

POTENTIALS OF NURSES, WHO PLAY A LEAD ROLE, IN REDUCING THE BURDEN OF NON- COMMUNICABLE DISEASES, IN TAMIL NADU - AN ANALYSIS

Abstract

Introduction: The prevention and control of Non-Communicable Diseases (NCDs) is of highest priority as these contribute to majority of deaths in India. The incidence and projected rise of non-communicable diseases (NCDs) are a significant global public health threat. Nurses as health educators are well positioned to support health promotion and prevention efforts.

Aim: To present the nurses potential as a lead role in reducing the burden of the non - communicable diseases in Tamil Nadu.

Methods: A simple random survey of 52 nurses in Kancheepuram district was conducted to better understand how nurses perceive their role in addressing risk factors associated with NCDs, as well as the types of supports required in order to facilitate this work. The study also explores nurses' changing views of the profession and their practice environment. The survey was administered via telephone and face-to-face interviews.

Conclusion: Research has demonstrated that nurses are effective at supporting individuals to make behaviour change, administering disease management programs and enabling self-care as well as self-management. Practice environment issues that prevent nurses from fully reaching their potential in addressing the NCD crisis need to be addressed.

Keywords: Nurses potential, NCDs, “Makkalai Thedi Maruthuvam” scheme and its challenges, Health Education, Counselling, Home visits

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I. INTRODUCTION

In recent decades, India has undergone a significant health transition characterized by a shifting disease burden from infectious diseases to non-communicable diseases (NCDs). This transformation has brought to the forefront the critical need for effective prevention and control strategies to combat the growing impact of NCDs on public health.

- 1. Rise of Non-Communicable Diseases:** Non-communicable diseases, often referred to as "lifestyle diseases," encompass a range of chronic health conditions that are primarily influenced by lifestyle factors, genetics, and environmental determinants. These diseases include cardiovascular diseases, diabetes, cancer, chronic respiratory diseases, and mental health disorders. The rise of NCDs has become a global health concern, and India is no exception to this trend.
- 2. Burden and Impact:** NCDs have emerged as a significant public health challenge in India, contributing to a substantial burden of morbidity, mortality, and economic strain. These diseases affect individuals across all age groups and socio-economic backgrounds, exerting a profound impact on both individuals' quality of life and the country's overall healthcare system.
- 3. Risk Factors and Determinants:** Several risk factors contribute to the prevalence of NCDs in India, including unhealthy diets, lack of physical activity, tobacco and alcohol consumption, and air pollution. Additionally, socio-economic factors, urbanization, and changing lifestyles have further compounded the problem. The interplay of these determinants underscores the complex nature of NCDs and necessitates a comprehensive approach to prevention and control.
- 4. Government Initiatives and Policy Framework:** Recognizing the urgency of addressing NCDs, the Government of India has implemented various initiatives and policy measures. The National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke (NPCDCS) is a flagship program that focuses on early detection, management, and awareness generation for these diseases. Additionally, the Eat Right India campaign aims to promote healthy eating habits and reduce the burden of diet-related NCDs.
- 5. Community Engagement and Behavioral Change:** Preventing and controlling NCDs requires a paradigm shift towards community engagement and behavioral change. Awareness campaigns, health education, and outreach efforts play a crucial role in promoting healthy behaviors, encouraging regular health check-ups, and fostering a culture of prevention.

As India confronts the formidable challenge of non-communicable diseases, the importance of prevention and control strategies cannot be overstated. Through comprehensive policies, community engagement, behavioral change, and robust healthcare systems, India aims to mitigate the impact of NCDs, enhance public health, and ensure a healthier future for its citizens.

II. “MAKKALAI THEDI MARUTHUVAM”- MTM - SCHEME

In recent years, Tamil Nadu has witnessed a transformative change in its healthcare sector through the introduction of "Makkalai Thedi Maruthuvam" (MTM) clinics. These clinics represent a groundbreaking initiative that aims to bring essential medical services closer to the doorsteps of the people.

- 1. Origins and Objectives of MTM Clinics:** MTM clinics, which translate to "Healthcare for the People" in English, were established with a primary focus on providing crucial healthcare services to the citizens of Tamil Nadu. The primary objective is to bridge the gap between healthcare facilities and the people, especially those in remote and underserved areas. By ensuring easy access to medical services, the MTM clinics contribute to early diagnosis, timely treatment, and overall improved health outcomes.
- 2. Expanding Accessibility:** The MTM clinics have been strategically placed in various regions across Tamil Nadu, ensuring accessibility to a wide range of demographics. These clinics are equipped to cater to the healthcare needs of individuals from different age groups, socio-economic backgrounds, and medical conditions. By locating clinics in both urban and rural areas, the state government aims to address healthcare disparities and ensure that quality medical care is available to all.
- 3. Services Offered:** MTM clinics offer a comprehensive spectrum of medical services, including routine check-ups, diagnostic tests, vaccination programs, and basic treatments for common ailments. Additionally, these clinics play a vital role in promoting awareness about preventive healthcare measures, encouraging healthier lifestyles, and offering guidance on managing chronic diseases.
- 4. Technological Integration:** To enhance the effectiveness of MTM clinics, the Tamil Nadu government has integrated technology into their operations. This includes digital medical records, telemedicine consultations, and mobile health applications that facilitate appointment scheduling, prescription management, and health education. These technological advancements contribute to a seamless healthcare experience for the citizens.
- 5. Empowering Healthcare Workforce:** MTM clinics not only benefit the patients but also empower the healthcare workforce. Skilled medical professionals, including doctors, nurses, and paramedical staff, are actively involved in providing medical care at these clinics. This not only creates employment opportunities but also strengthens the overall healthcare infrastructure.
- 6. Positive Outcomes:** The establishment of MTM clinics has yielded positive outcomes in Tamil Nadu's healthcare landscape. Timely access to medical services has led to early detection of diseases, reducing the burden on tertiary healthcare facilities. Additionally, by focusing on preventive measures, these clinics contribute to reducing the prevalence of preventable diseases and improving the overall health and well-being of the population.

III. ROLE OF STAFF NURSES IN MTM CLINIC

In the realm of "Makkalai Thedi Maruthuvam" (MTM) clinics in Tamil Nadu, the role of staff nurses emerges as a pivotal cornerstone in delivering patient-centric healthcare. These healthcare professionals play a multifaceted and indispensable role in ensuring the success and effectiveness of MTM clinics, where the primary objective is to bring healthcare services directly to the people.

- 1. Clinical Expertise:** Staff nurses in MTM clinics bring their clinical expertise to the forefront, offering a wide range of medical services to patients. Their knowledge and skills enable them to conduct routine check-ups, administer vaccinations, perform basic medical procedures, and provide essential medical care. This expertise is crucial in diagnosing common ailments, offering immediate treatment, and making informed referrals when necessary.
- 2. Patient-Centered Care:** At the heart of MTM clinics is the commitment to patient-centered care. Staff nurses take the time to listen to patients' concerns, assess their health status, and address their medical needs comprehensively. By fostering a nurturing and empathetic environment, staff nurses contribute to building trust and rapport with patients, which is essential for effective healthcare delivery.
- 3. Health Education and Promotion:** Staff nurses play a vital role in health education and promotion within MTM clinics. They educate patients about preventive measures, healthy lifestyle choices, and the importance of regular medical check-ups. Through informative sessions, they empower patients with the knowledge to make informed decisions about their health and well-being.
- 4. Medication Management:** Staff nurses in MTM clinics are responsible for medication management, including dispensing prescribed medications, providing instructions on proper dosage, and monitoring patients' adherence to their treatment plans. This aspect is critical in ensuring that patients receive the right medications and follow the prescribed regimen for optimal health outcomes.
- 5. Disease Screening and Early Detection:** Staff nurses contribute significantly to disease screening and early detection efforts in MTM clinics. They conduct screenings for various health conditions, such as hypertension, diabetes, and other non-communicable diseases. Through these screenings, potential health risks can be identified early, enabling timely intervention and management.
- 6. Collaboration and Referrals:** Staff nurses collaborate with other healthcare professionals within the MTM clinics and beyond. They work closely with doctors, pharmacists, and community health workers to ensure seamless patient care. When more specialized care is required, staff nurses make appropriate referrals, facilitating a continuum of care for patients.
- 7. Record Keeping and Documentation:** Accurate record keeping and documentation are integral to the role of staff nurses in MTM clinics. They maintain detailed patient records,

medical histories, and treatment plans. This documentation ensures that patients' health information is readily accessible, aiding in informed decision-making and continuity of care.

- 8. Community Engagement:** Staff nurses actively engage with the local community through health camps, awareness campaigns, and outreach programs. Their involvement helps establish a strong rapport with the community, encouraging individuals to seek regular medical care and take proactive steps towards better health.

The role of staff nurses in MTM clinics is dynamic and multifaceted, encompassing clinical expertise, patient-centered care, health education, and collaborative efforts. Their unwavering dedication contributes to the success of the MTM clinic model, ensuring that quality healthcare services are delivered directly to the people, irrespective of geographical barriers. Through their compassion, competence, and commitment, staff nurses play a transformative role in shaping the future of healthcare in Tamil Nadu.

IV. ROLE OF MID LEVEL HEALTH PROVIDER (MLHP)-AT HSC LEVEL

- The MLHP should provide proper and routine training to WHVs.
- The MLHP is responsible for NCD screening at HSC level and **should at least screen a minimum of 10 individuals per day.**
- The MLHP **will hand over the drug packages** under MTM to the **WHV for distribution.**
- The MLHP should **orient WHVs about the color-coded indication and segregation of drugs in the paper cover.**
- The MLHP should always maintain Referral-in and Referral-out Registers and ensure proper follow-up of the same
- Monitors the daily and weekly performance of WHV and reports to the SHN.
- The MLHP is responsible for daily reporting in all portals (UHC IT, AB Portal, MTM portals.).

V. ROLE OF WOMAN HEALTH VOLUNTEERS (WHV) IN MTM SCHEME

- The Roles of WHV include **Home based screening**, referring patients to PHC when required, follow up patients and distributing drugs to the linelisted patients (**above 45 years of age and individuals with restricted mobility**) at their households as per the Fixed Tour Programme.
- The WHV should carry electronic BP apparatus, Glucometer, Strips, Lancets, WHV MTM card, Packaged Drugs to deliver at households, ID card, IEC materials, BMW disposal boxes, Thermal screening and Pulse Oximeter in a branded jute bag provided.
- The WHV should have a Unit/ Sector/ HSC-wise **NCD linelist.**
- WHV should List/ enumerate all households in the HSC assigned and use a **family folder per household** using the prescribed family folder @ one per household.
- WHV should refer individuals with BP & RBS levels above normal values during screening to PHC and should subsequently monitor & follow-up on their final status.

- The WHV should not change a patient's drug prescription in terms of quantity, or the drugs prescribed since only the Medical Officer is authorized to do so.
- The WHV should not deliver drugs to family members i.e., spouse, parent, or child in the absence of the patient.
- Drugs should be provided to the patient at their household only if the patient's BP/ Sugar levels are under control.
- The WHV shall also provide targeted IEC intervention at the Households they visit.
- The WHV will also inform and orient the beneficiaries about seeking assistance anytime they might need it through the **e-sanjeevand tele- consultation service**.

VI. CHALLENGES FACED

Nurses in Medication Therapy Management (MdTM) for Non-Communicable Diseases (NCD) schemes often face challenges such as managing large patient caseloads, ensuring effective communication with patients, addressing medication adherence issues, and staying up-to-date with evolving treatment guidelines. Additionally, navigating electronic health records and coordinating with multiple healthcare providers can also be demanding.

Ways to Enhance: To enhance the Medication Therapy Management (MTM) scheme for Non-Communicable Diseases (NCDs) at the community level, staff nurses should do

- Patient Education
- Personalized Care Plans
- Regular Follow-ups
- Adherence Support Nurse
- Medication Reviews
- Collaboration with Providers
- Telehealth Solutions
- Digital Tools
- Cultural Sensitivity
- Continuous Training
- Outcome Measurement
- Feedback Loop Establishing

By implementing these strategies, staff nurses can contribute to a more effective and patient-centered MTM scheme for NCDs at the community level.

VII. CONCLUSION

In closing, nurses in Tamil Nadu are leading the way in combatting non-communicable diseases through their pioneering efforts. As navigators of holistic care, vanguards of health promotion, early detectives, collaborative care orchestrators, nurturers of self-empowerment, and advocates for change, nurses are reshaping the narrative surrounding NCDs. Their innovative and patient-centered approach is transforming healthcare delivery, improving outcomes, and paving the path towards a healthier Tamil Nadu.

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REFERENCES

- [1] DeCola P, Benton D, Peterson C, Matebeni D. Nurses' potential to lead in non-communicable disease globalcrisis. *Int Nurs Rev.* 2012 Sep;59(3):321-30. doi: 10.1111/j.1466-7657.2012.01006.x. Epub 2012 May 16. PMID: 22897182.
- [2] Casey D. Nurses' perceptions, understanding and experiences of health promotion. *J Clin Nurs.* 2007 Jun;16(6):1039-49. doi: 10.1111/j.1365-2702.2007.01640.x. PMID: 17518880.
- [3] WHO fact sheet 2023, Non-Communicable diseases.
- [4] Ministry of Health and Family Welfare Services , MTM scheme, Govt of Tamilnadu.
- [5] National Health Mission Website, Department of Public health and Preventive Medicine.