Research Article

Development of Nurse Dedication Scale in Bangladesh

Mohammad Abbas Uddin[1*], Nasima Akter[2], Mala Reberio[1], Merina Movis[1], Rabeya Basri[1]

[1]Directorate General of Nursing and Midwifery, Dhaka, Bangladesh.
[2]Lecturer, Fouzderhat Nursing College Chattogram, Bangladesh.

Abstract

Introduction: Nurses are recognized as essential members of the healthcare workforce. They prepare for their role through professional education and training. In hospitals, patients mostly depend on nurses for nursing care. Nurses' dedication is a significant factor in, and an indicator of, their professional development and the provision of quality nursing care.

Objective: This study aimed to develop a scale for measuring nurse dedication.

Methods: The study participants were 40 nurses working in different specialized hospitals in Bangladesh. Nurse dedication scale items were confirmed by analyzing existing literature on professional dedication. A self-administered questionnaire was used to collect data. Data were tested for internal consistency reliability using the SPSS program.

Results: The study developed instrument was found to be a reliable scale for measuring nurse dedication with an internal consistency reliability level of .72 (Cronbach's Alpha Coefficient).

Conclusion: The scale can be used to assess nurses' perceived dedication towards their profession and nursing care in Bangladesh and other developing countries and can support initiatives to increase nurses' dedication.

Keywords: nurses' dedication

Introduction

Nurses are vital to patient care in conventional healthcare systems. Nurses prepare for their roles by undertaking nursing professional education and training. In delivering care, nurses' dedication is essential to establishing a caring and trusting relationship with patients, promoting well-being, and valuing individuals [1]. Dedication may be defined as a feeling or state of mind and heart typified by an untiring commitment that is the art and essence of nursing [2]. Dedication can be demonstrated both inwardly and outwardly. Inner demonstration may comprise feelings and states of mind and heart about the profession

[3], such as courage, inspiration, interest, promise [4] and satisfied [5]. Outward demonstrations may include giving assistance, paying attention, accompanying, caring, concentrating, recognizing, accepting, having enough money, providing, connecting, and considering [6,7].

At present, nurses' dedication is very important due to new and chronic diseases, nurse workforce shortages, political unrest, increasing healthcare costs, and medical error rates [6]. Dedication is an element of professional nursing and also nurses' ethical behaviors [8]. Factors that contribute to nurses' dedication behaviors are gender, work experiences, patient literacy [9], and the supportiveness of the work environment [10]. Nurses' dedication may also be considered one of the indicators of professionalism and nursing care quality.

Dedicated workers think positively and understand the significance of completing their tasks [11]. Studies have found that dedication has a positive and significant connection with employee performance [12] and organizational performance [13]. In addition, workers are more dedicated when employers respect worker needs, develop and implement strategies to retain staff, and provide internal training [14]. Nurses' dedication was particularly evident during the COVID-19 period and their dedication is appreciated all over the world [15, 16].

In a 2006-7 survey of nurses in Spain, 33% of nurses reported high levels of dedication [17]. That study used the Utrecht Work Engagement Scale to measure dedication. This consisted of 3 items describing dedication: 1) I am enthusiastic about my job; 2) My job inspires me; and 3) I am proud of the work that I do [18]. In another study, primary school teachers in Turkey reported a high level of dedication to their profession [19]. That study used the Teachers' Professional Engagement Scale consisting of 20 items across 3 domains: 1) commitment to the profession (8 items); 2) dedication to students (8 items); and 3) selfless work (4 items) [20].

Notwithstanding the above studies, there is a scarcity of research into nurses' dedication and no valid, reliable, and complete measuring scale or instrument to measure nurses' dedication exists. Nowadays, nursing is undergoing huge change due to scientific advancement and evolving patient care demands. These changes may affect nurses' dedication to their roles. Thus, a suitable scale to measure nurses' dedication is needed. The purpose of this study is to review the existing literature regarding nurses' dedication and develop a culturally appropriate dedication scale for the Bangladeshi context.

Methods

Dedication is a worker's emotional attachment to a job [21]. Nurses' dedication is (outwardly) the continuous working toward patients' well-being and (inwardly) the desire to do so. Literature specifically about nurses' dedication measurement instruments is scarce. Therefore, literature about employee dedication in healthcare and other sectors [17, 20, 22] has been analyzed in the development of the present study's Nurse Dedication Scale (NDS).

Validity of the Nurse Dedication Scale

The NDS was translated using the back-translation method [23]. The original English questionnaire was translated into Bengali by an interpreter. Then, the Bengali questionnaire was interpreted back into English by another interpreter. Afterward, a third interpreter compared the two English versions and identified any variations. These variations were then resolved to produce the final NDS.

'Content validity' refers to the degree to which a measurement accurately represents the specific domain of content it is intended to measure [24]. The investigator asked three experts to review the questionnaire to determine its content validity and cultural appropriateness. The experts were Dr. Mohammad Shariful Islam, Dr. Mohammad Nurul Anwar, and Dr. Khaleda Akter from the National Institute of Advanced Nursing Education and Research [NIANER], Dhaka. The final version of the questionnaire was revised based on the experts' comments.

Instruments

This study used a self-administered questionnaire, developed by the investigator, based on existing literature about employee dedication. The questionnaire had two parts. Part 1 was the Participant Demographic Information of eight items: age, gender, religion, marital status, designation, highest professional educational degree, and length of work experience. Part 2 was the NDS in which participants reported on their dedication across 20 areas: feelings about caring, satisfaction regarding nursing care, desire to continue working as a nurse, sacrifices made to develop nursing, awareness of nursing duties, awareness of patient satisfaction, acceptance of criticism to improve, working hard to raise nursing status, participation in development activities, providing nursing care as a skilled nurse, providing the best nursing care, integrating evidence into nursing care, working as a team member, providing nursing care to many patients, evaluating nursing care, establishing therapeutic relationships, respecting patient values, encouraging patients, recognizing patient problems, and providing nursing care sympathetically. Each item was measured via a 5-point, Likert-style scale, with possible scores ranging from 0 to 4 (never=0, rarely=1, sometimes=2, often=3, always=4). Total possible scores were between 0 and 80. Higher scores reflect greater nurses' dedication.

Sample and data collection

The sample of this study was 40 nurses working in four hospitals: the National Institute of Cancer Research & Hospital, the National Institute of Diseases of the Chest and Hospital, the National Gastro Liver Institute and Hospital, and the Infectious Diseases Hospital. Ten nurses engaged in direct patient care were selected from each hospital as participants. All participants possessed either a diploma in nursing or a BSc in

nursing. The data were collected by four research assistants, one from each hospital. The research assistants were informed about the study's purpose and data collection processes. Before data collection, formal permission was obtained from the nursing authorities. Participants were informed about the aims of the study and that participation was voluntary. Informed consent was obtained from those willing to participate. The completeness of the questionnaires was checked by the research assistants. Data were analyzed using the SPSS program. Descriptive statistics was used to analyze the participants' demographic information and the NDS items' internal consistency reliability was assessed by reliability test.

Results

Demographic information

The participants' mean age was 32.90 years. The minimum age was 24 years, and the maximum age was 50 years. Most were female (90.00%), Muslim (77.5%), and married (90.00%). All participants were senior staff nurses. There was an equal distribution of nurses' professional educational qualifications. Most (75.00%) had between 3- and 8-years job experience (Table 1).

Characteristics	Categories	Frequency (%)
Age (M= 32.90, SD=5.80)	24-32 years 33-41 years 42-50 years	22 (55) 16 (40) 2 (5)
Gender	Male Female	4 (10) 36 (90)
Religion	Islam Hindu Christian	31 (77.5) 8 (20) 1 (2.5)
Marital status	Married Unmarried	36 (90) 4 (10)
Designation	Senior staff nurse	49 (100)
Professional educational qualification	Diploma in Nursing Science and Midwifery Bachelor of Science in Nursing	20 (50) 20 (50)
Work Experience	3-8 years 9-15 years 16-22 years	30 (75) 9 (22.5) 1 (2.5)

Table 1. Demographic information of nurses (n = 40).

Reliability of the Nurse Dedication Scale

The Nurse Dedication Scale was tested for internal consistency reliability. The SPSS program was used to analyze the data. The completeness of the data was checked after it was entered. All 20 items were entered into the program and analyzed. The result was a

Cronbach's Alpha Coefficient of 0.72 (Tables 2-4).

Reliability		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.721	.749	20

Table 2: Reliability of the Nurse Dedication Scale.

Item no	Item	Mean	Std. Deviation	N
1.	I like caring for patients	3.9500	.22072	40
2.	I want to spend my life as a nurse	3.8750	.51578	40
3.	I provide nursing care as a skilled nurse	3.9250	.26675	40
4.	I work hard to raise the status of nursing	3.8250	.50064	40
5.	I sacrifice a lot to develop nursing	3.5750	.67511	40
6.	I participate in nursing development activities	3.5000	.75107	40
7.	I provide the best nursing care to patients	3.9000	.30382	40
8.	I integrate evidence into my nursing care	3.6250	.66747	40
9.	I work as a team member for patients' wellbeing	3.3000	1.09075	40
10	I provide nursing care to many patients	3.9250	.26675	40
11	I monitor the quality of nursing care	3.5000	.87706	40
12	I am aware of my nursing duties	3.9500	.31623	40
13	I accept criticism my nursing care, which allows me to improve	3.6000	.67178	40
14	I find satisfaction in providing nursing care	3.8750	.33493	40
15	I establish therapeutic relationships with patients before providing nursing care	3.5500	.71432	40
16	I respect patients' values when providing nursing care	3.9250	.34991	40
17	I am aware of patients' satisfaction with nursing care	3.9000	.30382	40
18	I encourage patients that they will recover soon	3.8750	.33493	40
19	I carefully recognize patients' problems when providing nursing care	3.8000	.51640	40
20	I provide nursing care to patients sympathetically	3.9750	.15811	40

Table 3: *Item analysis statistics of the Nurse Dedication Scale.*

Discussion

A valid, culturally appropriate, and reliable measuring scale is important for collecting research data. The NDS was tested for internal consistency reliability. The result was a Cronbach's Alpha Coefficient of 0.72. This is an acceptable level; the recommended internal A previous study of students and employees using the Utrecht Work Engagement Scale (UWES-17), consisting of eight items to measure dedication, reported a reliability of .91 [22]. Another study measuring three items of dedication reported reliability between .75 and .90 [18]. A further study used the Scale of Dedication to the Teaching Profession, consisting of 20 items across three domains (8 about commitment to the profession, 8 about dedication to students, and 4 about selfless work). The individual domain reliability scores were .92, .86 and .70 respectively and the overall reliability score was .90 [20]. A study of employees in Indonesia used a 5-item dedication scale and reported a reliability of .64 [26]. Another study of civil service employees in Nigeria used a 5-item scale and found a reliability level of .74 [27]. Finally, a 2003 study of employees in Lima, Peru reported UWES-17 reliability levels above .70 for three factors (vigor, dedication, and absorption) [28]. Consistency reliability of a scale is usually equal to or larger than 0.70 [25].

The variations in scale reliability (both across the range of previous scales discussed above and between those scales and that of the present study) may be due to the question items used, use of Likert scale points, study samples, settings, response styles, acquiescence bias, and cultural contexts.

Conclusion

The 20-item NDS is a self-reporting questionnaire that measures Bangladeshi nurses' expressed dedication towards their profession and nursing. To develop the scale, investigators used an adequate number of samples to collect data. The psychometric properties of the scale were confirmed through assessment of content validity, back-translation, consideration of cultural context, and data analysis to confirm internal consistency reliability using the SPSS program. The NDS is therefore a reliable scale to measure nurses' dedication.

Acknowledgments

Funding

Conflicts of Interest

No conflict of interest has been declared by the authors.

Ethical Considerations

Informed consent was obtained from all individual participants in the study.

References

1. Gunawan J, Aungsuroch Y, Watson J, et al. (2022). Nursing Administration: Watson's Theory of Human Caring. Nursing Science Quarterly, 35(2), 235-243.
2. Sabetsarvestani R, Geçkil E, Hadian Shirazi Z. (2022). Dedication in nursing: A concept analysis. Nurs Midwifery Stud,11:62-70.
3. Othman N, Nasurdin AM. (2019). Job characteristics and staying engaged in work of nurses: Empirical evidence from Malaysia. Int J Nurs Sci,6:432-8.
4. Orgambídez A, Almeida H. (2018). Predictors of organizational commitment in nursing: Results from Portugal. Invest Educ Enferm,36:e14
5. Bargagliotti LA. (2012). Work engagement in nursing: A concept analysis. J Adv Nurs, 68:1414-28.
6. Seo K, Kim M. (2017). Professional identity of Korean nurse practitioners in the United States. J Am Assoc Nurse Pract, 29:195-202.
7. Grøthe Å, Biong S, Grov EK. (2015). Acting with dedication and expertise: Relatives' experience of nurses' provision of care in a palliative unit. Palliat Support Care,13:1547-58.
8. Ebrahimi H, Nikravesh M, Oskouie F, et al. (2015). Ethical behavior of nurses in decision-making in Iran. Iran J Nurs Midwifery Res, 20:147-55
9. Heggen K, Terum LI. (2013). Coherence in professional education: Does it foster dedication and identification? Teach High Educ, 18:656-69.
10. Van Bogaert P, Wouters K, Willems R, et al. (2013). Work engagement supports nurse workforce

stability and quality of care: Nursing team-level analysis in psychiatric hospitals. J Psychiatr Ment Health Nurs, 20:679-86.

11. May DR, Gilson RL, & Harter LM. (2004). The psychological conditions of eaningfulness, safety and availability and the engagement of the human spirit at work. Journal of Occupational and Organizational Psychology, 77(1), 11-37

12. Jaya LHS, & Ariyanto E. (2021). The Effect of Vigor, Dedication and Absorption on the Employee Performance of PT Garuda Indonesia Cargo. European Journal of Business and Management Research, 6(4), 311–316

13. Susan C, & Tamunomiebi DM. (2020). Employee Dedication and Organizational Performance of Telecommunications Companies in Rivers State, Nigeria. International Journal of Business School Annals, 6(2), 2361- 7144.

14. Rustiawan I, Almaududi Ausat AM, Gadzali SS, et al. (2023). Determinants of Employee Dedication to the Company as A Whole. Community Development Journal,Jurnal Pengabdian Masyarakat, 4(1), 708–712.

15. Liu YE, Zhai ZC, Han YH, et al. (2020). Experiences of front-line nurses combating coronavirus disease-2019 in china: A qualitative analysis. Public Health Nurs, 37:757-63.

16. Fernandez R, Lord H, Halcomb E, et al. (2020). Implications for COVID-19: A systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. Int J Nurs Stud, 111: 103637

17. Jenaro C, Flores N, Orgaz MB, et al. (2011). Vigour and dedication in nursing professionals: towards a better understanding of work engagement. J Adv Nurs, Apr;67(4):865-75.

18. Schaufeli, WB, Bakker AB, & Salanova M. (2006). The Measurement of Work Engagement With a Short Questionnaire: A Cross-National Study. Educational and Psychological Measurement, 66(4), 701-716.

19. Ertürk R. (2023). The effect of teacher autonomy on teachers' professional dedication. International Journal of Psychology and Educational Studies, 10(2), 494-507.

20. Kozikoğlu İ, and Senemoğlu N. (2018). Development of teachers' professional engagement scale: A study on validity and reliability. Journal of Human Sciences, 15(4), 2614- 2625.

21. Schaufeli WB, & Bakker AB. (2004). Utrecht work engagement scale Preliminary Manual Version 1.1. Occupational Health Psychology Unit Utrecht University, December,1–60.

22. Schaufeli WB, Salanova M, González-Romá V, et al. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, 3(1), 71–92.

23. Sperber AD. (2004). Translation and validation of study instruments for cross–cultural research. Gastroenterology,126:124–128.

24. Edward G. Carmines, James A. Woods. (2005). Validity Assessment, Editor(s): Kimberly Kempf-Leonard, Encyclopedia of Social Measurement, Elsevier, Pages 933-937,

25. Polit DF and Beck CT. (2008) Nursing Research, Generating and Assessing Evidence for Nursing Practice. 8th Edition, Lippincott Williams & Wilkins, Philadelphia p. 786.

26. Srie Intan Maisyuri R, & Ariyanto E. (2021). The Affect of Vigor, Dedication and Absorption on the Employee Performance at Pt. Mandiri Utama Finance. Dinasti International Journal of Management Science, 2(4), 689–702.

27. Asamaowei EF, Sylva W. (2023).Career Growth and Employee Dedication in the Bayelsa State Civil Service. EPRA International Journal of Economics, Business and Management Studies, 10 (2), 58-72.

28. Doig CA, Brandenberg T, & Marquardt N. (2023). A Mediation Model among Individual Mindfulness, Work Engagement and Collective Mindfulness of Employees in Lima-Peru. Psychology.