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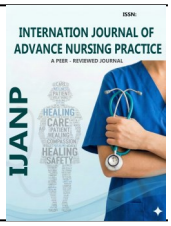

Research Article
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Effectiveness of an Instructional Module on Knowledge Regarding Components of the Reproductive and Child Health Programme Among Married Women in a Selected Community.

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Abstract:

Introduction: Reproductive and Child Health (RCH) is a significant public health project aimed at enhancing maternal and child welfare through comprehensive reproductive healthcare services. The program prioritizes maternal health, child survival, immunization, nutrition, family welfare, adolescent health, gender equity, and population stabilization. Enhancing women's awareness of the diverse elements of the RCH program is crucial for improving health outcomes and ensuring the efficient use of available resources. **Methods:** A quantitative methodology utilizing a pre-experimental one-group pre-test and post-test design was employed. Seventy-five married women were chosen using purposive sampling. Data were gathered utilizing a structured self-administered questionnaire created by the investigator. Descriptive and inferential statistics were utilized. **Results:** Pre-test results indicated that all participants (100%) possessed insufficient knowledge concerning the elements of the RCH program. After the educational module, 70 participants (93.33%) exhibited sufficient knowledge, whilst 5 individuals (6.67%) achieved a moderately sufficient level of understanding. The post-test scores revealed a significant enhancement in participants' comprehension of the program. **Conclusion:** The educational module markedly improved married women's understanding of the elements of the RCH program.

Keywords: Married Women, Knowledge, Instructional Module, Maternal Health, Child Health.

INTRODUCTION

Reproductive health encompasses the optimal functioning of the reproductive system throughout all life phases, including safe and healthy reproduction, the avoidance of reproductive illnesses, and access to suitable reproductive health care services. Reproductive health enables men and women to make informed and voluntary decisions regarding family planning, pregnancy, childbirth, and sexual health. It also emphasizes the right of individuals to access accurate information, appropriate healthcare services, and safe reproductive practices throughout their lifespan. The concept of reproductive health covers a wide range of services including maternal and child healthcare, adolescent health education, family welfare services, prevention of sexually transmitted diseases, infertility management, immunization, nutritional support, and counseling services.

The primary objective of reproductive health is to enhance the entire quality of life and well-being of persons from adolescence to old age. It focuses on promoting healthy lifestyles, preventing reproductive health problems, reducing maternal and infant mortality, and ensuring the physical and psychological well-being of both mother and child. Reproductive health programs also play a significant role in promoting gender equality, women empowerment, responsible parenthood, and population stabilization.

According to the study conducted by Priyadarshini and Dr. Gouri Manasa on the Reproductive and Child Health (RCH) Program Phases I and II, the RCH program was introduced as an important national health initiative to improve maternal and child healthcare services in India. The program was implemented in two separate phases, namely RCH Phase I and RCH Phase II, with the objective of strengthening healthcare delivery systems and ensuring accessible and affordable reproductive healthcare services to all sections of society, particularly women and children living in rural and underserved areas. The RCH program integrated various components of maternal health, child health, family welfare, immunization, nutrition, and adolescent healthcare under a single comprehensive framework.

The major objectives of the RCH program were to reduce maternal mortality rate, infant mortality rate, and under-five mortality rate by providing quality healthcare services at all levels. The program emphasized achieving 100% antenatal care coverage for pregnant women through regular health checkups, nutritional supplementation, tetanus immunization, early detection of complications, and health education. Another important objective was to ensure complete immunization coverage for infants and children to protect them against vaccine-
preventable diseases. The program also aimed to increase institutional deliveries and promote skilled birth attendance to reduce maternal and neonatal complications during childbirth.

Furthermore, the RCH program encouraged breastfeeding practices, especially exclusive breastfeeding during the first six months of life, to improve infant nutrition and immunity. It also focused on family planning services to help couples make informed choices regarding spacing and limiting pregnancies. Special importance was given to adolescent reproductive and sexual health by creating awareness regarding puberty, menstrual hygiene, nutrition, prevention of early marriage, prevention of teenage pregnancy, and healthy lifestyle practices.

The RCH program also emphasized community participation, health education, and the involvement of healthcare workers such as nurses, midwives, and community health workers in delivering reproductive and child healthcare services. Through various health education programs and awareness campaigns, the program aimed to improve public understanding regarding maternal health, child care, nutrition, sanitation, immunization, and reproductive rights. Overall, the Reproductive and Child Health program has played a vital role in strengthening the healthcare system, improving maternal and child health indicators, and promoting reproductive well-being among the population. The present study emphasizes the importance of delivering reproductive and child healthcare services to women residing in rural and underserved communities. In developing countries such as India, high rates of anemia, malnutrition, inadequate healthcare access, and poor maternal health significantly affect women of reproductive age and may lead to long-term adverse outcomes for both the mother and the fetus.

METHODOLOGY

A quantitative research approach was adopted. This approach was considered appropriate for collecting, analyzing, and interpreting numerical data related to participants' understanding of various components of the RCH program. A pre-experimental one-group pre-test post-test research design was utilized for the investigation. This design allowed the researcher to evaluate the participants' knowledge prior to and following the implementation of the instructional module within the same cohort.

The efficacy of the educational intervention was assessed by comparing pre-test and post-test knowledge scores. Participants first completed a pre-test assessment, then received the training module, and finally underwent a post-test evaluation to evaluate changes in knowledge levels. The study was carried out among married women residing in selected community areas. The research included 75 married women who were all eligible to take part. We used a purposive sampling strategy to pick our participants. The study only included women who met the following criteria: were willing to participate, were accessible during data collection, and had the cognitive capacity to understand and complete the questionnaire. Women who were seriously ill or unwilling to participate were excluded. Purposive sampling was considered appropriate because it facilitated the selection of participants possessing characteristics relevant to the objectives of the study .

Data were collected using a structured questionnaire developed by the investigator after an extensive review of literature, consultation with subject experts, and reference to standard reproductive and child health guidelines. The instrument included demographic variables. The questionnaire also contained multiple-choice items assessing knowledge related to various components.Content validity of the questionnaire and instructional module was established through expert evaluation by specialists. Necessary modifications were incorporated based on expert.

The study was conducted in sequential phases. Initially, rapport was established with the participants, demographic data were collected, and a pretest was administered using a structured questionnaire to assess baseline knowledge regarding the Reproductive and Child Health (RCH) program.

Following the pretest, an instructional module was delivered as the educational intervention. The module covered key aspects of the RCH program, including antenatal and postnatal care, maternal nutrition, breastfeeding, immunization, family planning, adolescent reproductive health, reproductive hygiene, prevention of maternal and child health complications, institutional delivery, and prevention of reproductive tract infections and sexually transmitted diseases. The content was presented in simple language, and participants' queries were clarified during the session. A post-test was conducted using the same structured questionnaire to evaluate the effectiveness of the instructional module. The collected data were coded, organized, and analyzed using descriptive and inferential statistics. Findings were presented through tables, graphs, and narrative descriptions

RESULT

The results of the current investigation validated the conceptual framework derived from Nola. J. Pender's Health Promotion Model proved suitable and efficacious in directing the educational intervention for married women concerning the elements of the Reproductive and Child Health (RCH) Program. The baseline assessment encompassed an evaluation of prior knowledge and demographic characteristics, including age, educational attainment, occupation, monthly income, number of children, and duration of marriage, which were deemed significant factors affecting the participants' comprehension of RCH services and programs.

Following the pre-test assessment, the instructional module was administered to all 75 married women included in the study. The educational intervention focused on enhancing awareness regarding reproductive and child healthcare services, improving understanding of maternal and child health practices, reducing perceived barriers in utilizing RCH services, and strengthening confidence in adopting health-promoting behaviors. The instructional module also provided comprehensive information in a simple, clear, and understandable manner. The post-test assessment, conducted seven days after the administration of the instructional module, demonstrated a marked improvement in the knowledge scores of the participants. The findings showed that all 75 (100%) married women had inadequate knowledge during the pre-test assessment. However, after the educational intervention, 70 (93.33%) participants attained adequate knowledge, while 5 (6.67%) participants demonstrated moderately adequate knowledge regarding the components of the RCH Program. These findings clearly indicate the effectiveness of the instructional module in improving the knowledge level among married women.

Subsequent analysis indicated that the computed 't' value ($t = 77.179$) was statistically significant at the $p < 0.001$ level, demonstrating that the instructional module was exceptionally effective in enhancing the post-test knowledge scores of married women concerning the components of the Reproductive and Child Health Program. The notable enhancement between the pre-test and post-test scores validated the efficacy of the educational intervention. The study findings indicated that the demographic variable of age in years demonstrated a statistically significant correlation with the post-test knowledge level concerning the components of the Reproductive and Child Health Program among married women at $p < 0.005$. Nonetheless, other demographic characteristics, including educational attainment, occupation, monthly income, number of offspring, and length of marriage, did not exhibit a statistically significant correlation with the post-test knowledge scores. The findings of this study robustly corroborate the tenets of Nola J. Pender's Health Promotion Model, which asserts that favorable behavioral outcomes can be attained through effective health education and incentive tactics. The notable enhancement in knowledge among married women indicated effective assimilation of health-promoting information and behavioral modification.

CONCLUSION

The study's findings indicated that the educational intervention exerted a substantial favorable influence on enhancing the participants' comprehension of several facets of reproductive and child healthcare services. The educational module effectively enhanced awareness and promoted knowledge regarding mother and child health among the study participants. Prior to the implementation of the educational module, most married women possessed insufficient understanding concerning the elements of the Reproductive and Child Health Program. A significant number of participants lacked awareness on critical components of maternal healthcare, pediatric healthcare services, immunization initiatives, family planning techniques, prenatal and postnatal care, nutrition, and the accessibility of government healthcare services under the RCH Program. The pre-test results indicated the necessity for organized educational interventions to enhance awareness and comprehension among married women concerning reproductive and child health services.

Following the pre-test assessment, the instructional module was administered to all participants in a systematic and organized manner. The module was designed using simple and understandable language to ensure that the participants could easily comprehend the information provided. The educational content included detailed explanations regarding the objectives and components of the Reproductive and Child Health Program, maternal healthcare services, safe motherhood practices, antenatal and postnatal care, immunization schedules, nutritional requirements, family planning methods, newborn care, prevention of communicable diseases, and the importance of utilizing healthcare services available in the community. The instructional module also emphasized the importance of early identification of pregnancy related complications and the need for regular health check-ups for both mothers and children. The post-test assessment conducted after the educational intervention revealed a remarkable improvement in the knowledge level of married women. More than 90% of the participants demonstrated adequate knowledge after the administration of the instructional module. The majority of the married women were able to correctly identify and explain various components of the RCH Program, including maternal health services, child welfare services, immunization, nutrition, family planning, and reproductive healthcare practices. The findings indicated that the participants had gained a clear understanding of the significance of reproductive and child healthcare services and their role in promoting the health and well-being of mothers and children.

Nurse-Led Occupational Risk Flagging System in NICU

A Nurse-Led Occupational Risk Flagging System in Neonatal Intensive Care Units (NICU) serves as an essential early surveillance and intervention mechanism that strengthens comprehensive neonatal care. It involves systematic screening and detailed assessment of parental occupational histories, focusing on exposures to chemicals, radiation, heavy metals, biological hazards, and high-stress or physically demanding work environments. This enables nurses to identify neonates at risk for low birth weight, congenital anomalies, respiratory distress, and neurodevelopmental impairments. Early risk detection facilitates prompt diagnostic evaluation, continuous monitoring, and timely referral to multidisciplinary specialists, thereby enhancing clinical decision-making, documentation accuracy, and continuity of care from NICU to follow-up services. Beyond clinical management, the system also addresses psychosocial well-being. Parental exposures may lead to anxiety, stress, and guilt, particularly in adverse outcomes. Neonatal nurses play a key role in recognizing these concerns, providing emotional support, counseling, and education, while promoting early stimulation and family-centered care.

Exposure Sensitive Growth Chart

The Exposure-Sensitive Growth Chart is an enhanced monitoring approach that combines standard anthropometric measurements with detailed information on environmental and occupational exposures. Unlike traditional growth charts that focus only on indicators such as height, weight, and head circumference, this model also considers a child's exposure history, including parental contact with harmful substances before and during pregnancy, as well as environmental influences after birth. Linking growth patterns with exposure data allows healthcare professionals to recognize subtle changes that may not be evident during routine assessments. These changes can reflect the influence of environmental toxins, pollutants, or occupational risks on both physical growth and neurological development. This approach supports the early identification of growth concerns and potential developmental delays, enabling prompt and appropriate interventions such as medical care, therapeutic services, and structured developmental support. It also encourages personalized care planning based on the child's unique risk factors. Overall, this comprehensive method enhances clinical evaluation and promotes better developmental outcomes.

Integrated Discussion: Life-Course Perspectives on Occupational Exposure Outcomes in Adult and Pediatric Populations

Occupational exposures are a complex and influential determinant of health across the entire life span, affecting both adults and children in interconnected ways. Understanding these effects requires a life-course approach, which considers how repeated, long-term, and even intergenerational exposures contribute to disease patterns, developmental outcomes, and future health risks, particularly in the Indian setting. In adults, occupational hazards arise from continuous interaction with chemical, physical, biological, and psychosocial factors. Prolonged exposure to industrial chemicals, dust, heavy metals, and poor ergonomic conditions contributes significantly to chronic non-communicable diseases such as respiratory illnesses, cancers, musculoskeletal disorders, and cardiovascular diseases. At the same time, non-physical stressors including job pressure, shift work, and financial insecurity intensify mental health problems such as anxiety, depression, and occupational burnout. These risks are especially evident in sectors like agriculture, construction, mining, and informal labor, where safety measures and health monitoring systems are often insufficient.

CONCLUSION

In conclusion, elucidating the relationship between occupational exposures and developmental malformations requires a shift from a narrow, hazard-based view to a broader life- course framework that captures both direct and indirect pathways of risk. While adults primarily experience the immediate and cumulative effects of workplace hazards, children are affected through more complex mechanisms involving parental exposure, intrauterine influences, and early-life environmental conditions. The occurrence of conditions such as Tracheoesophageal Atresia, even in the absence of identifiable traditional risk factors, underscores the role of subtle, often overlooked exposures including psychosocial stress, circadian disruption, and lifestyle- related occupational patterns. Bridging pediatric and adult perspectives highlights the intergenerational continuity of occupational risk and emphasizes the need for integrated, exposure- sensitive healthcare models. Strengthening occupational history assessment within maternal and child health services, enhancing early screening frameworks, and promoting interdisciplinary collaboration are critical for timely recognition and intervention. In this context, critical care nurses play a vital role in linking clinical presentation with underlying exposure histories, ensuring both effective neonatal management and informed parental support. Advancing research, policy, and clinical practice in this direction will be essential to address the hidden burden of occupational exposures and to develop preventive strategies that protect not only the current workforce but also the health and development of future generations.

The improvement observed in the post-test scores clearly demonstrated that the instructional module was highly effective in increasing the participants' awareness and understanding regarding reproductive and child health. The educational intervention helped the married women to develop better insight into the importance of utilizing healthcare services, adopting healthy practices, and seeking timely medical assistance during pregnancy, childbirth, and child-rearing periods. The instructional module not only enhanced theoretical understanding but also motivated the participants to utilize available reproductive and child healthcare services effectively.

Recommendations:

Expanding the study to include a larger population may provide better insight into the knowledge levels and educational needs of married women regarding the Reproductive and Child Health (RCH) Program. The same study may also be conducted in different settings such as rural areas, urban communities, primary health centers, hospitals, and other healthcare institutions to compare the effectiveness of the instructional module among diverse populations. Conducting the study in various geographical and cultural settings may help identify differences in awareness, healthcare utilization, and accessibility of RCH services among married women. Organized educational programs, awareness campaigns, and community-based health teaching initiatives can be implemented in local communities to improve public awareness regarding the components and benefits of the Reproductive and Child Health Program. Health education activities conducted through community health workers, nurses, schools, women's groups, and healthcare organizations may help strengthen maternal and child healthcare practices and promote utilization of available healthcare services. The present study can also be replicated with a larger number of participants in different demographic settings to validate the findings and assess the long-term effectiveness of instructional modules on knowledge improvement. Repeated studies may further contribute to the development of effective educational strategies for promoting reproductive and child health awareness among women.

REFERENCE

1. Ahirwar, N. (2018). Study to assess knowledge attitude and practices of antenatal care among antenatal women attending outdoor clinic in tertiary care hospital. International Journal of Reproduction, Contraception, Obstetrics and Gynecology, 7(5), 1754–1759. https://doi.org/10.18203/2320-1770.ijrcog20181473
2. Alemayehu, M., Belachew, T., & Tilahun, T. (2012). Factors associated with utilization of long acting and permanent contraceptive methods among married women of reproductive age in Mekelle town, Tigray Region, North Ethiopia. BMC Pregnancy and Childbirth, 12(1), 6. https://doi.org/10.1186/1471-2393-12-6
3. Kotecha, P. V., Patel, S. V., Baxi, R. K., Mazumdar, V. S., Shobha, M., Mehta, K. G., & Mavalankar, D. V. (2009). Effectiveness of reproductive health education among rural adolescent girls: A school-based intervention study in Udupi Taluk, Karnataka. Indian Journal of Medical Sciences, 63(10), 439–443. Available from: https://pubmed.ncbi.nlm.nih.gov/
4. Gotmark, F., & Andersson, M. (2020). Human fertility in relation to education, economy, religion, contraception, and family planning programs. BMC Public Health, 20(1), 265. https://doi.org/10.1186/s12889-020-8331-7
5. Haq, S. M. A., Chowdhury, M. A. F., Ahmed, K. J., & Chowdhury, M. T. A. (2023). Environmental quality and its impact on total fertility rate: An econometric analysis from a new perspective. BMC Public Health, 23(1), 1187. https://doi.org/10.1186/s12889-023-16056-7
6. Jelly, P., Jeenwal, N., Wadhwa, N., Kumari, N., Kumari, P., Mathur, P., Yadav, P., Nautiyal, P., Maurya, P., Sarwan, P., & Sharma, R. (2023). Knowledge, attitude, compliance and barriers of immunization among parents of under-five children. International Journal of Africa Nursing Sciences, 19, 100608. https://doi.org/10.1016/j.ijans.2023.100608
7. Jose, M. J., Fathima, F. N., Joseph, S. T., Fernandez, A. C., Siangshai, S., Vadakkan, N., & Agrawal, T. (2019). Knowledge regarding reproductive health among women of reproductive age group in three sub-centre areas of a primary health center, Sarjapur, Bengaluru, Karnataka: A cross-sectional study. International Journal of Community Medicine and Public Health, 6(9), 4082–4087. https://doi.org/10.18203/2394-6040.ijcmph20193992
8. Patel, B., Gurmeet, P., Sinalkar, D., Pandya, K., Mahen, A., & Singh, N. (2016). A study on knowledge and practices of antenatal care among pregnant women attending antenatal clinic at a tertiary care hospital of Pune, Maharashtra. Medical Journal of Dr. D. Y. Patil University, 9(3), 354–362. https://doi.org/10.4103/0975-2870.182507
9. Muthu Selvan, N. V., et al. (2025). Bridging innovation and practice in regenerative nursing: Challenges, barriers, and future directions. International Journal of Innovative Research in Health Science, 2(4), 1–10.
10. Muthu Selvan, N. V., & Hema, V. H. (2026). Coping repertoires as predictors of burnout trajectories in IT-workers: A psychosocial study. The Bioscan, 21(Special Issue 1), 806–822. Retrieved from https://thebioscan.com/index.php/pub/article/view/5351

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