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Original Article

Transitional Challenges and Role of Preceptor among New Nursing Graduates

Hepsi Bai Joseph[1], Alwin Issac[1*], Ann Gicy George[2], Gunjan Gautam[2], Melby Jiji[2], Sampa Mondal[2]

[1]All India Institute of Medical Sciences, Bhubaneswar, India
[2]College of Nursing, All India Institute of Medical Sciences, Bhubaneswar, India

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***Corresponding Author:**
Alwin Issac,
Email: aimalwinissac@gmail.com

Abstract

Introduction: The period of transition from nursing student to professional nurse is demanding. Most often the challenges among the novice nurses are attributed to the number of patients with complex illness and co-morbidities, inaccessible mentors, performance anxiety, communication difficulties, and blame/complaint culture. Transitional challenges could result in work dissatisfaction forcing novice nursing graduates to quit their jobs that result in a high turnover rate. The study aimed to identify the transitional challenges among new nursing graduates and the role of preceptor in various transitional challenges.

Methods: The study adopted descriptive correlational design. The data were collected from 314 participants working in six different tertiary level public hospitals situated in six states of India. Casey-Fink graduate nurse experience survey-revised was used to collect the data and methods of this study were in line with the guidelines of Strengthening the Reporting of Observational studies in Epidemiology (STROBE). Descriptive and Inferential statistics were calculated using SPSS software version 16.

Results: The study found that new nursing graduates are uncomfortable in performing numerous procedures independently and in accordance with them increased support would help them feel more supported or integrated into the unit. The study also found positive relationship between preceptor support and organizing and prioritizing, communication/leadership, professional satisfaction, and job satisfaction.

Conclusion: New nursing graduates experience various challenges during their transition period in the areas of role expectation, confidence, workload, orientation, and fears. The preceptors and the nursing administrators needs to bring forth significant strategies to address these challenges.

Introduction

Health workforce (HW) or health human resources is a vital building block of the health system, and undue investment in the HW is the key to attain sustainable development goals.[1] The health system could function only with the HW, wherein HW should realize that improving health service coverage and attainment of a maximum possible standard of health is subjected to their availableness, nearness, acceptability, and quality. Nearly half of the global HW comprises nurses and midwives, and among the global HW, women represent a notable share.[2] They play a crucial role in the promotion of health, prevention of illness, and delivery of primary and community care. Achievement of Universal Health Coverage by any nation would depend on the density of the HW, quality of education and training HW receive, quality of care the HW provide, and the kind of support they receive from the society.[3,4] This is in line with the 'global strategy on human resources for health workforce 2030' report by the World Health Organization (WHO). The report highlighted the significance of investments in the HW for improving public health and for economic and social progress.[5]

Among the professions under the HW umbrella, nurses are the most vulnerable to swift turnovers.[3] The National Healthcare Retention and RN staffing Report-2016 reported that among the new graduate nurses, approximately 43%, 33.5% and 17.5% left their initial jobs within three, two, one year of employment respectively.[1] The quick turnover has an array of repercussions in the delivery of care and monetary.[6,7] Each percent change in nurse turnover could cost/save the hospital approximately $379 500.[8] Quick turnover among nurses is attributed to, but not limited to the staff scarcity, arduous mental/physical labour, job dissatisfaction, poor recognition, and international job opportunities.[9,10] From the National Health Workforce Account (NHWA) 2018, India has 5.76 million HW, of which 2.34 million are nurses/midwives.

However, only 1.40 million nurses/midwives comprised the active HW size estimated from the Periodic Labour Force Survey 2017–2018 by the National Sample Survey Office (NSSO). The active HW density of nurses is 10.6 per 10 000 persons. In their recent report, WHO mentioned that India would require an additional 1.8 million doctors, nurses, and midwives to attain the minimal threshold of 44.5 HW per 10 000 population by the year 2030.[2] Deficient investment in the HW in India is epitomized by the fact that the nation has a very low density of HW per 10 000 population and the dispersal of HW across the states in India is exceedingly skewed.[11] Insufficient investment in education and training of HW, the discrepancy between education, employment policies, and public needs augmented by the difficulties in deploying HW to rural, remote, and under-served areas contribute to an incessant shortage of HW. As of June 16, 2021, India has 9 and 17 doctors and nurses respectively per 10 000 population.[2] The coronavirus disease 2019 (COVID-19) has additionally opened up the scarcity of HW in India's health system. Whilst, the Organization for Economic Cooperation and Development (OECD) countries have been benefited in the treatment of their coronavirus patients by the presence of Indian doctors and nurses. The risk of subsequent healthcare-associated infection increase to 15%, when the patient is exposed to an inadequate number of nursing staff.[12,13] As of June 16, 2021, India has 1735 nursing colleges duly recognized by the Indian Nursing Council (INC) (national regulatory body for nurses and nursing education in India) offering graduate training programs, wherein each year approximately 65 000 new graduates get their licensure to practice.[2]

The period of transition from theory to practice is the most demanding, emotionally draining, and nerve-racking experience for new nursing graduates who are expected to provide cautious nursing care in an environment of heightened liability.[14] New nursing graduates ordinarily report their initial clinical experiences as arduous, whilst they attempt to habituate and provide standard patient care.[15,16] Early negative clinical experiences could be attributed to incompetent clinical preceptors, poor communication skills, disharmony among health professionals, and an ill-suited working environment. The initial clinical experiences can have aftermath on their career intentions and their sense of wellbeing.[17,18] Amidst the demands placed on the new nursing graduates, they strive to cope and adapt to the challenges placed upon them through confrontation with stress, avoidance, mastering the mind, transference, problem-solving, and social support.[19,20] This transitional period has the maximum attrition accounting for nearly 20 percent.[21,22]

In India, a preceptor is an experienced and competent registered nurse who would serve as a role model, and is a point person to newly recruited nursing staffs or new nursing graduates. They perform various roles as of an educator, facilitator, mentor, and socializer.[13] The preceptor possesses numerous competencies and is not limited to knowledge of professional standards, skills in leadership and communication, facilitates conflict resolution, motivates and provide constructive feedback to new nurses. The nurse preceptor shadows the new nurse until they get accustomed to the new unit, act as a role model, and guides them to provide effective patient care using evidence-based practice. The preceptorship is significant for the new nursing graduates as it help them in creating a strong learning base, focus on quality, and boost employee satisfaction and retention.[23,24] In India, nursing educational programs such as Auxiliary Nurse Midwifery (ANM), General Nursing and Midwifery (GNM), Bachelor of Science in Nursing (BSN), Master of Science in Nursing (MSN), Master of Philosophy (MPhil) in Nursing and Doctor of Philosophy (PhD) in Nursing exist.[2] INC prescribes uniform standards and syllabi for every educational program to be implemented across the country. However, the implementation by educational institutions having varied capabilities is not uniform resulting in graduates with varying knowledge, attitude and competencies.

Intent to leave the profession attributed to the occupational stress during the initial transition period has been reported across the globe.[25,26] A shortage in the nursing workforce could lead to burnout, job dissatisfaction, increased errors, and elevated morbidity and mortality rate as compared to hospitals with higher nurse-patient ratios.[27,28] Comprehending the issues that the new nursing graduates face during their initial period of transition into the clinical environment is of paramount importance.[29,30] Identifying the transitional challenges can help the hospital administration in implementing strategies or programs aimed at ameliorating the difficulties that could result in an increased retention rate among new graduate nurses.[31,32]

Despite the reports of high attrition rates among the nurses in India, there is relatively little empirical research done to identify the transitional challenges that they encounter from their point of view during their transitional period. Transitional challenges among the nurses in western countries have been reported,[8,12] but there is poor evidence from India; a nation that produces approximately 65 000 new nursing graduates every year.

With this intent, we aimed to identify the transitional challenges and the relationship of preceptor to various transitional challenges among the new nursing graduates working in six tertiary level public hospitals in India.

Materials and Methods

According to the human resources data from each six settings, the total population of new nursing graduates as of January 5, 2020, was 1000. We have adopted convenience and snowball sampling methods to reach out to the participants. The sample size was calculated using 'Solvin's

formula [$n = N/ (1 + Ne^2)$], where 'N' = 1000(estimated population of new graduate nurses from all six tertiary levels public hospitals, 'e' = margin of error (0.05), and 'n' = sample size. The total sample size in the study was 314 (after adding 10% attrition).

A personal and online survey was conducted involving the new nursing graduates working in six tertiary level public hospitals located in six different states of India, using a descriptive correlational design. The data was collected between January 17, 2020, to April 20, 2021. The online survey was carried out by making use of Google Forms that targeted the new nursing graduates by dispatching the survey to a list of emails and social media platforms (e.g., WhatsApp). The survey was carried out incognito without any identity-related data, but specific questions concerning the institute they were working in were incorporated in the tool to avoid selection bias. A total of 497 surveys were distributed among which 420 agreed to participate (84% response rate). The reporting of the current study followed the guidelines of Strengthening the Reporting of Observational Studies in Epidemiology (STROBE).[33]

The study participants who graduated from an INC recognized nursing institution and presently working in any selected six tertiary level public hospitals in India, and those nursing graduates who were having less than two years of clinical nursing experience from both the gender were enrolled into the study. The number of clicks on the survey link was approximated and 420 possible participant responses were recorded. The new nursing graduates who didn't match the inclusion criteria, those who declined to participate, and incomplete responses were excluded from the study, and finally 314 participants were included in the study. New nursing graduates with less than two years of clinical nursing experience were chosen because this is the longest time duration required for new nursing graduates to become familiarised with the work environment and practices by Dr. Patricia Benner's stages of clinical competence.[34,35]

Casey-Fink Graduate Nurse Experience Survey-Revised, is a commonly used tool to investigate the efficiency of nurse-related programmes. The tool has 41 questions, comprising of five sections namely demographic proforma, skills and procedure that the new graduate nurse is uncomfortable carrying out singly, transitional challenges, satisfaction with the job, transitional experience. The tools help in exploring the information about the experiences of new nursing graduates during their transition period. The tool has an internal consistency of $\alpha = 0.78$.[36,37] The Casey-Fink Graduate Nurse Experience Survey-revised is distributed under five sections: skills and procedure that the new graduate nurse is uncomfortable carrying out singly, which is assessed through three open-ended questions and responses chosen from a provided drop-down list; transitional challenges containing 25 items for which a response option is provided for each of the first 24 items consisting of four-point Likert rating scale asking respondents to indicate their responses from the following four choices: "strongly disagree, disagree, agree, strongly agree" that are scored one to four or four to one for negatively scored items. Only those participants who choose "agree" or "strongly agree" response to item number 24 is asked to answer item number 25, wherein the respondent answers "yes" or "no" to a series of stressors; satisfaction with the job comprised of nine items designed to rate satisfaction with various aspects of the job on a five-point Likert rating scale; transitional experience comprising of four multiple response questions that ask the participants to opt the response that applies to their transition experience, and an open-ended question asking the participants about their concern and comments about the residency program; demographic proforma comprising of 15 items intended to assess the participant characteristics.[36]

Relative Importance Index (RII) was assessed to find out the most to the least satisfying aspects of the job. Each of the nine items in this section were graded on a five-point rating scale. A maximum score of five for each of the item, if the participants were very satisfied with the aspect of the job. A score of one were assigned, if the participant was very dissatisfied with the aspect of the job evaluated. RII was calculated using the formula [$RII = \Sigma W/(A*n)$], wherein W = weighting for each item, A = highest weight, and n = number of participants. The item with the highest RII would be interpreted as the item with the most importance in the satisfying aspect of the job and vice versa. The instrument takes an average of 15-20 minutes to complete.

Before participation in the study, informed consent was obtained from all the participants through personal email. Since the study incorporated an online survey, the participants who returned the responses were considered to have agreed to participate in the study (implied consent). The participants had the provision to withdraw from the study at any time during the study process. Frequency, percentage, mean, and standard deviation were used in the descriptive statistical analysis. The normalcy of the data was checked and since the data was not following normal distribution, Spearman's correlation test was used to identify the correlation between preceptor's support and Casey-Fink dimensions. Statistical analysis was performed using IBM's SPSS Statistics package for Windows (version 16.0). A *P* value less than 0.05 was considered statistically significant.

Results

The demographic features of the study participants are represented in Table 1. The participants age ranged from 22-34 years with a mean age of 24.89 years. Among the participants, majority 220 (70.1%) of them were females. More than half 205 (65.3%) of the nurse's work in specialty care units/wards, 231 (73.6%) of them had less than one

Table 1. Frequency and percentage distribution of demographic characteristics of new nursing graduates (n=314)

Demographic variables	No. (%)
Age (y)[a]	24.89
Gender	
Female	220 (70.1)
Male	94 (29.9)
Present area of service	
Intensive emergency care units	63 (20.1)
Care units	32 (10.2)
Operation theatre	14 (4.4)
Specialty care units/wards	205 (65.3)
Experience (mon)	
0-6	125 (39.8)
7-12	106 (33.8)
13-18	44 (14.0)
19-24	39 (12.4)
Highest qualification obtained	
Post basic bachelor of science in nursing	8 (2.6)
Bachelor of science in nursing	277 (88.2)
Master of science in nursing	29 (9.2)
The time period of unit orientation	
Not received	32 (10.2)
Still ongoing	107 (34.0)
≤4 weeks	169 (53.8)
5-8 weeks	3 (1.0)
≥9 weeks	3 (1.0)
Number of preceptor's during orientation	
None	36 (11.5)
1	252 (80.2)
≥2	26 (8.3)

[a] Mean was reported.

year of experience, 169 (53.8%) of them got ≤4 weeks of unit orientation, and 252 (80.2%) of them had one supervisor during their orientation.

Among the difficulties experienced with the role transition from a nursing student to the professional nurse, 220 (70%) of the participants experienced difficulty in role expectation (autonomy, more responsibility, being a preceptor or in charge), 173 (55%) of them had a lack of confidence in several aspects (communication skills, delegation, knowledge deficit, critical thinking), 170 (54%) of them experienced workload (organizing, prioritizing, feeling overwhelmed, ratios, patient acuity), 110 (35%) of them had orientation issues (unit familiarization, learning technology, relationship with multiple preceptors, information overload) and 72 (23%) of the participants had fears (patient safety).

The measures that could be done to help new nursing graduates feel more supported or integrated into the unit are represented in Figure 1. In accordance to

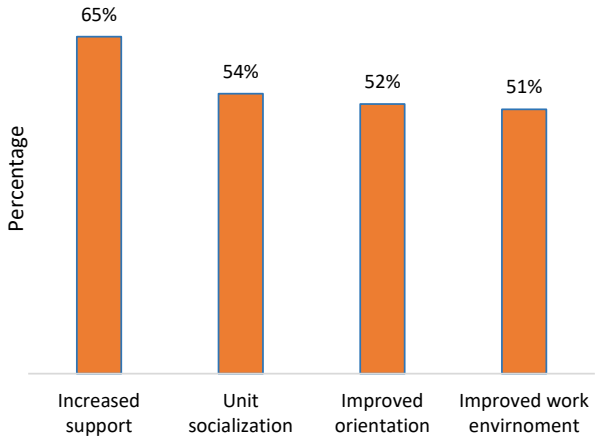

Figure 1. Percentage distribution of measures that could be done to help new nursing graduates feel more supported or integrated into the unit

the participants to feel more supported or integrated into the unit, 204 (65%) of the participants deemed increased support (manager, registered nurse, educator feedback, support, mentorship), 170 (54%) regarded unit socialization (being introduced to the staff, opportunities for staff socialization), 163 (52%) consider improved orientation (preceptor support and consistency, orientation extension, unit specific skills practice), and 160 (51%) of them deemed improved work environment (gradual ratio changes, more assistance from unlicensed personnel, involvement in schedule and committee work).

The most satisfying aspect of the work environment for 198 (63%) of the participants was peer support (belonging, team approach, helpful and friendly staff) and ongoing learning (preceptors, unit role models, mentorship). While, 138 (44%) of them chose patients and families (making a difference, positive feedback, patient satisfaction, patient interaction), 129 (41%) of them chose professional nursing role (challenges, benefits, fast pace, critical thinking, and empowerment), and 116 (37%) opted positive work environment (good ratios, available resources, facility, up-to-date technology).

Among the least gratifying facet of work environment, 264 (84%) of the participants chose system (outdated facilities and equipment, small workspace, charting, and paperwork), 160 (51%) regarded nursing work environment (unrealistic ratios, tough schedule, futility of care), 201 (64%) deemed interpersonal relationships (gossip, lack of recognition, lack of teamwork, politics), and 25 (8%) chose orientation (inconsistent preceptors, lack of feedback).

The skills that the new nursing graduates are uncomfortable in performing independently during their transition period are represented in Figure 2. The majority of the participants 161 (51.3%) chose ventilator care/management as the skill that they are uncomfortable in performing independently, followed by chest tube care 142 (45.2%), central line care 108 (34.7%), code/emergency responses 104 (33.1%), tracheostomy care

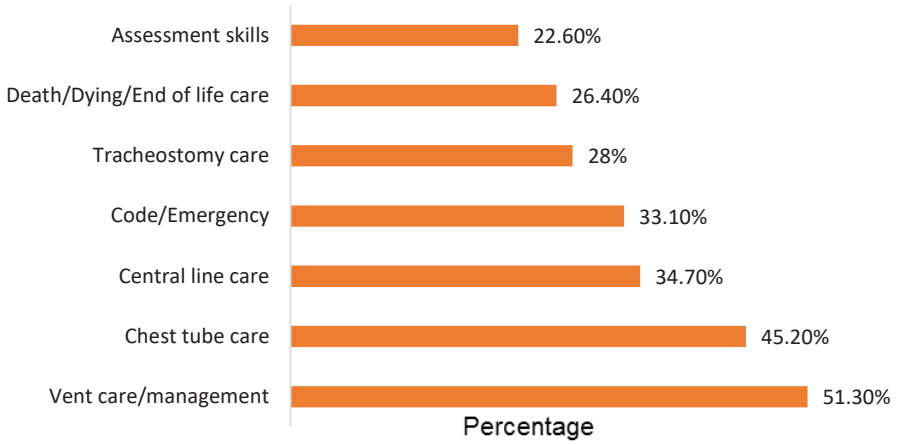

Figure 2. Percentage distribution of skills that are uncomfortable in performing independently by the new nursing graduates

88 (28%), death/dying/end-of-life care 83 (26.4%), and assessment skills 71 (22.6%).

Among the participants who have responded agree or strongly agree to question no. 24 (146 responses) in section-II (challenges) of the Casey-Fink graduate nurse experience survey, 112 (77%) of them had stress related to the living situation, followed by personal relationship 67 (46%), job performance 57 (39%), finances 18 (12%), child care 13 (9%), and student loans 3 (2%).

RII was calculated to assess the satisfying aspects of the job, wherein, salary (RII = 0.93) was the most satisfying aspect of the job followed by the amount of responsibility (RII = 0.85), hours of work (RII = 0.84), vacation (RII = 0.79), benefits package (RII = 0.78), weekends off per month (RII = 0.77), amount of encouragement and feedback (RII = 0.76), the opportunity for choosing work shift (RII = 0.75), and opportunities for career advancement (RII = 0.71).

The correlation between preceptor support and Casey-Fink dimensions are represented in Table 2. A statistically significant positive relationship was found between preceptor's support and organizing and prioritizing factor ($P = 0.31$), communication/leadership ($P = 0.67$), professional satisfaction ($P = 0.77$), and job satisfaction ($P = 0.16$). A significant positive relationship was observed between organizing and prioritizing factors and communication/leadership ($P = 0.42$), and professional satisfaction ($P = 0.36$). Whereas, a statistically significant negative relationship was observed between organizing and prioritizing factors with job satisfaction ($P = 0.26$). A significant positive relationship was observed between communication/leadership and professional satisfaction ($P = 0.57$).

Table 2. Relationship between preceptor's support and Casey-Fink dimensions (n = 314)

Correlations	Organizing & prioritizing	Communication/ leadership	Professional satisfaction	Job satisfaction
Preceptor's support				
Correlation coefficient	0.31	0.67	0.77	0.16
P value[a]	0.000*	0.000*	0.000*	0.004*

*Statistically significant, [a] Spearman's rho test was used.

Discussion

The age of the participants in the current study were between 22 to 34 years, with a mean age of 24.89 years. The majority of the participants were females 220 (70.1%). The findings are in line with the reports by Salem Alghamdi & Ghazi Baker and Sajadi Hezaveh et al, whose mean age of the participants was 24 and 27.84 years respectively.[14,37] The participants were mostly females 240 (85%) in study by Parker et al.[38] More than half of the participants 205 (65.3%) were working in the specialty care units/wards, and 231 (73.6%) of the participants had less than 1 year of experience, which was consistent with the reports by Sajadi Hezaveh et al (6.76 ± 4 months), and Casey et al (< 1 year).[37,39] Though majority participants 278 (88.5%) in the present study had at least one preceptor during their orientation which was a bit higher against the study by Parker et al among 144 (63%) new graduate nurses.[38] Most participants 169 (53.8%) had unit orientation duration to less than or equal to four weeks, and the same has been reported in study by Parker et al.[38] The roles expected to be performed were the most reported difficulty among the participants 220(70%) in their transition period and similar findings have been reported by Salem Alghamdi and Ghazi Baker.[14] The difficulties felt in the various professional tasks could detrimentally affect the quality of care provided by the new nursing graduates.[40] In the present study, skills that the new nursing graduates were uncomfortable performing independently were ventilator care/management 161 (51.30%), chest tube care 142 (45.20%), central line care 109 (34.7%), code/emergency responses 104 (33.10%), and tracheostomy care 88 (28%). The difficulties in these nursing tasks could be attributed to its complexity and preciseness it demands from a new nursing graduate who lacks clinical experience, which could be curtailed through adequate support throughout the transition period as reported by 204 (65%) of the participants, which is in accordance to other studies.[40,41]

The participants reported peer support 198 (63%) and ongoing learning 198 (63%) as the most satisfying aspects, and the system 264 (84%) as the least gratifying facet of the work environment. Peer support and peer coaching have an unequivocal impact in facilitating emotional decompression and resilience amongst those working in stressful environments.[42,43] However, a study by Connors et al described markedly higher burnout, significant resilience, and equal levels of job satisfaction among nurses who utilized the Resilience In Stressful Events (RISE) program as compared to those who had not.[44] Whilst, nurse leaders who had not utilized RISE were significantly more resilient and alike in burnout and work contentment. Ongoing learning has the potential to amplify nursing competency and patient care.[45,46] It provides an opportunity for the nurses to learn and advance their techniques. However, accessibility and an active engagement by the nurses in the ongoing learning, and undue funding by the organization is a prerequisite to attain the true intentions of the program.[45,47] The outdated equipment and facilities, and scarcity in supply of medical supplies have a detrimental effect on the care rendered for the patient in terms of quality and on the health of the healthcare workers.[48,49] Sufficient supply of functional medical equipment could be ensured through fortified management and governance structures to ensure an uninterrupted supply of patient care supplies.[50,51]

Among the 146 participants who reported stress, living situations (77%) accounted to be the most contributing factor to stress followed by personal relationships (46%). In similar studies, family relationship, time allocation, workload, psychological/physical abuse, professional relationship, understaffing, and risk of exposure to infection were the significant sources of stress.[52,53] With adequate colleague, organizational, preceptor, and social support, many of the stresses in the everyday lives of nurses could be managed effectively.[54,55] Induction training before entry into clinical practice has a significant impact in reducing stress and increasing job satisfaction.[56,57]

A statistically significant positive relationship between preceptor's support and organizing and prioritizing factor, communication/leadership, professional satisfaction, and job satisfaction was found at 0.05 level of significance. The findings are following the reports by Cline et al, wherein the participant's reported a heightened level of job satisfaction and significant improvements in communication/leadership and professional satisfaction.[58] However, the study by Salem Alghamdi and Ghazi Baker reported a positive relationship between preceptor support and communication/leadership, professional satisfaction, and job satisfaction; but a statistically insignificant negative relationship was found between preceptor support and organizing and prioritizing.[14] Providing emotional support to the new nursing graduates can help them tackle their uneasiness with diverse procedures, as it provides them with ample time in developing their critical thinking in a safe environment.[59]

However, the smaller sample size of our study was found as a limitation of current study.

Conclusion

The study found that the new nursing graduates experience various challenges during their transition period in the areas of role expectation, confidence, workload, orientation, and fears. They regarded increased support would aid them to experience further supported and merged into the unit. They were uncomfortable performing various procedures independently such as ventilator care/management, chest tube care, and central line care. The study also found a significant positive correlation between preceptor's support and Casey-Fink dimensions. Hence it can be concluded that with adequate preceptor support, the challenges encountered by new nursing graduates can be sorted out.

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Authors' Contributions

HBJ: Conceptualization, data handling, experiments design, data analysis, provision of study material and equipment's, supervision, draft preparation, writing and reviewing study validation, study consultation, project administration; AI: Conceptualization, data handling, experiments design, data analysis, provision of study material and equipment's, supervision, draft preparation, writing and reviewing; AGG, GG, MJ, SM: Data handling, data presentation, draft preparation. All authors have read and approved the manuscript.

Conflict of Interests

The authors declare no conflict of interest in this study.

Data Accessibility

The datasets are available from the corresponding author on reasonable request.

Ethical Issues

Ethical approval was obtained from the Institutional Ethical Committee (Reference No. IEC/AIIMS BBSR/Nursing/2020-21/11, dated December 21, 2020).

Research Highlights

What is the current knowledge?

New nursing graduates experience stress during their transition period and is cognizant of having a safe environment to deliver quality health care.

What is new here?

Reinforcing the orientation programme and uninterrupted supervision by the preceptor would assist new nursing graduates during their transition period to diminish the risk of errors. Comprehending the issues faced by new nursing graduates could help the hospital administration in implementing strategies or programs aimed at reducing these difficulties, which could result in decreased turn over on the already constrained healthcare workforce.

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