Original Article

Sociodemographic and work-related aspects of moral distress in Brazilian nurses

Aspectos sociodemográficos e laborais associados ao distresse moral em enfermeiros brasileiros

Aspectos sociodemográficos y laborales asociados al distrés moral en enfermeros brasileños

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Keywords
Ethics, nursing; Stress, psychological; Stress disorders; Post-traumatic

Descritores
Ética em enfermagem; Estresse psicológico; Transtornos de estresse pós-traumáticos

Descriptores
Ética en enfermería; Estrés psicológico; Trastornos por estrés postraumático

Submitted
October 1, 2018

Accepted
April 22, 2019

Abstract
Objective: Analyze associations between moral distress and sociodemographic and work-related characteristics of Brazilian nurses.
Methods: Cross-sectional study developed across the Brazilian territory between November 2015 and May 2016, in a sample of 1227 nurses, based on the application of the Brazilian Moral Distress Scale in Nurses (EDME-Br), by means of an electronic questionnaire. Descriptive and analytical statistics were used for the analysis.
Results: Statistically significant associations were established in all six factors, namely: 1. Recognition, power and personal identity; 2. Safe and qualified care; 3. Defense of values and rights; 4. Working conditions; 5. Ethical infringements; 6. Work teams. The variables with the largest number of associations were: hour load; graduate degree, nature of service care/complexity, nature, type and duration of employment bond. The role of experience and enhanced education in higher perceived and/or experienced moral distress stood out.
Conclusion: The range of the study and the diversity of the context reveal specificities in the occurrence of moral distress in the Brazilian context, highlighting the need to discover elements that play a role in the nurses' moral experience.

Resumo
Objetivo: Analisar associações entre distresse moral e características sociodemográficas e laborais de enfermeiros brasileiros.
Métodos: Estudo transversal realizado em todo território brasileiro, no período de novembro de 2015 a maio de 2016, com uma amostra de 1227 enfermeiros, a partir da aplicação da Escala Brasileira de Distresse Moral em Enfermeiros (EDME-Br), por meio de questionário eletrônico. A análise empregou estatística descritiva e analítica.
Resultados: Associações estatisticamente significativas foram estabelecidas em todos os seis fatores, são eles: 1. Reconhecimento, poder e identidade pessoal; 2. Cuidado seguro e qualificado; 3. Defesa de valores e de direitos; 4. Condições de trabalho; 5. Infrações éticas; 6. Equipes de trabalho. As variáveis que apresentaram maior número de associações foram: carga horária; pós-graduação, natureza da atenção/complexidade do serviço, natureza, tipo e tempo do vínculo. Destacou-se o papel da experiência e da formação ampliada na maior percepção e/ou vivência do distresse moral.
Conclusão: A amplitude do estudo e a diversidade do contexto revelam especificidades quanto à ocorrência do distresse moral no cenário brasileiro, reforçando a necessidade de conhecer elementos que participam da experiência moral dos enfermeiros.

Resumen
Objetivo: analizar asociaciones entre distrés moral y características sociodemográficas y laborales de enfermeros brasileños.
Métodos: estudio transversal realizado en todo el territorio brasileño, en el período de noviembre de 2015 a mayo de 2016, con una muestra de 1.227 enfermeros, a partir de la aplicación de la Escala Brasileña de Distrés Moral en Enfermeros (EDME-Br), por medio de cuestionario electrónico. El análisis empleó estadística descriptiva y analítica.
Resultados: se establecieron asociaciones estadísticamente significativas en los seis factores, que son: 1) reconocimiento, poder e identidad personal, 2) cuidado seguro y calificado, 3) defensa de valores y derechos, 4) condiciones de trabajo, 5) infracciones éticas, y 6) equipos de trabajo. Las variables que presentaron mayor número de asociaciones fueron: carga horaria, posgraduación, naturaleza de la atención/complejidad del servicio, naturaleza, tipo y tiempo del vínculo. Se destacó el papel de la experiencia y de la formación ampliada en la mayor percepción o vivencia del distrés moral.
Conclusión: la amplitud del estudio y la diversidad del contexto revelan especificidades respecto a los casos de distrés moral en el escenario brasileño, lo que refuerza la necesidad de conocer elementos que participan de la experiencia moral de los enfermeros.

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DOI
http://dx.doi.org/10.1590/1982-0194201900056

How to cite:
Ramos FR, Barth PO, Brito MJ, Caram C, Silveira LR, Brehmer LC, et al. Sociodemographic and work-related aspects of moral distress in Brazilian nurses. Acta Paul Enferm. 2019;32(4):406-15.

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Conflicts of interest: none to declare.

Introduction

The nurses experience intense moral problems in their daily work, among other reasons, because they work twenty-four hours per day in the care of patients and their families, being responsible for the care, teaching, research and management in the various work scenarios.[1,2] Moral problems can be a source of moral distress when nurses encounter barriers that prevent them from deliberating, causing anguish, sadness, anger, frustration, and impotence, among other manifestations.

Moral distress is considered a process with a singular moral experience, as each individual takes responsibility and judges moral problems in different ways. It can be triggered when the professional, faced with a moral problem, weaves his judgment, but is unable to act, when the process of moral deliberation is curtailed due to obstacles that impede the ethical-moral positioning.[3] After the use of international studies to analyze Moral Distress in nurses, a group of researchers constructed and validated the Brazilian Moral Distress Scale in Nurses (EDME-Br), intended to measure the intensity and frequency of moral distress in nurses, considering some sociodemographic and work-related variables.[4]

Different influences can affect the nurses' experience of moral distress, including their gender conditions, ethnicity and the context they are active in.[5] Specifically, sociodemographic and work-related characteristics can influence the nurse's moral sensitivity to the problems she is confronted with in practice. Moral sensitivity is considered as the "capacity for differentiated perception, refinement, education or instrumentalization of perception."[3] For this refinement, the authors also mention that being a nurse is developed throughout life and one's ethical-moral and professional formation. Therefore, several variables can influence moral sensitivity, participating in the intense processes of socialization that contribute to the professionalization of nurses.

Studies either point to the association between moral distress and sociodemographic variables such as age, sex, and religion,[5-7] or do not mention this relationship, although they express the association of moral distress with work-related factors.[8] The experience of situational stressors in the work environment, which prevent nurses from acting in accordance with their values, can arouse anguish that, when accumulated (moral residue), produces moral distress.[9] Based on this perspective, it is argued that the main barriers related to nurses' moral commitment are related to institutional factors and the nurses' work.[10] Therefore, the organization of work and the ways in which nursing practice is inserted in institutions (interfering in different work-related aspects) can be sources of moral problems and thus trigger moral distress.

Studies related to moral distress need to go beyond descriptive research limited to knowing the underlying reasons and to explore other options, as is the proposal of this study. The aim of this article was to analyze associations between moral distress and sociodemographic and work-related characteristics of Brazilian nurses.

The results may arouse reflections about moral distress and its relation with the context and with particularities of professional practice, also appointing new associations with the theme of moral distress. In addition, it can provide support that surpasses the palpable and already studied causes on the subject, permitting the discussion of tendencies that a sociodemographic and work-related profile can generate in the experiences of moral distress among nurses who work in different health scenarios.

Methods

Cross-sectional study involving nurses from all over Brazil, based on a population of 451,666 professionals in the database of the Federal Nursing Council. The calculation of the sample estimated at least 380 participants, a 95% confidence interval and precision of 50 ± 2% of the estimation, in accordance with the parameters for a finite population.(11) The non-probabilistic sample was expanded, given the range of the population and of the professional activity contexts and services, up to the largest number of instruments answered within the expanded

data collection period, reaching 1227 participants. The inclusion criteria were: undergraduate degree in Nursing and current or background experience in care of at least six months.

The data were collected by means of an electronic form (*Google.docs*) over a six-month period (November 2015 till May 2016), stimulating: initially, by an (convenience-based) e-mail invitation to professionals from teaching institutions and care services, particularly managers, located by means of a search in the institutional registers, requesting further dissemination of the study; to reach the sample and achieve regional representation, social networking served as a catalyst, focusing on the user profile identified as "nurse". The participants only got access to the instrument after reading further information on the research, confirming the inclusion criteria and reading and signing of the informed consent form.

The Brazilian Moral Distress Scale in Nurses (EDME-Br) was applied, an instrument that was constructed and validated in the Brazilian context.[4,12] The scale consists of 49 items that presenting predictors or triggers of moral distress on a double seven-point Likert scale, being one for frequency (ranging from 0 = never to 6 = very frequently) and one for intensity (ranging from 0 = none to 6 = very intense). Sociodemographic and work-related variables were surveyed on the identification page, considering: age; sex; state of the Brazilian Federation; time since graduation; complementary education (type); number of bonds; type and nature of the bond; place/service of activity; experience; weekly workload. The instrument items relate to six factors, being: "Recognition, power and personal identity" (11 items), "Safe and qualified care" (11 items), "Defense of values and rights" (eight items), "Working conditions" (six items), "Ethical infringements" (six items" and "Work teams" (seven items).[12]

For the analytical procedure, SPSS (PASW Statistic®, PredictiveAnalytics Software) software, version 23.0 was used. Descriptive statistics were used to analyze the qualitative variables by means of relative and absolute frequency distribution. Data normality was tested using the Kolmogorov-Smirnov test, showing asymmetric distribution of the data. Mann-Whitney's U and Kruskal-Wallis tests were applied, depending on the number of groups of the variables tested. For the variables with three or more groups, paired comparisons were made, such as the post-hoc test to identify intergroup differences, with 95% significance ($p<0.05$).

The research complied with the Brazilian and international research guidelines. Approval was obtained from the Ethics Committees for Research involving Human Beings at the three universities engaged in the Multicenter Project – opinions 602.598-0 from 02/10/2014 (UFSC); 602.603-0 from 01/31/2014 (UFMG) and 511.634 from 01/17/2014 (FURG).

Results

The 1227 Brazilian nurses who participated in the study were characterized as follows (Table 1): mostly women; being 30 and 49 years of age; graduated between 1 and 10 years earlier; *lato sensu* post-graduation degree; one employment bond; up to 10 years of experience at the same institution; weekly workload of 31 to 40 hours and tenured or contracted in accordance with the Brazilian labor law. Representativeness was achieved in terms of different types of main employment service and region; in the latter, the professionals' distribution across the different regions was considered, in line with the COFEN register, despite the smaller share of the Brazilian Northeast and the larger share from the South of the country in comparative terms.

In table 2, the associations between the moral distress factors and the nurses' sociodemographic and work-related variables are shown.

Statistically significant associations were evidenced with all factors and different variables. The variables that presented the highest number of associations with different factors were weekly workload; (level of complexity of the service), nature, type and time of the bond (associations between five and three factors).

The weekly workload was the variable with the highest number of associations, with five factors (all

Table 1. Participants' characteristics (n = 1227)

Variables	n(%)
Age	
20 to 29 years	210(17.1)
30 to 39 years	512(41.8)
40 to 49 years	299(24.4)
50 years or older	204(16.6)
Sex	
Female	1148(93.6)
Male	78(6.4)
Time since graduation	
Less than 1 year	24(2.0)
1 to 5 years	349(28.5)
6 to 10 years	386(31.5)
11 to 15 years	178(14.5)
16 to 20 years	93(7.6)
More than 20 years	189(15.4)
Complementary and postgraduate education	
Undergraduate with or without training	168(22.3)
Specialization/Residency	800(65.3)
Master's	127(10.4)
Doctoral	20(1.6)
Number of jobs	
One	863(70.4)
Two	323(26.3)
Three or more	33(2.7)
Nature of bond	
Public	824(67.2)
Private	347(28.3)
Other	49(4.0)
Type of contract (Main)	
Brazilian Labor Code	523(42.7)
Tenured	531(43.3)
Self-employed	16(1.3)
Temporary	80(6.5)
Other	71(5.8)
Length of experience/bond (Main)	
Up to 5 years	625(51.0)
6 to 10 years	269(21.9)
11 to 15 years	144(11.7)
16 to 20 years	69(5.6)
More than 20 years	116(9.5)
Weekly workload (Main)	
Up to 20 hours	38(3.1)
21 to 30 hours	237(19.3)
31 to 40 hours	619(50.5)
More than 40 hours	330(26.9)
Institution/service (Main)	
Primary Care services	273(22.3)
General and specialized inpatient services	231(18.8)
Emergency and mobile services	207(16.9)
Intensive Care Units	150(12.2)
Other services and specialized and support services	365(29.7)
Regions of the Country	
North	87(6.6)
Northeast	186(14.1)
Central-West	111(8.4)
South	292(22.2)
Southeast	552(41.9)

except factor 1). There is no linear relationship between higher workloads and higher MD. It can be observed from the post-hoc test that the difference is in the group with a workload of 21 to 30 hours, which presents higher MD compared to the groups of 31 to 40 hours in factors 2 ($p = 0.002$), 3 ($p = 0.004$), 4 ($p = 0.009$), 5 ($p = 0.002$) and 6 ($p = 0.025$). Although it is the group with the highest MD, those who work from 21 to 30 hours are not the majority of the workers.

We also identified an association between postgraduate education and MD in factors 2, 3, 4, 5 and 6. Regarding the intergroup difference, professionals holding a master's (Factor 2: $p < 0.001$, factor 3: $p < 0.001$, factor 4: $p = 0.014$, factor 5: $p = 0.012$, and factor 6: $p = 0.015$) and doctoral degree (factor 2: $p = 0.001$, factor 3: $p = 0.049$, factor 4: $p = 0.022$, factor 6: $p = 0.003$) presented higher MD and differed in all these factors from professionals who do not hold a postgraduate degree. In addition, Master's and doctoral graduates presented higher MD compared to those with training and specialization or residency in factors 2, 3 and 6. In all these cases, increasing MD intensities are observed when the level of training is higher, with doctoral graduates presenting the highest rates.

Regarding the nature of care, the professionals who worked in secondary care showed higher MD compared to primary care in factors 2 ($p = 0.039$), 3 ($p = 0.023$) and 5 ($p < 0.001$). Regarding factor 5, tertiary care patients also presented higher MD compared to primary care ($p = 0.001$). The only factor in which those who work in primary care have higher MD was 4 when compared to tertiary care ($p = 0.036$).

Regarding the nurses' affiliation, the association between the nature, type and time and MD was investigated. In relation to the nature of the bond, the highest MD occurred in the public service when compared to the private service, in factors 2 ($p < 0.001$), 3 ($p = 0.001$), 4 ($p < 0.001$) and 6 ($p = 0.016$). Corroborating this finding, tenured workers also presented higher MD compared to the Brazilian Labor Law in factors 2 ($p < 0.001$), 3 ($p = 0.002$) and 4 ($p < 0.001$). Only in factor 4 did professionals working on a temporary contract

Table 2. Associations between nurses' moral distress and sociodemographic and work-related variables

Variables		Factor1-RPI		Factor2-SQC		Factor3-DVR		Factor4-WC		Factor5-EI		Factor6-WT	
	n**	Md	p	Md	p	Md	p	Md	p	Md	p	Md	p
Sex													
Male	78	626.76	0.438	648.05	0.160	654.15	0.076	572.14	0.638	679.27	0.017*	644.72	0.169
Female	1116	595.45		590.84		581.94		591.21		582.40		588.92	
Age													
Younger than 30	208	591.15	0.005*	567.82	0.640	565.64	0.353	541.12	0.140	587.11	0.488	574.36	0.755
30 to 39 years	507	625.90		603.52		606.41		603.70		601.71		601.37	
40 a 49 years	285	600.42		591.59		569.78		602.15		585.57		596.09	
50 years or older	193	522.34		600.79		579.16		586.22		557.00		580.51	
Time since graduation													
Up to 5 years	366	587.31	0.497	561.20	0.026*	565.46	0.160	537.66	<0.001*	593.25	0.479	566.36	0.081
6 years or more	828	602.00		609.15		595.68		612.92		586.39		604.01	
Postgraduate education													
No	164	533.25	0.176	510.29	<0.001*	515.37	<0.001*	518.32	0.001*	527.84	0.004*	519.33	0.001*
Training	100	597.13		526.76		564.61		537.27		598.49		567.83	
Spec/Resid	780	604.10		593.06		580.31		593.43		580.49		592.24	
Master's	127	613.56		701.43		682.71		648.31		658.31		648.38	
Doctoral	18	620.39		856.47		751.58		770.26		757.44		825.28	
Number of Bonds													
1	840	599.27	0.785	581.66	0.046*	578.12	0.188	575.58	0.024*	585.14	0.598	585.55	0.278
2 or more bonds	354	593.31		625.24		606.68		624.57		596.60		609.20	
Nature bond													
Public	802	603.44	0.386	632.42	<0.001*	606.99	0.001*	644.74	<0.001*	600.01	0.104	609.84	0.012*
Private	339	579.04		496.99		524.32		453.28		554.98		548.05	
Other	47	553.53		568.61		599.60		558.35		555.96		538.86	
Type Contract													
Labor law	513	587.01	0.265	533.91	<0.001*	543.81	0.001*	504.31	<0.001*	561.09	0.073	565.73	0.071
Tenured	521	612.57		656.85		623.06		670.49		615.04		617.81	
Self-employed	15	591.40		566.00		692.36		624.50		670.29		641.25	
Temporary	74	598.68		583.09		611.19		628.18		574.36		607.04	
Other	66	515.09		543.77		526.30		523.54		542.31		528.44	
Length bond													
Up to 5 years	614	603.95	<0.001*	571.08	0.015*	584.87	0.071	560.28	0.011*	589.26	0.172	582.99	0.217
6 to 10 years	264	606.79		599.16		570.16		617.17		594.67		610.83	
11 to 15 years	136	643.04		674.01		643.15		659.81		613.99		627.24	
16 to 20 years	66	619.03		647.44		626.21		621.66		606.06		604.17	
More than 20 years	111	455.04		568.41		527.90		569.04		514.22		535.81	
Nature													
Primary care	368	593.19	0.181	570.74	0.029*	555.83	0.027*	615.09	0.016*	525.09	<0.001*	560.20	0.086
Secondary	352	624.83		634.51		623.79		610.94		626.91		613.77	
Tertiary	474	580.55		582.98		582.48		555.11		609.03		601.53	
Weekly workload													
Up to 20 hours	37	478.05	0.058	552.10	0.002*	607.75	0.008*	589.03	0.010*	544.58	0.004*	490.47	0.026*
21 to 30 hours	232	614.21		671.11		649.83		656.88		654.54		632.23	
31 to 40 hours	600	583.71		575.51		559.99		573.38		560.40		572.78	
More than 40 hours	323	621.11		575.50		584.28		570.63		594.34		610.24	

** Obs.: "n" changes according to the association with different variables, as only the valid answers of the two test variables are taken into account
Factor 1: RPI (Recognition, power and personal identity)
Factor 2: SQC (Safe and qualified care)
Factor 3: DVR (Defense of values and rights)
Factor 4 WC (Working conditions)
Factor 5 EI (Ethical infringements)
Factor 6 WT (Work teams)

also present a higher MD compared to the professionals governed by the Brazilian Labor Law (p = 0.035) and other (p = 0.012). Regarding the duration of the bond, factor 1 showed that those with more than 20 years of experience presented lower MD compared to all other groups, that is, up to five years (p <0.001), six to 10 years (p = 0.001), 11 to 15 years (p <0.001), and 16 to 20 years (p = 0.022). In factors 2 and 4, those with 11 to 15 years of experience presented higher MD compared to those of up to five years (p = 0.016 and p = 0.021, respectively). MD thus increased with the length of

experience and dropped only after 20 years or more of experience.

Finally, other variables such as sex, age, graduation time and the number of bonds were also associated with MD in a smaller number of factors. The gender variable was associated with factor 5, and male nurses presented higher MD regarding this aspect. On the other hand, the age variable showed an association when professionals between 30 and 39 years old presented a higher MD intensity in factor 1 when compared to the group of 50 years or older ($p = 0.002$). Finally, professionals who graduated six or more years earlier and have two or more work bonds showed higher MD in factors 2 and 4.

Discussion

The relation between sociodemographic and work-related variables and the MD of Brazilian nurses expresses important aspects whose distinctions need further analysis and consideration in relation to the international context.

The first aspect refers to the nature of the institution of professional affiliation, which seems to modify the type of MD predictors that is most significant. Thus, public servants demonstrated higher MD rates related to the constructs. Safe and qualified care (unfitness of practices and routines, insufficient welcoming, integration, continuity, humanization and problem-solving ability of care), Working conditions (insufficient quantity and quality of material conditions), Defense of values and rights and work teams (insufficient quantity and quality/ preparation/skills of the nursing and multiprofessional team members). It is difficult to compare this data with international studies, as most studies are carried out in hospitals, sometimes institutions or specific clinical sectors, when comparisons are not always made between public and private service characteristics.

In addition, not all international studies permit associations with sociodemographic variables, and when they do, the associations are well distinguished, leading to the assertion that there is no clear congruence on sociodemographic variables and moral distress in the expanded scenario of the studies, which may be due to cultural and contextual differences.[13]

No linear analysis was possible about the association between the care/service complexity level and moral distress, as the associations appear blurred between the three levels. Nevertheless, MD was not associated with the working conditions in secondary care. This can be inferred from the compatible logistics, material and personnel infrastructures (material and non-material technologies) of these services when compared to primary care, although the care logic of attention in health networks is taken into account, in which good practices at one care level enhance the problem-solving ability of another level.[14]

On the other hand, there is an association between high MD and primary care professionals regarding the Working Condition when compared to tertiary care. Studies have pointed to the nurses' precarious working conditions in this context, involving longer work hours, low remuneration, difficulties in health teamwork, lack of material, human resources and equipment.[15,16] This association was also found in a study that validated the instrument to identify situations triggering MD in nurses in the specific context of Primary Health Care.[17]

In addition, linear interpretations of cause and effect are also impossible, as if lesser feelings reported in the situations described in all constructs indicated better conditions or fewer problems faced, or only less awareness/attention to them. Nor can it be supposed that some associations, such as the ethical infringements factor (only with sex and level of education), indicate more or less importance of these situations, but only that there is greater homogeneity in their perception, in different contexts. We start from a productive conception of MD, which relates it to moral sensitivity and the development of moral competencies for the deliberation, judgment, and positioning of nurses.

The moral sensitivity and its articulation with the development of moral competencies are expressed in the fact of considering them as part of the social construct of the subjects, guiding their perceptions. These perceptions are accompanied by

feelings of restlessness and uncertainty, which mobilize nurses to confront or experience moral distress.[3] Ethical sensitivity is linked to practice, being limited by knowledge gaps related to ethics, lack of work experience, hierarchical organizational climate and conformist attitude; differently, positive cultural environments at work enhance such sensitivity.[18]

In this analysis, the relationship between greater moral distress among public service professionals, for example, may require that we reflect on real problems and precarious conditions, work teams and quality and safety of care, or on the possibility that work environments and management forms favor reflection and a critical approach to the ends and means of work. Finally, is the suffering due to working in worse conditions or to working with more reflection, discussion, and high qualitative ideals?

Similar reflections apply to other variables, such as work experience (higher MD in factors 1, 2 and 4) and time since graduation (associated with factors 2 and 4). Factor 1 (power and identity recognition) was the only one in which nurses with longer experience (+ 20 years) had lower MD compared to the other groups. In other words, the results showed that professional experience enhances MD for several reasons, but reduces it for other reasons. This controversial role of experience in the way the nurses address ethical problems indicates that time leads to the development of more effective forms of coping with moral suffering and to cumulative levels of anguish, as well as to "desensitization". In other words, this again remits to the individual nature of the experience, when the nurses can either get accustomed to the MD or experience it cumulatively as they gain experience.[13]

In that sense, not suffering is not necessarily good, as it may be related to not perceiving a moral problem, to stagnation in uncertainty regarding moral problems or lack of ethical, political and advocational expressiveness. Stagnation in uncertainty obstructs the perception of the existence of the moral problem, blocking the triggering of moral deliberation.[19] Therefore, it is in this sense that suffering can be productive and a source of resistance, given that it can stimulate moral reflection and deliberation in relation to situations experienced in daily life, especially when nurses practice their advocacy.

MD is acknowledged as a unique experience, taking into account internal and external elements that weigh on professional experience. The moral expression represented by the uncertainty/perception, by the moral deliberation and/or by the very experience of the MD is constructed in contextual circumstances of life that represent the identity of the subjects and the responsibility they assume, pointing to the singularity of that experience. Thus, the concrete relationship between the sociodemographic variables and the MD is affirmed by the results of this study, as these variables are part of the context the nurses experience and determine their moral position towards the potential circumstances triggering MD.

The fact that one does not feel impeded from deciding/acting according to personal values and judgments may mean that there is a climate of greater autonomy and respect for professional roles or, differently, that the recognition of these roles and the possibility of autonomous deliberation are that small, and thus crystallized in the institutional body, that one no longer perceives in one's decision territory and engagement in certain problems and questions - on which positioning is not demanded and therefore, for which one does not suffer. There is, therefore, a rupture with the value system that impairs moral sensibility, perpetuating stagnation and uncertainty, in which nurses are no longer able to perceive the moral problem they are experiencing.[3] This loss can provoke invisibilities concerning the recognition of the self, by the self and by the other, with important identity repercussions, which may lead to more severe cases of abandonment of the profession, a consequence addressed in several studies.[3,6,21,22]

This reasoning applies in a similar way to the association between the "Safe and qualified care", "Defense of values and rights", "Working conditions" and "Work teams", in which MD increases with the time since graduation, experience in the same service and with the extension of the training (post-graduate education). Education is a space for the development of ethical-moral competencies,

which reinforces the position and moral deliberation of the nurse.[23] Distancing from the precepts of education and daily and continuous dealing with moral problems can devastate the moral integrity of the nurse, composing the moral residue. This residue can be considered as the accumulation of feelings related to the experience of MD, further enhancing it.[9]

In the international scenario, there was a positive relationship between the experience of working with ethical sensitivity scores of nurses, demonstrating that clinical practice also plays a role in the construction of ethical sensitivity.[18]

The moral residue may also be related to the association of the variable age and time of the bond with the triggering factor of MD recognition, power, and personal identity. Although the linear relation of this variable, as well as sex, is not recognized in the literature either regarding its association with MD, it can be inferred that age and length of experience can predict the moral residue.[5,6,22,23] In this regard, it is worth reflecting that, just like moral experience, recognition, power and personal identity are built over time and through countless experiences of moral problems in everyday life. In this way, nurses with greater experience may accumulate feelings (moral residue) that lead to the onset of MD.

The study participants with bonding time between 11 and 15 years were those with the highest MD intensities (in 3 factors), which may be related to the moral residue, greater moral sensitivity, difficulties in relationships or rigidity of judgments. These arouse the risk that, justified by experience and expertise, professionals will evaluate in an arrogant way, imposing their reasons, assuming that they are right. This risk is not restricted to the more experienced, but to the clear difficulty in evaluating the moral divergences at work, to differentiate more correct, grounded and just ethical and personal points of view. This dubious characteristic leads to the point of indicating the abandonment of the concept of MD.[24,25]

Despite agreeing with the limits of the concept, research on the theme needs to advance further in the Brazilian context, but should already open up to new research areas, moving beyond the simple observation of the experience to deepen the understanding and the bases underlying the judgments and the ethical conducts leading to the situations found and to the impossibility or disability to solve them.

For the current research period, the study has contributed to the complexity of the problem, showing that sociodemographic and work-related variables influence the nurses' perception of the situations they face in daily life, as dealing with moral issues involves, in addition to personal issues, the social aspect.[26] In addition, moral and work-related issues are directly related to job satisfaction and to the onset of MD.[6]

The limits of the study do not permit a deeper understanding and the bases of the judgments and the ethical conducts that are leading to the situations encountered and to the lack or incapacity to solve them.

Overall, the study contributes to highlighting the concrete experience of nurses with MD and their moral position in the face of potential triggering circumstances. Finally, we see the need for studies that amplify other dimensions related to MD, in order to reflect particularities of the concepts and elements that support the professionals' conduct/action in their work experiences.

Conclusion

In view of the results found, the associations between MD and the sociodemographic and work-related characteristics of Brazilian nurses could be analyzed. The variables that presented the highest rates are related to the constructs "safe and qualified care", "working conditions" and "work teams". Therefore, it is concluded that, while playing a relevant social role, nurses are vulnerable in their work environment. There is a stagnation of the employment situation, which is not limited to the individual performance of the professional. Despite much research, discussion, and reflection on the abovementioned problems, little progress towards solving them or even mitigating them has been made over the last years.

The time of the bond is perceived as significant. The highest intensities of moral distress were associated with bonds between 11 and 15 years, which may be related to the moral residue, greater moral sensitivity or difficulties in interpersonal relationships. Professional experience and expertise can also be used as justifications for rigid judgments or arrogant assessments, imposing personal reasons as presumably correct. It should be noted that, in secondary care, there was no association between MD and working conditions. On the other hand, this association is strongly perceived in primary care. Several factors can contribute to this result, such as the precariousness of working conditions, relationships among work teams, quality and safety of care, work environments and management forms. Although the international literature addresses the issue of moral distress in the health area, there were difficulties in comparing these Brazilian results with international studies, as most of them are developed in hospitals, sometimes institutions or specific clinical sectors, when comparisons are not always made between public and private service characteristics. In addition, not all international studies permit associations between sociodemographic variables. In short, is the suffering due to working in worse conditions or to working with greater reflection, discussion and high ideals of quality?

Acknowledgements

Brazilian Scientific and Technological Development Council (CNPq) and Coordination for the Improvement of Higher Education Personnel (CAPES).

Collaborations

All authors declare that they contributed to the production of the research in the following aspects: Project design and data analysis and interpretation; Writing of the article and relevant critical review of the intellectual content: Final approval of the version for publication.

References

1. Dalmolin GL, Lunardi VL, Lunardi GL, Barlem EL, Silveira RS. [Nurses, nursing technicians and assistants: who experiences more moral distress?]. Rev Esc Enferm USP. 2014; 48(3): 521-9. Portuguese.
2. Silvino MC, Wakiuchi J, Costa JR, Ribeiro AL, Sales CA. [Moral suffering experiences in nursing staff]. Rev Enferm UFPE. 2016;10(3): 1054-62. Portuguese.
3. Ramos FR, Barlem EL, Brito MJ, Vargas MA, Schneider DG, Brehmer LC. [Conceptual framework for the study of moral distress in nurses]. Texto Contexto Enferm. 2016; 25(2):1-10. Portuguese.
4. Ramos FR, Barlem EL, Brito MJ, Vargas MA, Schneider DG, Brehmer LC. [Construction of the brazilian scale of moral distress in nurses - a methodological study]. Texto Contexto Enferm. 2017; 26(4):e0990017. Portuguese.
5. O'Connell CB. Gender and the experience of moral distress in critical care nurses. Nurs Ethics. 2015; 22(1):32-42. ;
6. Veer AJ, Francke AL, Struijs A, Willems DL. Determinants of moral distress in daily nursing practice: a cross sectional correlational questionnaire survey. Int J Nurs Studies. 2013; 50(1): 100-8.
7. Meltzer LS, Huckabay LM. Critical care nurses' perceptions of futile care and its effect on burnout. Am J Critical Care. 2004;13(3):202-8.
8. Corley MC, Minick P, Elswick RK, Jacobs M. Nurse moral distress and ethical work environment. Nurs Ethics. 2005;12 (4):381-90.
9. Epstein EG, Delgado S. Understanding and addressing moral distress. OJIN: The Online Journal of Issues in Nursing. 2010;15(3):1-13.
10. Peter E. Guest editorial: Three recommendations for the future of moral distress scholarship. Nurs Ethics. 2015;22(1): 3–4.
11. Bolfarine H, Bussab WO. Elementos de amostragem. São Paulo: Blucher; 2005.
12. Ramos FRS, Barlem ED, Brito MJ, Vargas MA, Scheneider DG, Brehmer LFC. Construction of the Brazilian Scale of Moral Distress in nurses - a methodological study. Texto Contexto Enferm. 2017;26(4):e0990019.
13. Oh Y, Gastmans C. Moral distress experienced by nurses: A quantitative literature review. Nurs Ethics. 2015; 22(1):15–31.
14. Erdmann AL, Andrade SR, Mello AL, Drago LC. [Secondary Health Care: best practices in the health services network]. Rev Lat Am Enfermagem. 2013;21(No Spec): 131-9. Portuguese.
15. Pires DE, Machado RR, Soratto J, Scherer MA, Gonçalves AS, Trindade LL. [Nursing workloads in family health: implications for universal access]. Rev Lat Am Enfermagem. 2016;24(e2682):1-9. Portuguese.
16. Schmoeller R, Trindade LL, Neis MB, Gelbcke FL, Pires DE. [Nursing workloads and working conditions: integrative review]. Rev Gaúcha Enferm. 2011; 32(2):368-77. Portuguese.
17. Barth PO, Ramos FR, Barlem EL, Dalmolin GL, Schneider DG. Validation of a moral distress instrument in nurses of primary health care. Rev Lat Am Enfermagem. 2018;26:e3010.
18. Huang FF, Yang Q, Zhang J, Khoshnood K, Zhang JP. Chinese nurses' perceived barriers and facilitators of ethical sensitivity. Nurs Ethics. 2016; 23(5):507-22.

19. Barlem EL, Ramos FR. Constructing a theoretical model of moral distress. Nurs Ethics. 2014; 22(5): 608-15.

20. Peter E, Liaschenko J. Moral distress reexamined: a feminist interpretation of nurses' identities, relationships, and responsibilites. J Bioethic Inq. 2013;10(3):337-45.

21. Lusignani M, Gianni ML, Re LG, Buffon ML. Moral distress among nurses in medical, surgical and intensive-care units. J Nurs Manag. 2016; 25(6):477-85.

22. Dyo M, Kalowes P, Devries J. Moral distress and intention to leave: A comparison of adult and pediatric nurses by hospital setting. Intensive Crit Care Nurs. 2016; 36:42-8.

23. Woods M, Rodgers V, Towers A, Grow SL. Researching moral distress among New Zealand nurses: a national survey. Nurs Ethics. 2015;22(1):117-30.

24. Renno HM, Ramos FR, Brito MJ. Moral distress of nursing undergraduates: Myth or reality?. Nurs Ethics. 2016; 25 (3):304-12.

25. Johnstone MJ, Hutchinson A. 'Moral distress' – time to abandon a flawed nursing construct? Nurs Ethics. 2015;22(1): 5-14.

26. Catlin A, Armigo C, Volat D, Vale E, Hadley MA, Gong W, Bassir R, Anderson K. Conscientious objection: a potential neonatal nursing response to care orders that cause suffering at the end of life? Study of a concept. Neonatal Network. 2008; 27 (2):101-8.