

Socio-emotional Processes of UNAM Nursing Students in the Context of Covid-19

Procesos socioemocionales de estudiantes de enfermería de la UNAM en contextos Covid-19

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Resumen: El objetivo es analizar los procesos psicosociales y socioemocionales de estudiantes de Enfermería antes y durante el confinamiento por Covid-19, derivados de las medidas de control sanitario en la Jornada de Sana Distancia implementada por la Secretaría de Salud en México. Como metodología se realizó un estudio descriptivo, cuantitativo y transversal mediante un cuestionario en línea con una muestra de 375 estudiantes. En cuanto a los resultados, los estados emocionales que más disminuyeron fueron: felicidad (52%), tranquilidad (34.40%) y confianza (34.13%); y los que más aumentaron fueron: incertidumbre (32.80%), angustia (27.46%), desesperación (26.13%) y miedo (21.60%). Conclusiones: el estudiantado de Enfermería relativo a esta investigación es una población plurivulnerable con alto riesgo de enfrentar desafíos psicosociales y emocionales que se incrementaron, en comparación con otros estudiantes de educación superior, como producto de ejes estructurantes de desigualdad social, en especial la edad, género, carrera, territorio y condición socioeconómica.

Palabras clave: procesos socioemocionales, ejes estructurantes de desigualdad social, estudiantes universitarios, enfermería, Covid-19.

Abstract: This study aims to analyze the psychosocial and socio-emotional processes of nursing students before and during confinement due to Covid-19, as a result of the Healthy Distance Initiative implemented by the Secretaría de Salud (Ministry of Health) in Mexico. The methodology used was a descriptive, quantitative, and cross-sectional study which involved an online questionnaire completed by a sample of 375 nursing students. The results of the study are presented, indicating a decrease in happiness by 52%, calmness by 34.40%, and confidence by 34.13%. Conversely, uncertainty increased by 32.80%, anguish

by 27.46%, despair by 26.13%, and fear by 21.60%. These results suggest a significant shift in emotional states. In conclusion, this research focuses on nursing students who are considered a pluri-vulnerable population due to their high risk of psychosocial and emotional challenges. These challenges are more prevalent compared to other higher education students, and are a result of social inequality factors such as age, gender, career, territory, and socioeconomic condition.

Key words: socioemotional processes, structural axes of social inequality, university students, nursing, Covid-19.

Introduction

Higher education students constitute a high-risk population group for experiencing mental health issues, given the challenges they encounter, including violence, economic hardships, social pressures, and employment difficulties. Analyzing the psychosocial and emotional impact they have faced in recent years is crucial. This impact encompasses psychological costs stemming from the social confinement itself (Gallego-Gómez *et al.*, 2020), Inadequacies and uncertainties in education (Head *et al.*, 2022), restrictions in social life, and family conflicts (Cengiz *et al.*, 2022). Furthermore, this impact extends to the students in biomedical areas due to the *hasty job insertion* into Covid-19 care environments. Many inexperienced individuals, particularly young students, found themselves working in makeshift hospitals, temporary units, or even home care settings (Gómez-Moreno *et al.*, 2022; Luo *et al.*, 2023; Rodríguez-Almagro *et al.*, 2021; Ulenaers *et al.*, 2021; Vázquez-Calatayud *et al.*, 2022).

Research on the impact of the Covid-19 pandemic on the emotional life of students and healthcare workers is extensive. A significant number have been conducted using psi theories and quantitative methodologies (Sheraton *et al.*, 2020). Most of the studies were carried out in high-income countries such as China or the United States, and in cities and urbanized areas. The most analyzed level was the third - focused on the Covid-19 care area - and to a lesser extent other areas that, although they were not dedicated to direct care of the virus, were in contact with infected patients. Nurses have been the most studied group, followed by medical professionals, with fewer studies focusing on other healthcare workers and students in the medical and nursing fields (Muller *et al.*, 2020; Rojas-Lozano *et al.*, 2023).

In relation to the latter, it is important to note the considerable number of studies interested in analyzing the impact of *Corona teaching*¹ in higher education, among which are: exploration of academic expectations and clinical education in the remote emergency system; technological challenges, material conditions and internet accessibility of students of institutions of higher education (IHEs); and clinical simulation strategies with technology to reconceptualize the gap between theory and practice in universities (Guerrero Alcocer *et al.*, 2023; Dziurka *et al.*, 2022; López Sánchez *et al.*, 2023; López Sánchez and Mendoza, 2021; Metin Karaaslan *et al.*, 2022; Nuuyoma *et al.*, 2023).

Similar studies have investigated knowledge, perceptions and preventive practices of students in regards to Covid-19 to update plans of study and programs in nursing curriculums. These studies also assessed students' personal concerns at an academic level and their coping strategies to address the challenges arising from pedagogical adjustments for academic continuity (Aksu *et al.*, 2022; Albaqawi *et al.*, 2020; Cervera-Gasch *et al.*, 2020; Kochuvilayil *et al.*, 2021).

Data presented in the report "State of the World's Nursing 2020" (WHO, 2020) indicates that this is the largest occupational group in the healthcare sector, representing approximately 59% of all professions in the sector. However, in Mexico, a historical deficit and a high number of infections and deaths were identified, which generated the *emergency hiring of personnel and hasty job insertion* of undergraduate nursing students who were in the last semesters of their programs or were interns (Rosas Loza *et al.*, 2022). In the case of the metropolitan area of Mexico City, the majority of the students came from three campuses of the Universidad Nacional Autónoma de México; the Faculty of Nursing and Obstetrics (FENO), formerly the ENEO, the Facultad de Estudios Superiores Zaragoza and the Facultad de Estudios Superiores Iztacala (FESI).

This study showed that nursing students constitute a pluri-vulnerable population. Firstly, because they are young; second as they are students; third, the precarious nature of their career in the hierarchical healthcare personnel system compounded by the feminized nature of the nursing profession; fourth, they reside in areas of high economic disparity;

1 The term is used to refer to the disruption of socio-educational processes with affective-emotional implications for the university community (students and teachers), "due to remote emergency migration without curricular or methodological mediations" (López Sánchez *et al.*, 2022b: 156).

and finally, due to the historical geographical centralization of hospital infrastructure that has increased the exposure of youth to contagion, violence, and discrimination in public spaces.

Although there are studies that refer to the prevalence of mental health issues such as sleep disorders, fear, stress, and academic burnout among nursing students in the face of the pandemic (Aslan and Pekince, 2021; Bai *et al.*, 2021; Medina Fernández *et al.*, 2021; Mulyadi *et al.*, 2021), research is needed that shows the complex relationship between the emotional life and the sociocultural conditions of young people who are being trained in this area of healthcare from socio-anthropological approaches, which go beyond *psi* explanations (López Sánchez *et al.*, 2023).

The extensive bibliography surrounding the topic shows an interest in the psychosocial approach, that although it provides information on the state of the student body, does so with a clinical, health, individual and behavioral perspective, losing sight of the situational, contextual, intersectional and intercultural perspectives. This implies taking into account the structuring axes of social inequality in the emotional and mental lives of people in times of emergency such as pandemics; at the same time that it recognizes the political dimension of the emotional as a perspective of analysis, by placing the emphasis on social agency and not on psychological vulnerability defined by so-called behavioral handicaps.

This article² is part of the study “Psychosocial characteristics and socio-emotional processes in university student communities in the face of health isolation due to COVID 19: Towards an institutional policy of care and self-care”,³ developed by members of the Interdisciplinary Research Laboratory on Body, Emotions and Gender (LIICEG) of the Faculty of Higher Studies Iztacala (FESI-UNAM). It also analyzes

2 The research that gave rise to this article was carried out with funding granted by the Postdoctoral Scholarship Program of the Universidad Nacional Autónoma de México (UNAM), administered by the General Directorate of Academic Personnel Affairs (DGAPA), and is part of the work of the LIICEG under the direction of Dr. Oliva López Sánchez.

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the socio-emotional processes of nursing students during the Covid-19 confinement derived from the health control measures implemented by the Ministry of Health (SSA) in Mexico.

Theoretical-methodological tool

The research is located within the sociocultural and political perspective of emotions that understands them in a situational, adaptive, trained, plastic, relational and contextual way (Ahmed, 2015), which in addition to a psychophysiological dimension, contains a social one that is normed and regulated by historical and social contexts and is outside binary logics: reason/emotion, body/mind, individual/society. It proposes emotions as a social dimension with heuristic and explanatory possibilities to understand the power relations that structure social life, recovering the sensitive life of subjects outside the pathologized and psychologizing coordinates in which emotional life is regularly circumscribed (López Sánchez *et al.*, 2022). This approach incorporates the political dimension to account for the emotional experiences traversed by social processes with collective and sociopolitical components, and not only individual and psychological ones that are positioned ethically and politically from a perspective of social agency and human rights.

The category *socioemotional processes* links “the emotional management of people based on their social position closely related to their gender, sexual, generational, social stratification, educational identities and their life situations” (Morales Romero and López Sánchez, 2020: 428), determined by the construction of a normative subjectivity. This heuristic tool allows us to identify how the psychosocial conditions of nursing students are linked during the health confinement generated by Covid-19, changes in living conditions, scenarios of uncertainty-concern, and the emotional effects due to the closure of universities during the pandemic. From this category, the emotional life of people can be articulated based on the axes of social structuring, without leaving out their vital/biographical conditions to show that emotional life is also a cultural configuration and not only an individual one.

The *socio-emotional processes* category allows us to explore the field of inequality because it is a social indicator of deeper things, such as the disadvantages that occur between genders, ethnic groups, sex-gender diversities, territories or generations, since they make it possible to see that the place occupied in the social structure produces status that emotional

life translates and manages in a differentiated manner than the body. In accordance with this theoretical proposal, the following matrix is proposed to methodologically operationalize the *socio-emotional processes* category (see Figure 1).⁴

Material and method

The study is descriptive, quantitative and transversal, and was carried out with the student community of the FESI-UNAM Nursing program. The *Psychosocial and Socio-Emotional Meter in the COVID 19 contingency* (MPE-COVID 19) was used, designed by the LIICEG to identify the psychosocial effects and socio-emotional processes generated by social distancing before and during the first days of the confinement policy. The sample was made up of 375 respondents, corresponding to 286 women, 85 men and 4 people of diverse sex-gender identity. The student community was invited to respond in a self-applied manner to the MPE-COVID-19 on the Google Forms platform, via the FES-Iztacala social networks between April and June 2020.

The MPE-COVID19 was composed of 30 items divided into six sections and two open questions. For this article, the sociodemographic data section two “Space and family coexistence”, section five “Academic Activities” and six questions from section four corresponding to “Health and emotional life” of the MPE-COVID-19⁵ were analyzed. The results are presented through frequencies and percentages of each of the variables evaluated using the statistical program R version 4.1.1.

Participation was voluntary, the non-existence of risk in the application of the instrument was specified and the informed consent letter was provided in advance to guarantee autonomy, confidentiality and anonymity. The research was approved by the FESI-UNAM Ethics Committee: CE/FESI/082020/1361 and was classified in category II because it is in common use and with safe procedures, in accordance with the provisions of the General Health Law and the Official Mexican Norms 012-SSA3-2012.

4 Both the figure and the table, as well as the graphs, can be found in the Annex at the end of this article (Editor's Note).

5 “Emotional states prior to and during the health measures of social distancing, social and personal scenarios of increased concern and uncertainty generated by the measures by Covid-19, mood-enhancing activities” (López Sánchez and Cortijo Palacios, 2021: 4152).

Results

The FESI is a multidisciplinary academic entity in the healthcare area that has seven degrees: biology, nursing, odontology, surgery, optometry, psychology and recently ecology. The total sample of the six majors that participated in the study amounted to 3,194 students. The results presented here correspond to 11.74% of students belonging to the nursing major.

The sample was made up of 375 nursing students, of which 76.3% were women, 22.7% were men, and 1% were diverse sex-gender population. The majority of those who participated⁶ were in graduate school (96.5%) and to a lesser extent were interns (3.5%). Within the undergraduate student body, 81.3% were between the second and sixth semester when the questionnaire was applied, and the age range of the analyzed population ranged between 18 and 23 years (Table 1).

During the first days of voluntary social distancing stipulated by the SSA in Mexico, carried out between March 23 and May 31, 2020, 40% of the study population remained in confinement. Among the reasons reported for leaving home, 82.72% was to buy food and medicine, 24.4% for work reasons, 3.5% to carry out academic activities and 7.3% left for other reasons. Male students reported more outings for work reasons (23.52%) compared to women (14.68%), but they went out with the same frequency to purchase food and medicine (women 88.46%, men 84.7% and diverse population 75%).

Derived from the social confinement measures, there were various effects on the lives of the students, among which were the organization of time to carry out remote academic activities and the space and use of devices to carry them out. Regarding the first, 23.43% reported not having a schedule or routine to carry out school activities. Regarding spaces, the most used to carry out these activities were: 1) bedroom (67.7%), 2) living room (37.9%), 3) kitchen (8.8%), 4) dining room (7.46%), 5) study enabled in their home (6.9%) and 6) the patio or garden (2.4%). The devices used to carry out academic activities, in order of importance, were: cell phone (82.3%), laptop (62.4%), desktop computer (33.3%) and, to a lesser extent, tablet (6.9%). A little more than half of the students had to share computer equipment (54.3%).

6 During the application of the questionnaire, the Ecology degree had not yet been opened.

In accord with the above, the situations of greatest distress experienced by the nursing students were; academic (79.5%), followed by financial (74.1%), loss of professional practices in clinics and hospitals (54.9%), modification of personal plans (42.93%), professional plans (32%) and concluding required social service (5.6%). The academic dimension was of greater concern to the younger students who were in their first semesters, and the financial situation and modification of personal plans to the older students who were already interns.

Another complication experienced by the study population is the significant effects on their income; 36.8% valued these effects as important, 49.1% considered them moderately, 8.3% considered them barely, and 5.8% did not perceive them.

The typical emotional states before and during confinement reported by the students varied and were experienced differently between women, men and those with diverse sex-gender identities. But in the three groups the emotion that remained constant was stress, decreasing by just 2.13% of the stress felt before confinement, and apathy and indifference, which increased by 2.4%. The average student said they had felt at least five emotional states prior to the pandemic and six during it; for the diverse population this increased to eight and nine states, respectively.

The emotional state that decreased the most was happiness (52%), followed by tranquility (34.40%) and confidence (34.13%); The states that experienced the most significant increases were uncertainty (32.80%), anguish (27.46%), despair (26.13%) and fear (21.60%). In the case of women, the emotion that decreased the most was happiness, with 55.35%, and the one that increased the most was uncertainty, with 32.17%; The same occurred in male students with 57.65% and 32.80%, respectively. In the case of the diverse population, the state that decreased the most was confidence and the one that increased the most was desperation (Graph 1).

Faced with these emotional states and scenarios of uncertainty related to confinement and social isolation, the actions used by higher-level students to face social distancing were also determined. The strategy that both women and men resorted to most was listening to music, watching television or reading (89.82%), followed by using social networks (57.77%) and talking with family and friends (53.86%). In the case of men, the increase in consumption of alcoholic beverages stands out.

Discussion

The research showed an increase in emotions related to discomfort during the first weeks of social distancing. In the project “Psychosocial characteristics and socio-emotional processes in university student communities in the face of health isolation due to COVID 19: towards an institutional policy of care, self-care and self-attention” it was observed that the most present emotions before the pandemic were tranquility and happiness, and during confinement, those that increased were: fear, anguish, uncertainty and desperation, more in women and in the diverse population than in men. These data coincide with those found in the psychology and medicine majors that also participated in the study and that were reported by one of the authors of this work and other members of the LIICEG (López Sánchez *et al.*, 2022; López Sánchez and Cortijo Palacios, 2021).

The results are also consistent with other investigations that documented an increase in concerns in the initial stage of contagion, given the high lethality, transmissibility of the virus, lack of knowledge and definitive treatment, and decrease of information and the late application of vaccines. They are also concomitant with studies that showed that fear and uncertainty were the main expressions of impact on mental health due to social confinement in university students, followed by insomnia problems and risk behaviors such as increased consumption of alcohol, tobacco and marijuana (Mulyadi *et al.*, 2021a; Robles Mendoza and López Sánchez, 2022).

Fear became an emerging category in this type of investigation. The findings show its recurrence in the experiences of healthcare professionals, which was associated with other related emotions such as anguish, anxiety and panic, linked above all to contagion —their own and that of others—, death and illness (Rojas- Lozano *et al.*, 2023). The fear of Covid-19, according to Luo *et al.* (2021), was higher in women than in men, and the highest fear scores occurred in Asian countries (which is consistent with the territorial advance of the virus).

For their part, Kuru Alici and Ozturk Copur (2022) documented that in Turkey, with a sample of 234 nursing students, levels of fear of Covid-19 were high, significantly higher in female participants than in male participants, and without significant differences according to school year, place of residence, infected family or relatives, home quarantine, and satisfaction with remote learning. In the case of FESI

nursing students, fear increased by 22.38% in women, 18.32% in men and 21.60% in the diverse population regardless of school year, age and home quarantine.

Kuru Alici and Ozturk Copur (2022) conducted a study in Turkey involving 234 nursing students, revealing high levels of fear of Covid-19, particularly among female participants. Interestingly, fear levels did not significantly differ based on factors such as school year, place of residence, infection within the family, home quarantine, or satisfaction with remote learning. Among FESI nursing students, fear increased by 22.38% in women, 18.32% in men, and 21.60% in the diverse population, irrespective of school year, age, or home quarantine status.

The emotional impact related to Covid-19 care, social confinement and emergency remote education on students also resulted in alterations in sleeping and eating patterns. The meta-analysis by Mulyadi *et al.* (2021), which included 17 studies with 13,247 nursing students, suggested that more than a quarter of respondents experienced sleep disorders (27%). In the case of FESI students, more than 50% of the sample expressed disorders that had to do with changes in schedules and the number of hours to rest. In women and diverse populations there was an increase in the number of hours of sleep and in men a decrease. Regarding the variation in eating habits, a little more than 50% of the students of the three gender identities reported having increased their food consumption (with an average of 52.34%) and less than 30% declared that they had decreased their consumption (with an average of 29.38%).

The mental and physical toll experienced by healthcare workers associated with their respective occupational activities during and after viral outbreaks has been significant (Billings *et al.*, 2021). Just as the fluctuation of psychosocial and emotional states was evident through the Covid waves, it was identified that the greater the confinement, the greater the increase in mental disorders, and the greater the proximity to Covid-19 care spaces, the greater the increase in indices of fear, exposure to Burnout syndrome and increase in mental disorders such as anxiety, depression and post-traumatic stress. Regarding the SARS-CoV2 pandemic, Muller *et al.* (2020) conducted a systematic review that included 59 studies with a sample of 54,707 participants from at least 34 different countries and documented that the percentage of healthcare workers with anxiety ranged between 9% and 90% with a median of 24%; that of depression between 5% and 51%, with a median

of 21%; sleep problems between 34% and 65%, with a median of 37%; and distress between 7% and 97%, with a median of 37%. In the specific case of Nursing students, the health problems with the highest prevalence were depression (52%), fear (41%), anxiety (32%), stress (30%) and sleep disorders (27%) (Mulyadi *et al.*, 2021).

Given the data on the prevalence of mental health and its risk factors, the limited evidence on interventions or psychological supports used by these professionals, and the lack of evaluations of their respective effects is contradictory (Robles Mendoza and López Sánchez, 2022). However, given the little interest in seeking professional help, there is documentation of greater dependence on support and social contact by these health workers (Muller *et al.*, 2020), a situation that corresponds to the results found in FESI students. In the case of young people, their self-care strategies consisted of listening to music, watching television, using social networks and talking to friends. Regarding the need for psychological support due to social distancing, 31.5% of women, 24.7% of men and 100% of the diverse population said they needed it.

The interest in analyzing the psychosocial and socio-emotional processes of nursing students is based on the recognition that they are a pluri-vulnerable population. In that sense, it is not only important to demonstrate that the pandemic negatively affected students in the health area, it is also necessary to problematize the emotional experience of pandemic phenomena and its connection with socio-structural aspects; especially age, schooling, career, territory and socioeconomic condition, because it revealed the digital divide, the lack of material resources in undergraduate students and gender vulnerabilities due to care burdens (López Sánchez *et al.*, 2023).

Age as a Structuring Axis of Social Inequality

The psychosocial processes of university students, characterized by uncertainty, anguish, despair and fear, although they are evidence of an increase in emotions related to the discomfort resulting from social confinement and the health crisis due to Covid-19, also show the situation of social stratification of the emotional well-being (Bericat Alastuey, 2018) of a significant population in Mexico (from 12 to 29 years old), which at the national level is represented by 30.7% of its inhabitants, where 5.7% speak an indigenous language, 2.0% consider

themselves Afro-Mexican and 8.4% live with a disability, limitation or with a mental problem or condition (IMJUVE *et al.*, 2021).

In Latin America, as proposed by the United Nations and ECLAC (2017), “socioeconomic status, gender, ethnic-racial condition, territory and age are structuring axes of social inequality.” Age as a principle of stratification, according to the same organizations: “determines the distribution of well-being, power in the social structure and operates as an important criterion of discrimination at different stages of life” (United Nations and ECLAC, 2017: 130); Furthermore, it builds intergenerational gaps given by the differentiated negotiation capacities that are fostered by the State, the community and the family.

There are two main areas that allow us to see how relations of inequality are established in this cycle of life: education and work. In youth, aspects that will mark adulthood are defined, such as the completion of studies, the beginning of a career and the formation of one’s own family life (15-29 years). However, compared to what is expected at this stage, the mechanisms that limit their emancipation and autonomy are given by relationships of subordination and economic dependence on the part of the father, mother or guardian, or by precarious salaries and low status due to the absence of labor experience. This was reflected in 2020 with 46.1% of young people in poverty, 71.8% with some social deprivation and with an unemployment rate close to double that observed in the non-young population (IMJUVE *et al.*, 2021).

Age as a structuring axis of inequality produces emotional gaps that are understood as the differences generated in emotional management between generations; accentuated by disparities in treatment and marked differences in the exercise of power and expressed in styles of mood affectation —such as anguish and despair—, increased social isolation, absence of emotional support and increased risk of alcohol and drug consumption (7.7% in women and 17.7% in men in the case of FESI students). Studies in rural and indigenous populations also show the exacerbation of the effects of precariousness and social and emotional gaps due to the lack of economic, technological and connectivity resources (López-Sánchez *et al.*, 2021: 19).

Education as a Structuring Axis of Social Inequality and Career as a Risk Factor for Gender Violence

The educational gap is another condition of vulnerability that young people go through, which throughout the pandemic was seen to increase due to the challenges of digital education. Although educational coverage—which amounts to 41.6% at the higher level—obstructed access to education for youth (IMJUVE *et al.*, 2021), emergency remote migration increased by technological and communication inequalities widened inequalities in HEIs, reflecting in stress due to decreased academic performance and online learning difficulties (Kuru Alici and Ozturk Copur, 2022; López Sánchez *et al.*, 2023).

In the case of the experiences of the university community in times of Covid-19, the socio-emotional processes in the face of stress expressed diminished social ties between students, faculty and administrative staff at the university. The hierarchical relations of power and status produced by the new dynamics of online education and digital divides generated what is called here dramaturgical stress, “psycho-emotional responses to social situations in which there is a deep separation between the way in which people want to present themselves and the demands of said context” (López-Sánchez *et al.*, 2021).

In the case of Field Two of the FESI health area, the discomfort increased due to the proximity to infected patients and the emotional regime that has historically shaped it. When we talk about a regime, it is understood as a form of emotional ordering, which in the case of the countryside is organized under power relations and a political economy of fear, humiliation and inequality, pedagogically taught through punishment, corporal discipline, the violation of dignity and the physical and emotional exhaustion in the career.

The emotional regime of the health field also produces and reproduces gender inequalities (Castro, 2014). In nursing, patriarchal relationships have undervalued, precarious and feminized its object of study: care. The above is reflected in university enrollment with a majority of female students and in the health system where 86% of its staff is also female (see Chart 2); In addition, due to the wage gap and other forms of gender discrimination in the work environment, such as their limited participation in management positions (World Health Organization, 2020; World Health Organization and Pan American Health Organization, 2022).

Socioeconomic Condition as a Structuring Axis of Social Inequality

During the pandemic, nursing students hurriedly entered the health workforce to have a paying job and support their families, given the high rate of unemployment of their parents. Although this experience provided the opportunity to obtain practical skills and compete for a formal position in the Mexican health care system, it also increased their fear of contagion compared to other students, and with their real risk three times more than that of the general population (Kuru Alici and Ozturk Copur, 2022; Luo *et al.*, 2021).

The *hasty job insertion* of young people was experienced amid uncertainty and fear of the new virus when the health system was not adequately prepared to respond to the pandemic. Training on the control of infectious diseases was insufficient, and there was a shortage of protective equipment. They experienced a lack of professional confidence when entering the workforce and insecurity in responding to a foreign, unknown situation (Gómez-Ibáñez *et al.*, 2020). These emotions were contrasted with the feeling of pride generated by serving their country “by being on the front lines” or financially supporting their family, and guilt for fear of infecting them.

Uncertainty, fear, insecurity, guilt, and pride are treated as moral emotions or ethical judgments in this study, that presuppose an evaluation of one’s own actions in relation to the consequences for others. The disparity experienced by young people in this pandemic was a product of their socioeconomic condition differentiated by gender, marital status and parenthood was visible through those emotions. In the case of male students, hastening their job placement was experienced as a mandatory strategy to complete family expenses, while women were denied permission or were required to resign. In the case of the students who lived with their partner and had financial dependents, pride turned into guilt, especially in the female students with children, who could not deliberately quarantine themselves to avoid infecting their relatives, as the women could single youth without descendants, who sought temporary accommodation to live alone.

Territory as a Structuring Axis of Social Inequality

According to the United Nations and ECLAC (2017), territory is considered another of the structuring axes of inequality. It constitutes a

complex process configured by networks of power, forms of exclusion, oppression, violence, and discrimination. Being a mediator in access to resources and rights where categories of class, gender, processes of racialization and age intersect, it allows us to observe the different socio-territorial positions that youth present before the hegemonic model of urban development.

The Metropolitan Zone of the Valley of Mexico (ZMVM) is a territorial extension that “alludes to urban expansion and the size of the considerable population that moves, denoting a functional and economic integration of different municipal demarcations” (SEDATU *et al.*, 2018). The area is made up of 16 municipalities of Mexico City, 59 municipalities of the State of Mexico, and Tizayuca, municipality of Hidalgo. According to the 2020 Population and Housing Census, the Valley of Mexico had a population of around 22 million inhabitants, of which 5,235,611 were young people (INEGI, 2020).

Living in the ZMVM, while offering access to different economic, educational, resource and infrastructure opportunities, also imposes challenges derived from its selective development model. In the metropolis, youth, as a population with an unequal distribution of income and opportunities, moves in relation to the logic of the market that segregates them spatially, reduces the appropriation of public space, generates insecurity and offers poor public transportation. In the context of the health emergency, increased restrictions on mobility exacerbated these issues in the midst of the hospital reconversion strategy developed by the Mexican government.

The geography of health services during the pandemic included approximately 610 converted hospitals, hybrids and temporary units in the country, of which in the ZMVM there were 110 (72 in 13 delegations of Mexico City, 37 in 19 municipalities suburbs of the State of Mexico and 1 in Tizayuca). This geography evidenced a set of relationships that are presented as a testimony of the history —past and present— of the Mexican health system, linked to the paradigm of the Hegemonic Medical Model that places biomedicine as the main social response to health problems and as State medicine with masculine spatial patterns that have not been and were not accessible to the entire population.

During the coronavirus pandemic this unequal distribution of infrastructure became a risk factor and an axis of inequality and vulnerability for health workers, particularly for young nurses. The

exhausting workday, precarious working conditions and the distance/time factor of access to health work spaces gave rise to different degrees of geographical accessibility that women, men and other gendered identities experienced in the metropolitan area not only differential according to gender, but deeply unequal according to age, class and number of dependents.

In the case of nursing students, staying at home represented an increase in caregiving responsibilities, particularly for married students compared to single students who lived with their families. However, traveling to work in a Covid-19 care center involved living experiences of gender violence, stigma, discrimination and violence due to fear of contagion (Lenta *et al.*, 2020). These experiences were suffered mostly by women, and more in peripheral areas without necessary resources and infrastructure (Konduru *et al.*, 2022).

The socio-territorial position occupied by youth revealed territorial inequality, masculine spatial patterns of cities and the geography of health as well as the presence of differentiated emotional landscapes. The territorial category is useful in analyzing relationships between mobility, care, emotions and gender that make visible realities go unnoticed, as Soto-Villagrán (2022) points out. These realities were present in the daily journeys of the nursing staff in the ZMVM.

Conclusions

Within the framework of this study, how the emotional life of young nursing students is experienced and managed based on their social position was initially explored. Among the findings encountered were socio-emotional processes closely linked to age, technological vulnerability, economic difficulties that framed dramaturgical stress in the face of remote emergency migration. Additionally, moral emotions engendered by socioeconomic conditions and the production of differentiated emotional landscapes with territory as a structuring axis of social inequality were identified. Nursing care was central to addressing the high number of infections that occurred in the country. Faced with the historical deficit of nursing personnel and given aging patterns, coverage of the healthcare system with the students who graduate from the IHEs will continue to be necessary. Therefore it is crucial to attend to the mental and emotional health of university students and commit to

educational innovation that guarantees theoretical-practical training, but also emotional management in times of emergency.

In pandemic contexts such as the one experienced, the sustainability of the health response will depend on its ability to safeguard the health - physical, emotional and mental - of healthcare workers (students and healthcare personnel), which undoubtedly must not only be given by psychological support, but by the design of public policies with a youth, intercultural, gender and human rights perspective that reverse the structuring axes of social inequality in this stage of life.

In pandemic contexts such as the one experienced, the sustainability of the health response will depend on its ability to safeguard the physical, emotional, and mental health of healthcare workers (both students and professionals). This safeguarding must not only be provided through psychological support but also through the design of public policies with a youth, intercultural, gender, and human rights perspective that address and reverse the structuring axes of social inequality at this stage of life.

The results of this research cannot be generalized because they are only exploratory with a non-probabilistic sample. However, they offer the possibility of building empirical hypotheses to analyze the socio-emotional processes of youth and students in the healthcare field. This is essential given the particular role they played during the pandemic and their potential as human resources in future emergencies.

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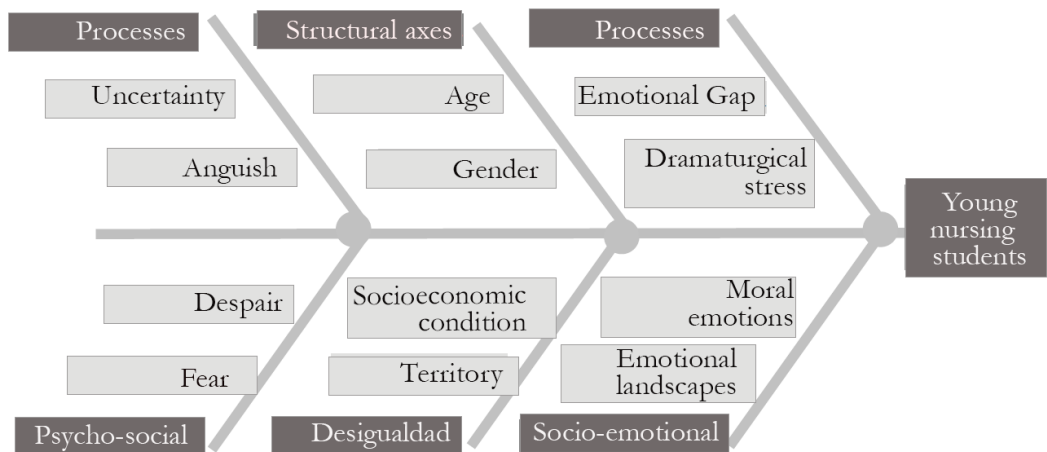
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Figure 1

Operationalization of the socioemotional processes category



Source: Own elaboration based on the data analyzed from the survey.

Table 1

Sociodemographic and educational characteristics of the participants

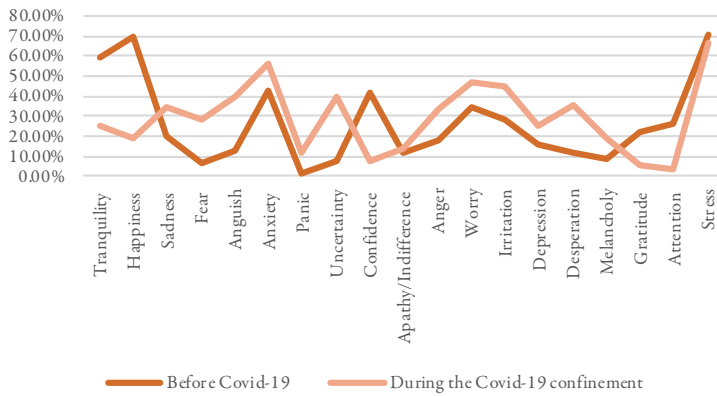
Age	18-20		21-23		24-26		27-29		30-32		33 & above		Total	
	B	I	B	I	B	I	B	I	B	I	B	I		
Women	N	144	1	110	5	11	2	7	1	0	1	4	0	286
	%	50.3	0.3	38.5	1.7	3.8	0.7	2.4	0.3	0	0.3	1.4	0	100
Men	N	38	0	37	1	4	0	2	2	0	0	1	0	85
	%	44.7	0	43.5	1.2	4.7	0	2.4	2.4	0	0	1.4	0	100
Diverse	N	4	0	0	0	0	0	0	0	0	0	0	0	4
	%	100	0	0	0	0	0	0	0	0	0	0	0	100
Total	N	186	1	147	6	15	2	9	3	0	1	5	0	375
	%	49.6	0.3	38.2	1.6	4	0.5	2.4	0.8	0	0.3	1.3	0	100

N = number of participants; % = percentage; B= Bachelor's Degree; I= Intern
 Source: Own elaboration based on survey data.

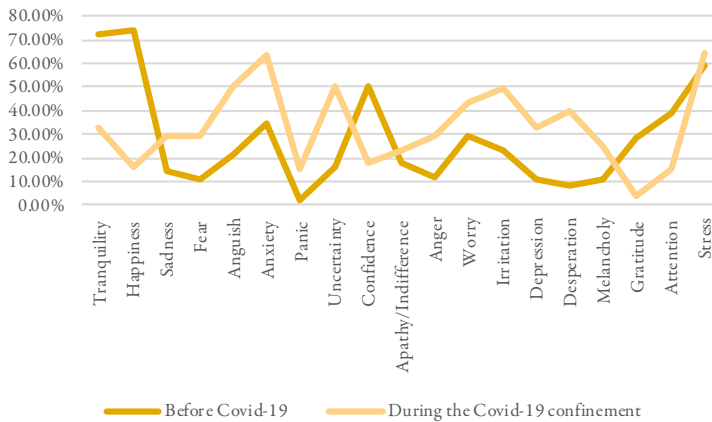
Graph 1

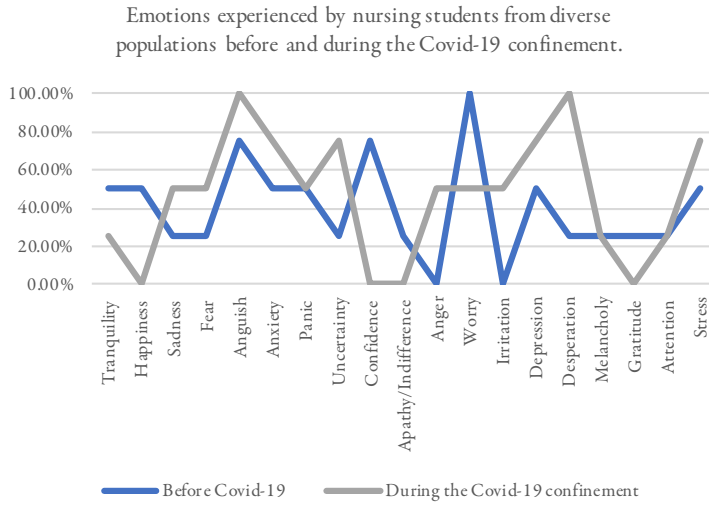
Common emotional states before and during the pandemic

Emotions experienced by female nursing students before and during the Covid-19 confinement.



Emotions experienced by male nursing students before and during the Covid-19 confinement.

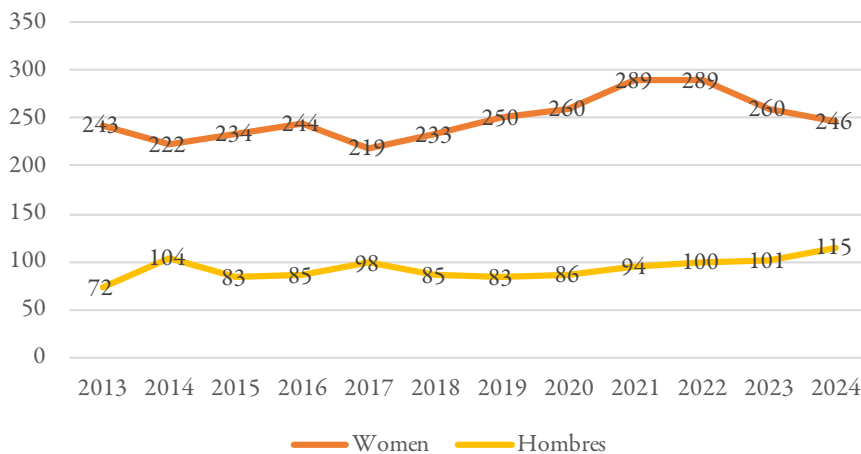




Source: Own elaboration based on survey data.

Graph 2

Total number of students who entered the nursing career by generation and sex



Source: Information provided by the Department of Systems Development and Process Control of the FESI-UNAM.

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