Journal of Positive School Psychology http://journalppw.com
2023, Vol. 7, No. 7, 139-146

Validation Of The Moral Sensitivity Questionnaire Among Nurses, During COVID-19 Pandemic In Pakistan

Nasim Rafiq[1] , **Shazia Noureen**[2] , **Robina Majeed**[3] , **Prof. Dr. Shahbaz Arif**[4] , **Prof. Dr. Rusli Bin Nordin**[5]

[1]*Principal, Shalamar Nursing, College Lahore, Pakistan.*
[2]*Nursing Lecturer, Shalamar Nursing, College Lahore, Pakistan.*
[3]*Senior Nursing Lecturer Shalamar Nursing, College Lahore, Pakistan.*
[4]*HOD English Linguistic Department Shalamar Institute of Health Sciences.*
[5]*Dean Faculty of Medicine & Bio-Science Nursing, MAHSA University Malaysia.*
Corresponding Author
Nasim Rafiq, Principal, Shalamar Nursing, College Lahore, Pakistan.

Abstract

Background: Moral sensitivity refers to to an individual's ability to perceive and respond appropriately to moral elements in a specific situation. Assessing moral sensitivity in this particular context can provide valuable insight into how nurses handle difficult situations, make tough decisions, and uphold their professional integrity and ethical responsibilities. To measure this, a specific questionnaire is necessary for assessment.

Objective: To validate the Moral Sensitivity Questionnaire specifically for nurses in Pakistan who have been working during the challenging times of the COVID-19 pandemic.

Method: A cross-sectional study design was used to gather data through convenience sampling from 298 nurses working at Shalamar and Mayo Hospital Lahore, Pakistan. The data were collected using a questionnaire that was validated by five experts in the field. The collected data were analyzed using SPSS 21.0 and display in the form of table.

Result: Most of them were females aged 20 to 35, and about 57.7%, worked in public hospitals. The analyzed KMO value (0.838), the Bartlett's test reveals a value of 0.000, which is less than 0.05 and the Cronbach's alpha coefficient of 0.924. Moreover the cumulative percentage variance for the 7 factor was (67.9%).

Conclusion: The MSQ proves to be a suitable tool for assessing moral sensitivity among Pakistani nurses due to its favorable factor structure, strong inter-question correlations, and adherence. This tool is particularly well suitable for developing country, as it offers easily understandable questions with strong factor analysis.

Keywords: Validation, Moral Sensitivity, Questionnaire, Nurses, COVID-19, Pakistan.

Introduction: Moral sensitivity refers to the capacity of individuals to recognize and appropriately respond to moral aspects within a given situation (1). It involves being attuned to ethical dimensions, values, and principles while making decisions and taking actions (2). In the context of nursing during the COVID-19 pandemic, moral sensitivity becomes even more

critical as nurses are faced with dilemmas related to resource allocation, triage decisions, patient autonomy, risk management, and ethical obligations towards patients, colleagues, and society as a whole (3).

The COVID-19 pandemic has placed unprecedented challenges on healthcare professionals worldwide, particularly nurses who have been at the forefront of patient care during these challenging times (4). During COVID-19 pandemic nurses have been confronted with complex ethical dilemmas and moral challenges in their daily practice (5). The ability to navigate these difficult situations with moral sensitivity is crucial for providing optimal care and upholding ethical standards (6).

Understanding the level of moral sensitivity among nurses during the COVID-19 pandemic is vital for several reasons (7). Firstly, it provides insights into the ethical challenges and dilemmas that nurse are encounter in their daily practice. By assessing moral sensitivity, healthcare institutions can gain a deeper understanding of the ethical climate within their organizations and identify areas that may require additional support, education, or policy development (8).

Secondly, assessing moral sensitivity can help identify potential gaps in ethical decision-making skills and provide opportunities for targeted interventions and training programs. Enhancing nurses' moral sensitivity can contribute to improved ethical decision-making, increased patient-centered care and better outcomes for both patients and healthcare professionals (9). Moreover, exploring moral sensitivity during the COVID-19 pandemic can shed light on the unique ethical considerations that emerge during public health emergencies. The pandemic has placed immense strain on healthcare systems, leading to resource scarcity, moral distress, and moral fatigue among healthcare professionals (10).

Hence, evaluating moral sensitivity within this context can offer valuable understanding of how nurses manage demanding situations, make challenging choices, and uphold their professional integrity and ethical obligations. However, it requires a modify set of questions that are suitable for the Pakistani context. Numerous questionnaires have been developed to assess moral sensitivity in previous studies (11), but their statements may not be suitable or applicable in the Pakistani context. Therefore, we aim to conduct a validation study using a modified version of a questionnaire derived from existing literature.

Methodology: A cross-sectional study design was used to gather data from the nursing staff in order to assess moral sensitivity using the Moral Sensitivity Study Questionnaire within the context of Pakistan. The participants in this study were selected through convenience sampling, resulting in a sample size of 298 nurses, which accounted for 50% of the total population of 596 nurses. The study included nurses of all ages and both genders who were working on the clinical side, expended one month as staff in covid 19 pandemic and hold either a diploma or master's degree in nursing**.** However, nurses in administrative or managerial positions were excluded from the study. The Moral Sensitivity Questionnaire (MSQ), initially developed by the author, goes through the piloting process a significant modifications in the questionnaire based on supervisor suggestions and cultural considerations.

This study aimed to enhance the internal validity and reliability of the questionnaire in assessing the moral sensitivity of nurses working at Shalamar Hospital in Lahore private setup and Mayo hospital public setup in Lahore, Pakistan. The data were collected using a questionnaire that was validated by five experts in the field, three of whom hold a Master of Science degree in nursing and 2 Doctorate of Philosophy (Phd) in Nursing.

Each participant was provided with a consent form before data collection, and they were given a total of 1 hour to complete the questionnaire. The collected data were analyzed using SPSS (Statistical Package for Social Science) version 21.0. The reliability and internal validity of the questionnaire were assessed using measures such as Chronbach's alpha, Kaiser-Meyer-Olkin (KMO) sampling adequacy, and Bartlett's test for association and factor analysis.

The KMO value was used as a guideline, where a value below 0.5 was considered poor, between 0.5 and 0.6 was average, between 0.6 and 0.7 was acceptable, between 0.7 and 0.8 was good, and above 0.8 was excellent. The Bartlett's test was utilized to determine if the correlation matrix resembled an identity matrix (diagonal values of 1 and off-diagonal values of 0). A p-value of less than 0.05 would indicate that the variables were not completely independent and that the factor model was appropriate. In the case of Cronbach's alpha, a value greater than 0.9 was considered excellent, between 0.9 and 0.8 was good, between 0.8 and 0.7 was acceptable, between 0.6 and 0.5 was poor, and below 0.5 was unacceptable.

Results

Table no 1: Demographic of the nurses working in Shalamar and Mayo hospital Lahore

Demographic variables		Frequency (n)	Percent (%)
Age in Years	20-35	256	85.9
	36-45	22	7.4
	46-60	20	6.7
Gender	Male	42	14.1
	Female	256	85.9
Marital Status	Single	188	63.1
	Married	110	36.9
Level of Education	Diploma in nursing	178	59.7
	BSN	99	33.2
	POST RN	16	5.4
	MSN	5	1.7
Clinical Experience	<10	249	83.6
	10-20	35	11.7
	>20	14	4.7
Work Place	Public sector	172	57.7
	Private Sector	126	42.3

Analyzed by frequency ’n’ and percentage ‘%’ This table 1 highlights that the majority of the individuals in the study participants were young females aged 20 to 35, with a high percentage of singles. They predominantly held a diploma in nursing and had less than 10 years of clinical experience. Additionally, it reveals that a significant portion, 57.7%, worked in public hospitals.

Table 2: Moral Sensitivity Questionnaire factor analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.838
Bartlett's Test of Sphericity	Approx. Chi-Square	4747.708
	df	378
	Sig.	0.000
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.924	0.924	28

Analyzed by scale and factor analysis with KMO>0.5, α>0.7 and significance <0.05

Table 2: The table demonstrates that the KMO value exceeds 0.8, indicating an excellent score. This confirms that factor analysis can be conducted in this study. Likewise, the Bartlett's test reveals a value of 0.000, which is less than 0.05. This suggests that the factors comprising the variables are satisfactory. Moreover, the moral sensitivity score demonstrated high reliability with a Cronbach's alpha coefficient of 0.924. This indicates an excellent score and suggests that the 28 items comprising the score are internally consistent.

Table 03: Moral sensitivity Questionnaire factor analysis

Questions	**Factor**								
	1	2	3	4	5	6	7	X	S. D
Q21	0.723							6.12	1.055
Q9	0.709							5.89	1.103
Q18	0.688			0.046				5.53	1.498
Q10	0.662	0.461				0.056		6.26	.983
Q17	0.647							5.93	1.060
Q4	0.646							5.81	1.108
Q3	0.635							6.03	1.050
Q11	0.623							6.24	1.092
Q22	0.623							5.98	1.033
Q23	0.620							5.89	1.277
Q19	0.608				0.566			6.16	.969
Q2	0.606							5.93	1.207
Q8	0.597							5.64	1.282
Q9	0.597			0.514				5.74	1.342
Q20	0.591							5.76	1.209
Q25	0.584							5.63	1.318
Q27	0.576							5.70	1.344
Q5	0.544							5.64	1.417
Q1	0.544			0.469				6.20	.918

Q28	0.494							5.78	1.372
Q14	0.490		0.446			0.417		6.13	.958
Q6.	0.460				0.403			5.78	1.380
Q24	0.456		0.431				0.403	6.13	1.049
Q07	0.420	0.606						6.12	1.055
Q13	0.492	0.593						6.26	.983
Q12	0.439	0.451						5.89	1.103
Q15	0.461		0.553					5.53	1.498
Q26	0.489		0.091					5.93	1.060
% of variance	33.4	9.52	7.04	5.37	4.60	4.21	3.72		
Cumulative %	33.4	42.9	50.0	55.3	59.9	64.1	67.9		

Analyzed by component factor analysis with , mean (X) and standard deviation (S.D)

Table 3: This table essentially assessed questions; It is critical that I follow guidelines even when a patient who has not been admitted under any Health Act denies treatment (0.723). I frequently find myself in circumstances when I am at odds with how to treat a Covid patient (0.709). Above all, the patient's reactions show whether or not my decisions were correct (0.688). When caring for specific patients, I believe it is critical to have strong principles (0.662). When I am unsure what to do with a patient, I largely rely on the knowledge of other nurses (0.647). When I have to make a decision against my patient's preferences, I do what I believe is in their best interests (0.646). It is crucial to me that the patient responds positively to all I do for them (0.635). I frequently find instances in which determining the ethically correct response for a Covid patient is difficult (0.623). I frequently find myself in circumstances when I must make decisions without the patient's active participation (0.623). If the patient refuses oral medication, there may be reasonable grounds to contemplate providing an injection (0.620). I frequently consider my personal values and conventions, which may impact my actions (0.608). Seeing my patient's progress is critical for me to find meaning in my profession (0.606). If a patient lacks understanding of their own ailment, I can only have a limited impact (0.597). I frequently believe that appropriate nursing care entails involving the patient in decision-making (0.597). In circumstances where it is difficult to establish what is ethically correct or wrong, I believe that my own experience is more significant than theoretical understanding (0.591). When presented with a difficult decision for a patient, I rely heavily on my intuition (0.584). Even if I am unable to assist a patient in understanding their ailment, I find significance in my professional work (0.576). Losing my patient's trust would render my efforts as a nurse pointless (0.544). As a nurse, it is my obligation to be informed about the general state of Covid-19 patients (0.544). It is tough for me to provide effective nursing care against the patient's will (0.544). I frequently find myself struggling to enable a patient to make their own decisions (0.494). It is critical for me to always be honest with the patient whenever I make a difficult decision (0.490). In circumstances where determining the best course of action is challenging, I confer with my colleagues to identify what should be done (0.460). Good nursing care, in my opinion, includes respecting the patient's right to choose (0.456). In my opinion (0.420), the nurse-patient interaction is the most important part of nursing care. If I am unfamiliar with a patient's personal

history, I follow the rules and guidelines that are available (0.492). Even if a patient protests, I always base my actions on nursing expertise to identify the appropriate strategy (0.461). As a nurse, I must always be aware of the specialized care given to patients on my ward (0.489). One (33.4%), two (9.52%), three (7.04%), four (5.37%), five (4.60%), six (4.21%), and seven (3.72%) were variance percentage factors, whereas the cumulative percentage was (67.9%).

Discussion: The primary objective of this research was to authenticate a measurement tool designed to assess moral sensitivity within the context of Pakistan. Given the absence of a theoretically grounded framework or previously validated items in Pakistan that specifically gauge the moral sensitivity of nurses who encountered the COVID-19 period, the researcher acknowledged the cultural disparities in the perception of moral sensitivity between Pakistan and the Western world. As an exploratory study, it held significance to explore the response patterns of Pakistani nurses to the items and uncover novel sub-constructs (12). The researchers were primarily focused on generating significant implications for future validation research utilizing the Pakistani population, rather than solely confirming the factor structure of the Moral Sensitivity Questionnaire (MSQ) as done by other researchers.

Based on the findings of our study, it was observed that the majority of individuals in the sample were young women between the ages of 20 and 35. They were primarily single and predominantly held a diploma in nursing. Their clinical experience was generally less than 10 years. Furthermore, a significant proportion, 57.7%, was employed in public hospitals.

Similarly, a Korean study yielded similar results, with the average age of participants being 29 years. However, in terms of marital status, education, and workplace, there were notable differences (13). Around half of the participants in the Korean study were married, indicating a higher proportion of married individuals compared to our study. Additionally, there were a significant number of participants holding master's degrees, suggesting a higher level of education among the participants (14). Moreover, the majority of individuals in the Korean study were working in private settings (13), which contrasts with our study where public hospitals were the predominant workplace.

Our study's questionnaire validation analysis demonstrated that the KMO value of 0.8 indicates a high level of suitability for factor analysis, signifying excellent compatibility (15). Likewise, the Bartlett's test result of 0.000 suggests satisfactory factors among the variables, indicating a significant relationship (16). The moral sensitivity score exhibits strong reliability, with a Cronbach's alpha coefficient of 0.924 (17). The cumulative percentage of variance reached 67.9%, revealing a substantial degree of interdependence among the variables and a strong correlation. Most of the factor components have scores above 0.55 (18). In comparison to other studies such as Dalla Nora et al.'s study, our study displayed a higher total variance of 55.8% and a Cronbach's alpha of 0.82 (19), Additionally, Ferreira et al.'s study reported internal consistency with a Cronbach's alpha of 0.62 (20). Thus, our study's results indicate better performance in terms of both variance and internal consistency compared to these previous studies.

Additionally, a separate study conducted in Spain aimed to adapt and culturally validate the Moral Sensitivity Questionnaire in the Spanish language. The reliability of the questionnaire was assessed using internal consistency through the Cronbach's alpha test, with an adequate alpha value considered to be 0.70. However, the Confirmatory Factor Analysis (CFA) revealed a poor fit (21). In comparison, our study's validation statistics performed significantly better than those of the previous study.

Conclusion: The MSQ proves to be a suitable tool for assessing moral sensitivity among Pakistani nurses due to its favorable factor structure, strong inter-question correlations, and adherence. This distinguishes it from previous studies and indicates its effectiveness. The validation process of the questionnaire identified several factors, including adherence to protocols, managing conflicts while caring for COVID patients, making judgments based on patient responses, holding strong principles for providing care, recognizing the importance of knowledge, valuing patients, and encountering situations requiring ethically appropriate actions for COVID patients. This tool is particularly well suitable for developing country, as it offers easily understandable questions with strong factor analysis.

References:

1. Amiri E, Ebrahimi H, Vahidi M, Asghari Jafarabadi M, Namdar Areshtanab H. Relationship between nurses' moral sensitivity and the quality of care. Nursing ethics. 2019;26(4):1265-73.
2. Mohammadi F, Tehranineshat B, Ghasemi A, Bijani M. A Study of How Moral Courage and Moral Sensitivity Correlate with Safe Care in Special Care Nursing. The Scientific World Journal. 2022;2022.
3. Hajibabaee F, Salisu WJ, Akhlaghi E, Farahani MA, Dehi MMN, Haghani S. The relationship between moral sensitivity and caring behavior among nurses in iran during COVID-19 pandemic. BMC nursing. 2022;21(1):58.
4. Falatah R. The impact of the coronavirus disease (COVID-19) pandemic on nurses' turnover intention: an integrative review. Nursing Reports. 2021;11(4):787-810.
5. Jia Y, Chen O, Xiao Z, Xiao J, Bian J, Jia H. Nurses' ethical challenges caring for people with COVID-19: a qualitative study. Nursing ethics. 2021;28(1):33-45.
6. Peter E, Mohammed S, Killackey T, MacIver J, Variath C. Nurses' experiences of ethical responsibilities of care during the COVID-19 pandemic. Nursing Ethics. 2022;29(4):844-57.
7. Sperling D. Ethical dilemmas, perceived risk, and motivation among nurses during the COVID-19 pandemic. Nursing Ethics. 2021;28(1):9-22.
8. Turale S, Meechamnan C, Kunaviktikul W. Challenging times: ethics, nursing and the COVID-19 pandemic. International nursing review. 2020;67(2):164-7.
9. Silverman HJ, Kheirbek RE, Moscou-Jackson G, Day J. Moral distress in nurses caring for patients with Covid-19. Nursing Ethics. 2021;28(7-8):1137-64.
10. Sun N, Wei L, Shi S, Jiao D, Song R, Ma L, et al. A qualitative study on the psychological experience of caregivers of COVID-19 patients. American journal of infection control. 2020;48(6):592-8.
11. Zhang N, Li J, Xu Z, Gong Z. A latent profile analysis of nurses' moral sensitivity. Nursing ethics. 2020;27(3):855-67.
12. Sürücü L, MASLAKÇI A. Validity and reliability in quantitative research. Business & Management Studies: An International Journal. 2020;8(3):2694-726.
13. Milliken A. Nurse ethical sensitivity: An integrative review. Nursing ethics. 2018;25(3):278-303.
14. Han S-S, Kim J, Kim Y-S, Ahn S. Validation of a Korean version of the Moral Sensitivity Questionnaire. Nursing ethics. 2010;17(1):99-105.
15. Hajjar S. Statistical analysis: internal-consistency reliability and construct validity. International Journal of Quantitative and Qualitative Research Methods. 2018;6(1):27-38.
16. Poitras I, Dupuis F, Bielmann M, Campeau-Lecours A, Mercier C, Bouyer LJ, et al. Validity and reliability of wearable sensors for joint angle estimation: A systematic review. Sensors. 2019;19(7):1555.

17. Amirrudin M, Nasution K, Supahar S. Effect of variability on Cronbach alpha reliability in research practice. Jurnal Matematika, Statistika dan Komputasi. 2021;17(2):223-30.
18. Mata-López WA, Juárez-Hernández LG, Tobón S, Montesinos-López OA. Analysis of construct validity and reliability of two instruments to evaluate professional oriented activities. Revista Española de Orientación y Psicopedagogía (REOP). 2021;32(2).
19. Dalla Nora CR, Zoboli EL, Vieira MM. Validation of a Brazilian version of the moral sensitivity questionnaire. Nursing ethics. 2019;26(3):823-32.
20. Ferreira AG, Barlem ELD, Rocha LP, Barlem JGT, Dalmolin GdL, Figueira AB. Cultural adaptation and validation of the Moral Sensitivity Questionnaire among Brazilian nurses. Texto & Contexto-Enfermagem. 2021;30.
21. Jiménez-Herrera MF, Font-Jimenez I, Bazo-Hernández L, Roldán-Merino J, Biurrun-Garrido A, Hurtado-Pardos B. Moral sensitivity of nursing students. Adaptation and validation of the moral sensitivity questionnaire in Spain. Plos one. 2022;17(6):e0270049.