# Coping strategies used by nurses in the face of stress in COVID-19 crisis management

**RESUMO** | Objetivo: Descrever as principais estratégias de coping utilizadas pelos enfermeiros durante o enfrentamento da Covid-19. Método: Estudo qualitativo, descritivo transversal, realizado em quatro hospitais, do município de Curitiba-PR, no período de setembro a novembro de 2021. Participaram 34 enfermeiros, que atuaram no enfrentamento da pandemia Covid-19. A coleta de dados foi realizada por meio de formulário eletrônico online, contendo a caracterização da pesquisa e o questionário "Inventário de Estratégias de Coping". O projeto de pesquisa foi avaliado e aprovado Pelo Comitê de Ética e Pesquisa da Secretaria Municipal da Saúde de Curitiba (Parecer: 4.693.343; CAAE: 45260421.5.3002.0101). A análise dos dados foi estatística descritiva. Resultados: Observou-se que as principais estratégias de coping utilizadas foram reavaliação positiva, aceitação de responsabilidade e suporte social. Conclusão: O estudo permitiu descrever as principais estratégias de coping, realizadas pelos enfermeiros no enfrentamento à pandemia da Covid-19. Contribuindo, para o avanço das pesquisas sobre estratégias coping com trabalhadores da área da saúde.

**Descritores:** Enfermagem; Estratégias de enfrentamento; Covid-19.

**ABSTRACT** | Objective: To describe the main coping strategies used by nurses to face Covid-19. Methodology: Qualitative, descriptive cross-sectional study carried out in four hospitals in the city of Curitiba-PR, from September to November 2021. Participated 34 nurses, who worked in the confrontation against the Covid-19 pandemic. Data collection was carried out through an online electronic form, containing the characterization of the research and the questionnaire "Inventory of Coping Strategies". The research project was evaluated and approved by the Ethics and Research Committee of the Municipal Health Department of Curitiba (Number: 4,693,343; CAAE: 45260421.5.3002.0101). Data analysis was descriptive statistics. Results: It was observed that the main coping strategies used were positive revaluation, acceptance of responsibility and social support. Considerations: The study describes the main ways of coping carried out by nurses in the face of the Covid-19 pandemic. Contributing to the advancement of research on coping strategies in the health area.

**Keywords:** Nursing; Coping strategies; Covid-19.

**RESUMEN** | Objectivo: Describir las principales estrategias de afrontamiento utilizadas por los enfermeros durante el enfrentamiento a la Covid-19. Metodología: Estudio cualitativo, descriptivo transversal, realizado en cuatro hospitales de la ciudad de Curitiba-PR, de septiembre a noviembre de 2021. Participaron 34 enfermeros, que actuaban en el combate a la pandemia de la Covid-19. La recolección de datos se realizó a través de un formulario electrónico en línea, que contenía la caracterización de la investigación y el cuestionario "Inventario de Estrategias de Afrontamiento". El proyecto de investigación fue evaluado y aprobado por el Comité de Ética e Investigación de la Secretaría Municipal de Salud de Curitiba (Opinión: 4.693.343; CAAE: 45260421.5.3002.0101). El análisis de los datos fue estadística descriptiva. Resultados: Se observó que las principales estrategias de afrontamiento utilizadas fueron la revalorización positiva, la aceptación de la responsabilidad y el apoyo social. Consideraciones: El estudio permitió describir las principales estrategias de afrontamiento realizadas por los enfermeros frente a la pandemia de la Covid-19. Contribuir al avance de la investigación sobre estrategias de afrontamiento con trabajadores de la salud.

Palabras claves: Enfermería; Estrategias de afrontamiento; Covid-19.

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#### INTRODUCTION

he coronavirus pandemic has brought to humanity situations that have affected and modified people's routine, making the period of quarantine, social distancing, frustration, boredom and the accumulation of tasks, the main stressors. 1,2

In addition, in the nurses' work context, there was an increase in the

workload, removal of contaminated professionals, special leaves due to other health conditions, denial of illness in addition to the fear of becoming infected and the fear of death. 2

In addition, the position on the front line subjected professionals to the stress of caring for infected patients, many in serious condition, in often inadequate working conditions. 3,4

In this way, stressful experiences can allow personal development, in addition to improving the physiological and psychological state, enabling adaptation to the stressor agent. 5-7 But, this is only possible when the stressors are recognized by the individual as an occasion for growth and the resolutions to stress are considered as functional and adaptable. 5

Since the beginning of the 20th century, scholars linked to ego psychology have been researching coping as a defense mechanism. It was then, from the cognitivist understanding, that Folkman and Lazarus in 1985 6 presented the coping strategies. These techniques are used by individuals to face specific internal or external demands that arise in stressful situations recognized as excess for their personal resources. 8

In addition, coping strategies are influenced by individual, situational, and environmental factors. Also, they have dynamic characteristics, being able to be used as a solution for specific situations, and not for others. 9

It is in this perspective that the need arose to know what were the coping strategies adopted by nurses in the face of the Covid-19 pandemic, from the understanding that the changes that occur in the daily work of nurses in this context contribute to the consolidation of the coping concept, and to research in this field. Thus, the present study aimed to describe the main coping strategies used by nurses during the confrontation of Covid-19.

Board 1 – Classification variables - Folkman and Lazarus Coping Strategies Inventory. Curitiba, 2022.				
VARIABLES	CONCEPT (LAZARUS AND FOLKMAN, 1985)	DOMAINS		
CONFRONTATION	Aggressive efforts to change the situation, which may present a degree of hostility and risk involved.	7, 17, 28, 34, 40, 47		
REMOVAL	Cognitive efforts of detachment and minimization of the situation.	6, 10, 13, 16, 21, 41 ,44		
SELF CONTROL	Efforts to regulate one's own feelings and actions	14, 15, 35, 43, 54		
SOCIAL SUPPORT	Seeking informational support, tangible support, and emotional support	8, 18, 22, 31, 42, 45		
ACCEPTANCE OF RESPONSIBILITY	Recognition of one's role in the situation and attempt to recompose the problem.	9, 25, 29, 48, 51, 52, 62		
ESCAPE AND DODGE	Strategies to escape or avoid the problem	58, 59		
PROBLEM SOLVING	Efforts focused on the problem, seeking to change the situation	1, 26, 46, 49		
POSITIVE REVIEW	Creation of positive meanings, which may also have a religious dimension	20,23,30,36,38,39, 56, 60, 63		

Source: The authors

#### **METHOD**

This is a qualitative, cross-sectional descriptive study carried out in four medium to large hospitals in the city of Curitiba-PR. The research is part of the macro-project "Crisis management: coping strategies for the COVID-19 pandemic in health services", of the Graduate Nursing Department at the Federal University of Paraná.

The study included 34 professional nurses, who worked in direct assistance, care management, or administrative activities during the Covid-19 pandemic. Those professionals who started filling out the online form, but did not complete it during the data collection period, were excluded.

Participants were informed about the study objectives, justification, procedure, contribution, guarantee of anonymity, reliability in data analysis and the right to freedom to participate or decline the study at any time during the research process, through the Free Informed Consent Term (ICF). In addition, in compliance with the social distancing recommendations recommended by the health authorities, the participants responded to an online form.

Data collection took place from September to November 2021, through an online electronic form, consisting of two parts, the first being the collection of data on the participant's profile and the second, the instrument Inventory of Coping Strategies. This questionnaire aims to identify the stressful factors for nurses and verify the coping strategies used in the face of a stressful situation, in the case of this study, the crisis due to Covid-19.

The instrument consists of 66 questions, whose validity and intensity measurement is given through a frequency scale from 0 to 3, where: 0 = I did not use this strategy; 1 = used a little; 2 = I used it a lot and 3 = I used it a lot.

In addition, the authors propose eight classification variables, reorga-

nized and maintained according to the evaluation of Savóia, Santana and Mejias (1996) 10, after its validation in Brazilian territory and presented in Table 1.

The collected data were stored on a proprietary platform, developed by the macroproject's statistical advisory, and underwent descriptive statistical analysis. Considering a target audience of 844, the sample obtained consisted of 46 nurses who agreed to participate in the research and of these, only 34 nurses completed the Coping Strategies Inventory form.

The research was approved by the Ethics and Research Committee of the Municipal Health Department of Curitiba, under opinion: 4,693,343; CAAE: 45260421.5.3002.0101, on May 31, 2021, meeting the requirements of resolutions 466/2012 and 510/2016 for research carried out with human beings.

# **RESULTS**

As for the characterization of the sample, it was observed that n=28 (82.35%) participants were female, with n=17 (50%) aged between 31 and 40 years, n=13 (38.24%) had graduated from 6 to 10 years, n=34 (100%) did not have a postgraduate degree, n=24 (70.59%) with current role of nursing assistant, and time of current role from 1 to 5 n=16 (47.06%) participants. As described in Table 1 below.

Regarding the type of strategy, it was found that the coping strategies most used by nurses during the confrontation of the Covid-19 pandemic were: Positive reassessment, Acceptance of responsibility, Social Support and the least used was: Escape and avoidance.

#### DISCUSSION

Considering gender analysis, an integrative review study 11, held in 2021, also showed a predominance of fema-

Table 1- Characterizatio	n of the sample profile. Curitiba, 2	021.	
	Variables	N	%
	Yes	23	67,65
Gender	Female	28	82,35
	Male	6	17,65
	I rather not answer		
	Not informed		
Age	18 to 30 years	12	35,29
	31 to 40 years	17	50
	41 to 50 years	4	11,76
	51 to 60 years	1	2,94
	More than 60 years		
	Not informed		
Time since graduation	Less than 1 year	2	5,88
	1 to 5 years	8	23,53
	6 to 10 years	13	38,24
	11 to 20 years	10	29,41
	21 to 30 years	1	2,94
	More than 30 years		
	Not informed		
Do they have a graduate degree?	No	34	100
Current function	Nursing Director or Coordinator	3	8,82
	Continuing Education	-	-
	Quality nurse	1	2,94
	Assistant nurse	24	70,59
	Continuing Education Nurse	1	2,94
	Nurse in care risk management	1	2,94
	Nursing Manager	2	5,88
	Nursing Supervisor	1	2,94
	Not informed	1	2,94
Working time in current	Less than 1 year	9	26,47
role	1 to 5 years	16	47,06
	6 to 10 years	5	14,71
	11 to 20 years	4	11,76
	More than 30 years		
	Not informed		

Source: The authors

les. Regarding age, the present research had a higher prevalence in the age group of 31 to 40 years, followed by

the age group of 18 to 30 years, which can also be observed in the integrative review mentioned above, on the increase in the number of young people who have entered the job market.

Regarding the education issue, having completed higher education can be considered a determining point for the emergence of occupational stress, due to the activities performed by the nurse. These play roles in their work activities, such as responsibility for other professionals and professions, health education of the team, management of the sector, in addition to the care provided to patients, family members. 11

In a study carried out by Moraes et al. (2016) 12, developed with nursing workers from a neonatal intensive care unit (ICU) to identify the coping strategies used, the average time of professional experience in the area of professionals was from six to 10 years. Divergent data can be observed in the present study, where the predominance was from one to five.

With regard to coping strategies, positive reassessment, acceptance of responsibility and social support were found to be the most used, a result similar to that found in a research carried out with resident nurses working in hospital units. 8,9

The positive reassessment strategy was the most used in the present study, but in a previous study 12 this was the second most used strategy. It is a strategy of acceptance of reality, where the individual redirects the stressor agent, changing the emotional state, and although it is not able to solve the problem, it allows the person to acquire emotional balance, allowing the person to properly perform the next action. 13

In addition, the use of this strategy can direct the actions of professionals and managers, in order to face occupational stressors and mitigate their effects, enabling a work environment with greater ease of coexistence and less conflicts and problems. 14

The responsibility acceptance strategy refers to professional recognition, where the individual identifies his role

Table 2- Means and Standard Deviations of the participants' coping strategies. Curitiba, 2021. SD\* **Strategies M**\* Min Max 0 10 2,52 Confrontation 4,91 Removal 6,65 0 13 3,14 Self control 6,79 0 14 3,41 Social support 9,03 0 17 4,15 Acceptance of responsibility 9,06 0 17 4,42 Escape and dodge 2.85 0 2.22 6 Problem solving 7,21 2 12 2,87

\*M= mean; SD\*= Standard Deviation

Source: The authors

Positive revaluation

in the problem, accepts the reality of the situation and begins the process of effectively facing the stressful situation. 13

However, a nursing study that works with potential organ donors in the ICU mentions that not always using this strategy is an effective way for the problem not to interfere with the quality of work and personal life. 15

On social support, an integrative review of national and international literature on coping strategies in the workplace 8, mentions that talking about frustrations and fears, as a way of facing daily stressors, helps to reduce the tension of the stress experienced. This is still based on individual beliefs and values, that the individual feels esteemed and loved by others, be they family, friends, managers or co-workers.

It is worth mentioning, however, that this support may not be available by the institution, due to the lack of specialized professionals to assist individuals with these needs, which can be observed in a research carried out with nursing that works with potential organ donors in an intensive care unit. 13

As an escape and avoidance

strategy, the professional intends to reduce the unpleasant sensation that is being caused by some stressor agent, and, therefore, the individual avoids talking and thinking about the subject in an attempt to avoid feelings, although it does not change the stressor. 13

0

27

7,66

In a study carried out by Maturana and Valle in 2014 16 with nurses, it was highlighted that the least used strategy was escape-avoidance, because in hospital environments, stressful events are part of the daily lives of professionals.

### CONCLUSION

15,24

The study allowed us to describe the main coping strategies used by nurses during the confrontation of the Covid-19 pandemic, through the Inventory of Coping Strategies by Folkman and Lazarus.

Although it is possible to describe the main adaptation techniques in the face of stressors, coping strategies are dynamic and will vary in the face of different stress situations.

In addition, it was possible to infer that the main strategy used was positive reassessment, where professionals accepted reality and redirected the stressor, modifying their emotional state and although they were not able to solve the problem, they were able to achieve emotional balance, making it possible to take the next steps.

As a limitation of the study, the low

adherence of professionals in filling out the online form was highlighted. It is understood that this was due to the moment of occupational overload due to the pandemic context, which implies the difficulty of generalizing the results.

However, it is considered that the

development of this study contributes to the advancement of research on coping strategies in the context of working with health workers, as well as the studies developed with these professionals during the same context.

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