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Original Article

Reconstruction of nursing health well-being in the COVID-19 pandemic: Mid-range theory.

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Abstract. Introduction: There are documented biopsychosocial factors that generate instability in the health well-being of nursing personnel, where the work, political and social environments are inherent. Such is the case of the COVID-19 pandemic that caused stress and job dissatisfaction as a consequence of the profession's working conditions. Given the multifactorial nature of this problem, the development of a situation-specific Middle Range Theory is necessary to understand the phenomenon. **Objective:** To build a situation-specific Middle Range Theory with a clear development, theoretical and methodological foundations for the benefit of the study population, which allows to contribute to the solution of a global problem such as the instability of health welfare in nursing professionals. **Development:** A Middle Range Theory was developed, applying the method proposed by Fawcett under the theoretical basis of Neuman's Systems Model and the published scientific evidence regarding stressors associated with the instability of well-being in health considering working conditions, stress and work dissatisfaction during the first wave of COVID-19. **Conclusion:** The Neuman's Systems Theory allowed to explain and expand the phenomenon of interest; it was observed that this method was useful to build a situation-specific theory with a clear development, theoretical and methodological foundations for the benefit of the study population, which will serve as support for the design and implementation of different preventive strategies to contribute to the management of stress and well-being of the nursing staff.

Keywords: Well-being; Nursing; Systems Theory; Betty Neuman; COVID-19.

1. Introduction

Coronavirus disease (COVID-19) was first reported in Wuhan City, China, in December 2019 (Trilla, 2020). By February 2020, the number of cases had reached 51,857 in 25 countries (Holshue et al., 2020); the World Health Organization

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(WHO) named COVID-19 a pandemic during the same month. The COVID-19 pandemic has caused the death of millions of people around the world, including health professionals (Escudero et al., 2020).

In this regard, the Pan American Health Organization stated that Mexico was the country with the greatest loss of health human resources worldwide, followed by the United States and Brazil; these countries alone accounted for almost 85% of all deaths due to COVID-19, and one out of every seven cases corresponded to a health worker (Agren, 2020). This is attributable to the fact that COVID-19 transmission occurs mainly through direct contact and inhalation of bioaerosols emitted by persons carrying the virus, where personnel working in the first line of care or in any other hospital area are more susceptible to infection (Wu et al., 2020).

In Mexico, one of the most affected areas was the city of Tijuana, Baja California, the municipality with the third largest number of inhabitants (more than 1.7 million) bordering California, United States, which is considered the busiest border in the world. Therefore, Tijuana may have been subjected to earlier exposure to COVID-19 than the rest of the country, associated with the importation of cases from California, since, in the first wave, this municipality reported the highest number of deaths (170 deaths) at the national level, with the highest mortality rate (17.3 per 100,000 people), almost 6 times more than the national rate (3.1 per 100,000 people) (Friedman et al., 2020).

Other risk factors that may be attributed to the mortality rate in this municipality is the fact that the northern part of the country has the highest prevalence of obesity (Barquera et al., 2020) where more than 40% of the adult population (including health personnel) suffers from it, as well as other comorbidities such as diabetes mellitus and/or systemic arterial hypertension (Alarcón Cienfuegos et al., 2018).

Recent studies have described that these pathologies are associated with an increased risk of death from COVID-19 (Caci et al., 2020; Gupta et al., 2020; Tenorio-Mucha & Hurtado-Roca, 2020; Velasco-Reyna et al., 2020). Therefore, personnel with these health conditions were sent home as a safety measure, which generated work overload and job dissatisfaction in those who remained active (Suzuki et al., 2021). Job dissatisfaction represents an important problem since it limits the motivation, commitment and performance of the professional (Diana et al., 2021).

Furthermore, the pandemic exacerbated the great shortages and inequities in the health sector, with nursing professionals being one of the most exposed and affected groups (Oliveira et al., 2020). This

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situation is not a novelty, several investigations over the years have documented the working conditions of nurses around the world, emphasizing the precariousness of the situation, and how these have had a negative impact on the health well-being of workers (Llop-Gironés et al., 2021).

While the primary goal of nursing research is to find answers or solutions to discipline-specific problems that enable the transformation, innovation, and updating of care (Castro & Simian, 2018), it is time to use research as a tool for the reconstruction of the guild itself.

One of the main strengths to meet this objective are the theories of the body of knowledge generated by the discipline itself, which enables the development of a situation-specific Middle Range Theory (MRT). Allowing to conduct research from the general to the particular, attending to the characteristics of the object of interest, in other words, moving from the theoretical to the practical (Younas & Quennell, 2019).

According to Fawcett, the product of research is always a theory, which allows guiding the practice of care through the derivation of nursing conceptual models (Fawcett & Desanto-Madeya, 2013). The importance of a theoretical derivation and the development of a MRT lies in the fact of taking conceptual models to lower levels of abstraction in order to improve the understanding of phenomena in real practice and provide professional care with greater quality and effectiveness (Ramírez Girón et al., 2019).

The objective of this research is to build a situation-specific MRT with a clear development, theoretical and methodological foundations for the benefit of the study population, which allows to contribute to the solution of a global problem such as the instability of health well-being in nursing professionals.

Development

This study describes the development of the MRT "Reconstruction of health well-being in nurses during the COVID-19 pandemic", applying the theoretical derivation method proposed by Fawcett (Fawcett & Desanto-Madeya, 2013), based on Betty Neuman's Systems Model (Neuman, 1996) and the published scientific evidence regarding stressors associated with instability of health well-being in nursing staff that included working conditions, stress and job dissatisfaction during the first wave of COVID-19.

The proposed MRT may contribute to the development of evidence-based interventions that promote the reconstruction of the health well-being of nurses. The use of a conceptual model to guide research and/or practice involves a three-step process described below:

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Step 1. Description of the selected conceptual model

This step describes the substantive content of the conceptual model (the concepts, non-relational and relational propositions linking two or more concepts) and the guidelines for applying the model to the research. The purpose is to understand the content and its application in research on the particular phenomenon under study.

Among nursing theories, Betty Neuman's Systems model (Wilson et al., 2021) was considered to be the appropriate one to adapt the MRT since this model has been used to guide interventions focused on rebuilding health well-being when it suffers instability due to environmental influences. The main features of this model are described below.

The systems model reflects nursing's interest in healthy and sick people and understands them as holistic systems and considers environmental influences on health. Client and nurse perceptions of stressors and resources are emphasized, with the client acting in partnership with the nursing staff to set goals and identify relevant prevention interventions.

The main concepts of the model are: integral vision, open system (including function, input and output, feedback, negentropy and stability), environment (including the created environment), client system (including the five variables, basic structure, lines of resistance, normal line of defense and flexible line of defense), health (from wellness to disease), stressors, degree of reaction, prevention as intervention (three levels) and reconstitution.

Holistic or integrated view. The systems model is a dynamic and open systems approach to client care, originally created to provide a unifying center with the intent of defining the nursing problem and understanding the client as he or she interacts with the environment. The client as a system can be defined as an individual, family, group, community, or object of study.

Client. Clients are considered as a whole whose parts are in dynamic interaction. The model simultaneously considers all variables affecting the client system: physiological, psychological, sociocultural, developmental and spiritual. In 1989, Neuman changed the spelling of the term holistic to wholistic to increase understanding of the term by referring to the person as a whole.

Open system. A system is open when the elements exchange information energy in a complex organization. Stress and reaction to stress are basic elements of an open system.

Function or process. The client is a system that exchanges energy, information and

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matter with the environment while using available energy resources to move towards stability and integration.

Input and output. For the customer as a system, input and output are the matter, energy and information exchanged within the system, between the customer and its environment.

Feedback. The output of the system in the form of matter, energy and information serves as feedback for future input and corrective action intended to change, enhance or stabilize the system.

Negentropy. Neuman defines it as a process of energy utilization that favors the progression of the system towards stability and well-being.

Stability. Stability is a dynamic and desired state of equilibrium in which the system successfully withstands stressors, i.e., it can maintain an adequate level of health.

Environment. The internal and external forces that affect and are affected by the customer at any point in time make up the environment.

Created environment. The created environment is unconsciously developed by the client to symbolically express the integrity of the system. Its purpose is to provide a safe place for the client system to function and to isolate the client from stressors.

Customer system. The customer system consists of five variables (physiological, psychological, sociocultural, developmental and spiritual) in interaction with the environment. The physiological variable refers to the structure and function of the organism. The psychological variable refers to mental processes in interaction with the environment. The sociocultural variable refers to the effects and influences of social and cultural conditions. The developmental variable refers to age-related processes and activities. The spiritual variable refers to spiritual beliefs and influences.

Basic customer structure. The customer is a system composed of a central structure surrounded by concentric rings. The inner circle of the diagram represents the basic survival factors or energy resources of the client. This central structure "consists of basic survival factors common to all members of the species" as innate or genetic characteristics.

Resistance lines. The series of circles of intermittent lines around the basic core structure are called lines of resistance. These circles represent the resource factors that help the client defend against a stressor. An example of this is the body's immune system. When the lines of resistance are effective, the customer system can reconstitute itself; if they are ineffective, death may ensue. The amount of resistance to a stressor is determined by

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the interrelationship of the five customer system variables.

Flexible defense line. The outer dashed line circle of the model is called the flexible defense line. This circle is dynamic and can be altered rapidly in a short period of time. It is perceived as a protective buffer that prevents stressors from crossing the normal line of defense and entering the normal state of well-being. The relationship of variables (physiological, psychological, sociocultural, developmental, and spiritual) may affect the extent to which individuals are able to use the flexible defense line against possible reactions to the stressor(s), such as sleep loss. Neuman describes the flexible defense line as the first protective mechanism of the customer system. When the flexible defense line expands, it provides greater short-term protection against the invasion of stressors; when it contracts, it provides less protection.

Health. Health includes a full continuous movement from wellness to illness. It is dynamic and constantly changing. Optimal wellness is achieved when all system needs are fully met.

Wellbeing. Wellbeing exists when the parts of the customer system interact in harmony with the whole system. And the needs of the system are met.

Disease. Disease is at the other end of the wellbeing continuum. It appears when needs are not met and causes a state of instability and energy expenditure.

Stressors. Stressors are stress-producing stimuli that are generated within the boundaries of the client system and result in an outcome that can be positive or negative. They can result from intrapersonal forces occurring within the individual, such as conditioned responses, interpersonal forces occurring between one or more individuals, such as role expectations, and extra-personal forces occurring outside the individual, such as economic circumstances.

Degree of reaction. The degree of reaction represents the instability of the system that occurs when stressors invade the normal line of defense.

Prevention as an intervention. Interventions are determined actions that help the client retain system stability, achieve and/or maintain it. They can occur before or after the lines of defense and resistance are overcome. Neuman suggests initiating intervention when a stressor is suspected or has already been identified. Interventions are based on the actual degree of reaction, resources, goals and intended outcome. Neuman indicates three levels of intervention: a) primary; b) secondary; and c) tertiary.

Primary prevention. Primary prevention must be carried out when the existence of a stressor is suspected or its presence has

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already been identified. Although a reaction has not yet occurred, the degree of risk is already known. The objective is to reduce the possibility of an encounter with the stressor or to reduce the possibility of a reaction.

Secondary prevention. Secondary prevention is the set of interventions or treatments initiated after stress symptoms manifest. The client's internal and external resources are used to strengthen internal lines of resistance, reduce reaction and increase resilience factors.

Tertiary prevention. Tertiary prevention takes place after the active treatment or secondary prevention phase. It aims to bring the patient back to optimal system stability. The objective is to maintain optimal wellbeing by preventing recurrence of the reaction or regression. Tertiary prevention circles back to primary prevention. An example is the avoidance of stressors that the client knows to be dangerous.

Reconstitution. Reconstitution takes place after the treatment of stressor reactions. It represents the return of the system to stability, which may be at a higher or lower level of wellbeing than before the stressor invasion.

Step 2. Literature search

This step consists of the search and critical review of the use of the theoretical model and the literature of empirical studies on the topic or practical research situation.

In this step, a literature search was conducted on the concepts of the systems model that have been used to describe, explain and predict wellbeing in health focused on nursing personnel. The search terms used were: (("systems model ") AND (("Betty Neuman") AND (("wellness") OR (("health ") AND(("intervention"))) AND ((("COVID-19"))). The search keywords were performed in Spanish and English. The search was performed in the following databases: PubMed/medline, Scielo, Web of Science, ScienceDirect, Scopus and Google scholar. The search period was from November 2021 to January 2022. A summary of the main findings identified is presented below.

Neuman's model has been used as a theoretical basis for the development of innovative nursing processes accompanied by holistic and systematic interventions (Goodarzi et al., 2021) that allow identifying, explaining, planning and guiding care with the aim of decreasing stressors in a community or hospital setting (Ahmadi & Sadeghi, 2017; Akhlaghi et al., 2020).

It has been used to guide nursing research of studies with experimental and non-experimental design where the identification of stressors is required, such is the case of the nursing student who becomes the client himself due to the level

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of stress experienced in the clinical environment, interpersonal relationships with hospital staff and the socioeconomic level that limits the economy and propitiates that the student is forced to work and study at the same time (Graham et al., 2016).

According to the literature review, the aforementioned factors continue to be stressful elements for the graduate student who is inserted in a work environment; multiple investigations based on the work environment of health professionals in the context of COVID-19 indicate that the factors that favor work stress are the perception and opinion of aspects related to the epidemic (fear of contagion), lack of knowledge and skills on patient management (work performance), work conditions (shortage of material and supplies, work overload, ineffective interpersonal relationships), and lack of social support (social discrimination, social discrimination, social exclusion, lack of social support); lack of knowledge and skills on patient management (job performance); working conditions (shortage of materials and supplies, work overload, ineffective interpersonal relationships) and lack of social support (social discrimination, confinement, loss of family members and coworkers) (Santos et al. , 2022).

The stress experienced by nursing professionals is a clear example of the loss of stability; however, this is not something new (Alfaro Madrigal et al... 2007), 2007), Neuman's model has already been used to describe the main reactions in the nursing professional related to work stress, among which stand out the alterations in the sleep pattern, the risk of suffering chronic degenerative diseases (type 2 diabetes mellitus (DM2) and/or systemic arterial hypertension (AHT), the presence of psychopathological symptoms, as well as inadequate lifestyles related to nutrition (obesity) and physical activity (sedentary lifestyle).

The significant relationship between inadequate lifestyles and the development of physical and mental illnesses is evident, since risk factors are more prevalent than protective factors (social support, balanced diet, physical activity and level of education of the nursing professional).

Regarding game-based interventions and the systems model, it was found that they allow the implementation of programs focused on improving people's quality of life through playful activities that promote effective coping strategies for better stress management and a decrease in psychopathological symptoms such as anxiety and depression (Ahmadi & Sadeghi, 2017; da Silva Papi Diniz et al., 2019).

The latter are frequently reported in interventions focused on systematization, for which reason, in addition to suggesting coping strategies, the authors mention the importance of integrating critical

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reflection and mindfulness in support programs, since they have shown to have a greater effect on the cognitive-behavioral aspect by stimulating in people the ability to accept and recognize thoughts, feelings or emotions beyond controlling, modifying or changing them. Participants, therefore, are able to identify work and daily stressors, as well as ways to generate responses in the customer system (Noguera Mena, 2020).

Although the stressors, reactions and strategies to manage work-related stress in the nursing professional were identified, according to the literature review, there is no MRT that allows the development of interventions focused on rebuilding wellbeing in the health of nurses due to the COVID-19 pandemic.

Step 3. Building a conceptual-theoretical-empirical structure

For the development of the conceptual theoretical and empirical structure (CTE), first, the concepts of interest of the systems model were identified; second, the classification by variability of the literature review was used, represented by the variables of the phenomenon to be studied; Third, the MRT assumptions were identified and classified as relational, because two or more of the variables are proportionally related; Fourth, through deductive reasoning the assumptions were ordered hierarchically, and finally the fifth step consisted of describing the conceptual theoretical empirical structure (CTE) of the MRT.

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The components of the CTE structure are the conceptual model (C), concepts selected from the Systems Model which is the basis for the research topic or practical situation. The theory (T) the concepts to be generated or tested, and the empirical indicators (E) that provide a way to directly observe the theory. The CTE structure of the MRT is presented in Table 1 and explained below. The CTE structure allows explaining the open system, environment, customer system (including the five variables, basic structure, lines of resistance, normal line of defense and flexible defense line), health (from wellbeing to disease), stressors, degree of reaction, prevention as intervention (three levels) and reconstitution are related to obtain a reconstruction (wellbeing in health). This MRT will help nurses to design interventions or conduct empirical research aimed at reconstructing wellbeing in health in the nursing professional.

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Table 1. Empirical Theoretical Conceptual Structure of middle-range theory concepts.

Theoretical	Basic Structure	Environment	Stressors	Protective factors	Secondary prevention	Reconstitution
Conceptual	Basic factors common to all organisms.	All internal and external factors surrounding and influencing the customer system.	Stress-producing stimuli that are generated within the boundaries of the client system and result in an outcome that can be positive or negative. They may result from: intrapersonal elements occurring within the individual, such as conditioned responses; interpersonal elements occurring between one or more individuals, such as role expectations; extra-personal elements occurring outside the individual, such as economic circumstances.	Resource factors that help the client defend against a stressor. Lines of resistance act as protective factors, which are activated by stressors that penetrate the normal line of defense.	A set of interventions or treatments initiated after the onset of stress symptoms.	Reconstitution takes place after the treatment of stressor reactions. It represents the return of the system to stability, which may be at a higher or lower level of wellbeing than before the stressor invasion.
Empirical	Personal data form: Sociodemographic data and personal pathological history: obesity, T2DM and SAH.	Personal data form: work area.	Scale of Perception and opinion of aspects related to the COVID-19 epidemic and the performance of respondents (Monterrosa-Castro et al., 2020). Spanish version of the work stress test (García Izquierdo et al., 1995). Personal data sheet: Working conditions and lack of social support.	Font-Roja Job Satisfaction Questionnaire in its Spanish version (Font-Roja, 1988), cited in (Manrique-Abril et al., 2019). Brief physical activity questionnaire for primary care consultation (Ribera et al., 2012). Personal data form: Level of education of the nursing staff.	Cognitive-behavioral intervention based on promoting the physical and mental health of the nursing professional through internal and external resources that reinforce resistance factors and reduce reactions.	Health Questionnaire SF-36 (version 2) (Vilagut et al., 2005).

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The central concepts of the MRT are: basic structure, environment, stressors, protective factors and reconstruction of wellbeing in health. The assumptions of this MRT are: working conditions and job dissatisfaction are part of the interpersonal environment, which influence the health wellbeing of the nursing professional. A positive change in the environment that promotes social support decreases work stress and promotes motivation and job satisfaction. Secondary prevention based on a cognitive-behavioral intervention based on promoting physical and mental health can improve or maintain health wellbeing.

The nursing professional as an individual, according to Neuman, is the *basic structure* that needs to be kept in balance in order to maintain a state of *wellbeing; where disharmony reduces the state of wellbeing* (Romero Herrera et al., 2018). Disharmony is caused by *stressors* in the *environment* (Raile Alligood & Marriner Tomey, 2011).

In this case, the environment is represented by the work area, since COVID-19 disease was declared a pandemic (Friedman et al., 2020), due to the great deficiencies and inequities in the health sector, being the nursing professional, one of the most exposed and affected groups, due to the interventions they executed within the protocols installed in the first line of care (Oliveira et al., 2020).

Instability in the health wellbeing of the nursing professional is generated by intrapersonal stressors such as professional competitiveness, since perceived professional skills and achievements form a fundamental part of the *basic structure*, where disciplinary experience and knowledge are essential for decision making in stressful situations such as the COVID-19 pandemic (Muñoz Fernández et al., 2020).

Another intrapersonal element is the perception and opinion of aspects related to the COVID-19 epidemic, where fear of personal and family contagion, the degree of confinement, social discrimination for being health personnel and sadness at the death or illness of colleagues stand out. The aforementioned led to *intrapersonal reactions* such as obesity, development of type 2 diabetes mellitus and/or systemic arterial hypertension as a result of instability and energy expenditure.

In addition to intrapersonal *stressors*, there are social aspects that are inherent to the person, called *inter- and extra-personal stressors*; the former are caused by frictions between work groups, due to exhausting working hours and work overload (Ramírez-Ortiz et al., 2020). Resulting in an *interpersonal reaction* manifested by psychosomatic problems such as anxiety and depression (Ramírez-Ortiz et al., 2020; Xie et al., 2020).

Regarding the extra-personal elements, there are working conditions where there is a lack or shortage of medical equipment and supplies, emergent training of

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colleagues, lack of incentives and/or promotions, as well as readaptation to new work areas, changes and new organizational strategies in the managerial model (Elizarrarás-Rivas et al., 2020; Oliveira et al., 2020), leading to extra personal reactions such as an environment of tension, monotony and job dissatisfaction (Cai et al., 2020).

According to Neuman, every reaction depends on the degree of exposure to stressors, the greater the exposure, the greater the reaction (Raile Alligood & Marriner Tomey, 2011), therefore, it is essential to carry out primary prevention when the existence of a stressor is suspected or has already been identified, in order to reduce the possibility of a reaction.

The systems model indicates that all reactions are given by the *invasion of normal lines of defense* (Raile Alligood & Marriner Tomey, 2011) where the protective factors are contained, represented in this case by social support, physical activity and level of education of the nursing professional (Salazar-Maya & Hoyos-Duque, 2017). Neuman argues that reactions can be modified by protective factors, which contribute to *reconstruction*, understood as the *capacity* to *adapt* to any *stressor* in the *environment*.

Even though scientific evidence indicates that nursing personnel demonstrated a great capacity to adapt to stressful situations due to the COVID-19 pandemic (Zárate Grajales et al., 2020), it is of utmost relevance to establish that this capacity does not necessarily imply health wellbeing; therefore, it is proposed to carry out a secondary prevention intervention based on promoting the physical and mental health of the nursing professional.

Propositions from the middle-range theory reconstruction of health wellbeing in nurses during the first wave of COVID-19:

Instability in the health wellbeing of the nursing professional is generated by intra-, inter- and extra-personal stressors.

The work environment is a conditioning stressor for presenting inter-, intra- and extra-personal reactions when working conditions are unfavorable. Secondary prevention based on a cognitive-behavioral intervention that reinforces the client's internal and external resources reduces reactions and increases the possibility of rebuilding health wellbeing.

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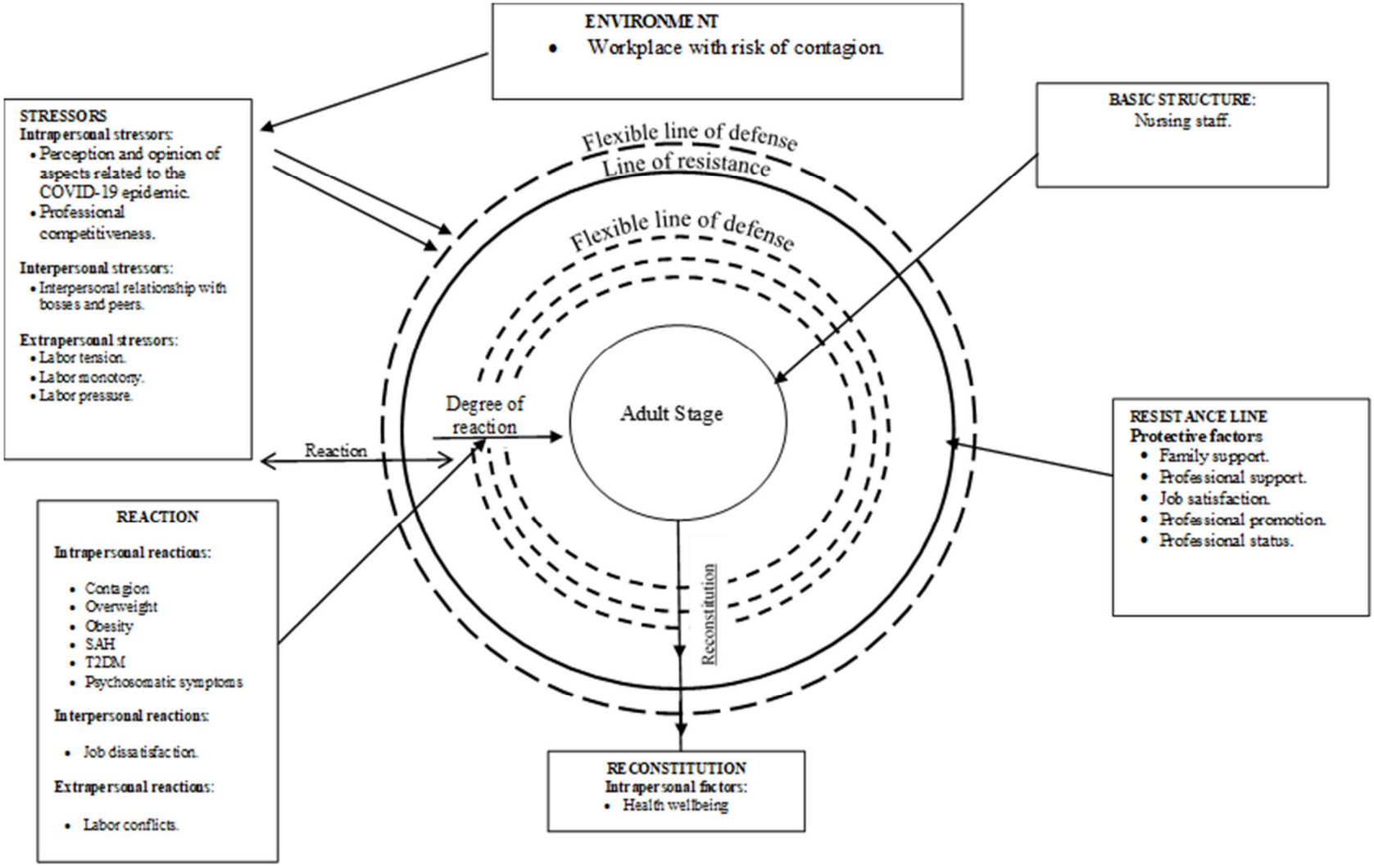

Figure 1. Model of Dissatisfaction and Job Stress in Nursing Personnel in the Face of the COVID-19 Pandemic. Design adapted from Betty Neuman's Systems Model.

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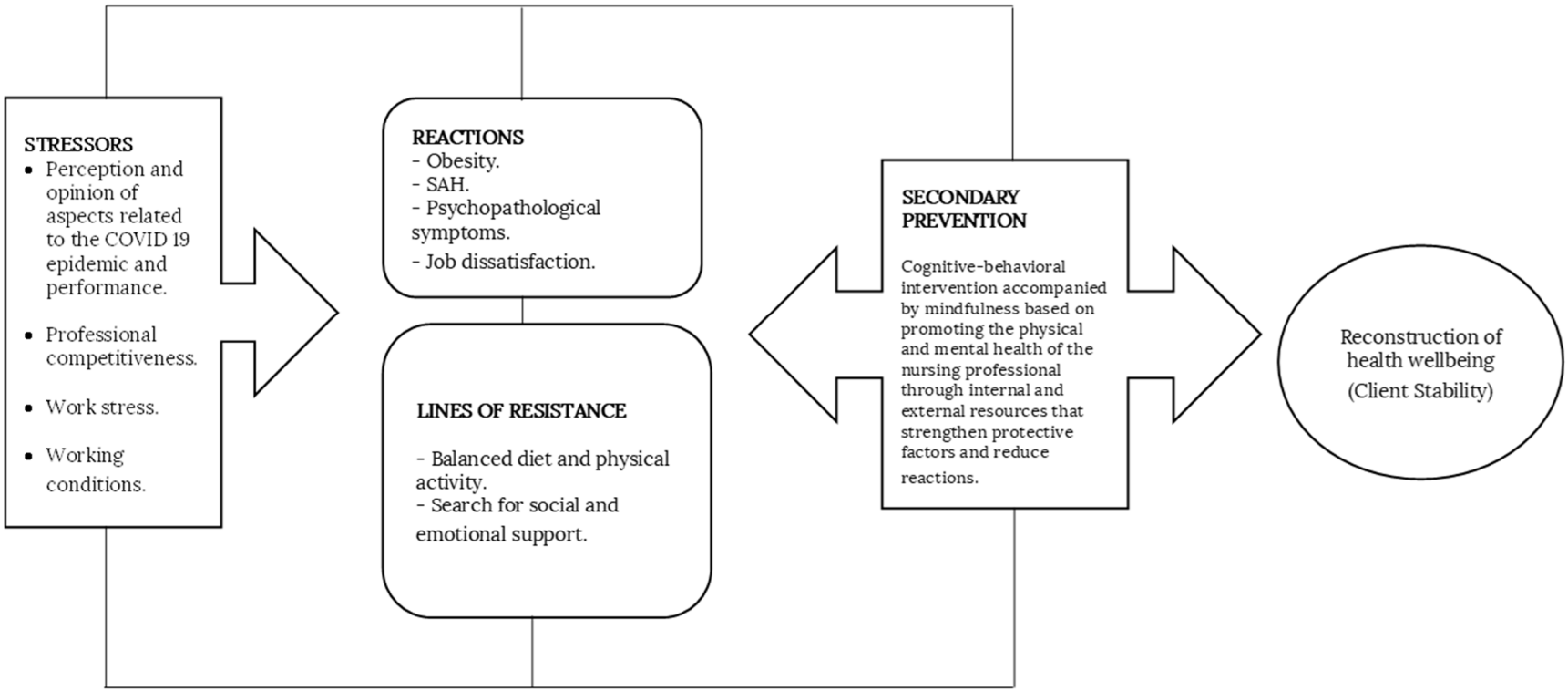

Figure 2. Situation-specific Middle Range Theory: Reconstructing health wellbeing in nurses during the COVID-19 pandemic.

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The model proposed by Betty Neuman made it possible to order and logically integrate the variables related to the phenomenon under study, which can be seen in Figure 1, showing the interrelationships between these variables, leading to the identification of the proposed prepositions.

The nursing professional is clearly a key player in improving the health wellbeing of his or her colleagues through the design of cognitive-behavioral interventions that promote and motivate the client to make positive changes such as eating a balanced diet and engaging in physical activity, as well as seeking emotional and social support. The above propositions are illustrated in Figure 2.

Conclusion

Based on the MRT, nurses can implement theoretical knowledge that allows them to rebuild the health wellbeing of their own guild in different health institutions, whether public or private, seeking to contribute to the maintenance and achievement of wellbeing.

Regarding nursing goals focused on maintaining wellbeing, there is a special interest in the development of preventive interventions focused on reducing work stress levels and maintaining the health wellbeing of workers, including the application of these actions in the labor field itself. For this reason, the integration of theory to nursing practice is required, which is fundamental given the complexity of the study.

The development and application of nursing theories make an essential contribution to knowledge, facilitating the growth, strengthening and development of the nursing discipline. In addition, it provides important guidelines to guide practice and the generation of new interventions focused on stress management and maintenance of wellbeing.

MRTs are part of the nursing structure; they address the substantive knowledge of the discipline by explaining and expanding the specific phenomena related to the care process. Likewise, they provide specific tools to be used in research and practice, which is why contextualizing them makes it easy to understand or respond to the phenomenon, as was done with Neuman's Systems Theory, which allowed explaining wellbeing in the health of nursing staff during the COVID-19 pandemic, through the methodology proposed by Fawcett.

It was observed that this method was useful to build a situation-specific theory with a clear development, theoretical and methodological foundations for the benefit of the study population. Results that will serve as support for the design and implementation of different preventive strategies to contribute to the management of stress and wellbeing of nursing staff.

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Although the Systems Model has been used to study different phenomena over the years, according to the literature review, no scientific evidence was found for its use in the study of nurses' health wellbeing either before or during the first wave of the COVID-19 pandemic. It is worth mentioning that in general, there is little evidence of studies on the wellbeing of nursing personnel under the approach of a situation-specific theory, therefore, it is suggested that more research be conducted in this sense, since it favors a clear visualization of the variables contemplated in a given study phenomenon.

Statements

Conflict of interest

The authors declare that they have no conflicts of interest.

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