

Tolerance level in friendly relationships among health professionals during the COVID-19 pandemic

Nível de tolerância nas relações de amizade em profissionais de saúde durante a pandemia da COVID-19

Nivel de tolerancia en las relaciones amistosas entre profesionales de la salud durante la pandemia del COVID-19

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RESUMO

Objetivo: Analisar o nível de tolerância nas relações de amizade em profissionais de saúde durante a pandemia da COVID-19. **Método:** Trata-se de um estudo transversal e descritivo, realizado com 979 profissionais de saúde das cinco macrorregiões brasileiras entre junho e julho de 2020. Aplicaram-se via online um questionário sociodemográfico; um questionário semi-estruturado e o Instrumento de Avaliação da tolerância nas relações de amizade. Utilizou-se a estatística descritiva para a análise dos dados que ocorreu no *Statistical Package for Social Science*, versão 25,0. **Resultados:** A tolerância de amizade no ambiente domiciliar é considerada satisfatória (92,2%); os amigos ajudaram a superar as tensões vivenciadas durante a quarentena (84,5%); e houve mudança nas relações de amizade desde o início da quarentena (72,5%). Verifica-se predomínio de alta tolerância nas relações de amizade (90,3%) entre os profissionais de saúde. Os profissionais são mais tolerantes nas seguintes situações: "aceitar os defeitos dos amigos; compreender amizade como aceitar a outra pessoa do jeito que ela é; esforçar-se para encontrar algo bom nas pessoas; entender e manter amizades demanda dedicação extrema; e os amigos considerarem o respondente como flexível e tolerante. **Conclusão:** A tolerância nas relações de amizade entre os profissionais de saúde durante a pandemia de COVID-19 é considerada alta, mesmo frente as mudanças trazidas por ela.

Descritores: Relações Interpessoais; Amigos; Infecções por Coronavírus.

ABSTRACT

Objective: To analyze the level of tolerance in friendship relationships among health professionals during the COVID-19 pandemic. **Method:** This is a cross-sectional and descriptive study, carried out with 979 health professionals from the five Brazilian macro-regions between June and July 2020. A sociodemographic questionnaire was applied online; a semi-structured questionnaire and the Tolerance Assessment Tool in friendship relationships. Descriptive statistics were used to analyze the data that occurred in the *Statistical Package for Social Science*, version 25.0. **Results:** The tolerance of friendship in the home environment is considered satisfactory (92.2%); friends helped to overcome the tensions experienced during the quarantine (84.5%); and there was a change in friendship relations since the beginning of the quarantine (72.5%). There is a predominance of high tolerance in friendship relationships (90.3%) among health professionals. Professionals are more tolerant in the following situations: "accepting the defects of friends; understand friendship how to accept the other person as they are; strive to find something good in people; understanding and maintaining friendships requires extreme dedication; and friends consider the respondent to be flexible and tolerant. **Conclusion:** Tolerance in friendly relationships among health professionals during the COVID-19 pandemic is considered high despite the changes brought about by it.

Descriptors: Interpersonal Relations; Friends; Infecciones por Coronavirus.

RESUMEN

Objetivo: Analizar el nivel de tolerancia en las relaciones de amistad entre profesionales de la salud durante la pandemia de COVID-19. **Método:** Se trata de un estudio transversal y descriptivo, realizado con 979 profesionales de la salud de las cinco macrorregiones brasileñas entre junio y julio de 2020. Se aplicó un cuestionario sociodemográfico en línea; un cuestionario semiestructurado y la Herramienta de Evaluación de la Tolerancia en las relaciones de amistad. Se utilizaron estadísticas descriptivas para analizar los datos que ocurrieron en el *Statistical Package for Social Science*, versión 25.0. **Resultados:** La tolerancia de la amistad en el ámbito familiar se considera satisfactoria (92,2%); los amigos ayudaron a superar las tensiones vividas durante la cuarentena (84,5%); y hubo un cambio en las relaciones de amistad desde el inicio de la cuarentena (72,5%). Se verifica un predominio de alta tolerancia en las relaciones de amistad (90,3%) entre los profesionales de la salud. Los profesionales son más tolerantes en las siguientes situaciones: "aceptar los defectos de los amigos; entender la amistad cómo aceptar a la otra persona tal como es; esforzarse por encontrar algo bueno en las personas; comprender y mantener las amistades requiere una dedicación extrema; y los amigos consideran que el encuestado es flexible y tolerante. **Conclusión:** La tolerancia en las relaciones amistosas entre los profesionales de la salud durante la pandemia de COVID-19 se considera alta, a pesar de los cambios provocados por ella.

Descriptores: Relaciones Interpersonales; Amigos; Infecciones por Coronavirus.

ORIGINAL

Introduction

Currently, from the point of view of health, the world is experiencing an intense challenge. This is due to the outbreak of Coronavirus 2019 (COVID-19), first reported in December 2019, in Wuhan province, China.^{1,2}

According to data from the World Health Organization, 3 at the end of July 2020, confirmed cases of COVID-19 worldwide had already exceeded 17,000,000. On the same date, Brazil registered more than 2,500,000 confirmed cases.³

As it is a pandemic, there are no strategic plans ready to be followed⁴ and, therefore, several measures are being established worldwide by government officials in order to contain the devastating effects of the virus.⁵ At the same time, within health institutions, several professionals - among these health workers have been providing vital services in the fight against COVID-19.⁶

The routine of health professionals is exhausting and, often, marked by work overload, lack of professional appreciation, direct contact with the suffering of others, low pay, double employment, precarious link in employment contracts and high responsibility.⁷⁻⁸ For Esperidião, Saidel and Rodrigues,⁸ the dimension of working conditions, collaborate for psychological pressure and psychosomatic symptoms in health professionals.

In addition to this situation, in the current pandemic scenario, it is common to accentuate feelings of fear, since health professionals who are at the forefront in the fight against COVID-19 are at greater risk of contracting the disease,⁹ feelings of sadness in the face of the reality experienced, loneliness, in addition to anxiety and stress.¹⁰ Corroborating this statement, an integrative review carried out this year, pointed out that health professionals, during pandemic situations, may be more vulnerable to stress, depression and insomnia.¹¹ Another investigation found that work-related stress is associated with anxiety, multiple clinical activities, depression in the face of countless deaths, long shifts due to assistance to patients with COVID-19.⁹

For Leão and Gomes,¹² the situations faced in the professional's daily life, such as discouragement due to lack of listening, hopelessness with management, lack of materials, inputs, resources, end up generating suffering.

On the other hand, an open and transparent dialogue, respect and trust between colleagues, handling of conflicting situations, valuing teamwork, companionship and friendly relationships, are factors that help in the establishment of healthy interpersonal relationships and contribute to improvement mental health of workers.^{12,13} In the case of friendship relationships, they are extremely important and must be present for the relationship to be lasting.¹⁴

In 1991, Mendelson and Aboud,¹⁵ defined six important requirements in friendship relationships, which are: stimulating companionship, help, intimacy, trustworthy alliance, self-validation, and emotional security.

Thus, stimulating companionship consists of carrying out pleasant, fun, exciting activities together. Aid concerns the provision of guidance, assistance, as well as other forms of assistance. Thus, intimacy

consists in the sensitivity of the needs of the other, in the openness to honest expressions of thoughts.¹⁵

In such a way, the trustworthy alliance refers to loyalty, availability; self-assessment consists of reassuring, encouraging and helping others to maintain a positive self-image; and, emotional security is about providing comfort and confidence in new or threatening situations.¹⁵

In view of this, in a research carried out by Schlösser,¹⁶ it was found that friendly relationships are sustained by the perception of well-being and quality of life, being one of the attributes considered essential in other types of relationships, such as loving ones. It was also analyzed that one of the elements to maintain friendship, concerns tolerance.

It is noted that tolerance is one of the characteristic elements associated with care in the friendship relationship, it is about the sense of having patience in the face of differences.¹⁶ It refers to a necessary condition that is extremely important in friendship relationships, for so that the relationship is long lasting.¹⁴

Furthermore, it is possible to affirm that the difficulties experienced by health workers in the midst of the pandemic, both related to work itself, and related to personal and individual issues of affective relationship and the daily fear of being contaminated or transmitting the disease to loved ones, they are very conflicting situations. Therefore, considering tolerance as a crucial element in relationships and that it can help these professionals to go through this complex and harsh situation that has been faced, assessing the level of tolerance in the friendships of this population is necessary.

In this context, the objective of this study was to analyze the level of tolerance in friendly relationships among health professionals during the COVID-19 pandemic.

Method

This is a cross-sectional, analytical and quantitative study, carried out with health professionals from the five macro-regions (North, Northeast, Southeast, South and Midwest) between June and July 2020. Individuals from different health professions were included. With more than 18 years, with access to the internet through subscription to social digital platforms of relationship or messages. Participants who did not complete the questions of the research instrument were excluded. For this, a non-probabilistic sample of the convenience type was used, establishing the closure of data collection when a minimum number of 800 professionals was obtained, including all Brazilian macro-regions.

Data were collected using the following self-administered instruments: sociodemographic questionnaire; semi-structured questionnaire about the pattern of interpersonal relationships of each participant regarding the COVID-19 pandemic; and Instrument for Assessment of Tolerance in Friendship Relationships (ATRF).¹⁴ These were typed in the Google® form and submitted via the social platforms: Facebook®, Twitter®, Whatsapp® and Instragram®. Such instruments could only be answered after digital confirmation of acceptance to participate in the study by signing the Free and Informed Consent Form (ICF).

The sociodemographic questionnaire, constructed by the authors, involved the following variables: date of birth, sex, sexual orientation, race, education, higher education institution with a student or employment relationship, monthly income, region of residence and with whom you live (alone or not). The semi-structured questionnaire addressed emotions about the COVID-19 pandemic and contained the following questions: In your family environment, is tolerance of friendship satisfactory? Did your friends help you to overcome the tensions experienced during the quarantine / social isolation period of COVID-19? Do you believe that there have been changes in your friendship relations since the beginning of the quarantine / social isolation due to the COVID-19 pandemic?

ATRF¹⁴ was built in 2019 by Moraes-Filho and collaborators to assess tolerance in friendly relationships. Its structure was based on the semantic analysis of evidence, guided by France and Schelini¹⁷ and based on the process of building psychometric scales by Reppold, Gurgel and Hutz.¹⁸ It is composed of 21 items arranged in a five-point likert scale, in which: 1 - totally agree, 2 - partially agree, 3 - neither agree nor disagree, 4 - partially disagree and 5 - strongly disagree. From the sum of the scores indicated in each item, the scores for the degree of tolerance of friendship relationships are obtained, and the higher the score, the greater the tolerance of friendship relationships. However, the items have a reverse scale and, therefore, before the data analysis, the likert scale should be reversed. Thus, based on the general average for the researched population, friendship tolerance is dichotomized into high tolerance (when the individual has a tolerance score for friendship higher than the population average) and low tolerance (when the individual has a tolerance score regarding friendship below the population average). The highest average items represent the situations in which there is greater tolerance in friendly relationships.¹⁴

For data organization and analysis, a database was built in the Excel program (Office 2019) and the program Statistical Package for Social Science (SPSS), version 25.0, was used. Qualitative variables were presented in absolute values (n) and percentages (%). Quantitative variables were exposed in descriptive measures: minimum and maximum values, mean and standard deviation. Cronbach's alpha was applied to analyze the reliability of the instrument applied.¹⁹ Still, the Wordle system, available on the website www.wordle.net, was used to build the word cloud for the variable "feeling about the pandemic COVID-19". This technique consists of using different font sizes and fonts according to the frequency of the words in the analyzed text.²⁰

This project is part of a larger study entitled: tolerance in friendships in the context of the COVID-19 pandemic. The project was submitted, via the Brazil platform, for consideration by the Research Ethics Committee (CEP), being approved under opinion number 4,113,127 on June 26, 2020. In addition, in compliance with the Guidelines and Regulatory Norms for Research Involving Human Beings (Resolution CNS 466/12), the Free and Informed Consent Term was presented and signed (in online mode) by the subjects who agreed to participate in the research before responding to the instruments.

Results

Of the 1003 people who were invited to participate in the study, 24 did not accept to participate, which led to an access population of 979 subjects. The analysis of Cronbach's alpha showed a value of 0.83 for the 21 items of ATRA, which attests to the instrument's satisfactory reliability. Table 1 shows the data on the sociodemographic characterization of health professionals in the 5 Brazilian macro-regions.

Tabela 1- Sociodemographic characterization of health professionals in the 5 Brazilian macro-regions (n = 979). Brazil, 2020.

Description		N	%
Age Range	18 to 29 years	415	42,4%
	30 to 49 years	438	44,7%
	50 to 59 years	47	4,8%
	≥ 60 years	79	8,1%
Total		979	100,0%
Sex	Female	837	85,5%
	Male	139	14,2%
	Other	3	0,3%
Total		979	100,0%
Sexual Orientation	Heterosexual	810	82,7%
	Homosexual	75	7,7%
	Bisexual	70	7,2%
	Others did not respond	18	1,8%
		6	0,6%
Total		979	100,0%
Higher Education Institution with a student or employment relationship	Public	244	24,9%
	Private	357	36,5%
	No educational institution at the moment	378	38,6%
Total		979	100,0%
Schooling	Elementary School	4	0,4%
	High School	119	12,2%
	University Education	359	36,7%
	Postgraduate	p	o
	Master's	91	9,3%
	Doctorate Degree	22	2,2%
Total		979	100,0%
Live Alone	Yes	116	11,8%
	No	863	88,2%
Total		979	100,0%
Breed	Yellow	32	3,3%

	White	413	42,2%
	Indigenous	6	0,6%
	Brown	413	42,2%
	Black	106	10,8%
	Other	9	0,9%
Total		979	100,0%
Monthly income	20 or more minimum wages	25	2,6%
	Between 10 and 20 minimum wages	132	13,5%
	Between 04 and 10 minimum wages	341	34,7%
	Between 02 and 04 minimum wages	305	31,2%
	Up to 2 minimum wages	176	18,0%
Total		979	100,0%
Região de moradia	Midwest	29	3,0%
	South	269	27,5%
	Southeast	425	43,4%
	Northeast	205	20,9%
	North	48	4,9%
	Out of Brazil	3	0,3%
Total		979	100,0%
Profissão	Nurse	402	41,1%
	Nursing Technician	143	14,6%
	Nutritionist	36	3,7%
	Psychologist	93	9,5%
	Doctor	19	1,9%
	Physiotherapist	55	5,6%
	Pharmaceutical	45	4,6%
	Dentist	60	6,1%
	Speech Therapist	12	1,2%
	Others	114	11,6%
Total		979	100,0%

There is a predominance of subjects aged between 30 and 49 years (44.7%), female (85.5%), heterosexual (82.7%), of races / white (42.2%) and brown (42.2%), who receive between 4 and 10 minimum wages (34.8%) and between 2 and 4 minimum wages (31.2%). They are linked to private educational institutions (36.5%), have graduate degrees (39.2%) and come from the Southeast (43.4%) and South (27.5%). In the analysis of the profession, there is a predominance of nurses (41.1%) and nursing technicians (14.6%). Table 2 shows the assessment of the pattern of interpersonal relationships and the unique feeling of health professionals regarding the COVID-19 pandemic.

Description		N	%
In your family environment, is the tolerance of friendship satisfactory?	Yes	903	92,2%
	No	76	7,8%
Total		979	100%
Did your friends help you overcome tensions during the social isolation of COVID-19?	Yes	827	84,5%
	No	152	15,5%
Total		979	100%
Do you believe that there have been changes in your friendship relations since the beginning of the quarantine / social isolation due to the COVID-19 pandemic?	Yes	710	72,5%
	No	269	27,5%
Total		979	100%

Figure 1- Word cloud obtained for the question: Define in one word your feeling about the COVID-19 pandemic (n = 979). Brazil, 2020.

Caption: Medo: Fear; Ansiedade: Anxiety; Tristeza: Sadness; Angústia: anguish; Insegurança: insecurity.

Tabela 3- Evaluation of tolerance in friendly relationships among health professionals during the COVID-19 pandemic (n = 979). Brazil, 2020.

Tolerance in Friendship Relationships			
Overall Rating		n	%
High		884	90,3%
Low		95	9,7%
Total		979	100,0%
Highest average items in the ATA			
Item		Average	Standard Deviation
I accept the defects of my friends, because I know that I also have defects.		4,49	0,85
Friendship is accepting the other person as they are		4,42	0,93
I always strive to find something good in people.		4,26	1,02
Maintaining friendships is something that demands extreme dedication.		4,17	1,05
My friends consider me flexible and tolerant		3,96	1,06

There is a predominance of high tolerance in friendship relationships (90.3%) among health professionals. Still, it is observed that “accept the defects of friends; understand friendship as accepting the other person as they are; strive to find something good in people; understanding and maintaining friendships requires extreme dedication; and friends consider the respondent as flexible and tolerant are the situations in which the subjects are more tolerant in their friendship.

Discussion

There was a predominance of female professionals (85.5%). Similar results were found in an analysis carried out in the state of Paraná, which observed the prevalence of health professionals - nurses, psychologists, doctors, nursing technicians and assistants, pharmacists, community health agents, among others, female (86,8 %)²¹ similar data were found in a survey conducted in Petrolina (Pernambuco) with 221 health professionals, including nursing technicians, nurses, doctors and dentists, of whom 87% were women.²²

Another survey carried out with 69 nurses from a public hospital in Cuiabá also identified the predominance of women (81.2%).²³ This may be related to the historical participation of women in nursing, particularly from the organization of the hospital as a healing space and care.²³ This situation was configured as one of the possibilities of women's work outside the family environment, with the well-known care and care nature of their activities remaining, such as the role that has been assigned to women since past times. The participation of women in health activities was observed in other investigations that addressed the profile of Brazilian nursing. Feminization is a strong feature of the sector, as the majority of the health workforce is female.²⁴⁻²⁷ It currently represents more than 70% of the entire contingent, with growth expected in the coming years, however, in the case of nursing, the data also shows a growing presence of the male population.²⁸

Regarding the age group, there was a predominance of professionals aged between 30 and 49 years (44.7%). Similar data were found in an investigation carried out in the Midwest region of Brazil with 92 health professionals, whose age range varied between 41 and 50 years of age (31.3%).²⁹

This age configuration draws attention, since, although it is a group of health professionals, it is a survey conducted via social networks and for this reason, it might have been imagined that younger people would respond to the research instrument.

In addition, there was a predominance of race / white (42.2%) and brown (42.2%). On the other hand, when analyzing ethnicity, according to the nomenclature of the Brazilian Institute of Geography and Statistics (IBGE), data from the Nursing Profile in Brazil survey show that 42.3% of the nursing team declare to be white. When browns (41.5%) and blacks (11.5%) are added, this percentage reaches 53%, becoming dominant in the composition of ethnicity.²⁹

Regarding the average salary, it was found that 34.8% receive monthly income between 4 and 10 minimum wages. In comparison, a survey conducted in the Midwest of Brazil found monthly income of four to six minimum wages (36.6%).³⁰ However, in another study in the city of São Paulo, family income was between four and eight minimum wages for 38% of participants and above eight minimum wages for 26%.²⁸

The vast wage gap can be attributed to the different professional categories and the different remunerations that generally occur among nursing professionals, in addition to the dissimilarity between the category itself, between technical and higher levels, divergences between the same level are still constant. different regions and states of the country.

Regarding the private-public work area, with regard to the institutional bond, 244 (24.9%) of the respondents were linked to public institutions, 357 (36.5%) to private institutions and 378 (38%) reported not belonging to no institution at the moment, even with a quantity of 384 (39.2%) of those surveyed having high training with Postgraduate courses, revealing a harsh reality of unemployed professionals in the country, even in a time of a pandemic like this, in which the demand for a larger contingent of health workers is constant, many people still remain without employment. When comparing with a study carried out in the state of Paraná, it was found that 59.7% of health professionals had postgraduate degrees.²¹ In this regard, it is highlighted that the contingent of health professionals is also faced, in large part, with the profile of nurses, mostly female, with an average age of 32.7 years; graduates in *lato sensu* courses (specialization); prevailing in hiring by public hospitals under the Consolidation of Labor Laws (CLT) and remuneration of one to five minimum wages.³⁰

The present analysis found a predominance of nurses (41.1%) and nursing technicians (14.6%). Under another bias, a study carried out in Rio Grande do Sul, found that in a sample of 39 nursing professionals, 28% were nursing technicians and 24.4% nurses.²⁹ About this, a large part of the hospital contingent it is formed by nurses and technicians, with the nursing team responsible for making up 60% of the hospital staff³¹, as it corroborates with other studies in the area.³²⁻³³

Regarding the pattern of interpersonal relationships and the

unique feeling of health professionals about the COVID-19 pandemic, it was observed that most health professionals interviewed, considered their tolerance of friendship in the home environment to be satisfactory (92.2%). Thus, friendly relationships are factors that help in the establishment of healthy interpersonal relationships and contribute to the improvement of workers' mental health; therefore, it is related to professional interdependence. With regard to nursing work in the hospital organization, it is signaled as a tool of fundamental importance for the establishment of effective interpersonal bonds, contributing inherently to the provision of health services from the perspective of comprehensive health care.^{12-13,34}

Corroborating this fact, a research carried out in the state of Rio Grande do Sul with 60 adults of these (27 men and 33 women, between 20 and 50 years old), in relation to friendship in the professional environment, demonstrated that such affection is defined through of terms such as: companionship, admiration and guidance, part of the participants also considered that professional colleagues are also friends, in that they help to support the work rhythm and maintain a good-humored environment.³⁵

Therefore, it is possible to affirm that good interpersonal relationships in the work environment can act positively to strengthen and expand trust between coworkers and, consequently, generate greater opportunities for interaction and closer and more organized ways of dealing with the care offered.

Most respondents (84.5%) consider that friends helped to overcome the tensions experienced during the quarantine / social isolation period. This can occur due to the isolation itself and jointly by the hypothesis that COVID-19 can reach anyone, regardless of social class, age or sex, this possibility evokes a feeling of fragility and vulnerability.

The fact is that acting on the front lines to fight a pandemic of this proportion, in which little is known about the disease, as well as the therapeutic possibilities or even possible complications, and yet associated with all this problem, there is the quantitative exorbitant number of patients, including among their colleagues at work, which evokes more feelings of anguish and fear. Thus, there is a need for support and sharing on the part of those who daily live with this previously devastating condition.²

It is observed that about 72.5% of the health professionals interviewed in this study believe that there has been a change in friendship relations since the beginning of the quarantine. This change in the relationship, among other issues, can be associated with the use of electronic equipment for communication. Technology, in addition to influencing people's lives and favoring new habits, also allows for the possibility of real-time integration, regardless of distance.³⁵

The feelings that emanated most frequently among health professionals during the pandemic were: fear (n = 121), anxiety (n = 91) and sadness (n = 74), followed by anguish (n = 53) and insecurity (n = 36). The subjects also report feelings less frequently, such as: despair, worry, uncertainty and hope. About this, it is highlighted that health professionals can face stressors in pandemics, such as: high risk of being infected, getting sick and dying; possibility of infecting other people; overload ; fatigue; exposure to large-scale deaths; frustration at not being

able to save lives, despite efforts; threats and aggression per se, by people who seek care and cannot be welcomed by limited resources; and separation from family and friends.³⁶

With regard to coronavirus in particular, the challenges faced by health professionals can be the tip of the iceberg for triggering or even intensifying symptoms of anxiety, depression and stress³⁷ especially when it comes to those working on the so-called “front line”, That is, in direct contact with patients infected by the virus.³⁸ This corroborates the feelings most mentioned by health professionals in this research, that is, fear, anxiety and sadness. In this sense, in a Chinese study conducted with 1,563 doctors who worked in hospitals in different Chinese cities, the prevalence of stress symptoms was found in 73.4% of respondents, depression in 50.7%, anxiety in 44.7% , and insomnia in 36.1%.³⁹

In general, these professionals have been discouraged from interacting with other people in a close way, which tends to increase the feeling of isolation; have dealt with frequent changes in service protocols as a result of new discoveries about COVID-19; and still depend on significant time in their day to put on and take off personal protective equipment, which increases work-related exhaustion.³⁹

There was a predominance of high tolerance in friendship relationships, 90.3% among health professionals. Having a “high tolerance” in friendships can be related to wanting to be “accepted” by a group or a person, even more so in times of pandemic, since the human being has an induced social distance. In this way, friendly relationships at work can provide relief, security and well-being in times of tension. The six essential requirements in friendship relationships are companionship, help, intimacy, trustworthy alliance, self-validation and emotional security.⁴⁰ However, with social distance, intimacy and other important aspects, tolerance can regress, shaking the pillars of friendly relationships.

It is clear that the pandemic has changed who we are, affecting different areas of our mind. Some changes are positive, such as more humanitarian and community values. In contrast, negative situations, such as intolerance and selfishness, also emerged during the pandemic. Thus, the pandemic has brought changes in the way people relate, work, live in their personal and work lives, which can especially affect the mental health of these individuals.

As limitations of the research, we highlight the fact that the study does not portray all the social and age strata of Brazilian health professionals in a proportional way and that there are not many investigations with this approach for a wide discussion and debate on the topic. In this sense, it is suggested that future studies use stratified random sampling, which will allow the analysis and comparison of data between Brazilian macro-regions.

Conclusion

Tolerance in friendly relationships among health professionals is high. The situations in which they have greater tolerance are: accepting the defects of friends; understand friendship as accepting the other person as they are; strive to find something good in people; understanding and maintaining friendships requires extreme dedication; and friends

consider the respondent to be flexible and tolerant. Therefore, it is suggested that more relationships be strengthened in this period, in order to maintain a favorable mental health, in order to preserve feelings of perseverance and esteem and, consequently, install a more altruistic and cooperative action, improving individual and collective possibilities assistance.

Referências

- 1-Humerez DC de, Ohl RIB, Silva MCN da. Saúde mental dos profissionais de enfermagem do Brasil no contexto da pandemia Covid-19: ação do Conselho Federal de Enfermagem. *Cogitare enferm.* [Internet]. 2020 [acesso em 05 agos 2020]; 25. Disponível em: <https://revistas.ufpr.br/cogitare/article/view/74115/40808>.
- 2-Sousa TV, Melchior LMR, Gondim MC, Silva RC, Carvalho-Filha FSS, Moraes-Filho IM. COVID-19: A importância da pesquisa científica. *REVISA.* 2020;9(Esp1):357-61. Doi: <https://doi.org/10.36239/revisa.v9.nEsp1.p357a361>.
- 3-World Health Organization. Coronavirus disease (COVID-19). Situation Report -193 [Internet]. 2020 Jul [citado 2020 Agosto 03]. Disponível em: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200731-covid-19-sitrep-193.pdf?sfvrsn=42a0221d_4.
- 4-Freitas ARR, Napimoga M, Donalisio MR. Análise da gravidade da pandemia de Covid-19. *Epidemiol. Serv.* 2020; 29 (2): e2020119. doi: <https://doi.org/10.5123/s1679-49742020000200008>.
- 5-Cascella M, Rajnik M, Cuomo A, Dulebohn SC, Napoli RD. Features, evaluation and treatment coronavirus (Covid-19). In: Statpearls. StatPearls Publishing [Internet]. 2020 Jul [citado 2020 Agosto 04]. Disponível em: <https://www.ncbi.nlm.nih.gov/books/NBK554776/>.
- 6-Miranda FMA, Santana L de L, Pizzolato AC, Saquis LMM. Condições de trabalho e o impacto na saúde dos profissionais de enfermagem frente a Covid-19. *Cogitare enferm.* [Internet]. 2020 [acesso em 05 agos 2020]; 25(e72702). Disponível em: <https://revistas.ufpr.br/cogitare/article/view/72702/pdf>.
- 7-Zomer FB, Gomes KM. Síndrome de burnout e estratégias de enfrentamento em profissionais de saúde: uma revisão sistemática. *Rev de Iniciação Científica* [Internet]. 2017 [acesso em: 2020 agosto 03]:15(1):55-68. Disponível em: <http://periodicos.unesc.net/iniciacaocientifica/article/view/3339/3498>.
- 8-Esperidião E, Saidel, MGB, Rodrigues J. Saúde mental: foco nos profissionais de saúde. *Rev. Bras. Enferm.* 2020;73 (Supl 1): e73supl01. doi: <https://doi.org/10.1590/0034-7167.202073supl01>.
- 9-Neto, MLR, Almeida HG, Esmeraldo JD, Nobre CB, Pinheiro WR, Oliveira CRT et al. When health professionals look death in the eye: the mental health of professionals who deal daily with the 2019 coronavirus outbreak. *Psychiatry. Research.* 2020:112972. doi [10.1016/j.psychres.2020.112972](https://doi.org/10.1016/j.psychres.2020.112972).
- 10-Weide JN, Vicentini ECC, Araújo MF, Machado WL, Enumo SRF.

Cartilha para enfrentamento do estresse em tempos de pandemia. Porto Alegre: PUCRS/Campinas: PUC-Campinas. Trabalho gráfico: Gustavo Farinaro Costa, 2020.

11- Oliveira WA, Oliveira-Cardoso EA, Silva JL, Santos MA. Impactos psicológicos e ocupacionais das sucessivas ondas recentes de pandemias em profissionais da saúde: revisão integrativa e lições aprendidas. *Estud. psicol. (Campinas)*. 2020, 37: e200066. doi: <http://dx.doi.org/10.1590/1982-0275202037e200066> .

12- Leão LHC, Gomez CM. The issue of mental health in occupational health surveillance. *Ciênc Saúde Colet*. 2014; 19(12):4649-58. doi: <http://dx.doi.org/10.1590/1413-812320141912.12732014> .

13- Fernandes HN, Thofehr MB, Porto AR, Amestoy SC, Jacondino MB, Soares MR. Relacionamento interpessoal no trabalho da equipe multiprofissional de uma unidade de saúde da família. *J. res.: fundam. care.online*. [Internet]. 2015 [acesso em: 2020 agosto 05]:7(1):1915-26. Disponível em:

<https://www.redalyc.org/pdf/5057/505750945016.pdf>.

14- Moraes- Filho IM, Carvalho LF, Melo LE, Marcelo MRD, Santos YM, Faria MRGV. Construção do instrumento para avaliação da tolerância nas relações de amizade. *Rev. Cient. Sena Aires*. 2019; 8(1): 71-9.

15- Mendelson MJ, Aboud FE. Measuring friendship quality in late adolescents and young adults: McGill Friendship Questionnaires. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*. 1999; 31(2): 130-132. doi: <http://dx.doi.org/10.1037/h0087080>

16- Schlösser A. Elementos caracterizadores das representações sociais da amizade para universitários. *Revista de Psicologia*. 2020;11(1):12-9.

17- França AB, Schelini PW. Análise semântica e evidências de validade da escala metacognitiva para idosos. *Aval. psicol.* [Internet]. 2014 Dez [citado 2019 Maio 09]; 13(3): 333-341. Disponível em:

http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1677-04712014000300005&lng=pt.

18- Reppold CT, Gurgel LG, Hutz CS. O processo de construção de escalas psicométricas. *Aval. psicol.* [Internet]. 2014 Ago [citado 2019 Maio 07]; 13(2): 307-10. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1677-04712014000200018&lng=pt.

19- Hair, JR, Anderson RE, Tatham RL, Black WC. Análise multivariada de dados. 5ª. ed. Porto Alegre: Bookman; 2005.

20- Carvalho Jr PM, Rosa RSL, Sgambatti MS, Adachi EA, Carvalho VCL. Avaliação do programa de residência multiprofissional em saúde da família: uma análise qualitativa através de duas técnicas. *Revista HUPE*. 2012;11 (1):114-9.

21- Garcia GDV, Zanoti-Jeronymo DV, Zambenedetti G, Cervo MR, Cavalcante MDMA. Percepção dos profissionais de saúde sobre saúde mental na atenção básica. *Rev. Bras. Enferm.* 2020;73(1):1-8. doi: <https://doi.org/10.1590/0034-7167-2018-02011> .

- 22-Sampaio LR, Oliveira LC, Pires MFDN. Empatia, depressão, ansiedade e estresse em Profissionais de Saúde Brasileiros. *Ciencias Psicológicas*. 2020; 14(2): e-2215. Doi: <https://doi.org/10.22235/cp.v14i2.2215>
- 23-Spíndola T, Martins ERC. Enfermagem como opção: perfil de graduandos de duas instituições de ensino. *Rev bras enferm*. 2008;61(2):164-9. doi: <https://doi.org/10.1590/S0034-71672008000200004>.
- 24-Benito GAV, Pinheiro SR. Gestão do trabalho: concepções sobre o processo de trabalho gerencial do enfermeiro na atenção básica/estratégia saúde da família. In: *Anais do 2º Seminário de Trabalho em Enfermagem (SITEn)*. 2008: 17-19; Curitiba: ABEn Disponível em: <http://www.abennacional.org.br/2SITEn/Arquivos/N.059.p df>.
- 25-Ramos CS, Heck RM, Ceolin T, Dilélio AS, Facchini LA. Perfil do enfermeiro atuante na Estratégia saúde da família. *Cienc cuid saúde*. 2009;8:85-91. doi: <https://doi.org/10.4025/cienccuidsaude.v8i0.9722> .
- 26-Guerrer FJL, Bianchi ERF. Caracterização do estresse nos enfermeiros de unidades de terapia intensiva. *Rev Esc Enferm. USP*. 2008; 42(2):355-62. doi: <https://doi.org/10.1590/S0080-62342008000200020> .
- 27-Machado MH, Vieira ALS, Oliveira E. Construindo o perfil da enfermagem. *Enferm Foco*. 2012;3(3):119-22. doi: <https://doi.org/10.21675/2357-707X.2012.v3.n3.294>
- 28-Sousa VFS, Araujo TCCF. Estresse Ocupacional e Resiliência Entre Profissionais de Saúde. *Psicol. cienc. prof*. 2015;35(3): 900-15. doi: <https://doi.org/10.1590/1982-370300452014>.
- 29-De Araújo MAN, Filho WDL, Alvarenga MRM, Oliveira RD, Souza JC, Vidmantas S. Perfil Sociodemográfico dos Enfermeiros da Rede Hospitalar. *Rev enferm UFPE on line*. [Internet]. 2017 [citado 2020 Agosto 07];11(11):4716-25 Disponível em: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/viewFile/231214/25225>.
- 30-Gaidzinski, R. R. Dimensionamento de pessoal de enfermagem. In: Kurcgant. P. *Administração em enfermagem*. São Paula: EPU. 1991.
- 31-Trindade LL, Grisa CC, Ostrovski VP, Adamy EK, Ferraz L, Amestoy SC et al. Absentismo en el equipo de enfermería en el ambiente hospitalario. *Enferm glob* [online]. 2014;13: 138-46. doi: <https://doi.org/10.6018/eglobal.13.4.181541>.
- 32-Moura GMSS, Magalhães AMM, Chaves EHB. O serviço de enfermagem hospitalar: apresentando este gigante silencioso. *Rev Bras Enferm* 2001; 54(3): 482-93. doi: <https://doi.org/10.1590/S0034-71672001000300011>.
- 33-Costa, JBR, Silva MAM. Relações Interpessoais da Enfermagem na Organização Hospitalar: um estudo de caso na Unidade de Terapia Intensiva Neonatal. VI Encontro de Estudos Organizacionais da ANPAD, Florianópolis, 2010.
- 34-Taylor S. *The psychology of pandemics: preparing for the next global outbreak of infectious disease*. Newcastle upon Tyne: Cambridge Scholars Publishing; 2019.

- 35-Kipper, A. (2003). *Sobre a amizade: relações de trabalho e bem-estar subjetivo*. Dissertação de Mestrado Não-Publicada, Programa de Pós-Graduação em Psicologia do Desenvolvimento, Universidade Federal do Rio Grande do Sul, Porto Alegre.
- 36-Delfino SS, Pinho Neto JAS, Sousa MRF. Desafios da sociedade da informação na recuperação e uso de informações em ambientes digitais. RDBCI: Revista Digital De Biblioteconomia E Ciência Da Informação, 17, e019036. <https://doi.org/10.20396/rdbci.v17i0.8655973>
- 37-Bao, Y., Sun, Y., Meng, S., Shi, J., & Lu, L. (2020). 2019-nCoV epidemic: address mental health care to empower society. The Lancet, 395(10224), e37-e38. [http://dx.doi.org/10.1016/S0140-6736\(20\)30309-3](http://dx.doi.org/10.1016/S0140-6736(20)30309-3)
- 38-Li Z, Ge J, Yang M, Feng J, Qiao M, Jiang R. et al. (2020a). Vicarious traumatization in the general public, members, and non-members of medical teams aiding in COVID-19 control. Brain, Behavior, and Immunity. 2020; 88:916-19. doi: <http://dx.doi.org/10.1016/j.bbi.2020.03.007>
- 39-Zhang, C., Yang, L., Liu, S., Ma, S., Wang, Y., Cai, Z., ... Zhang, B. (2020a). Survey of insomnia and related social psychological factors among medical staff involved in the 2019 novel coronavirus disease outbreak. Frontiers in Psychiatry. 2020;11(306):1-9. doi: <http://dx.doi.org/10.3389/fpsy.2020.00306>
- 40-Mendelson MJ, Aboud FE. Measuring friendship quality in late adolescents and young adults: McGill Friendship Questionnaires. Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement. 1999;31(2):130-32. doi: <http://dx.doi.org/10.1037/h0087080>

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