Human Resource Needs of Nurses for Universal Health Coverage by 2020: Recommendations for the 12th Five Year Plan

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- *Leila Caleb Varkey, Vinod K. Paul, Dilip Mavalankar, Damisetti Thammarao, Srinath Reddy & Priya Balasubramanian*[1]

Introduction

The vision of Universal Health Coverage as seen by the HLEG (High Level Expert Group) is one in which Primary Care is in focus and supported by secondary and tertiary care. Nurses are uniquely placed to take on major roles in expanding health coverage through the innovative use of their skills in task shifting and sharing and information technology to filling the gap of qualified Medical doctors in marginalized and underserved areas. This will also fill a vital need for local employment opportunities for educated rural youth.

As a female-dominated profession, nursing training has the capacity to support the correction of centuries old gender discrimination, but this requires sensitive training and a gender sensitive work environment.

Nursing currently incentives towards public sector provision due to the better salaries and working conditions; and with an emphasis on local recruitment, training and vernacular education can best meet the basic health services available in the Essential Care Package. Current educational qualifications will need to be reviewed and upgraded for Nurse Practitioner roles.

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[1] *Email for contact: <leila.caleb@gmail.com>*

Key Aspects of Nursing Needing Attention

Shortage of Nurses

There is a shortage of nursing personnel in most hospitals and public health departments in India. Some of this is because of a genuine shortage and some because of financial constraints so that not enough nursing positions are created. The nurse: population ratio in 2004 was 1:2250 compared with 1:100-150 in Europe. Besides this in India the nurse: doctor ratio is almost 1.5:1 while it is almost 3:1 in advanced countries. The National Health Policy (NHP 2002) emphasizes the need for improvement in the ratio of nurses to doctors/beds to meet international quality standards (Dileep Kumar, 2006)

This shortage especially in hospitals affects nurses' roles. The fewer nurses tend to taken on ward management and medication tasks leaving surgical dressings and close monitoring to junior doctors, and bedside nursing tasks to attendants and patient's relatives.

There is also a professional divide between teaching and non-teaching nurses. This is because there are few specialist active nursing positions. Most specialist nurses with post-graduate degrees therefore become teachers as there are few specialized nursing posts with adequate remuneration incentives for clinical practice.

This divide has been further worsened since teaching nurses do not have clinical responsibilities other than student supervision as their shortage leads to them taking on a larger didactic academic load. Only a few institutions exist where teaching and nursing practice are balanced in a nurse's career (e.g. CMC Vellore).

India is at a crucial juncture in the history of nursing and midwifery. Architectural changes are needed. In rural areas the process of task-shifting is leading to an increase in the level of

skills and functions demanded of Auxiliary Nurse, Midwives and Contracted-in Staff Nurses in the Public Health System (through SBA and Essential Obstetric and Newborn Care (EmONC) training); while in urban areas task shifting is leading to a narrowing of skills and functions demanded of nurse-midwives (especially in the Private Hospitals and Nursing Homes) where the surplus of various other under-qualified or unqualified personnel are filling this vital gap.

National Programs and the Increase demand for Midwives to Provide Skilled Birth Attendance

Under the RCH II initiative, maternal health interventions have focused on provision of Essential Obstetric and Newborn Care (EmONC) by working to increase the numbers of primary health care facilities that provide delivery facilities on 24 hours, 7 days-a-week basis. The aim is to increase the proportion of PHCs providing such 24/7 services to 50 percent and then raise it to 100% in the next 2 years. This requires concerted efforts by the state governments with large central outlays by the NRHM both for up-gradation of facilities and provider skills, especially for nurses and doctors. Besides the increase in nursing personnel - ANMs to two per Health Sub-centre and Staff Nurses at PHCs one to three staff Nurses under the IPHS standards, the Ministry of Health and Family Welfare has also increased the scope of work of these workers to greater Midwifery tasks and prepared guidelines for the expected standards for facilities and for training for this purpose. (*See list of Guidelines in references.*)

After reviewing the country's human resources situation in the Health sector, the 11th Five Year Plan allocated funds for better pre-service education in Maternal and Child Health for both Medical and Nursing professionals. Thus, curricula were revised and the numbers of trained professional have been increased. The President of the Indian Nursing Council stated in his interview, that allocation for infrastructure development under the 11th Five Year Plan

has been large (several hundred million rupees) and that the intake of students for training to certain centrally and state run institutions has increased. In order to allow more nursing education institutions to be registered, the standards for complying with INC regulations have been relaxed, for example, with regard to age limits for tutors and bed-strength limits.

Lack of a Live Register and Employment Figures for Nurses in Public and Private Sector

The number of qualified nurses in the country at this point is not known in exact terms as all States do not keep live registers of nurses in all States. The best estimate provided by the Indian Nursing Council, based on the numbers graduating each year and estimates of loss and withdrawal from the processing place it close to 4 lakhs, of which the majority are currently Auxiliary Nurses (18 month training after Class 10) and General Nurse Midwives (3 ½ years training after class 12, any stream).

The Indian Nursing Council keeps a register to training institutions and numbers of students graduating.[1] This is however not a live register for licensed nurses, they are kept by the State Nurse's Registrar's Offices. Some states still do not have a full time Nurse's registrar making for paucity of evidence of reliable numbers of licensed nurses currently working in the country .

Migration figures have not been consolidated but are available from Embassies and Consulates if asked for by the Government.

The total output of training institutions at this point is around 65,000 General Nurses and 36,000 BSc and Post-Basic (GNM) BSc and over 120 Institutions having started the M.Sc Nursing courses and an increase in Universities offering Doctorates in Nursing (e.g., IGNOU, Rajiv Gandhi University of Health Sciences which has a tie-up with the INC). The Indian

Nursing Council's continues to support both GNM and BSc Nursing programs however it encourages the establishment of BSc nursing programs in large teaching hospitals as well as post-graduate nursing education.

Given the increase in the number of training institutions during the 11th Plan period, the numbers of Nurses in the country are increasing rapidly to try to meet demand however more needs also to be done to stem migration and increase retention within the system for working women and attract competent men and women to the profession.

Besides increase in new institution, there is need for a Centralised team to rejuvenate Nursing in India in a Mission mode. Leadership and Technical capacity should be built in older central training institutions to provide the teachers needed to staff these institutions.[2] The almost universal job requirement of MBBS for Public Health positions also prevents nurses from joining Government recognized institution or jobs in Public Health where Community Health experienced nurses could play a leadership role.

The increase in numbers in existing institutions needs to be only carefully considered. Like other professions nursing training requires a full-time residential commitment from its students. The limit to the number of students is therefore the living accommodation and hospital beds for training. As numbers increase institutions tend to economise on accommodation and living standards deteriorate. These need to be given due consideration so that good quality accommodation, food and hygiene standards are kept high. Numerous studies have shown the pitiful living conditions, or overcrowding for the numbers of Nurses and other Allied Health Services training – e.g., in the Government Public Health Sector (where the data on nurses is the best – see Table in Appendix).

Related Factors

a) ***Nurse: In-patient ratios:*** The lack of nurses puts a burden on Doctors and unskilled family members who are often substitute nurses in institutions and conduct most of the minor procedures and record keeping as well as preparation of patients for surgery. This undermines inpatient care and over time will become more difficult as society evolves with more women in the workforce**.**

b) ***Private: Public Sector Pay and Work Conditions:*** The issue of Nurses working in poor condition with poor pay in some private sector facilities needs to be addressed, especially as this is often a case of gender based disparity.

c) ***Numbers of Different Types of Nurses:*** The numbers of nurses required varies on the type of facility. Using the basic proportion of 1 Bed to 1 nurse (taking into consideration that there need to be 3 nurses to maintain 24 hour coverage as well as administrative and leave vacancy positions) the calculated shortfall of nurses can be worked out based on the numbers of in-patient beds required.

d) ***Distribution of Nurses in the Country***

a) *Centre:* There is urgent need to encourage and broaden nursing leadership in the country and to make efforts to follow more democratic and transparent means of appointments to high level posts. There is need to review the number of years a post should be held at the highest levels. While there is advantage in stability from continuing leadership there is need for broadening the leadership base at the highest level. Besides the Nursing Advisor to Govt of India there are few others visible in leadership positions at the central level.

The barriers and limitations to appointment to senior positions through centralized recruitment need to be reviewed for bottle-necks.

b) *States:* Equalizing educational and occupational opportunities need to be reviewed. The Govt of West Bengal as implemented many of the recommendations of the High Powered Committee for Nursing 1989 and is an example of a functional Nursing Directorate. Besides this the inequality in training facilities needs to be corrected. There is a need to ensure that States with surplus training facilities are able to allow campus recruitment and address the shortages in states with scarcity of nurses in the Public sector.

c) Strict conditions and inspection of institutions both public and private should be held to see the qualification of nurses, their working and living conditions and salary levels.

d) Rural Urban: The urban bias seen in doctors is also present to a lesser extent with nurses – however there are many Public Health nursing positions that need to be created and filled across the country.

e) *Public: Pvt* - The relatively higher wages in the Public sector and better working hours and salary benefits makes public sector more attractive than private sector for nurses. The need for central selection and regional allocation for Public facilities nursing positions with proper recording and maintenance of records for promotions and training needs to be provided.

f) *Neglected areas/ Difficult areas:* The most neglected area in nursing is the career path—there are far and too few senior positions and little emphasis on autonomy and professional development. With the setting up of Nursing

Directorate in each state (3% at Grade I positions, 7% at Grade II positions and 20% at senior specialized posts) the numbers of public sector jobs are bound to rise.

e) ***Skills and Categories of Nurses Needed and Available:*** The need for specialized nurses has been felt in the areas of OT, Chronic Care, Midwifery, Paediatric and Surgical ICUs and Cardio-thoracic and neurosurgery, anaesthesia all require specialized nurses. All nurses who have worked in such areas for over 3 years should be given the opportunity to specialize through a course (80% seats from nurses sent on deputation). They should have adequate incentives for promotions after training including clinical instructors for training institutions.

f) ***Distortion - Unstandardized Practice:*** A large number of non-clinical, clean (not requiring surgical asepsis) tasks can be shared with Nurses aids – who have received a 1 year training after completion of class ten.

a. *Nursing aides*: They will significantly assist in taking on ward-based general nursing care.

b. *Capacities:* Colleges, students (Pub: Pvt), issues with their practicum (skills and testing)

Nursing Education: Curriculum Issues and Recommendations

Nursing Curriculum is the responsibility of the Indian Nurses Council. Comparisons and parity with other countries in the standards of Nursing and Midwifery are kept in mind and regulating training institutions through inspections is the means of maintaining standards.

1. ***Admission requirements to joining the Nursing Profession:*** Nursing is a unique profession that lies at the cusp of the Arts and Sciences. While skills and scientific

knowledge in subjects like Anatomy, Physiology, Microbiology and Nutrition form the groundwork for scientific understanding for professional nursing, the arts provide the needed background for the Nursing Arts. Nurses learn to understand the individual and communities they work in through a study of Nursing Arts, Psychology and Sociology and the application of refined inter-personal skills in Counselling and Support as well as Management. This forms the "caring heart" of Nursing.It is therefore strongly advised that recruitment of nurses continues to be open to both science and arts background students in the 12th class since inclination and aptitude for nursing is not solely found in science students, many of whom chose nursing only as a third or fourth career option while students from an arts background may be much more inclined to chose nursing as a first or second choice. Keeping Nursing in a JEE model with the option for nursing as a late option for those who do not get into medicine or dentistry will only perpetuate the unacceptable hierarchies that exist in institution based nursing.

2. ***Basic bridge courses:*** There is need to devise a clear set of curriculum standards for the bridge courses that allow ANM to become an General Nurse Midwife. The curriculum of the Auxiliary Nurse Midwife at present covers basic Community Health Nursing and Midwifery. There needs to be more standardized courses for Nurses aid(Ayah) , orderlies (male) and other practical workers.

3. ***Nurse Practitioners and License to practice:*** Specialized Nursing Training curriculum needs to be matched with changes in the Nurses Registration act and in the prescribing and skills norms that are mentioned in Legal documentation with the Drug Controller of India (DCI) and in the practice of certain basic interventions (e.g. Life-saving Intravenous injections under standing orders/or telecommunication in cases of specific emergencies). These need to be rationalized and specific licences for practice

will need to be developed for these specialists- e.g- use of defibrillator, emergency i/v injections, anaesthesia, advanced obstetric manoeuvres incl. external version under USG visualization, vaccume extraction and manual removal of placenta – all covered in specialist Nursing post-graduate degrees.

4. ***Midwifery*** – the current curriculum does not cover all aspects of Midwifery considered necessary to be considered a Skilled Birth Attendant according to the WHO definition of the term (e.g. Life-saving treatment for PPH and shock, advanced obstetric manoeuvres incl. vacuumed extraction and manual removal of placenta, and use of modern diagnostics such as Pelvic Ultrasound, Continuous fetal monitoring, presumptive treatments in cases of preterm labour and advanced procedures for neonatal resuscitation and stabilization of sick newborns – all covered in specialist Obstetric Nursing and Midwifery post-graduate degrees and Nurse practitioner certification.

   This needs immediate attention if Midwives are to reach their full potential. Legal barriers exist as well for autonomous practice which will need to be reviewed for Nurse Practitioners. Opportunities for refresher courses and in-service trainingare also urgently needed, especially in places where the Obstetrician is only available on the telephone or women will not survive the long distance traversed in case of emergencies.

5. ***Need for more Auxiliary Nurses/Nurse aides*** **:** Historical evidence shows that the course of ANM- originated during the World War II when there was need for more nursing staff- Midwives were therefore trained as “auxiliary nurses” to meet this demand. Over time post-independence the term ANM morphed into persons who are neither trained as auxiliaries to in-patient nurses nor fully trained midwives. The

Kartar Singh Committee (1973) recommendations, and the Srivastava Committee's recommendations in 1975 led to the change in curriculum in 1977 to create a community-based provider employed as a Multipurpose Health Worker-Female (Geeta Malik, 2009) .

The need for Auxiliary Nurses exists and many hospitals have developed their own courses and in-house training and call these persons – Nurses, Nurses- aids, Orderlies or Bedside attendants. The curriculum and skills expected for these personnel need to be reviewed and standardised to come under the purview of the Indian Nursing Council. It should be developed as a practical training course after Matriculation (10 years of schooling pass or fail) and will provide employment to a large number of less academically minded young women and men who are excellent carers.

Establishment of an National Centre for Education in Nursing Sciences (NCENS) - this is needed to

1. Develop prototypes for textbooks, teachers' modules and manuals, clinical experience guides and reference texts with real life case studies.

2. Develop adequate quality and supply of practical training aids, electronic media usage, and electronic record keeping and data management

3. Support the INC and State Nursing Councils to implement new accreditation procedures and renewal of recognition to training institutions

4. Provide teachers with review courses and specialized training in **new technologies**.

5. Interact and provide guidance and support to development of training of Doctors and other Allied Professions in the Nursing Arts and ensure that these are incorporated and

standardized – e.g., Ward management, Asepsis, Injection safety etc in which Nurses should sets the standard

6. Creation of a National E-learning in Nursing Division within the Centre to support pre service and in-service training needs with Inter- regional collaboration to encourage Nurses to move across states and work along with other professions.

7. Use of English should not be a barrier to Nursing education. The Centre will need to have a full fledged department to provide Standardized translations to all States of India for Local language translations of all materials/AV aids so that Nursing training can be encouraged to take place in the State language with encouragement for enrolment of students from local language medium schools.

Career Paths within and across Health Professions

Nursing and Allied Health Services can chose to join the **Clinical Hospital Management** stream, or remain in Clinical expertise for **Services and Teaching** within Nursing or join with other Health professions in pursing specialization in **Public Health. Nurses must be taken in proportionate numbers to the Management and Public Health Cadres.**

There needs to be a review of entry level qualification and examination and adequate practical training duration for the capacity and needs of Nurses in different career paths with clear linkages that allow excellence to be rewarded. States need to standardize their requirements along National lines and a National Cadre for Nursing should be developed to assist with rapid ramp-up of training capacity.

Recommendations for the Human Resources in Health for Nursing

1. Set up a separate multi-disciplinary Nursing and Midwifery Renewal Mission of India headed by a Nurse with adequate State representation to speed up implementation of corrective measures to improve the quality and expansion of nursing in the country.

2. Immediately establish a Directorate of Nursing at the Centre authorised to implement recommendations of the NRMI and the other previous committee and research recommendations (High Powered Committee 1989, NRHM Situation Analysis recommendations) to enable States to improve Nursing.

3. Increase Education, Training, Registration and Employment Capacity in all States with a training facility deficit- primarily- the EAG states. Accountable for quality of both public and private Nursing training facilities.

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5. Facilitator' Guide and Handbook for Conducting Training for ANMs, LHVs, and Staff Nurses as a Skilled Birth Attendant

http://mohfw.nic.in/NRHM/MH/Facilitors_Guide.pdf

6. Guidelines for Pregnancy Care and Management of Common Obstetric Complications by Medical Officers http://mohfw.nic.in/NRHM/MH/Normal_delivery_and_management_of_obstetric_complications_.pdf

7. Life Saving Anesthetic Skills for Emergency Obstetric Care

http://mohfw.nic.in/NRHM/MH/Life_saving_Obstetric_Care_Log_Book_for_Trainers.pdf

8. National Guidelines on Prevention, Management and Control of Common RTI/STIs

http://mohfw.nic.in/NRHM/MH/Guidelines_PMC_RTI.pdf

Endnotes

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[1]Their website http://www.indiannursingcouncil.org/ provides *"Guidelines to Start Nursing Programs"*http://www.indiannursingcouncil.org/guidelines-nursing-school-college.asp and also provides *"Regulation for Nursing Programs*http://www.indiannursingcouncil.org/anm-regulations-norms.asp*"* including the fee structure.

[2] There are many examples – a few that the Author notes include the Lady Reading Health School Delhi, the RajkumariAmritKaur College of Nursing New Delhi, Silver Jubilee School for Health Workers in Lucknow, many Nursing training institutions and accommodation and recreational facilities, retirement home for nurses started under the Vicerena's patronage such as Lady Dufferin's "Dufferin Fund" have closed down or are delapidated. Nursing Institutions and Departments at the Centre and State such as All India Public Health Institute in Kolkata, the Ministry of Health and Family Welfare's own Training Division, the National Institutes such as the NIHFW and Central Universities such as JNU to name just a few where the positions of Nurses on the Faculty at levels of Principal, Professor, Lecturer or Reader . In the new institutions with niversity affiliation for Bachelors and Masters degrees the post of Tutor has not be upgraded despite increases in faculty qualification and experience and workload.