INDEPENDENT NURSE PRACTITIONER

Abstract

The health care experts have been concerned about an impending increase in shortage of physicians for several years.This concern was accelerated in 2014 due to expanded health coverage available as a result of implementation of the Affordable Care Act when policy makers had suggested that nurse practitioners(NP) could fill this gap. In this chapter has given a clear idea of who the NPs are and how NPs can start their independent practice or become an independent nurse practitioner emphasizing on both the developed counties like U.S and the developing counties like India.This chapter has included the definition of NP, its historical background, training or educational qualification required for NPs.It has also clearly explained the scope of practice for NPs, what are the different specialties available for NPs to pursue, and the various role that a NP can perform.This chapter also gives an overview on the scenario and realities of independent nurse practitioners in India, challenges / barriers for NPs in India and what may be the possibles strategies for successful implementation of NP cadre in India.

Keywords: Nurse Practitioners, Advanced Nursing Practice; Scope Of Practice; Role; History; Challenges; Strategies; India; U.S.

Authors

Najmoon Naher Begum
Nurse Practitioner in Critical Care
NH-Rabindranath Tagore International Institute of Cardiac Sciences
Kolkata, India.

I. INTRODUCTION

Independent Nurse Practitioners (INPs) or Nurse Practitioner(NPs) are quickly becoming the health partner of choice for millions of Americans as as reported by the American association of nurse Practitioners(AANP). As a clinician NPs blend clinical expertise not only in diagnosing and treating the health conditions but also with an added emphasis on disease prevention and promotion, management of health status. NPs have been brought a comprehensive perspective and a personal touch to the health care.

The nurse practitioner (NP) is a generic term and it has a variety of titles, including advanced nurse practitioner (ANP), clinical nurse specialist (CNS), nurse specialist, and advanced clinical practitioner. The role is existing in the USA since 1965, the United Kingdom since 1980, in Australia since 1990, and in the Netherlands since 2010 as a result of primary care physician shortage. The NP role is sprouting enormously worldwide. It has provided primary, acute, specialty health care to patients of all ages for more than a half-century across the globe.

In the U.S. and some other countries, many states allow nurse practitioners (NPs) to practice and prescribe drugs without physician oversight for increasing the number of autonomous primary care providers.The extend to which NPs can fill the primary care role of physicians is partly governed by the state scope-of-practice laws that regulate the types of medical services that NPs can provide. Most notably , some state allows NPs to both practice and prescribe drugs without physician supervision giving them full practice authority and in some states NPs are allowed to practice and prescribe drugs under the supervision of the physician.

In January 2015, New York State (NYS) adopted the Nurse Practitioners Modernization Act (or “the Modernization Act”) which expanded nurse practitioner (NP) scope of practice (SOP) (NYS Senate, 2013) by removing the requirement that experienced NPs, who have practiced over 3600 h, must be supervised by, or collaborate with, physicians via a written practice agreement. The only requirement after 2015 is a confirmation that, if necessary, experienced NPs may consult with a physician when delivering care or prescribing medications. The Modernization Act aimed to address the disequilibrium on the market for primary care providers across NYS (NYS Department of Health, 2011, Poghosyan et al., 2022).According to the American Association of Nurse Practitioners, 26 states and the District of Columbia currently allow full SOP or full practice authority (FPA), while the remaining states have either reduced or restricted practice authority (AANP, 2022). Studies have shown that allowing NPs to practice to the fullest extent of their education and training results in a better access to care, improved quality of care, lower costs, and higher utilization of care. (Alexander and Schnell, 2019, Sonenberg and Knepper, 2017, Spetz et al., 2013, Traczynski and Udalova, 2018).

The International Council for Nurses (ICN) reported almost 70 countries across the globe successfully implemented nurse practitioner roles, including Asian countries like Singapore, South Korea and Thailand. Evidence worldwide has highlighted the benefits achieved by the advancement of nursing care through the NP role.But in India the NP role is yet to be clearly defined and implemented.

Studies reveal that there is significant variation in expected practice and actual practice of NP in different states and countries because of variation in legislative autonomy; however, they were found practicing assessment, ordering tests, making the diagnosis, prescribing medicines, referring patients to higher centers as the scope of practice

II. DEFINITION

1. According to American Association of Nurse Practitioners (AANP,2016 , nurse practitioners (NPs) are licensed autonomous clinicians focused on managing people's health conditions and preventing diseases.
2. A nurse practitiner (NP) is defined as , "an advanced practice registered nurse (APRN) who has completed graduate level education (either a master of nursing or doctor of nursing practice degree).
3. Nurse practitioner (NP) are registered nurses who have graduate level nursing preparations as a nurse practitioners at the masters or doctoral level and perform comprehensive assessments and promote health and the prevention of illness and injury"

III. HISTORICAL BACKGROUND OF INDEPENDENT NURSE PRACTITIONER

While tracing the history of the nurse practitioners it showed that in 1985, a small group of visionaries convened under an apple tree in Pennsylvania to address the growing need of Np's of all specialties to have a unified voice.They established ANNP (American Association of Nurse Practitioners) to fill that need and became the voice of nurse practitioners.These perceptive leaders recognized that national level actions was very essential for the relevance and durability of NP role.After that AANP has flourished in such a way that it represents the interest of more than 355,000 licensed Np's in the United States.The INP(Independent Nurse Practitioner) for years were the registered nurses traditionally working in hospitals,in health care institutions, public health settings,research and government services,where they had significant contact and professional interactions with other health care professionals.Since 1960's the NP program has been evolved in various in a tremendous way.

In 1965 Dr. Loretta Ford and Dr. Henry Silver developed the first Nurse Practitioner(NP) program at the University of Colorado. In 1967 Boston College initiated one of the earliest master's programs for Np's. In !971, one of the first family NP programme, PRIMEX opened its doors at the university of Washington. In 1974 The American Nurses Association (ANA) developed the Council Of Primary Care Nurse Practitioners ,helping legitimize role.The Burlington Randomized trial study found that NP's make appropriate referrals when medical intervention was necessary. In 1975 The University of Colorude offered its continuing education symposium for NP's. In 1978 The Association of faculties and pediatric Nurse Practitioner (FPNP) was established and PNP curriculum was developed. In 1980 more than 200 NP programme or tracks were available to students and the Nurse Practitioner Association for continuing education (NPACE) was established. After that guidelines for family Nurse Practitioner Curriculum Planning was published after five years of development of the University of New Mexico.In 1987, $100 million had been spent by spent by the federal government on NP education and AANP conducted members survey regarding NP professional malpractice liability insurance coverage, assisting NP's in re-establishing affordable malpractice insurance.

In 1989, almost 90% of NP programme became either master degree granting programme or post master degree programme during this year itself the publication of the journal of the AANP started, the first official AANP National Conference was held in Philadelphia with 158 attended,AANP moved head quarters from Massachusetts to Texas and hired first part-time staff position and AANP released results of first AANP National NP sample survey collecting the data on a range of NP preparations and practice characteristics.In 1991 the AANP state Award for NP excellence was established.In 1992 AANP actively worked with nursing association such as the Royal college of nursing,UK to develop the role of NP internationally.In 1993 AANP formed certification programme as separately incorporated entry.In 1994 Mundinger published "Advanced Practice Nursing-Good Medicine for physicians" in the New England Journal of Medicine,further supporting the fact that NP's were cost effective and quality primary health care provider.In 1995 AANP initiated the corporate advisory council(ACAC) to enhance communication and interaction with industry leader.In 1999 AANP conducted National NP sample survey comparing results reported in 1989 survey,it was approximately 68,300 NP's.

In 2000 AANP initiated the fellows programme hosts first international NP conference in US and created the Political Action Committee (PAC).In 2002 AANP had 13,500 individual members and 70 group members and in 2003 AANP membership survey was conducted and AANP had 14,500 individual members and 74 group members and approximately 97,000 NP's in the U.S (AANP).In 2004 The American Association of College of Nursing (AACN) published position paper on Doctorate of Nursing Practice and AANP conducted national NP sample survey and found 106,000 NP's in the U.S (AANP).In 2005 AANP celebrated 20 years as the oldest and largest national organization for NP's of all speciality and NP's celebrated 40 years of practice.In 2006 AANP conducted educational needs assessment survey and AANP fellows(FAANP) launched the membership programme.In 2007 AANP conducted National NP incomes survey.In 2009 "Did you know?" AANP video showcasing the role of NP was distributed to public televisions stations in all 50 states and 400 times in many of the top 200 makers on networks such as CNN fox news,discovery and was distributed international to voice of America with a daily viewing audience of 96 million people airing in 200 cities and 127 counties.Product advertorial open letter to president Obama a and members of congress highlighting NP's as primary care provider was sent.The letter ran in roll call publication that was distributed to elected officials in D.C and till the AANP reported approximately 130.000 NP's.In 2010 AANP attended president Obama's white house for briefing health care legislation and AANP celebrated 25th anniversary and AANP had 28,000 individual members and 151 groups (as of May 2010).There were approximately 140,000 NPs in the U.S (AANP) and in 2011 it was approximately 148000 NPs in the U.S (AANP) and in 2012 it reached to 157,000 NPs in U.S approximately.

On 1January 2013 the American academy o Nurse Practitioners (Founded in 1985) and the American College of Nurse Practitioner (Founded in 1995) came together to form the American Association of Nurse Practitioners(AANP), the largest full-service national professional membership organization for NP's of all specialties and till then there were more than 171,000 NPs in the U>S (AANP).In 2014 AANP surpassed 50,000 members and there were more than 192,000 NPs in the U.S till then. And it reached to 234,000 NPs in the U.S (AANP) by 2017.In 2018 the AANP Office of Government Affairs moves to its new location in Arlington ,Virginia and there were 248,000 NPs (AANP) in the U.S after surpassing 85,000

members.In 2019 AANP built and moved into its first fully owned corporate headquarters in Austin ,Texas.And finally AANP surpassed 100,000 members and there were 270,000NPs in the U.S (AANP).

IV. TRAINING OR EDUCATIONAL QUALIFICATION REQUIRED FOR INDEPENDENT NURSE PRACTITIONER

1. All NPs must complete a master's or doctoral degree program and have advanced clinical training beyond their initial professional registered nurse (RN) preparation as reported by AANP.This didactic and clinical courses prepare the nurses with specialized knowledge and clinical competency to practice in primary care,acute care and long-term health care settings.
2. And to practice independently, after completion of their training they must obtain the advanced practice license from the states where they practice and they practice under the rules and regulations of the state in which they are licensed.

V. SCOPE OF PRACTICE FOR IDEPENDENT NURSE PRACTITIONER

According to American Association of Nurse Practitioners (AANP) the NPS can practice independently in various healthcare settings,including primary health center,community health center,and the tertiary care hospitals.They can also perform an assessment of patients, order some diagnostic studies including laboratory studies and x-rays, treatment, and evaluation services without oversight by the physician ; however their roles and legal authority vary between states and countries.The most often reported scope of practice for nurse practitioners in different countries of the world are-

1. Assessment

- Nurse practitioners obtain a complete health history of the patient including the general history and the focus history.
- They perform complete physical examination and also perform the systemic examination.
- They evaluate psycho-social factors that influence a client's health status.

2. Diagnostic Services

- Nurse practitioners can order laboratory, radiological, and pathological tests.
- They can interpret the laboratory tests, and the radiological reports.
- They can make the medical diagnosis of minor ailments such as fever, pain,nausea, vomiting, acidity, constipation, insect bites, etc.

3. Treatment Services

- Nurse practitioner can prescribe or regulate the medications according to the standard protocol.
- They can treat minor ailments i.e. fevers, pain, nausea, vomiting, acidity, constipation, insect bites, etc.

- They can provide the maternity services including antenatal care, post-natal care including family planning services.
- They can conduct normal deliveries and can provide well baby care including immunization.

4. Evaluation of Care/Referral services

- Nurse practitioner can evaluate the effectiveness of the plan of care.
- They perform follow up and home-based care.
- They provide family/relationship counselling on health behaviour and treatment options.
- They deliver health teaching and participate in community education.
- They collaborate with community agencies to provide care and also collaborate with multidisciplinary team members by making appropriate referrals.

5. Administration services

- NPs perform some administrative and managerial activities.
- They can do mentoring or patient advocacy.
- They can be the resource for their colleague.

VI. TYPES OF INDEPENDENT NURSE PRACTITIONER SPECIALITIES

Although all the nurse practitioners (NP) can write prescriptions for some controlled drugs, order diagnostic tests and diagnose the disease conditions, but their exact roles and responsibilities and patient bases vary depending on which specialization (s)they have pursued and their scope of practice is also contingent upon their state's laws and regulations. NP specialties correspond toa specific population or concerns like adult-gerontology or psychiatric mental health. NPs can be certified as primary (non-urgent) or acute care.The following are the different specialties or licenses that NPs can hold.

1. **Family Nurse Practitioner (FNP):** According to AANP majority of nurse practitioners, nearly 70% are the FNPs. In many instances the role of FNPs are similar to the primary care physicians where they mainly provide comprehensive primary care of all ages.The typical responsibilities of a family nurse practitioner are-monitoring patient updates and maintaining records, developing and adjusting treatment plans for non-acute issues, providing continuing education and support for patients.

2. **Pediatric Nurse Practitioner (PNP):** The Pediatric Nurse Practitioners in Primary Care (PNP-PC) mainly work with child patients of all ages mainly ranging from private practice to public health centers.And along with FNPs, they help patients and their families to understand and manage their health care.They perform physical exams, health screenings, and diagnose and treat non-acute conditions.

   PNPs working in acute care (PNP-AC) provide family-centered care for young patients dealing with acute, critical, complex, and/or chronic issues. PNP-ACs practice in pediatric ICU s, emergency departments, and specialty-based clinics.

3. **Adult-Gerontology Nurse Practitioner (AGNP):** AGNPs work with adult and teenage patients. They can work either in primary care (AG-PCNP), which entails comprehensive care for a broad spectrum of needs, or they can provide acute care (AGACNP), typically to the patients in ICU, emergency, or acute care units. AGNPs can work in private practice, hospital settings, nursing homes or in the homes of their patients. They also have expertise in helping older adult patients and they address the unique processes and needs related to aging of their clients.

4. **Psychiatric Nurse Practitioner (PMHNP):** PMHNPs are nurse practitioners who work in mental health care settings. Depending on the state in which they practice, they may have full license to diagnose and prescribe medication to treat mental illnesses, disorders, or substance abuse problems. They may also work in collaboration with a psychiatrist. PMHNPs can work across different settings, including private psychiatric practices, schools, and community mental health centers etc.

5. **Neonatal Nurse Practitioners (NNP):** NNPs work with infants up to two years of age who are born prematurely and/or with an illness (such as infection), birth defects, or other health conditions. They often work in neonatal ICUs, where they collaborate with a health care team. The role of a NNP also includes screening, diagnosing, and treating the neonates in their care, and educating parents and family.

6. **Women's Health Nurse Practitioner (WHNP):** Thes NPs who specialized in women's health provide gynecologic care, including reproductive and sexual health services, as well as diagnosing and treating reproductive system disorders. While many WHNPs work in private practice, including at OB/GYN offices, they can also work at fertility clinics, hospitals, or other settings.

VII. ROLES OF INDEPENDENT NURSE PRACTITIONER

The NP role is consistent with the APRN(Advanced Practice Registered Nurse) Consensus Model, practicing in the population foci of Family/Individual Across Lifespan, Pediatrics, Women's Health/Gender Related, Adult-Gerontology, Neonatal and Psychiatric Mental Health. So the NPs must be competent enough to play a very diverse role which includes-

1. **Management of Direct Client Health or Illness status:** This role of NP requires them to be able to provide a complete assessment of patients health status.While performing this role they must be capable of using the contemporary theories and clinical knowledge for the management of their client. This successful management of client involves health promotion and protection,disease prevention and the treatment of their clients.

2. **Educator or Coach Role:** NPs are the advanced practice registered nurses (APRNs) who obtain graduate education at the masters, post-master's or doctoral level and obtain national board certification. Academic NP programs follow established educational standards, which ensure the attainment of the APRN role and population core competencies.So, these competencies question their ability to convey knowledge and requires them to acquire the skills of interpret and personalize therapies.

3. **Administrator Role:** As an administrator the NPs implement the best care of patients, the advancement of the profession and the enhancement of direct care and management.To become a good administrator a nurse practitioner must demonstrate a commitment to the professional role. NPs perform this administrative role mostly in the hospital settings. NPs are expected to practice consistent with an ethical code of conduct, national certification, evidence-based principles and current practice standards.

4. **Researcher Role:** NP's practice is based on the evidence-based principles.They always focus on monitoring and ensuring the quality of health care practice.So to assure the quality of care ,they are always involved in some research studies to find out the evidence-based and cost-effective quality of nursing care, therapies and the treatments.

5. **Advocaat Role:** Advocacy for patients and access to quality health care is the essence of NP practice. The NP role was founded based on need for access to quality, equitable health care for all communities, and everywhere. As a n advocate, NPs serve asliaisons between patients, their physicians, and healthcare facilities.

VIII. SCINARIO AND REALITIES OF INDEPENDENT NURSE PRACTIONER ROLE IN INDIA

The National Health Policy (2017) recognized that redesigning the health care delivery system and establishing cadres like NPs and public health nurses to increase their availability in the most needed areas of the country could be helpful to deal with the shortage of primary care physicians..The country's workforce experts agreed on a growing wide gap between the populations and demand for primary care physicians. Therefore, the introduction of the NP role is a better way to meet these challenges.The Ministry for Health and Family Welfare (MoHFW) emphasized that the nurses occupy an essential position in healthcare delivery. They can be utilized equally to doctors when we think of achieving the Sustainable Development Goals(SDGs) . The union government is considering creating a cadre of NPs to address the shortage of doctors in rural areas.

In India **r**oots of unorganized and unregulated NPs can be found in states like Rajasthan; many RNs practice as general nurse practitioners, especially in rural areas though it is very well accepted by the public but not legalized. In the year 2002, the Government of West Bengal was the first state in India to start nurse practitioner in midwifery course (NPM) under the India-AusAID project provided training for 18 months to diploma and graduate nurses yet unable to obtain due recognition. On a track, Gujarat's government started in 2009 and sanctioned 25 posts of independent midwifery practitioners (IMP) but still waiting to appoint . The policy process was delayed for several reasons includes less drive and shared vision, unconfined about developing an autonomous cadre of midwives, and less space for open dialogue. Similar steps to train registered nurses in NPM by Telangana, Kerala, West Bengal, and other states. However, it could not attract the candidates due to the absence of clarity about registration with the nursing councils, the scope of practice, and the employment.

The Indian Nursing Council (INC) implemented a NP in the critical care program (NPCC) with the approval of the MoHFW all over the country since 2017 to expand the role of registered nurses. INC had signed a memorandum of understanding (MoU) with the

University of Houston College of Nursing in April 2018. In continuation of MoU, INC invited two faculties from the University of Houston to share and guide in the implementation of the nurse practitioner in critical care (NPCC) and a doctorate of nursing practice (DNP) programs in India. The number of Institutes offering NPCC course in the country illustrates that it is declined over the years due to lack of a specified role for NPs in the health care delivery system, no provision of registration in nursing councils as NPs, lack of legal protection to NP title and limited scope of employment/practice.

IX. CHALLENGES OR BARRIERS FOR INDEPENDENT NURSE PRACTIONER IN INDIA

Since 1960s from the time of Dr. Loretta Ford who is known as the mother of Nurse Practitioner NPs have historically encountered many obstacles to practice throughout the world. But with the passage of time, NPs have been able to make it a reality to start with the full independent practice role in the U. S. and some other countries. But, in a developing country like India Nursing is still considered a lower-level profession, and nurses receive little acknowledgment, no authority or power.Although INC implemented Nurse Practitioner Programme specially NPCC in the year 2017, it's been more than 4 years after passing out of the first batch of nurse practitioner in critical care, the country is still unable to deal with the challenges to employ this NPCC cadre as the Independent Nurse Practitioner. The main barriers or the challenges are as discussed below.

1. Structural Barriers

- Lack of legal framework for nurse practitioner (NP) practices.
- Restrictive government legislation and regulations.
- Insufficiently trained nursing faculty and clinical facility to train NPs.
- Poor infrastructure (skill labs and clinical material) for the training of NPs.
- Scarce in preparation of nurses in bio-medical subjects at the undergraduate levels, such as anatomy, physiology, pathology, pathophysiology & pharmacology, etc .
- Lack of clearly defined policy.
- Weak national-level nursing leadership/mentoring .

2. Functional Barriers

- No defined cadre structure/jobs for NPs
- Less collaboration health care team members
- Uncertainty of medico-legal responsibility
- Lack of quality mentoring and supervision.
- Reluctant or refusal of other health care workers to work collaboratively with NPs.
- Lack of planning for employment of NPs in the public and private sectors
- No clear line of authority
- Lack of prescribing authority
- Medical fraternity dominated society.

3. Perceptional Barriers

- Lack of clear understanding of the nursing curriculum and training and advanced nurse practitioner roles among management, including doctors and other health care team.
- Lack of trust in nursing capabilities to take up advanced nursing role.
- Fear of job and financial security among general practitioners.
- Lack of acceptance of the advanced nursing roles of NP by doctors and other health care personnel.
- Perceived poor image of the nursing profession in society.
- Lack of awareness of NPs education, cadre among the public.

X. STRATEGIES FOR SUCCESSFUL IMPLEMENTATION OF NP CADRE IN INDIA

The implementation of the NP programme in India is still in the infancy stage due to multiple barriers or challenges. There are several questions to be answered by the government of India and Ministry of Health and Family Welfare for the successful implementation of the NP cadre.

- How: How to get a license?
- How are NPs to be instituted?Where: Where will the training take place? (refers to educational institutions/standards)
- Who: who will teach? What are the educational qualifications
- When: When NPs license will be renewed ?
- What: what will be core competencies in their respective area of practice?
- What will be the carrier pathways of NPs?

The possible strategies for overcoming the challenges and to successfully implement the NP cadre in India are discussed below.

1. **Restructuring Nursing Education and Curriculum:** In India the NP programs must be implemented onthe residency model, and the curriculum must be purely based on competency. As per INC, the NP course's entry-level criteria is a registered graduate nurse with one year of clinical experience. A NP is expected to have a sound knowledge of basic biomedical science subjects such as anatomy, physiology, biochemistry, microbiology, pharmacology, pathology; however, the study finding across the world reveals that the physician refuses to accept NPs due to their poor knowledge in pharmacology, pathology, anatomy, physiology, assessment skills, diagnosis, critical thinking, and decision making.So, restructuring the nursing education and curriculum with an emphasis on to improve the knowledge on these subjects may be helpful to overcome the challenges.

2. **Building Sound Infrastructure for Training Competent Nurse Practitioners:** The NP curriculum in India according to INC is designed so that the practicum accounts for 85% and theory classes for 15% Thus to build up core competencies for NPs,therefore the institution must have a dedicated skill lab equipped with moderate-to-high fidelity

simulators and various task trainers and sufficient clinical facilities for adequate opportunities to observe and practice required competencies for the NPs.

3. **Nursing Faculty Capacity Building to Train Competent Nurse Practitioners:** Nursing education has rapidly evolved from hospital-based diploma nurse training to university-based graduate, postgraduate, and NP programs in India. Therefore, there is a serious shortage of experienced and competent nursing faculty in this country. The NP program is recently launched in India. Thus there are very limited or no trained NPs in India to teach and guide new NPs. Therefore, building and strengthening nurse educators through regular in-service education-focused and specialized training and collaborating with experienced medical faculty may help training nursing faculty for effective implementation and running of the NP programs in India.

4. **Radical Transformation In Nursing Practice Legislation and Licensure:** The INC and state nursing council should provide a clearly defined role of practice for the NPs. It should be protected by legislation through the nurse practice act, which may be done by anamendment in the existing INC act, 1947, and respective state nursing councils like U.S. and other countries.

5. **Regular Updating and Periodical Licensure Renewal:** Health care technology, strategies, and research can change professional practice, as it may become an issue for public safety. Therefore, health care professionals, including NPs, need to be regularly updated, and there must be a periodic licensure renewal system. Renewal of NP licensure policy and procedure varies between countries. ANCC recommends five-year renewal certification with the requirement of continuing education hours, practice hours, research publications, and licensure renewal examination. Consequently, the state nursing council should plan and implement common knowledge and skill update and licensure renewal for NPs in India too.

6. **Specialization and Defined Career Pathways for Nurse Practitioner:** The INC has recently launched NPs in critical care; however, there is a need to expand the scope of NPs in other fields of specialization such as primary health care, family health, midwifery, diabetes, geriatrics, pediatrics, mental health, and so on on. Moreover, there must be defined career pathways of NPs from entry-level in India.

7. **Promoting Research on Nurse Practitioner Role:** Numerous studies were carried out before and after the implementation of NP roles all over the world. It facilitated them to overcome barriers for successful implementation. NP role is anupcoming trend, and there are limited studies done and published in India. Thus there is a profound need for research to explore barriers, scope, and strategies throughout pre and postimplementation of NP role. Furthermore, the first batch has passed out, so they may be monitored for the acceptance and impact in society; also, awareness, perception, and acceptance of healthcare professionals and the general public, the effect on cost, patient satisfaction, etc. may be explored.

8. **Empowering Nursing Associations and Societies Of Nurse Practitioners:** In India also there must be an association and society of NPs for effective political lobbying to

persuade policy and image building of nurse practitioners like the AANP and the Canadian Association of Advanced Practice Nurses.

9. **Create Awareness Regarding Nurse Practitioners' Role:** General public knowledge about NP roles and lack of understanding by other healthcare personnel have been problematic over time in India. Further, it is the most frequently reported barrier, leading to a lack of acceptance of the NP role in India. As it is a novel/less known concept in India, it's essential to familiarize the concept regarding the role and responsibilities of NP to the beneficiaries and health care personnel to gain acceptance of the cadre.

XI. CONCLUSION

The NP cadre was started in the year 1960s in the USA and subsequently implemented in other developed and developing countries all over the world, which is found quite successful and is rapidly expanding.Bun In India although it has started the NP programme like NPCC according to the standard set by INC ,but till now there is no government employment and scope for independent practice and there is not any clearly defined licensure for the NPs in the nursing council.As India becomes the most populated country shortage of the physicians according to population has reached a crucial level. Therefore the successful implementation of this NP cadre allowing them to practice independently not only in India but also in the other developing countries may make up this gap.

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