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RESEARCH

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SELF-CARE AND LIFESTYLE HABITS OF NURSING STUDENTS DURING THE SARS-COV-2 PANDEMIC

*Autocuidado e hábitos de vida de acadêmicos de enfermagem durante a pandemia de sars-Cov-2**Hábitos de autocuidado y estilo de vida de estudiantes de enfermería durante la pandemia Sars-Cov-2*Vitória Vasconcelos Logullo¹ Iven Giovanna Trindade Lino² Mariana Enumo Balestre³ Beatriz Jorge Oliveira Gomes⁴ Sabrina Rodrigues Ramos⁵ Sonia Silva Morcon⁶ 

ABSTRACT

Objective: to understand how the Covid-19 pandemic has interfered with the self-care and lifestyle of university students.**Method:** exploratory descriptive research carried out with nursing students from four higher education institutions in the state of Paraná. Data were collected using an electronic form available on Google Forms; those of a quantitative nature were subjected to descriptive and inferential analysis, and the answers to open questions analyzed using the Iramuteq Software. **Results:** 58 nursing students participated in the study, the majority of whom were female (82.76%), with an average age of 22 years, the majority lived with their family. Statistically significant association was observed between Age and “Made friends during remote classes”; Sex and “substance use”; and Year of graduation with eating habits and “Made friends during remote classes”. **Conclusion:** the pandemic especially influenced eating habits, self-care, sleep quality and alcohol and tobacco use among nursing students.**DESCRIPTORS:** Cuidados paliativos; Atenção primária à saúde; Continuidade da assistência ao paciente;

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RESUMO

Objetivo: compreender de que maneira a pandemia de Covid-19 interferiu no autocuidado e estilo de vida de universitários. **Método:** pesquisa descritiva exploratória realizada com acadêmicos de enfermagem de quatro instituições de ensino superior do estado do Paraná. Os dados foram coletados mediante formulário eletrônico disponibilizado no google forms; os de natureza quantitativa foram submetidos à análise descritiva e inferencial, e as respostas às questões abertas analisadas no Software Iramuteq. **Resultados:** participaram do estudo 58 estudantes de enfermagem, sendo a maioria do sexo feminino (82,76%), com idade média de 22 anos, a maioria residia com sua família. Observada associação estatisticamente significativa entre Idade e “Fez amizade durante aulas remotas”; Sexo e “uso de substância”; e Ano da graduação com hábito alimentar e “Fez amizade durante aulas remotas”. **Conclusão:** a pandemia influenciou, especialmente, os hábitos alimentares, de autocuidado, qualidade do sono e uso álcool e tabaco entre os acadêmicos de enfermagem.

DESCRIPTORIOS: Hábitos saudáveis; Autocuidado; Covid-19; Estudantes de enfermagem;

RESUMEN

Objetivos: comprender cómo la pandemia de Covid-19 ha interferido en el autocuidado y estilo de vida de los estudiantes universitarios. **Método:** investigación descriptiva exploratoria realizada con estudiantes de enfermería de cuatro instituciones de educación superior del estado de Paraná. Los datos fueron recopilados mediante un formulario electrónico disponible en Google Forms; los de carácter cuantitativo fueron sometidos a análisis descriptivo e inferencial, y las respuestas a preguntas abiertas analizadas mediante el Software Iramuteq. **Resultados:** Participaron del estudio 58 estudiantes de enfermería, la mayoría del sexo femenino (82,76%), con una edad promedio de 22 años, la mayoría vivía con su familia. Se observó asociación estadísticamente significativa entre Edad y “Hizo amigos durante las clases remotas”; Sexo y “consumo de sustancias”; y Año de graduación con hábitos alimentarios y “Hice amigos durante clases remotas”. **Conclusión:** la pandemia influyó especialmente en los hábitos alimentarios, el autocuidado, la calidad del sueño y el consumo de alcohol y tabaco entre los estudiantes de enfermería.

DESCRIPTORIOS: Hábitos saludables; Cuidados personales; COVID-19; Estudiantes de enfermería.

INTRODUCTION

The Covid-19 pandemic, officially announced in March 2020 by the World Health Organization (WHO), has triggered a series of challenges that have transcended physical and social boundaries.¹ With the establishment of disease prevention measures such as: wearing masks, frequent hand hygiene, lockdowns, social distancing and travel restrictions, the population's daily life has been drastically altered.²

In this context, in addition to concerns about public health and the economy, the impact of the pandemic on people's quality of life has emerged as an important issue to consider.² Consequently, companies, schools and universities have suspended their face-to-face activities, adapting to new spaces for work and study.

In relation to higher education in Brazil, Ordinance No. 343 of 2020, issued by the Ministry of Education³, established the possibility of replacing face-to-face classes with digital classes while the COVID-19 pandemic persists. As a result, university students' study routines have changed, especially in the nursing course. Some institutions have instituted synchronous and asynchronous activities, virtual classes and practical fields have been suspended.⁴

University students generally face a variety of challenges throughout their academic journey, including disappointment with the course subjects and curriculum, dissatisfaction with teachers and teaching methods, lack of motivation to study and attend classes, difficulties in time management and combating procrastination, unfavorable experiences in internships or the job market, among others.⁵

Therefore, considering that most university students are in adolescence and/or entering adulthood, the negative effects of social distancing may be more influential among them, since social interaction is essential at this stage.⁶⁻⁷

Given this context, it is necessary to understand how these changes, resulting from the pandemic, have affected the habits and lifestyle of young university students, making it possible to work and intervene assertively in relation to the needs of this public in the short, medium and long term. The aim of this study was to describe the impact of the SARS-CoV-2 pandemic on the lifestyle habits and self-care activities of nursing students.

METHODS

This is a descriptive exploratory study, with a quantitative approach, carried out in the state of Paraná (Brazil), with nursing students from four higher education institutions, two private and two public, three of them located in the same municipality and the other public institution located in a municipality 30KM away from the first.

The students were invited to take part in the study by means of an invitation sent via their individual institutional email and WhatsApp® groups for the classes in each grade and institution, containing the study's objective, the type of participation desired and the link to access the data collection instrument.

The inclusion criteria for the study were: a) being duly enrolled in any grade and regularly attending the Nursing course and; b) being 18 years of age or older. The exclusion criterion

was failing to answer 10% or more of the questions on the data collection instrument.

The data was collected in October and November 2021, using an electronic form available on Google Forms, designed by the authors based on the aim of the study. This form consisted of three parts: the first consisted of questions regarding sociodemographic characterization (gender, age, marital status, children, work activity, participation in a project as a scholarship holder, educational institution, municipality in which they live, with whom they live, need to work during the pandemic). The second part addressed questions with dichotomous answers about lifestyle habits and self-care before and during the pandemic (sleep, diet, physical activity, hours dedicated to studies, use of antidepressant medication and psychological counseling) and four open-ended questions in which participants were asked to name three good and three bad habits in relation to self-care, and likewise in relation to diet. Finally, the third part addressed questions about relationships with classmates and teachers during remote classes. The answers to these questions were dichotomized (yes and no) for later analysis.

The data collected was recorded in a Microsoft Excel spreadsheet (Google Spreadsheets) and analyzed using descriptive statistics (absolute numbers and percentages) and inferential statistics using the chi-square test, using the formula with Yates correction (X^2_{Yates}) and presented in tables. The answers to the open questions were analyzed using Iramuteq software, using basic lexicography and retired using a word cloud.

The study complied with all the ethical precepts set out in resolutions 466/2012 and 510/2016 of the National Health Council and the CONEP Guidelines for Procedures in Research with Any Stage in a Virtual Environment. The project was approved by the Standing Committee on Ethics in Research with Human Beings of the signatory institution (Opinion number 5.028.952). It should be noted that access to the data collection form was only made available after reading the Informed Consent Form and expressing agreement to take part in the study.

RESULTS

Fifty-eight nursing students took part in the study, aged between 18 and 42 (average 22 years), of whom the majority were female (82.76%, $n=48$), attended public institutions (79.61%, $n=46$), were single (81.03%, $n=47$) had no children (89.66%, $n=52$) and lived with their families (62.07%, $n=36$), with a higher prevalence (31.03%, $n=18$) of third-year students (Table 1).

With regard to lifestyle habits during the pandemic, 82.75% ($n=48$) of the students reported a change in sleep, 87.93% ($n=51$) slept less than eight hours a night, and their study routine showed a change during the pandemic with 96.55% ($n=56$). It is worth noting that the majority did not use antidepressant medication (79.31%, $n=46$), did not undergo psychological counseling (68.96%, $n=40$) and that 32.75% ($n=19$) needed to start some paid activity during the pandemic, of those who used antidepressants 10.34% ($n=6$) started during the pandemic period (Table 1).

Table 1 - Sociodemographic characteristics of nursing students from four higher education institutions in Paraná ($n=58$). Maringá-PR, Brazil, 2024.

Variables	N	%
Sex		
Female	48	82,76
Male	10	17,24
Age		
18-20	34	58,62
21-24	18	31,03
30-42	6	10,34
Year of graduation		
First year	11	18,97
Second year	16	27,59
Third year	18	31,03
Fourth year	13	22,41
Who you live with		
Alone	4	6,90
Friends	7	12,07
Spouse/partner	5	8,62
Spouse with child(ren)	6	10,34
Family (mother/father/siblings)	36	62,07
Has children		
No	52	89,66
Yes	6	10,34

Table 2 shows the variables related to habits and changes during the pandemic and the association with some characteristics such as age, gender and year of study. In the bivariate analysis (not shown in the table), a significant association was only observed between: 1) Age and "Made friends during remote classes" ($p= 0.030$); 2) Sex and "substance use" ($p=0.025$); and 3) Year of graduation with eating habits ($p= 0.017$) and "Made friends during remote classes" ($p= 0.023$).

It should also be noted that women have a worse perception of their self-care than men, since while 77.08% ($n=37$) of them

Do you receive a college grant?		
No	32	55,17
Yes	26	44,83
Change in study routine		
No	56	96,55
Yes	02	3,45
Antidepressant medication		
Does not use	46	79,31
Make use of	12	20,61
Total	58	100

n: Absolute frequency; %: Relative frequency

Table 2 - Association between age, gender, people living with and year of graduation and the changes experienced by nursing students from four higher education institutions in Paraná during the Covid-19 pandemic (n=58). Maringá-PR, Brazil, 2024.

VARIABLES	Age		Gender		Year of graduation	
	≤ 20 to	≥21 to	Female	Male	1° and 2°	3° and 4°
	n=34	n=24	n=48	n=10	n=27	n=31
Started a paid job						
Yes(n=19)	23,5	45,83	33,33	30,00	22,22	41,94
No (n=39)	76,5	54,17	66,67	70,00	77,78	58,06
Perception of self-care						
Excellent or good (n=16)	29,4	25,00	6,25	50,00	29,63	25,81
Average or bad (n=42)	70,6	75,00	77,08	50,00	70,37	74,19
Sleep routine						
Sleeps less than 8 hours a day (n=51)	85,29	91,67	87,50	90,00	85,19	90,32
Sleeps more than 8 hours a day (n=7)	14,71	8,33	12,50	10,00	14,81	9,68
Sleep has been affected by the pandemic						
Yes (n=48)	91,18	70,83	87,50	60,00	85,19	80,65
No (n=10)	8,82	29,17	12,50	40,00	14,81	19,35
Eating habits during the pandemic						
Healthy or more or less healthy(n=42)	67,64	79,17	72,91	70,00	55,56	87,10
Unhealthy (n=16)	32,35	20,83	27,08	30,00	44,44	12,90
Practicing physical activities(n=52)						

reported average or poor self-care, among men this percentage was 50% (n=5). It should also be noted that the use of substances, whether alcohol and/or tobacco, is related to the male sex, as shown in Table 2.

With regard to eating habits, the word clouds shown in Figure 1 show that the most frequently mentioned bad habits were: consumption of fast food, sweets, fried food, soft drinks, industrialized food and the absence of a dietary routine. Among the good habits, the consumption of fruit, vegetables and hydration stood out (Figure 1).

With regard to self-care, figure 2 shows that the most frequently mentioned bad habits were: a sedentary lifestyle, poor diet, self-neglect, self-blame, anxiety, sleeping badly and disorganization, while the good ones basically involved the opposite of the bad ones:

Physical activity is present (n=24)	38,70	57,14	41,86	66,67	25,93	58,62
Stopped physical activity (n=28)	61,29	42,85	58,13	33,33	74,07	41,38
Psychological support						
Doesn't do (n=40)	58,82	83,33	66,67	80,00	66,67	70,97
Started or increased periodicity (n=18)	41,17	16,67	33,33	20,00	33,33	29,03
Substance use						
Alcohol and/or cigarettes (n=20)	35,29	33,33	27,08	70,00	33,33	35,48
Neither alcohol nor cigarettes (n=38)	64,71	66,67	72,92	30,00	66,67	64,52
Did you make friends in the pandemic during remote classes?						
Yes(n=35)	73,53	41,67	58,33	70,00	77,78	45,16
No (n=23)	26,47	58,33	41,67	30,00	22,22	54,84
He felt welcomed by the teachers						
Yes or sometimes (n=53)	94,11	87,50	91,67	90,00	96,30	87,10
No (n=5)	5,88	12,50	8,33	10,00	3,70	12,90

†The bivariate analysis showed a significant association between "Age" and "Befriended during remote classes" ($p= 0.030$); Sex and "substance use" ($p=0.025$); and "year of graduation" with "eating habits" ($p= 0.017$) and "Befriended during remote classes". ($p= 0,023$).

Figure 1: Good and bad eating habits mentioned by nursing students.

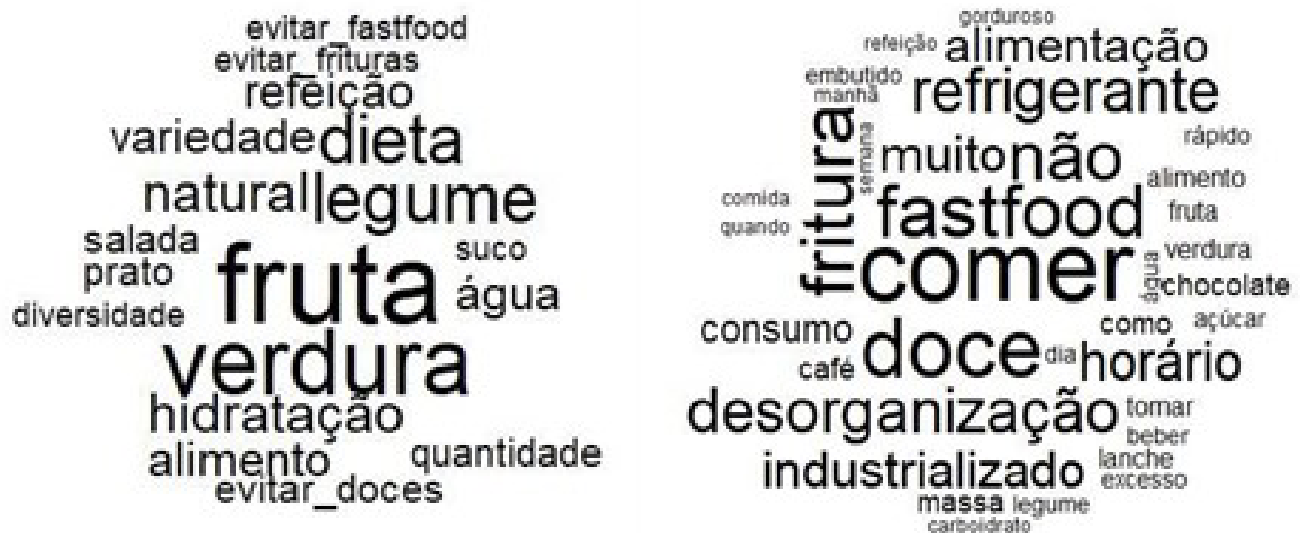


Figure 2: Good and bad self-care habits of nursing students.

DISCUSSION

The higher prevalence of female participants is consistent with the fact that the majority of vacancies in nursing courses in Brazil are still occupied by women, which is also observed at the technical level.⁸ However, they have been shown to have a worse perception of their self-care than men, which allows us to infer that even among young people, the burden of other activities is greater among them, who already begin to work a double shift at this stage by reconciling their studies with other obligations at home.

The proportion of academics who referred to a worsening of their lifestyle habits as a result of the pandemic can be considered high and mainly involved changes in sleep patterns, consumption of a less healthy diet and a reduction in physical activity. These results corroborate those of studies that sought to identify the impact of the pandemic on university students, which highlighted damage to their mental health and sleep quality.⁹⁻¹¹

A qualitative study that aimed to understand the experience of fear by university students during the COVID-19 pandemic, collected data through an online focus group and had the participation of 16 university students, 12 of whom were nursing students, found the presence of worry, frustration, exhaustion, nervousness, guilt, isolation and difficulty in making decisions.¹²

In addition, university students also showed fears related to the disease and its consequences, which allowed the authors to highlight the Covid-19 pandemic not only as a stressful situation that people may have difficulty dealing with and coping with, but that the fear generated by it is individual - that is, it is not universal - nor is it linear.¹²

The use of alcohol and tobacco can be related to high levels of stress and/or anxiety, being used as a response to negative events and problems. A study shows that the high use of these substances among students, especially those in the health sector, is due to the stressful environment to which they are exposed on a daily basis¹³. Thus, the pandemic context and the changes in daily life imposed on thousands of people around the world have undoubtedly constituted a potentially stressful circumstance.

The proportion of academics who reported using alcohol and/or tobacco can be considered low and was significantly more frequent among males ($p=0.025$). A study carried out in Poland with almost 80% of female participants and almost half of the students studying medicine, found that 70.22% observed no differences and only 12.58% reported an increase in the consumption of psychoactive substances due to the pandemic, with no statistically significant association with gender. However, a worse perception of psychological well-being was correlated with a greater tendency to use tobacco ($p < 0.001$) and alcohol ($p < 0.001$), but not with heavy substances.¹⁴

Along the same lines, another study also conducted in Poland, but only with medical students, found that as the pandemic and lockdown progressed, they began to consume more frequent or larger quantities of alcoholic beverages and cigarettes, while at the same time decreasing their levels of physical activity, which contributes significantly to an increased sense of stress among students.¹⁵

In France, however, a study of 3,671 university students (mean age 20.9 ± 2.47 years, 72.9% female), when comparing the periods before and during COVID-19, found significantly favorable changes for smoking (18.5% vs. 14.8%), excessive alcohol consumption (35.9% vs. 9.3%) and cannabis use (5.6%

vs. 3.2%), as well as unfavorable changes for moderate (79.4% vs. 67.9%) and vigorous (62.5% vs. 59.1%) physical activity. After logistic regression, the factors associated with favorable changes in smoking and unfavorable changes in vigorous physical activity were concern about not validating the school year and stress related to changes in teaching modality, respectively. Unfavorable changes were associated with higher levels of depression and male gender.¹⁶

High consumption of ultra-processed, high-calorie foods is linked to various health problems, such as cardiovascular disease and obesity. Although the harmful effects of foods high in fat, sodium or sugar are widely publicized, their consumption is high among university students due to their daily routine.¹⁷ It is interesting to note that even when they are at home, which could theoretically mean more time to prepare food, 84.48% of the nursing students in the study reported unhealthy eating habits, which was significantly more frequent among students in the initial years of their degree ($p=0.017$). Fast food, sugars, soft drinks and fried foods, as well as the absence of a dietary routine, were pointed out as bad habits. It's possible that this was because during classes, many students ate at least one of their daily meals in university restaurants, places where there is concern about providing a balanced diet.

Other studies with Brazilian¹⁸, Portuguese and Spanish¹⁹ university students also found an increase in the consumption of ultra-processed foods, which they related to the high level of stress experienced during the pandemic period. A study of 980 university students from all over Poland (75% female), whose data was collected online, found that during the pandemic, 43% of them neglected their meals in some way.¹⁰

The COVID-19 pandemic has led to the closure of gyms and various spaces for physical activity, causing the population to reduce and even stop practicing physical activity, including when practiced outdoors, thus increasing sedentary lifestyles.²⁰ This reality was also reported by the nursing students included in this study. Along these lines, the authors of a study carried out in Poland, based on changes in behavior that contributed to poorer mental health, listed the following as protective factors against psychological distress: maintaining a daily routine, staying physically active, following a regular eating pattern and taking care of sleep hygiene.¹⁰

Among the numerous benefits of physical activity are the control and prevention of excess weight; promoting a sense of well-being, improving sleep quality and self-esteem. There are currently specific recommendations for different age groups, such as children, adolescents, adults and the elderly, since the benefits of this practice in the short, medium and long term for mental, muscular and bone health have already been proven.²¹

Possible limitations of the study refer to the small size of the sample studied and the similarities between the participants, which limited the statistical analysis and the identification of correlation between the variables.

CONCLUSION

This study described the impact of the SARS-CoV-2 pandemic on the lifestyle habits and self-care activities of nursing students. In general, it can be concluded that the pandemic has influenced nursing students, especially with regard to eating habits, self-care, sleep quality and the use of substances such as alcohol and tobacco. Identifying these variables will enable strategies to increase the care and self-care of nursing students, especially in situations of social isolation.

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