A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING TRAINING ON EARLY RECOGNITION AND MANAGEMENT OF SEPSIS AMONG 1st YEAR GNM STUDENTS IN SMT NARATATHNAMMA SCHOOL OF NURSING

By:

Ms. Nayana Joshi

Ms. Neethumol Mathew

Ms. Ngawang Pem

Mr. Neeraj

Mr. Nim Dorji Tamang

3rd Year GNM Nursing (2023-2026)

Research project submitted to

Smt. Nagarathnamma College and School of Nursing

Under the guidance of

Dr. Vijayamalar

Professor/HOD Department of Child health Nursing

Smt. NR College

Acharya Institute, Dr. Sarvepalli Radhakrishnan Road

Soldevanahalli, Bengaluru-56010

DECLARATION BY THE CANDIDATES

We hereby declare that this project entitled **"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING TRAINING ON EARLY RECOGNITION AND MANAGEMENT OF SEPSIS AMONG 1st YEAR GNM STUDENTS IN SMT NARATATHNAMMA SCHOOL OF NURSING"** is a genuine research work carried out by Ms. Nayana Joshi, Mrs. Neethumol Mathew, Ms. Ngawang Pem, Mr. Neeraj, Mr. Nim Dorji Tamang in fulfilment of requirements for the diploma of General Nursing and Midwifery under the guidance of Dr. Vijayamalar, Smt. Nagarathnamma School of Nursing.

Place: Bengaluru
Date:

Signature of the candidate
Ms. Nayana Joshi
Mrs. Neethumol Mathew
Ms. Ngawang Pem
Mr. Neeraj
Mr. Nim Dorji Tamang

CERTIFICATE BY THE GUIDE

This is to certify that this project entitled **"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING TRAINING ON EARLY RECOGNITION AND MANAGEMENT OF SEPSIS AMONG 1st YEAR GNM STUDENTS IN SMT NARATATHNAMMA SCHOOL OF NURSING"** is a genuine research work carried out by Ms. Nayana Joshi, Mrs. Neethumol Mathew, Ms. Ngawang Pem, Mr. Neeraj, Mr. Nim Dorji Tamang in fulfilment of requirements for the diploma of General Nursing and Midwifery under the guidance of Dr. Vijayamalar, Smt. Nagarathnamma School of Nursing.

Place: Bengaluru
Date:

Signature of the guide:
Dr. Vijayamalar
Professor/HOD Department of Child health Nursing
Smt. Nagarathnamma School of Nursing,

ENDORCEMENT BY THE PRINCIPAL

This is to certify that this project entitled **"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING TRAINING ON EARLY RECOGNITION AND MANAGEMENT OF SEPSIS AMONG 1st YEAR GNM STUDENTS IN SMT NARATATHNAMMA SCHOOL OF NURSING"** is a genuine research work carried out by Ms. Nayana Joshi, Mrs. Neethumol Mathew, Ms. Ngawang Pem, Mr. Neeraj, Mr. Nim Dorji Tamang in fulfilment of requirements for the diploma of General Nursing and Midwifery under the guidance of Dr. Vijayamalar, Smt. Nagarathnamma School of Nursing.

Place: Bengaluru
Date:

Signature of the Principal
Dr. Devi Nanjappan
Principal
Smt. Nagarathnamma School of Nursing

AKNOWLEDGEMENT

“Gratitude is the fairest blossom which springs from the soul."

We express our heartfelt gratitude to the Almighty God for His endless blessings, guidance, and strength throughout the completion of this research study.

We extend our sincere thanks to **Sri. Premnath Reddy, Chairman, JMJ Trust, Smt. Shalini Reddy, Director of Admissions, JMJ Trust, and Mr. Krishna Bhasani, Managing Director**, for providing excellent facilities, encouragement, and support that enabled us to successfully carry out this study in this esteemed institution.

We are deeply indebted **to Dr. Devi Nanjapan, Principal, Smt. Nagarathnamma School of Nursing**, for granting us permission to conduct the study and for her valuable encouragement and support throughout the research process. We express our heartfelt thanks to **Prof. Snehalatha Reddy, Academic Coordinator, Smt. Nagarathnamma School of Nursing,** for her constant encouragement, valuable suggestions, and support in carrying out this research study successfully

We would like to express our profound gratitude to our guide, **Dr. Vijayamalar, Professor/HOD Department of Child health Nursing, Smt. NR College** for her expert guidance, constructive suggestions, constant motivation, and unwavering support, and constant motivation played a significant role that greatly contributed to the successful completion of this research work into reality.

We also extend our sincere appreciation to all the **faculty members of Smt. Nagarathnamma School of Nursing** for their valuable advice, encouragement, and cooperation during the course of the study. Special thanks are due to **Mrs. Sheela, Librarian,** and the **supporting staff** for their assistance in providing the necessary resources and support required for this research. We are grateful to all the **participants of the study** who willingly took part in this study and contributed to its successful completion.

We express our deepest gratitude to our **beloved parents and friends** for their continuous moral support, prayers, encouragement, understanding, and assistance throughout this academic and research journey. Their support has been invaluable in completing this work successfully

Lastly, we are grateful to **all those who have directly or indirectly contribute and supported us in the successful completion of this research study.**

ABSTRACT

"A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING TRAINING ON EARLY RECOGNITION AND MANAGEMENT OF SEPSIS AMONG 1st YEAR GNM STUDENTS IN SMT NARATATHNAMMA SCHOOL OF NURSING"

Background of study: Sepsis continues to be an important global health concern and is a life-threatening condition that requires early recognition and prompt, effective management. It can occur when the body's response to an infection causes organ dysfunction and can rapidly lead to serious complications if not identified and treated in time. Nurses play a vital role in the early identification of signs and symptoms of sepsis, monitoring patients, initiating appropriate interventions, and communicating changes in the patient's condition to the healthcare team.

Nursing students are future healthcare professionals who will have direct responsibility for caring for patients with infections and those at risk of developing sepsis. Adequate knowledge regarding the early recognition and management of sepsis is therefore essential for developing appropriate clinical skills and providing timely and safe patient care. Lack of knowledge may result in delayed identification and management of sepsis, which can adversely affect patient outcomes.

Structured teaching provides systematic and organized information regarding the causes, risk factors, signs and symptoms, early recognition, and management of sepsis. It can help nursing students improve their knowledge and develop greater confidence in identifying patients at risk of sepsis and responding appropriately. Therefore, the present study is undertaken to assess the effectiveness of structured teaching training on early recognition and management of sepsis among nursing students in a selected college.

OBJECTIVES OF THE STUDY:

1. To assess the baseline knowledge of nursing students regarding the early recognition and management of sepsis.
2. To determine the association between the pre-test knowledge scores and selected demographic variables of the nursing students.
3. To evaluate the effectiveness of the structured teaching training by comparing the pre-test and post-test knowledge scores of nursing students.
4. To provide structured teaching training on the early recognition and management of sepsis.

METHODOLOGY

A quantitative pre-experimental one-group pre-test and post-test research design was adopted to assess the effectiveness of a Structured Teaching Programme (STP) on knowledge regarding the early recognition and management of sepsis among GNM nursing students. The study was conducted at Smt. Nagarathnamma School of Nursing, Bengaluru, Karnataka. A total of 60 GNM nursing students were selected using a non-probability purposive sampling technique. Data were collected using a structured knowledge questionnaire to assess the students' knowledge regarding the early recognition and management of sepsis. A pre-test was conducted to assess the baseline knowledge, followed by the administration of the Structured Teaching Programme. A post-test was conducted after the intervention to evaluate

the effectiveness of the teaching programme. The collected data were analysed using descriptive and inferential statistics.

RESULTS

The findings of the study revealed that the Structured Teaching Programme (STP) was effective in improving the knowledge of GNM nursing students regarding the early recognition and management of sepsis. The post-test knowledge scores were higher than the pre-test scores, indicating an improvement in knowledge after the intervention. The findings support the effectiveness of the Structured Teaching Programme in enhancing students' understanding of the early recognition, signs and symptoms, risk factors, complications, and management of sepsis.

CONCLUSION

The study concluded that the Structured Teaching Programme (STP) was effective in improving the knowledge of GNM nursing students regarding the early recognition and management of sepsis. The improvement in post-test knowledge scores indicates that structured and systematic teaching can enhance students' understanding of sepsis and its importance in providing timely and appropriate nursing care.

The findings emphasize the importance of incorporating sepsis-related education into nursing education, as early recognition and prompt management of sepsis are essential for preventing complications and improving patient outcomes. Adequate knowledge among nursing students can help them identify the early warning signs of sepsis, understand appropriate management measures, and provide timely nursing interventions. Therefore, the Structured Teaching Programme can be considered an effective educational strategy for enhancing the knowledge of GNM nursing students and preparing them to provide safe and quality care to patients with sepsis.

Keywords: Sepsis, Early Recognition, Management, Structured Teaching Programme, Knowledge, Nursing Care.

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CHAPTER I
INTRODUCTION

INTRODUCTION

"Sepsis is a life-threatening condition that requires early recognition and immediate management."

"Every minute matters in sepsis; early identification and timely treatment can save lives."

Health is a fundamental human right, and every individual deserves timely, safe, and quality healthcare. Healthcare professionals play an essential role in maintaining health, preventing complications, and providing appropriate care to individuals suffering from acute and life-threatening conditions. Among the various emergencies encountered in healthcare settings, sepsis is an important condition that requires immediate attention. Sepsis is a life-threatening clinical condition that occurs when the body's response to an infection becomes dysregulated and results in organ dysfunction. If not recognized and managed promptly, sepsis can progress rapidly and may lead to serious complications and death.

Sepsis continues to be a major concern in hospitals and healthcare settings worldwide. It can affect individuals of different age groups and may develop as a complication of various types of infections. Common sources of infection associated with sepsis include respiratory tract infections, urinary tract infections, abdominal infections, bloodstream infections, skin and wound infections, and other bacterial, viral, or fungal infections. The severity and progression of sepsis may vary depending on the source of infection, the health status of the individual, the presence of underlying conditions, and the promptness of treatment.

The clinical presentation of sepsis can be variable, and early signs may sometimes be difficult to recognize. Patients may develop fever or abnormally low body temperature, increased heart rate, rapid breathing, altered level of consciousness, weakness, changes in blood pressure, reduced urine output, or other signs of deterioration. These changes may indicate that the patient's condition is worsening and require immediate assessment and communication with the healthcare team. Therefore, knowledge of the warning signs and appropriate assessment of patients is essential for the early identification of sepsis.

Early recognition is one of the most important aspects of sepsis care. Delay in identifying deterioration can result in delayed treatment and increased risk of complications. Healthcare professionals need to observe patients carefully, monitor vital signs, assess changes in their clinical condition, identify possible sources of infection, and communicate concerns promptly. Appropriate management may include timely clinical assessment, investigations as ordered, administration of prescribed medications and fluids, monitoring of vital signs and organ function, infection control measures, and continuous evaluation of the patient's response to treatment. Management of sepsis requires coordinated teamwork among nurses, doctors, and other healthcare professionals.

Nurses have a particularly important role in the early recognition and management of sepsis because they spend considerable time directly observing and caring for patients. Nurses are often in a position to notice subtle changes in a patient's condition before significant deterioration occurs. Their responsibilities include monitoring temperature, pulse, respiration, blood pressure, oxygen saturation, level of consciousness, urine output, and other relevant clinical parameters. They also assess the patient's overall condition, maintain accurate documentation, administer prescribed treatment, monitor responses to interventions, follow infection prevention practices, and promptly report abnormal findings to the appropriate healthcare professional. Thus, adequate knowledge among nursing personnel and nursing students is essential for promoting timely recognition and appropriate care.

Nursing students are future healthcare professionals who require adequate theoretical knowledge and clinical skills to provide safe and effective nursing care. During the early stage of nursing education, students are introduced to fundamental concepts related to disease processes, patient assessment, infection prevention, and basic nursing care. Developing knowledge about potentially life-threatening conditions such as sepsis can help students understand the importance of systematic observation and timely communication. For 1st-year GNM students, strengthening their basic knowledge at an early stage may support their future clinical learning and preparedness.

However, 1st-year GNM students may have limited knowledge regarding sepsis because they are at the beginning of their professional nursing education. They may not have sufficient understanding of the causes, risk factors, early warning signs, assessment, complications, prevention, and principles of management of sepsis. Limited knowledge may make it difficult for students to understand the significance of changes in a patient's condition during clinical learning. Therefore, appropriate educational interventions are needed to provide students with clear, organized, and relevant information about sepsis.

Nursing education plays a significant role in preparing students to respond appropriately to health emergencies. Classroom teaching, demonstrations, clinical experiences, discussions, and structured educational programmes can help students develop knowledge and improve their understanding of important clinical conditions. A Structured Teaching Programme (STP) is a planned educational intervention that provides information in an organized and systematic manner. It allows important concepts to be presented according to predetermined objectives and helps learners develop a better understanding of the subject.

In relation to sepsis, a Structured Teaching Programme can provide 1st-year GNM students with comprehensive information about the condition. The programme may include topics such as the definition and meaning of sepsis, causes and sources of infection, risk factors, pathophysiology, signs and symptoms, early warning signs, assessment, complications, prevention, and principles of management. It can also emphasize the importance of monitoring patients, recognizing deterioration, maintaining infection prevention practices,

documenting observations, and promptly communicating significant changes to the healthcare team.

Smt. Nagarathnamma School of Nursing, Bengaluru, provides nursing education and clinical learning opportunities for GNM students. As 1st-year GNM students begin their nursing education, it is important to establish a strong foundation of knowledge regarding common and potentially life-threatening health conditions. Sepsis is particularly important because early recognition and appropriate management are essential components of quality patient care. Providing students with systematic education regarding sepsis may improve their understanding and help them appreciate the importance of timely assessment and intervention in clinical settings.

Knowledge alone does not replace the supervision and clinical judgment of qualified healthcare professionals; however, appropriate theoretical preparation can help nursing students understand their responsibilities and participate safely in patient care under supervision. Early education regarding sepsis can encourage students to observe patients carefully, recognize warning signs, report abnormal findings promptly, and understand the principles behind timely management. This educational foundation may contribute to improved clinical preparedness as student progress through their nursing programme.

The effectiveness of educational interventions can be assessed by measuring students' knowledge before and after the intervention. A pre-test can help identify the existing level of knowledge among students, while a post-test can determine whether their knowledge has improved following the Structured Teaching Programme. Comparing the pre-test and post-test knowledge scores can therefore provide evidence regarding the effectiveness of the educational intervention.

The need for the present study is based on the importance of early recognition and appropriate management of sepsis and the role of nurses in identifying changes in patients' conditions. Strengthening the knowledge of nursing students may help prepare them for future clinical responsibilities and promote awareness of safe and timely nursing care. A systematic teaching programme can address gaps in students' knowledge and provide them with essential information in a structured and understandable manner.

Therefore, the present study is undertaken to assess the effectiveness of a Structured Teaching Programme on knowledge regarding early recognition and management of sepsis among 1st-year GNM students of Smt. Nagarathnamma School of Nursing, Bengaluru. The findings of the study may provide useful information regarding the existing knowledge of students and the effectiveness of structured teaching in improving their understanding of sepsis. The study may also contribute to strengthening nursing education and preparing 1st-year GNM students with a better foundation for recognizing and responding to clinical deterioration under appropriate supervision, ultimately supporting safe, timely, and quality patient care.

NEED FOR THE STUDY

Sepsis continues to be a serious and life-threatening health condition affecting individuals, families, and communities worldwide. It is a medical emergency that occurs when the body's response to an infection causes organ dysfunction and can rapidly progress to severe illness and death if not recognized and treated promptly. Despite advances in infection prevention, diagnosis, antimicrobial therapy, and critical care, sepsis remains an important cause of morbidity, mortality, prolonged hospitalization, and increased healthcare burden. Early recognition and appropriate management are therefore essential to improve patient outcomes.

Sepsis can develop as a result of various infections, including respiratory tract infections, urinary tract infections, abdominal infections, wound infections, and bloodstream infections. Patients with sepsis may present with changes in temperature, heart rate, respiratory rate, blood pressure, mental status, urine output, and other clinical signs of deterioration. These signs may initially appear nonspecific and can be overlooked if healthcare professionals do not have adequate knowledge and awareness. Therefore, recognizing the early warning signs of sepsis is an important component of safe and effective patient care.

Early recognition of sepsis is essential because delays in identifying and managing the condition can lead to progression of organ dysfunction and serious complications. Prompt assessment, monitoring of vital signs, identification of the source of infection, timely communication with the healthcare team, administration of prescribed treatment, fluid management, and continuous monitoring are important components of sepsis management. Nurses have a significant role in each of these areas and are often among the first healthcare professionals to identify changes in a patient's condition.

Nurses maintain continuous contact with patients and are responsible for observing and monitoring their clinical condition. They assess vital signs, monitor changes in consciousness, identify signs of deterioration, maintain accurate records, administer medications as prescribed, provide supportive nursing care, and communicate important findings to the healthcare team. Therefore, nurses require adequate knowledge about the early signs and symptoms of sepsis, risk factors, assessment, complications, and principles of management.

Inadequate knowledge regarding sepsis may affect the ability of student nurses to recognize early clinical changes and understand the urgency of the condition. Lack of awareness may result in delayed reporting of abnormal findings or inappropriate understanding of the patient's condition. Since sepsis can progress rapidly, developing knowledge about early recognition and management is particularly important for student nurses during their nursing education.

1st year GNM students of Smt. Nagarathnamma School of Nursing, Bangalore are at an important stage of their nursing education. During this period, students begin developing their basic nursing knowledge, clinical skills, observation abilities, and professional responsibilities. They are introduced to patient care and gradually learn to identify normal and abnormal findings. Providing knowledge about serious conditions such as sepsis at this stage can help establish a strong foundation for their future clinical practice.

The early years of nursing education provide an appropriate opportunity to develop students' understanding of emergency and life-threatening conditions. Knowledge gained during this

period can help students become more attentive to changes in patients' vital signs and general condition. It can also encourage them to report abnormalities promptly and understand the importance of timely intervention under the supervision of qualified healthcare professionals.

As future nurses, GNM students are likely to encounter patients with various infections and medical conditions in hospitals, community health centres, clinics, and other healthcare settings. They may care for patients who are at risk of developing sepsis or who show early signs of deterioration. Therefore, knowledge regarding sepsis should be strengthened during nursing education so that students can recognize important warning signs and understand their responsibilities in providing safe patient care.

A Structured Teaching Programme (STP) provides information in a planned, systematic, and organized manner. It can help students develop a clear understanding of the definition, causes, risk factors, signs and symptoms, early recognition, assessment, complications, prevention, and management of sepsis. Through structured education, students can clarify their doubts and develop a better understanding of the importance of timely recognition and appropriate intervention.

The investigator felt that assessing the existing knowledge of 1st year GNM students regarding sepsis is important because knowledge forms an essential foundation for developing appropriate clinical skills and professional practice. If students have inadequate knowledge about sepsis, they may have difficulty understanding the significance of changes in a patient's condition. Providing an appropriate educational intervention at the student level may help improve their knowledge and prepare them for future clinical responsibilities.

Furthermore, nursing education should prepare students not only to provide routine nursing care but also to recognize potentially life-threatening conditions at an early stage. Sepsis requires prompt identification, continuous observation, effective communication, and timely intervention. Developing these areas of knowledge during nursing education may contribute to better clinical preparedness and safer patient care.

The importance of sepsis education is further emphasized by the fact that patients can deteriorate rapidly when infection progresses to organ dysfunction. Early recognition by healthcare professionals can support timely escalation of care and appropriate treatment. Therefore, improving the knowledge of student nurses regarding sepsis may contribute to developing greater awareness of clinical deterioration and the importance of immediate reporting and management.

The investigator selected 1st year GNM students for the present study because they are at the foundation stage of their nursing education and are developing essential knowledge and clinical competencies. Introducing knowledge about sepsis at an early stage can provide students with a strong foundation that can be further developed through subsequent classroom learning and clinical experience. Early education may also help students become more confident in identifying important signs of patient deterioration under appropriate supervision.

The study is also relevant because GNM students will eventually work in different healthcare settings where they may encounter patients with infections and other conditions that can progress to sepsis. The ability to recognize early warning signs and understand the principles of management is therefore an important component of competent nursing practice. Strengthening this knowledge during nursing education may help future nurses contribute effectively to timely patient care.

Therefore, the investigator considered it necessary to conduct a study to assess the effectiveness of a Structured Teaching Programme on knowledge regarding early recognition and management of sepsis among 1st year GNM students of Smt. Nagarathnamma School of Nursing, Bangalore. The study is expected to identify the existing level of knowledge among the students and determine whether a structured educational intervention can improve their knowledge regarding sepsis.

The findings of the study may be useful for nursing educators in planning appropriate educational activities related to sepsis, early recognition, clinical assessment, timely management, and prevention of complications. Ultimately, improving the knowledge of 1st year GNM students may contribute to better clinical preparedness and the development of safe, timely, and quality nursing care for patients at risk of or experiencing sepsis.