	2	7
	≥53	4	14
Scholarship	Basic	1	4
	High school	2	7
	Technology	10	36
	3 level	3	46
	4 level	2	7
Occupation	Administrative	4	14
	Operative	24	86

Once the psychosocial risk assessment questionnaire of the Ministry of Labor of Ecuador was applied, 4 dimensions and 4 sub-dimensions with high risk were detected. The altered dimensions were: 6 (recovery- 25%), 3 (leadership- 20%), 4 (margin of action and control- 4%) and 7 (support and support- 4%); and the subdimensions that correspond to 8.6 (double presence- 30%), 8.8 (self-perceived health- 18%), 8.2 (workplace harassment- 11%) and 8.5 (working conditions- 48%). Table 3.

**Table 3. Results of the psychosocial risk assessment tool of the Ministry of Labor**

Dimension	Low risk	Medium risk	High risk
D1. Workload and pace	64%	36%	0%
D2. Skills development	86%	14%	0%
D3. Leadership	40%	50%	20%
D4. Margin of action and control	64%	32%	4%
D5. Work organization	89%	11%	0%
D6. Recovery	20%	55%	25%
D7. Support and support	68%	29%	4%
D8. Other important points	71%	29%	0%
D8.1. Discriminatory harassment	79%	21%	0%
D8.2 Workplace harassment	43%	46%	11%
D8.3 Sexual harassment	86%	14%	0%
D8.4 Work addiction	79%	21%	0%
D8.5. Working conditions	30%	22%	48%
D8.6. Double presence (work - family)	30%	40%	30%
D8.7. Work and emotional stability	79%	21%	0%
D8.8. Self-perceived health	46%	36%	18%

It was observed that in dimension 6 (recovery) women (19.3%) were more affected compared to men (5.6%); in ages between 35 and 43 years for women and 25 to 34 years for men. According to the level of education, the most affected groups were technologists (19.3%) and those with a basic education level (5.6%). All personnel with high risk in this dimension occupy operational positions.

In subdimension 8.6 (double presence), the affected group was only women (23.9%) between the ages of 25 and 34, who held operational positions. Third-level technologists and professionals were affected by 14.3% and 3.6% respectively. Sub-dimension 8.8 (self-perceived health) shows a predominance of affection in women (24.3%) between the ages of 25 and 34 who occupy operational positions. According to the level of education, the most affected workers were technologists (14.3%) and third-level professionals (3.6%) between the ages of 25 and 34 for both sexes, all of them in operational positions.

**DISCUSIÓN**

The inherent characteristics of psychosocial factors have made their objectification, evaluation and modification difficult over time, together with the COVID pandemic, the risk of psychosocial alteration has been increasing in workers, mainly in those who are in direct care, leading to to serious anxiety problems, lack of sleep, mood swings. In addition, they are real risks that are difficult to control with a negative effect on the worker's health that may or may not lead to immediate, medium or long-term damage. Several assessment methodologies have been formulated, including those applied in this article: the Ista21 method (CoPsoQ) short version and the psychosocial risk assessment tool of the Ministry of Labor. The latter coincide on the general issue but not on the way of questioning the dimensions and even less on their qualitative and quantitative evaluation.

**CONCLUSIONS**

- 1.- The psychosocial assessment tool of the Ministry of Labor is a valid tool for assessing psychosocial risk. Since it values all the aspects that affect the worker.
- 2.- ISTAS 21 is a European tool that has not been adapted to be carried out in Ecuador, it consists of 6 dimensions, while the tool of the Ministry of Labor of Ecuador has 8 dimensions; therefore, the latter has a broader spectrum of assessment that allows a more complete psychosocial evaluation.
- 3.- The data obtained show us that there is a greater risk of anxiety in the personnel who are caring for patients with COVID-19 infection, since they suffer from a higher level of stress and with it leads to the consequences of absenteeism from work.
- 4.- Given the results in our study, we suggest the combined application of the two methods previously described due to their complementarity.

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