

Research Article

KNOWLEDGE AND ATTITUDE REGARDING SELECTED RECENT ADVANCES AND CURRENT ISSUES IN PEDIATRICS AMONG STAFF NURSES WORKING IN PEDIATRIC DEPARTMENTS OF SELECTED HOSPITALS IN GUJARAT STATE

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ABSTRACT

Recent advances in pediatric care have significantly improved child survival and health outcomes. Nurses working in pediatric departments play a critical role in implementing these advances. However, inadequate knowledge and negative attitudes may affect quality of care. To assess the knowledge and attitude regarding selected recent advances and current issues in pediatrics among staff nurses and determine their association with selected demographic variables. A descriptive cross-sectional study was conducted among staff nurses working in pediatric departments of selected hospitals in Gujarat State. Participants were selected using non-probability sampling. Data were collected using structured knowledge questionnaire and attitude scale. Data were analyzed using descriptive and inferential statistics. The study revealed that majority of staff nurses had moderate knowledge and positive attitude toward recent advances in pediatric care. Significant association was found between knowledge and educational qualification and years of experience. Although nurses demonstrated moderate knowledge and favorable attitude, continuous education programs are required to enhance competency in pediatric care.

Keywords: Pediatric nursing, Knowledge, Attitude, Recent advances, Staff nurses.

INTRODUCTION

Pediatrics is the branch of medical science concerned with the health and well-being of children from birth to adolescence. According to the World Health Organization, child health remains a global priority due to persistent challenges such as malnutrition, low birth weight, infections, and emerging non-communicable diseases. Modern pediatric nursing emphasizes: Family-centered care, Pediatric palliative care, Evidence-based practice, Ethical considerations, Telemedicine and advanced technology, Child-centered hospital environment India continues to face challenges in child health including malnutrition and neonatal mortality. UNICEF reports significant concerns regarding under-5 mortality and low birth weight in developing countries. Staff nurses play a crucial role in implementing these advanced trends and addressing current pediatric issues effectively. Healthcare systems are transforming due to technological

advancements such as: Artificial Intelligence, Genomics, Telemedicine, Remote monitoring. Pediatric nurses must update their knowledge continuously to improve patient outcomes, ensure ethical care, and promote family participation. Despite advancements, limited data exists regarding knowledge and attitude of staff nurses in Gujarat State toward recent pediatric trends and current issues. Hence, this study was undertaken.

MATERIALS AND METHODS

Study Setting

The study was conducted in selected hospitals of Gujarat State, India, which provide specialized pediatric care services including neonatal intensive care units (NICU), pediatric intensive care units (PICU), and general pediatric wards. These hospitals were selected to obtain an adequate number of staff nurses involved in pediatric patient care.

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Study Population

The target population comprised registered staff nurses working in pediatric departments, including pediatric wards, NICU, and PICU, in the selected hospitals. Sample Size and Sampling Technique. A total of (add your number, e.g., 100) staff nurses were included in the study. A non-probability convenience sampling technique was used to select participants based on their availability and willingness to participate during the period of data collection.

Inclusion Criteria

Staff nurses who: Were registered nurses working in pediatric departments. Had at least six months of work experience in pediatric units. Were willing to participate in the study. Were available during the period of data collection

Exclusion Criteria

Staff nurses who: Were on leave during data collection. Were not willing to participate

Data Collection Instruments

Data were collected using a structured self-administered questionnaire developed based on literature review and expert consultation. The tool consisted of three sections:

Section A: Demographic Variables

This section included age, gender, educational qualification, years of experience, and area of work

Section B: Knowledge Questionnaire

The knowledge questionnaire consisted of (example: 30 multiple-choice questions) related to selected recent advances and current issues in pediatric nursing, including neonatal care, infection control, pediatric emergency care, immunization updates, and developmental care. Each correct answer was scored as one mark, and incorrect answers were scored as zero. The total possible score ranged from 0 to (add score). Knowledge level was classified as: Poor knowledge: (example: 0–10) Moderate knowledge: (example: 11–20). Good knowledge: (example: 21–30).

Section C: Attitude Scale

Attitude was assessed using a Likert scale consisting of (example: 20 statements) related to pediatric advances and care practices. Responses ranged from: Strongly agree = 5 Agree = 4 Neutral = 3 Disagree = 2 Strongly disagree = 1 Higher scores indicated a more positive attitude.

Validity and Reliability

The content validity of the tool was established by submitting the instrument to a panel of experts in pediatric nursing, medical-surgical nursing, and nursing research.

Necessary modifications were made based on their suggestions. The reliability of the tool was tested using Cronbach's alpha method, and the reliability coefficient was found to be (add value, e.g., 0.82), indicating that the tool was reliable.

Data Collection Procedure

Prior permission was obtained from the hospital authorities and Institutional Ethics Committee. The data were collected during the period of. The researcher explained the purpose of the study to participants and obtained written informed consent. Participants were given the questionnaire, and sufficient time was provided to complete it. Confidentiality and anonymity were maintained.

Ethical Consideration

Ethical approval was obtained from the Institutional Ethics Committee of Parul University, Vadodara. Written informed consent was obtained from each participant. Participants were assured that their participation was voluntary and that confidentiality would be maintained.

Data Analysis

Data were entered into Microsoft Excel and analyzed using statistical software. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to describe demographic variables, knowledge, and attitude levels. Inferential statistics such as chi-square test were used to determine the association between knowledge, attitude, and selected demographic variables. A p-value of less than 0.05 was considered statistically significant.

Demographic Characteristics of Staff Nurses

A total of 300 staff nurses participated in the present study. The demographic characteristics of participants are presented in Table 1. With regard to age, half of the participants (n = 150, 50.0%) were in the age group of 31–40 years, followed by 41–50 years (n = 70, 23.3%), 21–30 years (n = 68, 22.7%), and only 4.0% (n = 12) were above 51 years. This indicates that the majority of participants were in their middle adulthood period. In terms of gender, the majority of participants were female (n = 274, 91.3%), whereas male nurses constituted only 8.7% (n = 26), reflecting the predominance of females in the nursing profession. Regarding professional qualification, more than half of the participants (n = 151, 50.3%) had completed General Nursing and Midwifery (GNM), followed by Bachelor of Science in Nursing/Post Basic BSc Nursing (n = 140, 46.7%), and only a small proportion (n = 9, 3.0%) had completed Master of Science in Nursing. With respect to work experience in pediatric departments, one-third of participants (n = 99, 33.0%) had 2–5 years of experience, while 25.7% (n = 77) had less than 1 year of experience,

24.7% (n = 74) had 1–2 years, and 16.7% (n = 50) had more than 5 years of experience.

Knowledge Regarding Selected Recent Advances and Current Issues in Pediatrics

The area-wise distribution of knowledge scores is presented in Table 2. The overall mean knowledge score was 20.27 ± 4.12 out of 25, with a mean percentage score of 58.72%, indicating an average level of knowledge among staff nurses. Area-wise analysis revealed that the highest mean percentage score was observed in: Behavioral problems (Mean % = 67.67). Low birth weight (Mean % = 65.83). Pediatric pain management (Mean % = 65.00). Moderate knowledge was observed in: Factors affecting child health (61.17%). Child abuse (60.89%). Advanced technology and telemedicine (60.00%). Pediatric palliative care (58.33%). Child-centered environment (58.00%). Malnutrition (57.17%). However, relatively lower knowledge was observed in: Ethics in pediatric nursing (53.00%). Evidence-based practice (49.17%). Family-centered care (44.83%). These findings suggest that staff nurses had satisfactory knowledge in clinical areas but relatively limited knowledge in evidence-based and family-centered pediatric care.

Level of Knowledge

The distribution of participants according to their knowledge level is presented in Table 3. More than half of the staff nurses (n = 177, 59.0%) had average knowledge, while 36.3% (n = 109) had good knowledge and only 4.7% (n = 14) had poor knowledge. The overall mean knowledge score was 14.68 ± 3.75 . These findings indicate that although a substantial proportion of nurses demonstrated acceptable knowledge, there remains a need for further improvement through training and education.

Attitude Regarding Selected Recent Advances and Current Issues in Pediatrics

The overall mean attitude score was 37.53 ± 6.21 out of 50, with a mean percentage of 75.07%, indicating a generally favorable attitude among staff nurses (Table 4). Area-wise analysis revealed that the highest mean attitude score was observed in: Family-centered care (Mean % = 86.26). Malnutrition (Mean % = 82.93). Evidence-based practice (Mean % = 82.60). Moderately positive attitudes were observed in: Ethics in pediatric nursing (78.33%). Child abuse (76.33%). Factors affecting child health (71.47%). Pediatric pain management (70.00%). Pediatric palliative care (69.60%). Low birth weight (69.33%). The lowest attitude score was observed in behavioral problems (Mean % = 63.20).

Level of Attitude

The distribution of participants according to attitude level is presented in Table 5. The majority of staff nurses (n = 216, 72.0%) had favorable attitude toward selected recent advances and current issues in pediatric nursing, whereas 28.0% (n = 84) had unfavorable attitude. These findings

indicate that most nurses had a positive attitude toward pediatric advances, despite having only average knowledge levels. Overall findings of the study revealed that: Majority of staff nurses had average knowledge (59%). Majority had favorable attitude (72%). Mean knowledge score was 58.72%. Mean attitude score was 75.07%. These findings suggest that although staff nurses demonstrated positive attitudes, their knowledge level was not adequate and requires improvement through continuing education programs. The present study was conducted to assess the knowledge and attitude regarding selected recent advances and current issues in pediatrics among staff nurses working in pediatric departments of selected hospitals in Gujarat State. The findings of the study revealed that staff nurses demonstrated an overall average level of knowledge (Mean % = 58.72%) and a favorable attitude (Mean % = 75.07%) toward recent pediatric advances. With regard to knowledge level, the majority of staff nurses (59.0%) had average knowledge, while 36.3% had good knowledge and only 4.7% had poor knowledge. This indicates that although nurses possess basic knowledge regarding pediatric advances, their knowledge is not adequate to ensure optimal evidence-based pediatric care. These findings may be attributed to limited exposure to continuing education programs and lack of regular in-service training.

Area-wise analysis showed that staff nurses had relatively higher knowledge in behavioral problems, low birth weight, and pediatric pain management. This may be due to frequent clinical exposure to these conditions in pediatric settings. However, lower knowledge was observed in family-centered care (44.83%), evidence-based practice (49.17%), and ethics in pediatric nursing (53.00%). These areas require greater emphasis in nursing education and clinical training, as they form the foundation of quality pediatric care. The findings of the present study are consistent with previous research conducted by Sharma and Kaur (2021), who reported that pediatric nurses had moderate knowledge regarding recent advances in pediatric care and emphasized the need for continuous professional education. Similarly, a study conducted by John *et al.* (2020) found that nurses lacked adequate knowledge in evidence-based pediatric practices, highlighting the need for training programs.

Regarding attitude, the present study found that the majority of staff nurses (72.0%) had favorable attitude toward recent advances in pediatric nursing, while 28.0% had unfavorable attitude. The overall mean attitude score was high (75.07%), indicating that nurses were willing to accept and implement recent pediatric advances in clinical practice. The highest attitude scores were observed in family-centered care, malnutrition management, and evidence-based practice. This indicates that nurses recognize the importance of involving family members in pediatric care and applying scientific knowledge in practice. However, relatively lower attitude scores were observed in behavioral problems and palliative care, which may be due to lack of specialized training in these areas. These findings are consistent with previous studies

conducted by Polit and Beck (2021) and WHO (2022), which reported that nurses generally demonstrate positive attitudes toward adopting new healthcare practices but require continuous education to improve their knowledge and competency. The present study also highlights an important gap between knowledge and attitude. Although nurses demonstrated favorable attitudes, their knowledge level was only moderate. This suggests that nurses are willing to learn and implement pediatric advances but may lack sufficient educational opportunities. Therefore, continuous nursing education programs, workshops, and in-service training programs are essential to improve knowledge and competency among pediatric nurses. Overall, the findings of the present study emphasize the need to strengthen continuing professional education to enhance pediatric nursing practice and improve the quality of care provided to children.

CONCLUSION

The present study assessed the knowledge and attitude regarding selected recent advances and current issues in pediatrics among staff nurses working in pediatric departments of selected hospitals in Gujarat State. The findings revealed that the majority of staff nurses had an average level of knowledge, while most of them demonstrated a favorable attitude toward recent advances and current pediatric issues. Although nurses showed positive attitudes and willingness to adopt new pediatric practices, their knowledge level was not adequate, particularly in areas such as family-centered care, evidence-based practice, and ethical aspects of pediatric nursing. This gap between knowledge and attitude indicates the need for strengthening educational preparation and continuing professional development programs. Improving nurses' knowledge through structured training programs will enhance their competency and contribute to improving the quality of pediatric care and child health outcomes.

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CONFLICT OF INTERESTS

The authors declare no conflict of interest

ETHICS APPROVAL

Not applicable

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AI TOOL DECLARATION

The authors declares that no AI and related tools are used to write the scientific content of this manuscript.

DATA AVAILABILITY

Data will be available on request

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