Human Resources Division
National Health Systems Resource Centre
National Rural Health Mission,
Ministry of Health and Family Welfare
Government of India

Study Report

## Nursing Services in

# Rajasthan

Current Situation, Requirements and Measures to Address Shortages


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# Section - I
# Background and Methodology

### 1.1 Demographic, socioeconomic and health profile of Rajasthan

Rajasthan is presently the largest Indian state with 342,240 Sq. Km occupying 10.4% of the total area of the Country. It is located in the northwest of India with Gujarat and Madhya Pradesh in its south. Northern border touches the Punjab and Haryana. On the west it shares border with the neighboring country Pakistan. Geographically the terrain is mainly deserted and includes the Thar Desert – the only desert of the subcontinent – which diagonally divides the state into plain and hilly areas. It is one of the driest regions of India where the temperature usually crosses 40 degrees celsius during the summer months. Historically, Rajasthan is known for its warrior people - the Rajputs. The State has a rich cultural heritage, people wear colorful clothes. Typical fabric printing from Rajasthan called *bandini* is famous all over the country and abroad. The State is famous for its well-known forts, palaces and princely havelis (traditional mansions).

Rajasthan has a population of 56.51 million (Census, 2001). Most of the State is well connected with the rest of the Country, especially due to its thriving tourist industry. The State has 33 districts and 41,353 villages (RHS Bulletin, 2007). Data in table 1 show that the decadal growth rate of Rajasthan state (28.41) according to Census 2001 is much faster than the Country average of 21.34. Crude birth rate and TFR are much higher than the national average. Rajasthan also lags behind the rest of the Country in terms of key indicators – such as IMR and MMR. The MMR of the State (445) especially is one of the highest in the Country.

**Table 1. Demographic, Social and health profile of Rajasthan compared to India**

| | **Indicators** | **Rajasthan** | **India** |
|---|---|---|---|
| 1 | Population (2001) in millions | 56.51 | 1028.61 |
| 2 | Rural population (% of total) | 76.6 | 72.12 |
| 3 | Population Density (persons per sq km) | 165 | 324 |
| 4 | Decadal population growth rate, 1991-2001 | 28.41 | 21.34 |
| 5 | Crude birth rate (CBR) | 28.6 | 23.8 |
| 6 | Crude death rate (CDR) | 7 | 7.6 |
| 7 | Sex Ratio (Census 2001) | 922 | 933 |
| 8 | Total Fertility Rate | 3.2 | 2.7 |
| 9 | Institutional deliveries (NFHS-III) | 32.2 | 38.3 |
| 10 | Infant mortality rate (IMR) | 68 | 58 |
| 11 | Maternal Mortality Ratio | 445 | 301 |
| 12 | Population below poverty line (%) | 15.28 | 26.1 |
| 13 | Human Development Index (HDR, 2001) | 0.424 | 0.619 |
| 14 | Scheduled Caste (%) | 17.15 | 16.2 |
| 15 | Scheduled Tribe (%) | 12.56 | 8.2 |
| 16 | Female literacy rate (Census 2001) | 43.9 | 53.7 |

Another key fact is that only a third of the childbirths in the State take place in institutions (32.2%) compared to nearly 40 percent in the Country. This indicates a problem in access to services and also socio cultural barriers to accessing health facilities for childbirths. A larger percentage of people in Rajasthan live in villages and the population density is much lower than the national figure. The State data also show that there is a slightly higher percent of scheduled caste and scheduled tribe population in the State indicating social vulnerability. But, the percent of population living below poverty line in Rajasthan (15.28 %) is much below the national average of 26.1 %. Sex ratio data show that there are fewer females per 1000 males in Rajasthan (922) compared to the rest of the Country (933). In addition to this, the female literacy rate (43.9) in the State is far lower than the Country's figure of 53.7 indicating that the climate in Rajasthan is less favourable to the social development of women.

**Availability of health facilities and human resources for health care:** It is not enough for health infrastructure to be built – the facilities must be functional in order to deliver services. Over the years, norms have been established for the number and type of health facilities for rural areas in India. Table 2 presents data on availability of health care infrastructure and human resources for health at three levels in rural areas: Sub-health centres (SHCs), primary health centres (PHCs) and community health centres (CHCs). Rajasthan currently has 10612 sub-health centers, 1499 PHCs, and 337 CHCs. There is a shortfall of 56 PHCs and 51 CHCs in the State. The sub-health centres, however, are in larger number than sanctioned.

Presence of frontline workers is critical to achieving rural health goals and improving national health profile. In Rajasthan, there is no shortage of ANMs according to the sanctioned – infact, there are 160 more ANMs than mentioned as sanctioned. The shortfall of female health supervisors is 141. There is an acute shortage of male health workers and their supervisors - 8084 and 785 respectively. There is also a shortage of 181 medical officers at PHCs. Rajasthan faces acute shortage of specialists at CHCs such as physicians, obstetricians and pediatricians. In the case of pediatricians the shortfall is critical. There are only 78 pediatricians against the sanctioned 337 making the shortfall as large as 259. Overall not even half of the specialists required are available.

Another essential category of health care providers is the staff nurse or the nurse-midwife. There are 8425 nurse-midwives in position in Rajasthan compared to 3858 sanctioned. The shortfall is nil. This is unlike the huge shortfall of nurse-midwives at the periphery in other large states in the Country. At first glance it appears as though there is an excess of nurse midwives in the State. Further scrutiny shows that there are many male nurses in the State. Data obtained from Swasthya Bhavan showed that there are 2427 male nurses in position in the PHCs of the State. Later sections will discuss the issue of male nurses in Rajasthan and that many of them are not trained midwives but general nurses.

**Table 2. Health Infrastructure & human resources in rural Rajasthan**

| Particulars | Required 1 | Sanctioned 2 | In position 3 | Vacant 4(2-3) | Shortfall 5 (1-3) |
|---|---|---|---|---|---|
| Sub-health centres | 9554 | | 10612 | | Nil |
| PHCs | 1555 | | 1499 | | 56 |
| CHCs | 388 | | 337 | | 51 |
| **Personnel** | | | | | |
| ANMs | 12111 | 12271 | 12271 | Nil | Nil |
| LHVs or HA(F) | 1499 | 1358 | 1358 | Nil | 141 |
| Male Health Workers | 10612 | 3968 | 2528 | 1440 | 8084 |
| HA(M) | 1499 | 938 | 714 | 224 | 785 |
| Doctors at PHCs | 1499 | 1527 | 1318 | 209 | 181 |
| Nurses/Midwives | 3858 | 9891 | 8425 | 1466 | Nil |
| Lab Technicians | 1836 | 2153 | 2065 | 88 | Nil |
| Pharmacists | 1826 | 2375 | 2355 | 20 | Nil |
| Radiographer | 337 | 269 | 299 | Nil | 68 |
| Obstetricians / gynecologist | 337 | 155 | 111 | 44 | 226 |
| Physicians | 337 | 308 | 208 | 100 | 129 |
| Pediatricians | 337 | 97 | 78 | 19 | 259 |

*(Source: RHS Bulletin, March 2007, M/O Health & F.W., GOI, Progress Report of Medical and Health , Rajasthan and information provided by Additional Director Administration, Swasthya Bhawan)*

### 1.2 Objectives of study

This study was undertaken by the research wing of the ANSWERS (Academy for Nursing Studies and Women's Empowerment Research Studies) on behalf of the National Health Systems Resource Centre, National Rural Health Mission, Government of India with the overall objective of identifying gaps in the nursing workforce and recommending measures for addressing deficiencies in Rajasthan. The Nursing personnel that were the focus of the study for peripheral health services included ANMs and their supervisors (LHVs or female health supervisors) and staff nurses or nurse midwives at PHCs, CHCs and hospitals. This study did not address other categories such as lab technicians, male health workers or male supervisors and specialists.

The specific objectives of the study were:

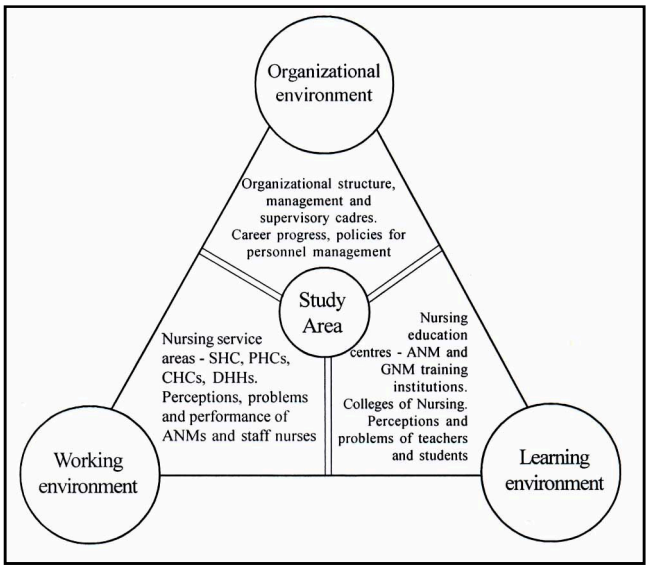
a. To review the organization of nursing and midwifery services in the state public health system.
b. To review the workforce management policies in place in the state public health system as relates to nursing and midwifery, including issues of career progression, their working conditions in government as compared to that in private sectors, their reasons for discontinuing the profession where this is the case.
c. To compare workforce management policies between contractual staff and regular staff and see the differing experience and utilization between them.
d. To assess the workforce performance and assess how it relates to workforce conditions and to skills of the workforce.
e. To conduct situation analysis of nursing and midwifery requirements of health centres and hospitals both in public and private sectors, their current availability in the state, within the system and in the open market.
f. To assess the current capacities (public and private sectors) of training institutions and feasibilities within the state to meet the short fall of nurses, ANMs and LHVs for the immediate needs as well as midterm and long term requirements, to also assess the requirements in terms of faculty development programmes, and quality assurance measures to ensure quality in nursing education.
g. To evaluate the different options available for expanding nursing and ANM and LHV education and the necessary conditions that would be needed to ensure that a substantial part of those trained in these institutions become available to serve within the public system or outside it in rural areas. This includes the important issue of the availability of faculty for running these schools.
h. To draw up a detailed project report for starting up of ANM schools and nursing schools in some (about 20 such schools per state within one year) tribal blocks/districts such that educated women resident in the tribal blocks/districts are able to access ANM and nursing education.

### 1.3. Methodology of study

In order to collect information to fulfill the objectives set out for the study, the team conducted brain-storming sessions to identify the major components on which data needed to be collected. All the issues discussed were reorganized into groups to assess how closely they fit into the objectives. The research framework focused on the following three major themes: the working environment, learning environment and organizational environment of nursing workforce in Rajasthan. Figure 1 depicts the framework on which the methodology of the study was developed.

Research design selected for the study included an integrated quantitative and qualitative approach. The entire nursing workforce of the state of Rajasthan became the focus of study. This included clinical nursing as well as public health areas, all levels of teaching institutions, teachers, and students and primary care providers-ANMs and staff nurses.

**Figure 1 Diagram of major themes and subthemes included in the study**




### 1.3.1 Sites and sample included in the study:

The sample included four levels: Service providers (ANMs and staff nurses), health care facilities from district below, training institutions and officials. Table 3 gives the details of the sites and sample included in the study. Five districts were selected: Udaipur, Dhaulpur, Kota, Jodhpur and Bikaner. The criteria for selection of districts were geographical location, size, demographic and health indicators and availability of health facilities. In total five district hospitals, 10 CHCs, 20 PHCs and 50 sub-health centres were assessed. The nursing personnel included 216 staff nurses and 146 ANMs. For assessing the capacity of nursing educational institutions, a listing of all the institutions was done and three colleges of nursing, 10 GNM schools of nursing and six ANM training centres were selected. Within the training institutions, 187 students and 54 teachers were interviewed. Interviews were also conducted with 23 state level officers and key stakeholders.

**Table 3. Sample of facilities and personnel from districts included in the study**

| **Category** | **Number included** |
|---|---|
| **Facilities observed** | |
| District hospitals – one in each district | 5 |
| Community health centres – two in each district | 10 |
| Primary health centres – two in each CHC | 20 |
| Sub-health centres – ten in each district | 50 |
| Private hospitals – one in each district | 5 |
| Colleges of nursing – throughout the state | 3 |
| GNM schools – throughout the state | 10 |
| ANM training schools -throughout the state | 6 |
| **Personnel interviewed** | |
| Staff nurses | 216 |
| ANMs | 146 |
| Nursing students | 187 |
| Nursing teachers | 54 |
| Officials and stakeholders interviewed – state level and district level | 23 |
| Participants in FGDs | 22 |
| Participants in workshop | 20 |

Qualitative data collection techniques included a series of FGDs, workshops and interactions with officials. FGDs were conducted with different groups from both government and private institutions in order to understand the issues of nursing personnel connected with performance: infrastructure and facilities, working conditions and career progression. The participants included ANMs, LHVs and union leaders. The following officers participated in the workshop: six principals of schools of nursing, two Dy. Directors of Nursing, one Registrar of Nursing Council, two retired nursing officers, one district chief nursing superintendent, deputy director (training), joint director (training), joint director (non gazette directorate), Addl. Director (Admin), two nursing superintendents and two retired senior faculty members.

### 1.3.2. Tools and techniques used in data collection:

Semi-structured interview schedules and observation checklists formed the two main methods for primary data collection. Guidelines were prepared for conducting focus group discussions with different categories and for interviews with key stakeholders and officers. A series of workshops were conducted with experts at the Academy for Nursing Studies for conceptualization, tool development, identifying gaps in primary data collection, revision of tools etc. The tools used for data collection with different groups and facilities are presented in table 4. Secondary data were collected on organizational environment through review of policies, documents and official circulars and manuals.

**Table 4. List of tools used for data collection**

| Sno. | Level | Tools |
|---|---|---|
| 1 | State and District level | Semi structured interview schedule for data on personnel, number and type of institutions, different programmes and policies related to nursing personnel and their training and administration. |
| 2 | Training Institute level | Semi structured interview schedule and observation checklist for information on physical facilities, teaching facilities and living conditions. |
| 3 | Health Facilities | Observation checklist for quality of facilities and working conditions at four levels. |
| 4 | Service Providers (ANMs and Staff Nurses) | Interview schedules to assess working environment, conditions of work, performance and problems. Focus group discussion guideline for ANMs, LHVs, and staff nurses, teachers and supervisors. |
| 5 | Teachers and Students | Interview schedules for obtaining information from students and teachers in different institutions. |

### 1.3.3. Research Teams:

Two teams were involved in data collection. The primary research team consisted of seven research assistants for the quantitative aspects. The secondary research team consisted of two senior nursing consultants who built their methodology on the data from questionnaires and interviews. They conducted focus group discussions and interviews with state level officers, senior nurses, and key stakeholders with focus on organizational environment. The data analysis and report writing were done by a core team of coordinator, data manager and support person.

### 1.3.4. Brief description of data collection process:

Pilot study of the process and tools was carried out in the last week of September, 2008 within one district and two training institutions. This helped to plan out data collection process in detail. The primary data collection was done over a period of eight weeks between October and December, 2008. Secondary data were reviewed throughout study period – between September 2008 and August 2009.

**Data collection at training institutions:** Both government and private institutions were selected. Within each institution three types of tools were used: an observation checklist for information about the institution, an interview schedule for teachers and an interview schedule for students. Only final year students were selected for interview in each institution in order to obtain the most informed respondents for data collection on

curriculum and teaching. The institutional assessment checklist had questions for assessing adequacy of teachers (student-teacher ratio), intake of students in each course per year, facilities for conducting the training programs, accommodation, selection criteria for students for each training program, syllabus related to midwifery teaching, availability of clinical and community field areas for practical experience, availability of student welfare programmes. Observations were focused on the building, midwifery and newborn skill lab, classrooms, hostel and student facilities. A common interview schedule was designed and used for all students – government or private. Students were questioned about their awareness of rotation plan, clinical posting, supervision and guidance, case book maintenance, adequacy of clinical teaching, and satisfaction with teaching. The interview schedule for teachers helped in assessing teachers' profile, in-service education, teaching style and quality, clinical teaching, and evaluation methods.

**Data collection in health facilities:** Data were collected from facilities as well as from personnel within each selected district. The facilities included five district hospitals, 10 CHCs, 20 PHCs and 50 sub-health centers. Personnel included 216 staff nurses and 146 ANMs. The tool assessed details regarding the residence and mode of transport to work, working conditions and working environment for the nurses and their patients. Some questions were framed to identify issues related to availability of drugs, articles and health teaching aids and availability of forms/charts and registers and their regular maintenance and supply. Questions were framed to identify the satisfaction about pay and allowances, facilities such as supply of electricity and water and the functioning of the labor room and operation theatre. Special emphasis was laid on maintenance of universal precautions for infection prevention.

### 1.3.5. Data management, analysis, and plan of report:

Methods of analysis included both qualitative and quantitative techniques. The Statistical Package for Social Sciences (SPSS) was used for preparing structure for entry and analysis of information collected through checklists and interview schedules. Data entry was completed by two members along with one member of the field visit team for ensuring data verification, compilation and editing. Qualitative data were analyzed through manual coding and identifying themes and sub themes. After discussion at various levels, a structure was prepared for consolidated reporting of the findings so as to ensure comprehensive outputs. A series of workshops were conducted at state level and at Academy for Nursing Studies to review the report, consolidate findings and prepare an action plan. Finally, a review team consisting of senior nursing resource persons from the State consolidated the findings, helped in interpreting the data and provided historical and social context to the nursing situation in Rajasthan.

# Section - II

## Nursing Personnel: Availability, shortfall and requirements

Nursing and midwifery personnel primarily work in two broad areas: clinical nursing and public health nursing. Only a few are placed in teaching institutions and a handful work in administrative positions at district or state level. The norms for the number and type of personnel vary considerably for different facilities as the needs, workload and working conditions differ. Accordingly, the Indian Public Health Standards (2007), Guidelines from Indian Nursing Council (2002), Government of India recommendations of 1989 (High Power Committee on Nursing), and the GOI letter to the States (2006) were considered as applicable in different situations. Norms recommended by IPHS and INC are given in tables 5 and 6.

**Table 5. Norms for nursing personnel at different facilities (IPHS 2006, 2007)**

| | Type of Hospital | ANMs | LHVs | Staff Nurses | PHN | Ward In charge | Asst. Matron | Matron |
|---|---|---|---|---|---|---|---|---|
| 1 | SHCs | 2 | - | - | - | - | - | - |
| 2 | PHC | 1 | 1 | 3 | - | - | - | - |
| 3 | CHC | 1 | - | 7 | 1 | - | - | - |
| 4 | SDH 31-50 Beds | - | - | 21 | - | - | 1 | - |
| 5 | SDH - 51-100 Beds | - | - | 51 | - | 5 | 1 | 1 |
| 6 | DHH - 101-200 Beds | 6 | - | 88 to 113 | - | - | 2 | 1 |
| 7 | DHH 201 - 300 Beds | 4 | - | 115 | - | - | - | 7 |
| 8 | DHH - 301-500 Beds | 4 | - | 217 to 267 | - | - | - | 9 |

**Table 6. Norms for nursing personnel in teaching hospitals (INC, 2002)**

| | **Categories** | **Requirements** |
|---|---|---|
| 1 | Nursing Superintendent | 1: 200 beds |
| 2 | Dy. Nursing Superintendent | 1: 300 beds |
| 3 | Departmental Nursing Supervisors / Sisters | 7: 1000 + 1 for every addl. 100 beds |
| 4 | Ward Nursing Supervisors / Sisters | 8: 200 + 30% leave reserve |
| 5 | Staff Nurses for wards | 1: 3 (or 1:9 each shift) + 30% leave reserve |
| 6 | Staff Nurses for OPD, Blood Bank, X-Ray, Diabetic Clinics, CSR etc | 1: 100 outpatient + 30% leave reserve |
| 7 | Staff nurses for Intensive Care Unit (8 beds ICU/200 beds) | 1:1 (or 1:3 for each shift) + 30% leave reserve |
| 8 | Staff Nurses for specialized departments and clinics such as OT, Labour Room | 8: 200 + 30% leave reserve |

No one single norm or recommendation is suitable for the entire state and for different types of facilities. The IPHS provides norms for hospitals and health facilities upto the district hospital. There are gaps, discrepancies and paradoxes. For example the ward in charge is not mentioned at district hospitals with 201-300 and 301-500 beds whereas five are recommended for hospitals with 51-100 beds. In such cases norms recommended by INC are referred since most of these hospitals are also teaching arenas for ANM and GNM students. Moreover, the IPHS does not mention the DPHNO or district public health nursing officer. The

recommendations of the High Power Committee (1989) and the communication of GOI (2006) to the states have been referred for calculating the requirement for DPHNOs

**Delimitations:** Certain delimitations have been set while working out the requirement for nursing personnel in this paper and it is necessary that this aspect be considered while looking at the figures.

- The 30 percent leave reserve that should be considered has not been used
- Attrition rates due to migration, resignation and retirement have not been included
- The increase in number of health facilities and hospitals according to population increase, disease trends are not part of this study.
- This paper calculates requirements only for government health facilities – does not consider the needs of the steadily rising private sector.

The above delimitations mean that the actual requirements for nursing personnel are much higher than what this report presents.

**2.1 ANMs or MPHW(F):**

According to the Indian Public Health Standards each sub-health centre must have two ANMs. Based on this norm Rajasthan requires a total of 23991 ANMs - 21484 ANMs at the sub-health centres, 1503 at the PHCs, 356 at the CHCs, 516 at SDHs with 51-100 beds and 101 -200 beds, and 132 at the district headquarter hospitals with 301-500 beds. The existing number of ANMs in Rajasthan is 14546. The shortfall of ANMs in Rajasthan is 46%. Additional number of ANMs required for the state is 11065. Rajasthan needs almost double the number of ANMs it currently has.

**Table 7. ANMs -Available and requirement according to IPHS**

| | Type of health care facility | Number of facilities | Existing ANMs | Required number of ANMs as per IPHS | Shortfall |
|---|---|---|---|---|---|
| 1 | S.C | 10742 | 12271 | 10742x2=21484 | 11065 |
| 2 | PHC | 1503 | | 1503x1=1503 | |
| 3 | CHC (1-30) and satellite hospitals (1-50) | 349+ 7 | | 356x1=356 (Including 7 satellite hospitals) | |
| 4 | SDH(51-100 or 101 - 200) | 86 | 2275 | 51-100 not recommended 86x6=516 | |
| 5 | D H (201-300) | 33 | | 33x4=132 | |
| 6 | MCH | | | Not recommended | |
| | Medical College Hospital at 800-850 beds | 2 | | | |
| | 1500 beds | 3 | | | |
| | 3000 beds | 1 | | | |
| | Total | 14546 | 14546 | 23991 | 11065 46% |

**2.2. Lady Health Visitors /Female Health Supervisors:**

The IPHS recommend one LHV or Female Health Supervisor for every PHC. Currently there are 1358 LHVs in Rajasthan against the 1503 required. The shortfall is 145 or 9.6%.

**Table 8. LHVs Available and requirement according to IPHS**

| Place of work | Required | Existing | Shortfall | % |
|---|---|---|---|---|
| PHC | 1503 | 1358 | 145 | 9.6% |

**2.3 Public Health Nurses (PHNs) / Block Health Supervisor (BHS):**

The IPHS recommended one PHN in every CHC and one in each regional training centre. The PHN is called Block Health Supervisor in Rajasthan. The shortfall is 187 PHNs or 53.5 %. The absence of PHN creates a big gap in supervision and guidance to peripheral health service providers and needs to be addressed urgently.

**Table 9. PHNs (BHS) - Available and required according to IPHS**

| Place of work | Existing | PHNs as per IPHS | Total | Required | % |
|---|---|---|---|---|---|
| CHC | 162 | 349x1=349 | 349 | 187 | 53.50% |

**2.4 District public health nursing officers (DPHNOs):**

The IPHS do not mention the DPHNO. The presence of DPHNOs in every district is essential to supervise and guide PHNs, LHVs and ANMs to render quality services for maternal and child health and to monitor services related to reproductive health and family welfare. The state requires 66 DPHNOs at two per district according to High Power Committee and the GOI recommendation of 2006. Currently not a single DPHNOs is available. Therefore the vacancy is 100%.

**Table 10. DPHNOs – Available and required (High Power Committee, 1989 and GOI, 2006)**

| Designation | Sanctioned | IP | Recommended | Shortfall HPC | Percentage |
|---|---|---|---|---|---|
| DPHNO | 26 | Nil | 33 x2 = 66 | 66 | 100% |

**2.5 Shortfall and requirements for Staff Nurses:**

According to IPHS Rajasthan needs 6952 staff nurses at PHC and CHC level. Currently there are 8425 staff nurses hence there is no shortfall. Staff nurses are also required for teaching hospitals though the IPHS do not mention this. At present there are 2831 staff nurses at the medical college hospitals, SDH, DHH and the shortfall is 9490 staff nurses (58.5%) in these areas.

**Table 11. Staff Nurses- Available and required (IPHS and INC)**

| S.No | Type of hospital (and beds) | Number of Inst. | Existing S/N | Required as per IPHS | Total required | Shortfall as per IPHS | % |
|---|---|---|---|---|---|---|---|
| 1 | PHC | 1503 | 8425 | 1503x3=4509 | 6952 | 1473 Surplus | 40.56% |
| 2 | CHC(1-30) | 349 | | 349x7=2443 | | | |
| 3 | Satellite hospital (1–50 beds) | 7 | 2831 | 21x7=147 | 11987 | 9156-1473 | |
| 4 | SDH 51-100 | 86 | | 86x51=4386 | | | |
| 5 | DHH 250-350 | 33 | | 115x33=3795 | | | |
| 6 | MCH 800-850, 1500, 3000 | 2 | | 338x2=676(INC) | | | |
| | 1500 | 3 | | 571x3=1713(INC) | | | |
| | 3000 | 1 | | 1270x1=1270(INC) | | | |
| | Total | | 11256 | 18939 | | 7683 | |

**Note:** The number of existing staff nurses is based on the data collected from the office of the Additional Director Administration.

**2.6 Head Nurses:** The IPHS recommend five nursing sisters for a 51-100 bedded sub district hospital. The total requirement of nursing sisters for all hospitals is 595. Hence the Indian Nursing Council Norms were examined

and used. According to this, 352 nursing sisters are required for teaching institutions bringing the total required to 947. Currently 1667 are available, showing no shortfall.

**Table 12. Head Nurses required as per IPHS and INC**

| Institution (beds) | No | Existing number | As per IPHS/INC norms | |
|---|---|---|---|---|
| SDH (51-100) | 86 | 1667 | 86x5=430 IPHS | 595 |
| DHH (250-350) | 33 | | 33x5=165 - IPHS | |
| MCH | | | | 352 |
| 800-850 | 2 | | 32x2=64 | |
| 1500 | 3 | | 56x3=168 | |
| 3000 | 1 | | 120x1=120 | |
| | | | | 947 |

**2.7 Assistant Matrons:** Assistant matron posts are available in district hospitals and teaching hospitals in the entire state. As per IPHS norms, one post of assistant matron is proposed in each SDH and DDH with 201-300 beds and two for 301-500 beds and two are required in teaching hospitals 500 beds and one for every additional 50 beds. Hence 31 assistant matrons are needed for teaching hospitals. Overall 282 assistant matrons are needed for the state whereas 82 are in position. This means 146 more are required. The shortfall is 71%.

**Table 13. Assistant Matrons required as per IPHS and INC**

| Institution (Beds) | SP | IP | V | Proposed by IPHS / INC | Addl. Req | % |
|---|---|---|---|---|---|---|
| SDH – 7 (31-50) | 121 | 82 | 39 | 7 | 146 | 64% |
| SDH – 86 (51-100) | | | | 86 | | |
| DHH – 33 (250-300) | | | | 66 | | |
| MCH-2 (800-850) | | | | (not recommended) | | |
| | | | | 12x3=36(INC) | | |
| MCH-3 (1500) | | | | 33x1=33(INC) | | |
| MCH-1 (3000) | | | | | | |
| Total | 121 | 82 | 39 | 228 | 146 | |

**2.8 Nursing Superintendent, Matrons and Chief Matron for Teaching Hospitals:** IPHS recommend one matron for hospitals with 51-100 beds and 101-200 beds and 9 matrons for hospitals with 301-500 beds. As per INC norms one CNO is required for each teaching hospital. Overall 364 posts for matron are required or Rajasthan but only 34 are available. There are 5 chief matrons in the state whereas 37 more are required as per INC norms. Hence the shortfall is 330 or 90.65%.

**Table 14. Matron and chief matron (IPHS)**

| Institution ( beds) | Numbers | Existing | Vacancy | Proposed by IPHS or INC | Addl. Required | % |
|---|---|---|---|---|---|---|
| SDH 51-100 | 86 | 34 | 21 | 86x1=86 | 330 | 90.65% |
| DHH200-300 | 33 | | | 7x33=231 | | |
| MCH | | | | | | |
| 800-850 | 2 | | | 4x2=8(INC) | | |
| 1500 | 3 | | | 7x3=24(INC) | | |
| 3000 | 1 | | | 15x1=15(INC) | | |
| Total | | 34 | 21 | 364 | | |

**2.9 Faculty:** Faculty shortages have been a chronic problem in Rajasthan since the beginning of modern nursing education. This shortfall is based on the existing gaps in the availability of ANMs, staff nurses. In addition the State requires many new schools i.e., the requirement of teaching faculty will also increase.

**Table 15. Faculty- ANM, LHVTC and GNM schools**

| S no | Category | Required number | Existing number | Shortfall | % |
|---|---|---|---|---|---|
| 1 | Principal | 47 | 0 | 47 | 100% |
| 2 | Vice principal | 143 | 38 | 105 | 73% |
| 3 | PHN tutor | 128 | 84 | 44 | 34% |
| 4 | Nursing tutor | 225 | 57 | 168 | 74.60% |
| | Total | 543 | 179 | 364 | 67% |

**2.10 Faculty for College of Nursing:** Rajasthan has only one college of nursing at Jaipur where BSc and MSc course is going on. The state needs more teachers for the schools of nursing. Hence just one college of nursing with existing admission capacity of students is not enough to produce nursing teachers for the entire State.

**Table 16. Faculty-Nursing Colleges (INC norms)**

| S no | Category | Proposed as per INC | Existing faculty | Shortfall | % |
|---|---|---|---|---|---|
| 1 | Principal | 1 | - | 1 | 94.11% |
| 2 | Vice principal | 1 | - | 1 | |
| 3 | Reader / associate professor | 5 | - | 5 | |
| 4 | Lecturer | 8 | 2 | 6 | |
| 5 | Tutors / clinical instructors | 19 | - | 19 | |
| | Total | 34 | 2 | 32 | |

The existing faculty of college of nursing is also extremely inadequate as per INC norms. Officially the college has only two out of 34 faculty required according to the INC norms. The present college needs one principal, one vice principal, 5 readers cum associate professor, 6 lecturers and 19 clinical instructors. The total shortfall is 94%. With the additional requirements more nursing teachers for ANM training centre and school of nursing should be prepared from colleges of nursing. Hence one college is not sufficient to prepare large number of nursing teacher within a short period.

**Summary:**

The overall shortfall of nursing personnel is enormous. Rajasthan needs 11065 ANMs, 1503 LHVs, 187 PHNs, 66 DPHNOs to fill current shortages in the public health system. The state also needs 7683staff nurses, 146 assistant matrons and 330 matrons. The current shortfall of teaching faculty is 364 at ANM and GNM level and 32 at collegiate level. The overall shortfall among different categories of nurses is huge. The shortfall is acute at the senior faculty level. Since the posts of Principal are not filled these jobs are handled by persons in charge of post.

# Section - III
# Workforce policies and working environment: Analysis of nursing situation in Rajasthan

Nursing personnel in Rajasthan work in different settings –hospitals, health centres in the periphery and in the private sector. Workforce policies and working situation have a tremendous influence on their performance and job satisfaction. This section deals with a range of issues related to workforce policies, cadres and posts, career progression and the working environment of nursing personnel. An analysis of the position of nurses in the health system and opportunities for their career advancement is also done based on primary and secondary sources and review of government documents at different levels. This section also presents findings on the availability of infrastructure, facilities, equipment and supplies in different levels of health facilities in the government sector that influence the performance of nurses and determine the quality of services provided to patients and communities. The findings are presented in the following subsections.



### 3.1 Nursing workforce: Posts, recruitment and administration

Rajasthan, just as other states in India, does not have a separate department of nursing. Nurses are categorized under subordinate services and work under an additional director (administration) who is an RAS officer under the Director of Family Welfare. The teaching staff of the ANM and GNM schools is directly under the Joint Director Training (medical doctor) who also reports to the Additional Director mentioned above. The faculty of the nursing college reports to the deputy secretary – Group III Medical and Health. Administratively, they report to the Principal of the SMS Medical College. For academic purposes, the college of nursing is affiliated to the medical university.

### 3.1a Nursing posts in Rajasthan:

The status and autonomy of a profession is determined by the number of administrative and senior level posts that the personnel occupy. Senior posts take them closer to policy making and allow them to participate in decisions related to their training, their performance and career development. Review of the records of the department of health and discussions with key officials showed the following categories of nursing personnel in Rajasthan:

- In hospitals: Nurse Grade II, Nurse Grade I, Nursing Superintendent Grade II, Nursing Superintendent Grade I, and District Chief Nursing Superintendent (DCNS)
- In the periphery: ANMs or Health Workers (F), LHVs, BHS (Block Health Supervisors)
- In teaching category: PHN Tutor, sister tutor, vice principal, principal.
- College of nursing: Principal, vice principal, reader, lecturer, clinical instructor
- Administrative posts: DD Nursing, Registrar Nursing Council (JD Nursing discontinued).

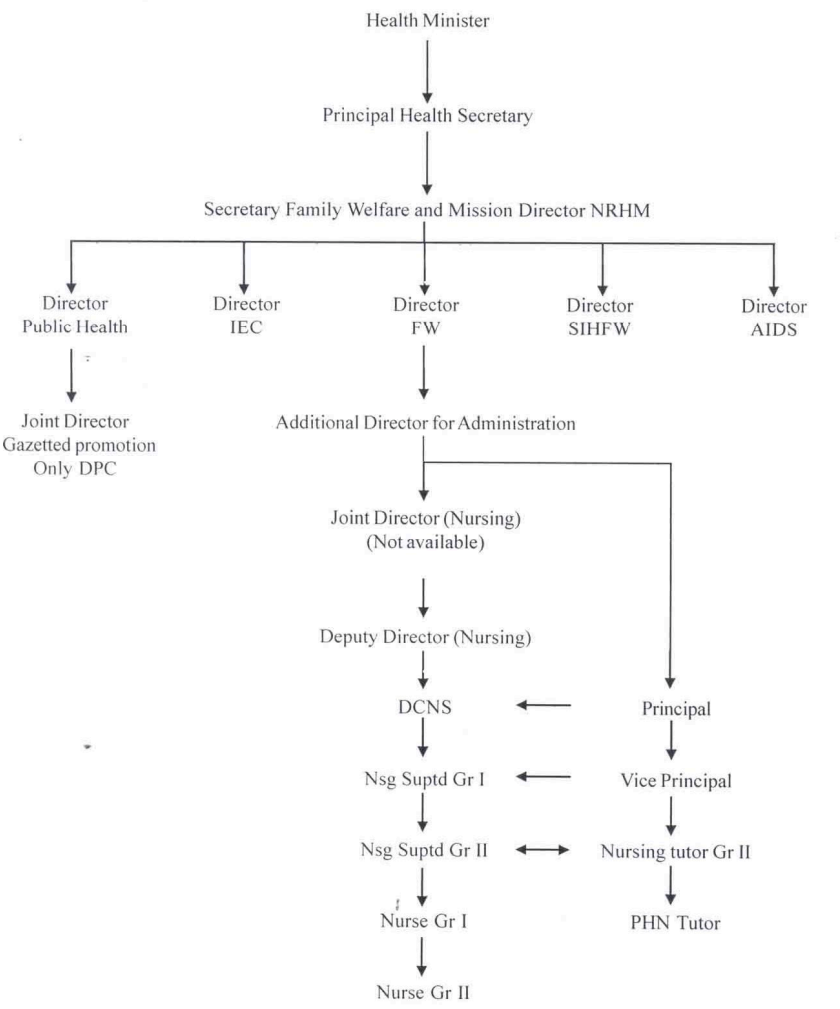
**Absent, abolished or downgraded posts:** The importance given to a cadre is reflected in the number of new posts and higher level posts held by the professionals. In Rajasthan, instead of number of nursing posts becoming varied and more, some key points have been discontinued or downgraded resulting in decline in professional growth. Rajasthan does not have the post of PHN in the field. The PHN as visualized by the Bhore Committee (available in Delhi state) does not exist anymore. The Block Health Supervisor(F) is a promotion post for the female health supervisor or erstwhile LHV. Rajasthan also does not have the post of DPHNO at the district level though this post was available earlier. The few remaining DPHNOs are in teaching posts. The post of JD was present till 2007 but has been downgraded since then.

**Scales of pay:** Remuneration paid to nursing personnel is also an indicator of the status of the profession in the organizational hierarchy. The scales of pay of nursing personnel in Rajasthan were examined to assess the status of different posts. The pay scale records showed that only two posts in the state are placed in the scale above Rs. 10,000 (DDN and DCNS). This means that not even one percent of the nurses are in a higher scale of pay.

| ***Scale of pay*** | ***Posts*** |
|---|---|
| 15,600 – 39,100 | DDN, DCNS |
| 9,300- 34,800 | Principal of school of nursing, NS Grade I and II, Nursing Tutor, PHN Tutor, Nurse Grade I and II, BHS |
| 5,200 – 20,200 | LHV and ANM |

**Facilities provided to senior nursing personnel:** Each post in the government system has certain responsibilities and commensurate facilities and privileges. These are meant to aid and facilitate job performance and encompass the position of the post. In addition these privileges also indicate the authority and power that the post enjoys. The top nursing posts in the state however do not enjoy these privileges. For example, the three deputy directors of Nursing are sharing one small room with two tables and some broken chairs. When the research team visited them, they felt demoralized and said they should have separate rooms to facilitate their work with landline connection and computer in each room. They said that though they were holding the highest nursing post in the State they could not go for supervisory meetings as they did not have a vehicle allotted to them. Being older in age, they found it difficult to travel in autos and buses and so they are not going for any supervisory visits.

**Organizational chart of nursing structure of Rajasthan (existing)**



**Management and administration of nursing services:** Nursing in Rajasthan is characterized by a broad base and weak top with very few positions at the higher level for nurses. For the massive workforce of nearly 30,000 in the government sector there are only three DDN posts. The highest post in the state is that of DD Nursing. One post of joint director nursing had been created in 1985. The post was not filled after the last incumbent retired in 2007. Instead, the post was downgraded to DD nursing. Now there are three posts of DD nursing in the State. Two of these are filled and one is vacant. All three report to the additional director, administration. Their activities include routine administrative and clerical work such as – addressing court cases, sanctioning leaves and file maintenance. They are extremely busy with administering educational programmes of 32 ANMTCs and 15 GNMTCs. This does not leave them much time or energy for managerial functions or providing professional leadership. On top of this, their field visits are hampered due to lack of vehicle. Most, persons at the senior level are "acting or in charge" giving the occupants very little administrative leverage. Even the only college of nursing in the state does not have the post of principal filled, as the person is acting as principal. This has resulted in apathy, poor career development and professional stagnation. Overall the nursing profession in Rajasthan survives at a low level. Nursing is considered paramedical.

**3.1b Recruitment and promotion policies:**

**ANMs or Female Health Workers:** The Health Worker (Female) was established when the multipurpose health worker scheme was launched in Rajasthan along with the rest of India. After this, training for producing ANMs was discontinued. At that time, there were not enough girls who had passed 10th class and willing to take up the new MPHW course. Rajasthan however, had nurse dais. An attempt was made to absorb nurse-dais into the post of FHWs. Even today, Rajasthan Recruitment Policies state that nurse dais with 8$^{th}$ standard pass should first be recruited to the post of ANMs. "Once all of them are absorbed, others with ANM certificate will be taken on direct recruitment". Overall, one can say that the educational qualification of the ANMs in Rajasthan is slightly lower than that of ANMs in other states.

**LHVs or Female Health Supervisors:** LHVs are promoted from the ANM cadre on seniority basis after a minimum service of seven years and if they have completed the six months promotional training. Earlier the State had three LHV training institutions with direct entry and training for three years at Jaipur, Udaipur and Ajmer. This was stopped in 1978 when the multipurpose health worker scheme was launched. These schools then offered the six months promotion training for senior ANMs between 1992-1996. The six months course was stopped in 1997 because there were no more vacancies of LHV in the State.

**Block Health Supervisors:** The BHS is promoted from LHVs on seniority basis but without additional training. The criteria were that she should have atleast five years experience as LHV.

**Nurse Grade II (staff nurse):** The GNM passed candidate and the compounder grade II have been designated as Nurse Grade II. The entry point of this post is 100% by direct recruitment. However, a non matriculate compounder Grade III appointed before the formation of Rajasthan was given a one- time promotion as Nurse Grade II. The last recruitment for staff nurses was done through an entrance test of Rajasthan Public Service Commission in 2008 when approximately 1300 staff nurses were recruited (April, 2008) through the NRHM Mission Director in the State. Again an advertisement was given for 370 staff nurses to be filled by 31st March 2009 on contractual basis based on vacancies at district level.

**Nurse Grade I:** For nurse grade I, 100% recruitment is through promotion and criteria are RNRC or its equivalent qualification recognized by government and five years of experience as Nurse Grade II. The designation of compounder Grade-I is proposed to be changed as Nurse Grade I

**Nursing Superintendent Grade II:** NS grade II is promoted from Nurse Grade I with an experience of 4 years in that post. There is no direct entry. Another feeder post for NS Grade II is Nursing Tutor. For this post the filling up is 50% by direct entry and 50% on promotion. The criteria for promotion are RNRC or its equivalent qualification recognized by Govt; Registered as 'A' grade nurse; completion of sister tutors course and three years of experience as staff nurse/compounder grade II. If the candidate passes B.Sc (nursing) and has one year service also she is eligible for tutor post.

**Nursing Superintendent Grade I:** The Nursing Superintendent Grade I is promoted from NS Grade II after experience of three years as NS Grade II. There is no direct recruitment.

**District Chief Nursing Superintendent (DCNS):** DCNS is promoted from NS Grade I with five years experience in that post. There is no direct recruitment.

**Deputy Director Nursing (DDN):** DDN is also based on 100% promotion from DCNS with five years experience in that post.

### 3.1c Nursing personnel on contract

The government started recruiting contractual staff in 2000 at Rs. 4500 for staff nurses and Rs. 3500 for ANMs to fill up vacant posts in PHCs and sub-health centres. As in August 2009 there were 1700 nurses on contract in the 32 districts. The designation of contractual nurses has been changed to Rural Nurse Grade II. Interviews with the individual nursing personnel and focus group discussions with the different categories of nurses revealed several problems faced by those appointed on contract. It was observed that nurses working on contract basis felt they worked in an insecure environment with threat of termination if did not obey seniors and officers. They felt they would be terminated for the slightest problem in performance, non compliance or any irregularity. They were also worried that salaries may not be paid in time. Observations and responses showed that they were punctual and regular in their duties, were more willing to stay late and do night duties and were more responsive to patients and relatives. Interaction with patients also showed that patients and relatives were more likely to approach the contractual staff nurses than regular nurses.

The issue of whether lower cadres – who are already weighed down by fewer opportunities - should be employed on contract basis with the fear of termination looming over them should be seriously considered. During interviews, it was observed that they were afraid to reveal problems because they were on contract. It is necessary to ensure that no individual is threatened or exploited due to vulnerabilities related to economic hardship, unemployment and gender. It is also important to review the policy of contract employment for another reason. In the long run, it may be more economical to have satisfied and challenged staff who will strive for higher performance, job satisfaction and achievement rather than to perform under fear and threat of termination.

**Table 17. Comparison between regular and contractual staff**

| Areas | Regular nursing personnel | Nursing personnel on contract |
|---|---|---|
| **Duties, shifts and workload** | Majority did paper work, recording and reporting and worked in the day shifts. They followed rounds, discussed with doctors and did monitoring. | They were posted in the evening and night shifts, usually alone. Being young and new to service they were expected to be subordinate and were assigned to carry out the difficult tasks. |
| **Salary, allowances and benefits** | According to state government pay scale. A beginning staff nurse gets about Rs.12000- 13000 per month. They also get all the allowances. Not many complained about salary but some said they should get central scales. They were eligible for leave – four months maternity leave, 15 days casual leave, 30 days earned leave and 10 days sick leave. | Consolidated pay of Rs. 4000- Rs.5000 per month. No dress or other allowances. Accommodation facility was not available and so they faced financial burden for paying house rent.<br>They were eligible for four months maternity leave, 15 days casual leave, 30 days earned leave and 10 days sick leave. |
| **Promotion** | Very few promotions. During interviews the team saw nurses with 30 years service without a single promotion. | There is no specific time period for becoming a regular staff. Many of them wanted to leave this job and work in the private sector. |
| **Grievances** | Heavy workload due to inadequate number of nurses. Inadequate equipment and supplies.<br>They do not have adequate opportunities for higher education and attending conferences. | Heavy workload. Being dominated by regular staff. Job insecurity. Low and consolidated salary. No safety and security. Inadequate equipment and supplies.<br>No opportunity for higher education. |
| **Technical knowledge and skills** | Knowledge and skills loss as they were not in touch with latest information and had very little encouragement or guidance for professional improvement. They gained skills and confidence in some specific tasks because of long years in the same area. | Latest information and knowledge of the subject. They were not confident in skills. They said regular staff nurses helped them in their work and that they were gaining confidence. |
| **Patient and public satisfaction** | They were handling many responsibilities due to shortage and so could not spend time with each patient. Because they were strict, patients and relatives hesitated to approach them for information. | They tried to be polite and give required care to patients. Patients appreciated their support and care.<br>Patients' relatives approached them as they were willing to listen and explain things. |

### 3.2 Career pathways and progression

Workforce policies and career progression were studied through review of documents and interviews with state level officials. In addition the research team gained the perspective of the nursing personnel about workforce policies and their impact on their personal and working lives. The team conducted focus group discussions and held workshops with different categories of nursing personnel. A total of 19 ANMs participated in the FGDs and 20 took part in the workshop to discuss policies and their impact. In addition 20 key stakeholders and officials at district and state level were interviewed.

The two entry points for nursing personnel in Rajasthan are: ANM or MPHW (F) in the public health side and Nurse Grade II in the clinical side. The career ladder for nursing personnel in Rajasthan does not have many steps and takes too long to climb from the first to the next step. In general, the progress stops after the second step. A summary of the findings related to the career progression pathways is given below.

### 3.2a Career pathway for ANMs in Rajasthan:

The career pathway for ANMs should facilitate them to climb five or six steps on the career ladder and by this to progressively improve their position in the hierarchy. However this does not happen in Rajasthan. The ANM enters service at the age of 19 years and can expect to go up only one step on the career ladder during her service. There are 14,546 ANMs in Rajasthan and 1301 posts of LHV. Therefore not even ten percent of ANMs have crossed the first step at any time. They can only climb the second step if they have completed the six months LHV training. ANMs are deputed for LHV training according to seniority and promotions are also given according to seniority if posts are vacant.

ANMs of Rajasthan face two hurdles to climb even this first step. The State closed all the three LHV Training Schools in 1992. In the present situation it takes 20-25 years for the first promotion which means that an ANM would be 40 years or older at the time of her first promotion. This stagnation for nearly 20 years in the entry post discourages and frustrates ANMs in Rajasthan. Since there are no career development courses there is stagnation of personnel and more than 80 % of them retire as ANMs. Delay in conducting departmental meetings, seniority disputes, reservations and court cases cause further hurdles in promotions. Figure 2 shows the career stagnation of ANMs.

From LHV to BHS is another hurdle due to non availability of vacant posts. The post of DPHNO is negligible since not a single one of the 26 sanctioned posts is filled. The qualification for DPHNO is BSc Nursing or Diploma in Public Health Nursing and is extremely difficult for ANMs to gain the qualification.

Some ANMs completed the GNM course on their own initiative and cost but were not considered for promotion since no policy exists to facilitate this lateral mobility.

**Figure 2 Existing Career Ladder for ANM – Rajasthan**

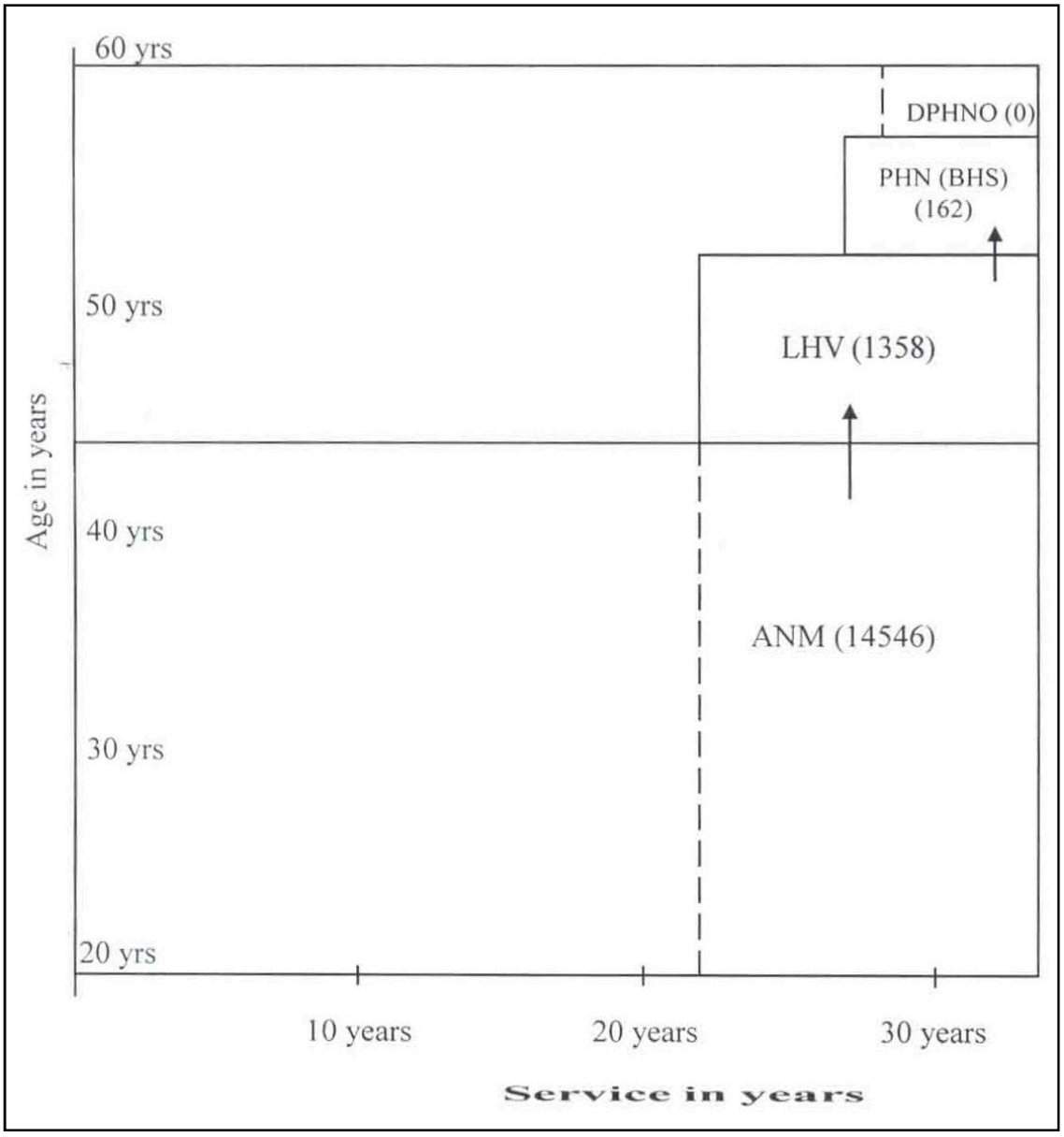
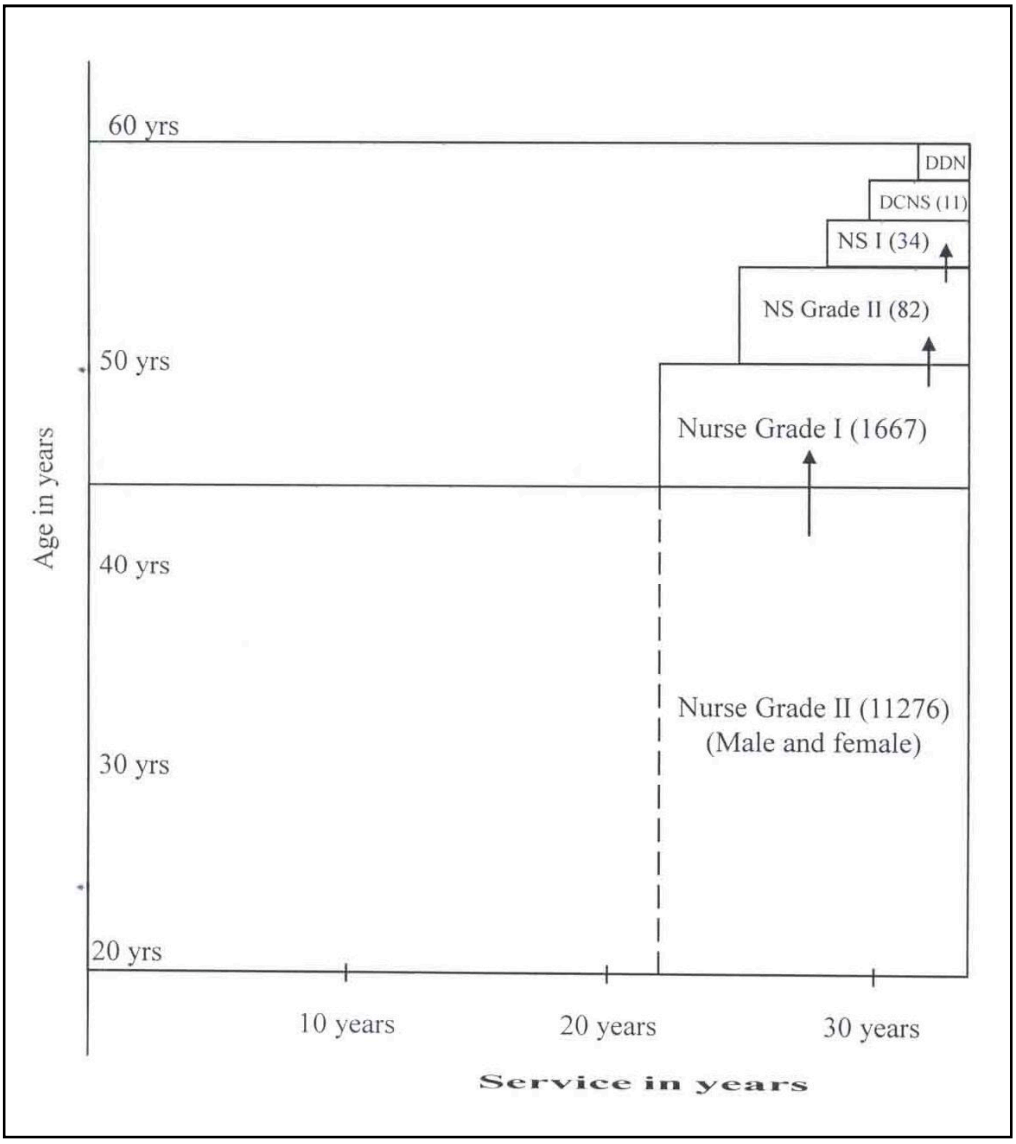


**Figure 3 Existing Career Ladder for Staff Nurses – Rajasthan**




**Career pathways for nurses in Rajasthan:** The nurse Grade II enters service around the age of 21 years and may climb one or at the most two steps during her entire service. The nurse has to complete general nursing (initially and later with midwifery and recently with integrated course). The other entry for nurse grade II is from compounder Grade III. There are 50 percent of male nurses in Rajasthan who have come either through the compounder Grade III or through GN route in Rajasthan. There are 11,256 nurses Grade II in Rajasthan government. According to government promotional policy Nurse Grade II is eligible for promotion as Nurse Grade I after 5 years. Even if she completes five years she has to wait for a vacancy before being considered for promotion. Nurse Grade I is the first promotion. There are 2227 posts of Nurse Grade I and so only 19.7% of nurses grade II get chance to become Grade I nurse and the rest may get selection Grade Scale and retire. The average time taken by a nurse grade II to become nurse grade I is more than 25 years when he or she is around 46 years. A staff nurse may however get a chance for lateral career mobility and become a tutor if she completes BSc (N).

The next step on the career ladder is NS Grade II. There are 121 posts in the state and only one percent of nurses grade II are likely to get this opportunity if they are still in service when the vacancy occurs. The next promotion is NS Grade-I. The state has 55 posts only and just a handful of nurses grade II may actually get this opportunity. The next post is that of the DCNS and then DDN. Incumbents have to wait another 5-10 years to get this post. By this time most of them have retired (retirement age is 60 years). Interactions with Nurses Grade II in different districts indicated that some nurses are working in the first post for last 27-29 years without promotion.

Two cases of the impact of lack of promotion are given below.

- One PHN tutor teaching in an ANMTC completed MSc Nursing about four years ago and made repeated applications for promotion. However, she is not getting promotion because there is no channel from PHN to go to teaching side. This nurse complained that she with M.Sc. is not getting a tutor post but the Principal of her school and also the principal of the nearby GNMTC a diploma (DNEA) course. This nurse expressed her frustration and said that it is a waste to do MSc Nursing and spend so much money.
- One ANM has been working in the post of ANM for the past 29 years. She has lost hope of ever getting promoted before retirement. She applied for the LHV training but the training had already been stopped.

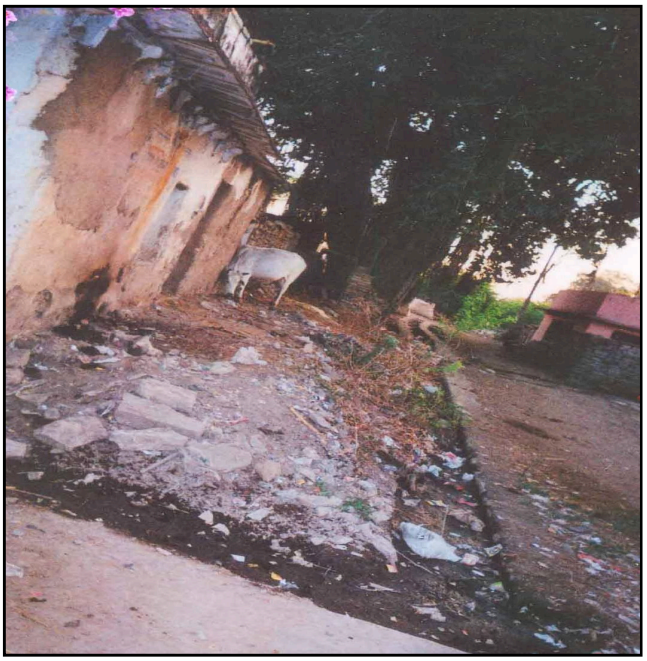
The above two cases indicate that the government's policies for promotional posts was affecting the lives and the outlook of personnel who were trying to perform and had even studied to uplift their educational status. There is an urgent need for review of promotional policy in the government so that all nurses get equal opportunity to rise higher in the nursing cadre.

### 3.3 Working environment of nursing personnel: Facilities at different levels

The research team visited five districts for in-depth understanding of the working environment of nursing personnel at the periphery as well as in clinical areas in different hospitals. They observed health facilities, interacted with nursing personnel and conducted discussions with related officers. The findings are given briefly below.

**3.3a. Facilities at sub-health centres:** Outreach services are provided through 10,612 sub-health centres that cover all the 39,793 villages including hamlets and remote tribal, desert and hilly areas of the State. An ANM is expected to reside in the sub-health centre and provide services to about 5000 population in her area. Therefore physical facilities and living amenities are critical for her performance.

The research team visited 50 sub-health centres in five districts -10 each in Udaipur, Dhaulpur, Kota, Jodhpur and Bikaner. Forty out of 50 sub-health centres had buildings located in the village but only 50% of these had electricity and only 17 had regular water supply. Most of the buildings were old and crumbling. Only 14 out of 50 had toilets. Telephone was available in 29 sub-health centres.



A sub-health centre in Kota district. It has only one small room half of which is dumped with furniture. There is no water, electricity or telephone facility. The picture shows the surrounding areas of the sub-health centre which were extremely unhygienic.

Furniture was not adequate in the sub-health centres. Only 27 out of 50 sub-health centres had labor tables. Though most of the sub-health centres had thermometer, adult weighing machine, stethoscope, blood pressure apparatus, child weighing scale and fetoscope, many did not have critical life saving equipment. For example, baby resuscitation kit was found in only 8 centres and mucus suckers were seen in 15, only four had ambu bag, 16 had 100 watt lamp for baby warming. Drugs for managing and preventing maternal emergencies (misoprostol, methergine and magnesium sulphate) were available only in 9 sub-health centres and I.V fluids were found in 22 centres. Drugs for minor ailments, iron and folic acid tablets for anemia prevention and correction and TT injection were available in most of the sub-health centers. Vaccine carriers, disposable syringes and AD syringes were available in almost all sub-health centres reflecting that facilities for antenatal assessment and immunization services were nearly adequate. Health education and teaching material was found in only 35. All sub-health centres had immunization cards and registers. Storage and maintenance

was a major problem. Most of the sub-health centres had poor building maintenance and very few shelves or closed storage space. Things of the sub-health centre including, equipment, supplies and medical items were stacked in a disorderly manner.

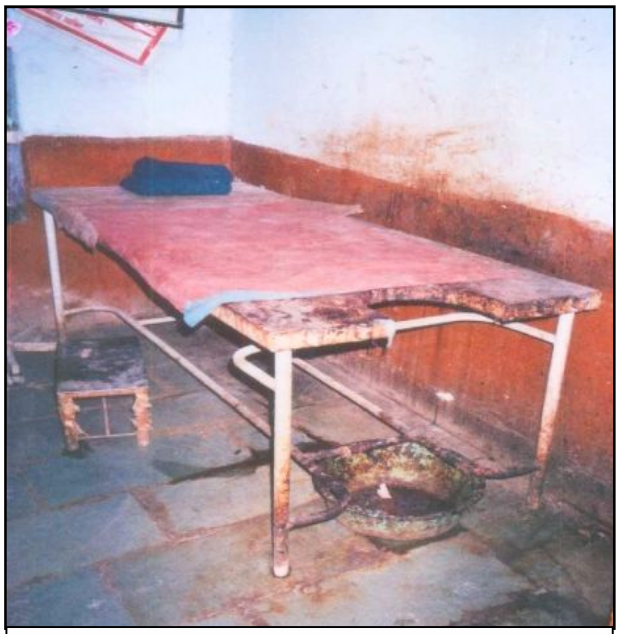
**Universal precautions:** No strict sterilization or universal precautions are followed in sub-health centres due to lack of supplies and other problems like autoclave out of condition and not being repaired. Color coded bins for biomedical waste management were available in only nine sub-health centres, sterilizer was seen in 10 sub-health centres, gloves were seen in 20 sub-health centres and adequate linen was found only in 26 sub-health centres though it is required for the examination table for keeping a person under observation in emergencies and during epidemics. On the other hand, in one sub-health centre there were four cookers for sterilization but no stove. These findings indicate that biomedical safety and universal precautions are not adequate.

**Service delivery:** Overall, ANMs were providing basic maternal and child health services in the sub-health centres but the activities were not carried out systematically or documented appropriately. Nearly all were conducting deliveries either in homes or sub-health centres but two were plotting partograph. Nearly all were conducting antenatal clinics and immunization sessions and assessing birth weight. Forty five of the sub-health centers were providing IUD insertion services and all of them reported that they were referring high risk cases. All ANMs were recording services provided and maintaining registers.

**Supervision and support:** Many ANMs mentioned that they rarely had supervision by LHV in their field area. Even when supervisors visited the field, not much technical or personal supervision and guidance was provided. The ANMs who were interviewed in the field said that they needed guidance and support from seniors. The relationship between ANMs and LHVs did not appear cordial as some ANMs said that LHVs forced them to get cases on their behalf or they would not mark their attendance correctly. One senior ANM with 29 years of experience said, “I can count on my fingers the LHVs who came to supervise me in the field or in my sub-health centre”. In turn, the LHVs interviewed said they also do not get adequate support and supervision. They said they needed the guidance of senior nursing personnel. ANMs said that they felt insecure in the sub-health centres. They had to face eve teasing while returning from work and they did not feel comfortable to stay back late even when they were needed because it would be difficult to return back. Out of the 50 sub-health centres visited as part of this study, not even half were found to be located in safe places where it would be to stay at night.

In summary, the capability of sub-health centre ANM to attend to childbirth either in the sub-health centre or at home is limited based on the facilities and support provided to them. Lack of adequate facilities, irregular monitoring and absence of supportive supervision were the major factors contributing to poor performance in sub-health centres according to the response of the ANMs.

**3.3b. Primary health centres:** Twenty PHCs were visited in the five districts of study. It was observed that all the 20 had buildings with electrical supply but the supply was irregular. None of them had generator facility as a backup. Thirteen PHCs had running water and toilet. Phone was available in five PHCs only. Operation theatre was present in five PHCs. Laboratory was available in 13 out of 20 PHCs.



The labor table of a PHC was found full of dust and rust. The IV stand was dirty. There was a foul odour from the basin.

Though separate labor room was available in 17 PHCs, facilities were inadequate for providing delivery services, newborn care and resuscitation. Though 17 out of 20 PHCs had labor tables, these were old, rusted, and not used. Only 14 out of 20 PHCs had delivery sets. Drugs like misoprostol, methergine and magnesium sulphate were available in 16 out of 20 PHCs. Essential items such as 100 watt lamp, mucus sucker, suction apparatus and oxygen cylinder with key were found in 14 PHCs and ambu bag was observed in 13 PHCs. Baby intubation sets were found in only eight centres and Boyles apparatus was available was six centres.

Basic articles were not adequate. Thermometer was available in 17 PHCs and child weighing scale in 16 PHCs. Drugs for minor ailments, IV fluids, and iron and folic acid tablets, and tetanus toxoid injections were available in all PHCs. But PEP (post-exposure prophylaxis of HIV) drugs were available in three PHCs only. All PHCs visited had adequate supply of immunization articles like vaccine carrier, disposable syringes, AD syringes and ice packs. ILR/ deep freezer / cold box was found everywhere. Immunization cards and registers were available in 15 centers. Temperature charts were present only in four PHCs. Partograph was seen in only one PHC. Referral cards were available in all PHCs. Health teaching material in the form of posters, flash cards and others was found in eighteen out of twenty PHCs.

A PHC where all the broken furniture and equipment are dumped for condemnation. They were not cleared even with repeated reporting and requests. Some pieces here could be re-used after minor repairs.

**Universal precautions:** Biomedical waste management was observed to be a major issue in PHCs. Color coded bins for biomedical waste management, mackintosh and gloves were available in 14 out of 20 PHCs. Sterilizer was available in only twelve PHCs. Adequate disinfectants and linen were available in most of the PHCs.

**Personnel available and services being provided:** Doctors were available in only six PHCs and though nurses were not available round the clock, 16 out of 20 PHCs were conducting deliveries, antenatal, postnatal and immunization clinics. IUD insertion was being done in 19 out of 20 PHCs.

**3.3c. Community health centres:** The research team visited 10 CHCs in the five districts. All of them had electricity and round the clock water supply. Operation theatre was also present in eight CHCs. Half of the CHCs had residential quarters for staff in the hospital complex. Toilet was available in the ward for the clients, but no separate arrangement was available for staff. Generator and telephone facility were available in nine out of 10 CHCs. Centralized oxygen supply was not seen anywhere and blood bank was seen in only one CHC. Boyle's apparatus was available in only eight CHCs. Instruments for tubectomy were available in all the CHCs. Basic articles like BP apparatus, stethoscope, adult weighing machine and child weighing machine and adequate drugs were available in all CHCs. Three CHCs had television for health communication.

**Facilities for MCH services:** All the ten CHCs had separate labor rooms and most of the equipment necessary to support a normal delivery and care for a newborn. Normal delivery sets and episiotomy suturing materials were found in almost all CHCs. But only five out of 10 CHCs had instruments for LUCS or forceps delivery. Vacuum extractor was available in only one CHC. A separate baby resuscitation room was available in only three out of the 10 CHCs visited. Fetal Doppler machine was available in five CHCs.

All the ten CHCs had color coded bins for biomedical waste management but sterilizer facilities for autoclaving were available in only one CHC. Only two CHCs had fire extinguisher as a safety measure. But PEP drugs were available in one CHC. All the CHCs had adequate supply of gloves and linen. Temperature chart was available only in one of the ten CHCs.

**Personnel available and services being provided:** All the 10 CHCs provided 24 hours services. They were conducting deliveries, antenatal and postnatal clinics and immunization sessions. Partograph recording was not done in any CHC and none of them had the charts. Nine out of ten CHCs were performing IUD insertion for eligible couples.

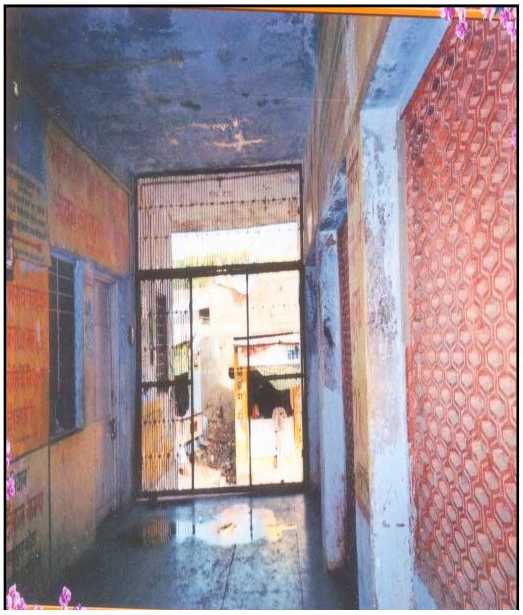
There were acute shortages of specialists in the CHCs. Only four had obstetrician, three had pediatrician, one had anesthetist. Observations in one CHC are presented here to give a glimpse of the workload, working conditions and performance of nursing personnel in rural hospitals.

**Case study of a CHC in Kota District:**

*The team visited Sultanpur CHC in Kota district to observe working environment, facilities for providing services and to interact with the nursing personnel. There are a total of four PHCs around the CHC. This is an old CHC with 10 beds. The CHC is located in the middle of the busy town. The roof was leaking in the entrance of the hospital and all the walls were damp and the dust bins were overflowing with mosquitoes and flies and gave bad smell.*

Rusted and unused equipment

An example of a badly maintained CHC

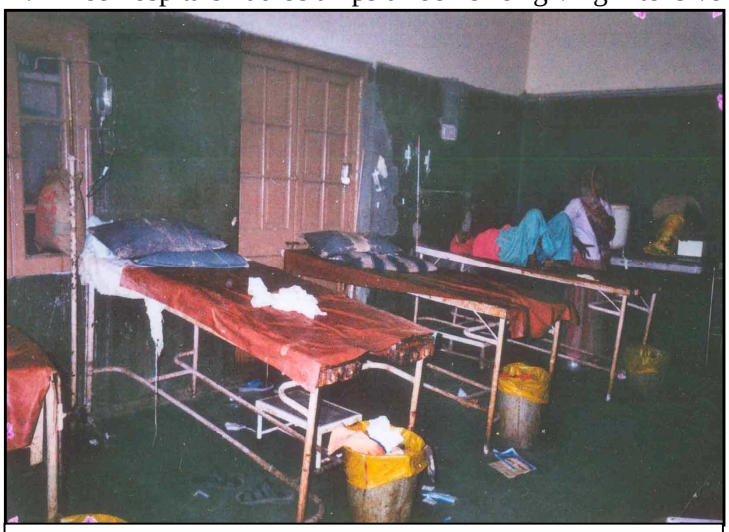


*The total nursing staff of the PHC consisted of seven nurses and one LHV. The CHC also had one doctor and one surgeon. The anesthetist came when required from Kota. When the team visited, it was late evening and one doctor, one staff nurse and one LHV were on duty. They provided maternal and child health services, gave clinical services, administered drugs and supervised overall hospital maintenance. The staff had to also deal with emergency patients for diarrhea and dehydration, accidents and fever. The staff nurses worked in shifts to provide 24 hours service. They conducted deliveries but did not do episiotomy repair due to lack of practice, skill and confidence. There was one small room for observation of cases with a mattress on the floor. The only labour table was in poor condition – rusted with a dirty macintosh. The walls of the labour room were dirty and stained. Only a few instruments were seen but on further questioning it was observed that there were many new instruments and trays not being used. There was an open radiant warmer which was broken, rusted, and dirty.*

New equipment available (left) but kept under lock and key. Rusted ones are used as a routine (right).

**3.3d District hospitals:** The research team visited five district hospitals in Udaipur, Dhaulpur, Kota, Bikaner and Jodhpur. Only four of the five hospitals had casualty, blood bank, postoperative ward. Emergency operations were being performed in general OT. Only three out of five hospitals had separate family welfare ward and four had outpatient wards. All five hospitals had facilities for providing drugs, equipment and supplies as a centralized system. Only two hospitals had central sterilization department and one had centralized oxygen system. All five had laboratory facilities round the clock. Incinerator was found in only two out of five hospitals.

Four out of five hospitals had separate maternity unit with postnatal ward and labor room but all five had antenatal ward and antenatal and postnatal OPD. Three hospitals had eclampsia rooms for giving intensive and specialized care to mothers with eclampsia. The number of labour tables was not adequate. Drugs related to maternal care were available in all the five hospitals. Facilities for newborn care were available in all the five but facilities for sick and premature newborns were observed in only one district hospital though resuscitation room was available in four hospitals. Critical life saving equipment like ambu bags, oxygen cylinders with key were found in all five hospitals but none of the hospitals had open radiant warmer and resuscitations sets, the ones present were full of dust, rusted and not in working condition or under lock. Fetal Doppler was available in only three hospitals.



This labor room of a district hospital with six labour tables has problems with maintaining cleanliness. Universal precautions are not maintained.

General equipment such as B.P. apparatus, stethoscope, weighing machine were available in all hospitals. HIV kits were available in all five hospitals but PEP facility (post exposure prophylaxis to HIV) was available only in two hospitals. Though all the hospitals were providing routine and emergency care for maternal and child health problems and for general medical, surgical conditions, facilities for essential investigations for acute and chronic cases were inadequate. Out of five hospitals, three had USG and CT scan facilities. Four out of five district hospitals had ambulance for referring the patient to other teaching institutions. All the five district hospitals had phone facility and four had intercom. Only two out of five had PCO booth facility for patients and their relatives.

**Universal precautions:** All the district hospitals had supply of color coded bins for bio-medical waste management, Only three out of five hospitals had needle cutters. Linen and disinfectants were adequate.

**Personnel available and services provided:** Staff nurses were available round the clock in all five district hospitals. But the number was not adequate. Workload was heavy resulting in dealing with only emergency cases and carrying out some routine tasks.

*For example, Dhaulpur district hospital has 300 beds and 48 nurses - 38 male nurses and 10 female nurses. In addition there are 9 Grade I male nurses. According to IPHS there should be 88 staff nurses (75 for general, 9 for OT and 4 for blood bank/ storage=88) in this hospital. Only 4 ANMs were working in this district hospital whereas IPHS recommend six ANMs.*

Nurses were conducting normal deliveries, antenatal and postnatal clinics, immunization clinics and maintaining records and registers in all the district hospitals. But partograph was not being plotted anywhere in the district hospitals.

Overall, the study showed that there are many gaps in facilities and equipment and their quality at the peripheral centers. The bigger the institutions, facilities are better but the staff availability is lower. For example, though seven CHCs had obstetricians and four had pediatricians, none had anesthetists. Nursing personnel were inadequate at all levels- PHCs, CHCs and district hospitals.

### 3.4. Work related problems of ANMs and staff nurses

The research team interviewed 146 ANMs and 216 staff nurses in the five districts. The average age of staff nurses (32.8 years) was lower than ANMs (40.2 years). Majority of the ANMs and staff nurses were married. It was also observed that many nursing personnel had completed graduation or higher studies though it was not the requirement. Twenty-five ANMs and 93 (mostly male) nurses were graduates or post graduates.

**Table 18. Age, marital status and educational status of ANMs and nurses**

| Category | Characteristics | ANM (n=146) | Nurses (n=216) |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Age | Less than 25 years | 10 | 71 |
| | 26-30 years | 16 | 44 |
| | 31-35 years | 19 | 20 |
| | 36-40 years | 30 | 30 |
| | 41-45 Years | 34 | 24 |
| | More than 45 years | 37 | 27 |
| Marital status | Married | 139 | 160 |
| | Unmarried | 7 | 56 |
| General education | Less than 10th class | 11 | 0 |
| | 10th class | 56 | 5 |
| | Intermediate | 54 | 118 |
| | Graduate | 16 | 80 |
| | Post graduate and above | 9 | 13 |

Only five out of 146 ANMs and three out of 216 staff nurses said they knew about written job description, but they didn't receive any written documents on appointment. Only 8 out of 146 ANMs and 30 out of 216 staff nurses said that they had written protocols for managing emergency maternal conditions. Out of 146 only 71 ANMs said that promotional policy is based on higher education. About half (87 out of 146 ANMs and 101 out of 216 staff nurses) expressed satisfaction with present pay and allowances. It appeared that a higher percentage of ANMs (86 out of 146) received in-service education for professional development compared to nurses (44 out of 216).

Availability and working condition of equipment and articles appeared to be a problem for both ANMs and staff nurses. Though they expressed satisfaction with the equipment and supplies (131 ANMs and 184 staff nurses ) they said these were not in working condition. Supply of essential drugs was a problem - 184 out of 216 staff nurses interviewed said they did not get essential drugs in adequate amounts.

Most of the ANMs and staff nurses said they faced problem because land phone is not available in the field. Most of the staff nurses said that they are not getting health teaching material in the form of charts, posters, flash cards etc but ANMs said that they were getting A .V. Aids in sufficient amounts. Most of the staff nurses and ANMs said that they did not have support staff for maintaining the centres – even when they are available, they are not present round-the clock and in sufficient numbers to keep the centre clean. Staff nurses expressed, " due to the heavy patient load many times we are not able to even wash our hands before and after giving care to the patients and what universal precautions are you talking about?". Even after repeated requests to the authority they are neither providing new autoclaves nor repairing the older ones.

The staff nurses complained that the PHCs and CHCs are not having any boundaries at many places and they are also not having any watchman. They felt it is difficult for female staff to do night duty since there was no security and many times the PHCs did not have houses close to them.

**Grievances and conflict resolution:** Most of the staff nurses said that they either go to the medical officer or their immediate higher official for conflict resolution. There is only one recognized association – TNAI (Trained Nurses' Association of India) with about 1500 members in the whole state. There are local unions but they did not play a major role in dealing with nurses' problems and during interviews, nurses said they were not sure who should be approached and said they went to their immediate higher authority and from here to the additional director administration and then to the deputy secretary Grade III, medical and health and at last to their MLA. Some nursing personnel said they went to the tribunal court meant for employees and then to the district court and at last to the high court. Some of them said they approached press like Dainik Bhaskar and Rajasthan Patrika.

**Some areas of grievance:**

- Village posting – Staff nurses and ANMs are posted in remote areas without adequate support and security or amenities. There is no one to seek help in case of problems.

- Promotion: There are no opportunities for career development. ANMs and nurses may get only one promotion in the entire career. The block Health Supervisor does not have any further chance to grow. PHN tutors do not have chance for promotion even after higher qualification. In the same school, nurses with diploma are acting as principals while those with M.Sc. are tutors. Even after completing GNM, ANMs are not getting promoted. They expressed frustration that higher education has no value in nursing.
- Job security: Contractual nurses are working against the posts of regular staff but salary and other allowances are not similar. They appealed to the government for regularizing their job.
- In-serivce education and higher education: ANMs wanted to update their knowledge and skills. They wanted to undergo the six months LHV training. One ANM said, "no one deputes us for any skill training program". They said they wanted regular information and were unhappy that they did not get even the TNAI journals. Staff nurses said they rarely get in-service education and felt it should be regular and organized. Only a few had received updating through HIV/AIDS awareness training for three days, IMNCI- new born care for six days and SBA training for 21 days. They do not get scope to read journals; they rarely attend conferences, workshops etc. Skills learnt during the SBA training are not being implemented due to lack of facilities. They wanted to be deputed for short term courses.

### 3.5 Nursing in the private sector

Study of the private medical sector is a massive task and could not be undertaken fully in this rapid assessment. It was difficult to gain an understanding of the volume of nursing personnel employed in the private sector due to absence of organized system of record maintenance and reporting. The quality of care also could not be assessed due to problems in gaining permission. This study therefore touched the private sector at two points only: Nursing Education and interaction with a few individual nurses. Eight institutions were visited to assess training. (The findings are presented in section IV). After several attempts five private hospitals were visited – one in each district. Two of these hospitals (in Jodhpur and Bikaner) were similar in size to district hospitals. Two hospitals (in Kota and Udaipur) were similar to small CHCs and one was similar to a PHC (in Dhaulpur)

The research team interviewed 22 staff nurses working in the five private hospitals. But the team did not find a single ANM working in the private sector in these hospitals. Recruitment was according to requirement. The candidates who approached the hospital were interviewed and appointed on contractual basis if there was a need and if they agreed to terms of work. Nursing staff in private hospitals were hesitant to provide any information about themselves or their working conditions. Key findings are given below.

| Positive aspects | Negative aspects |
|---|---|
| • Adequate articles: Nurses said they had job satisfaction because facilities were available for carrying out functions. Patients were responsible to get most of the articles required for care.<br>• Space for nurses: In most places, nurses had a nursing station and place to write, sit and work.<br>• Security assured: Safety and security of nurses was better assured in private hospitals.<br>• Regular monitoring and supervision: Supervision of nurses was done by the director and doctors through the CCT. The nurses were supervised and guided regularly by senior nurses also. Their records and reports were checked daily and also through meetings.<br>• Nurse patient ratio was followed and nurses said the workload was not heavy | • The salary was low. The range was between Rs. 1500 to 3500.<br>• No opportunity for regular employment and so no job security<br>• No opportunity for in-service and higher education<br>• No chance for promotion<br>• The findings of this study showed that many BSc.(N) graduates and even MSc Nursing graduates were working in private hospitals as they were not absorbed in the government sector. |

### 3.6 Male Nursing and its influence in Rajasthan

Male nurses are seen in large numbers in Rajasthan in all categories, except as ANMs. They have admission in GNM, BSc, MSc courses, in government as well as private institutions. Four out of the five nursing superintendents of the district hospitals visited were male nurses. Among the staff nurses interviewed more than 50% were male nurses. There were male nurses in equal numbers working on contractual basis as there were females. Most of the male nurses had done GNM degree after finishing graduation in some other

subject. One of the male nurses interviewed had completed MA, LLB and then joined GNM course because of better job opportunities and has been working as a male nurse since the last two years.

Low female literacy and cultural practices did not encourage girls initially to join nursing and hence male nurses were prominent in the State from the beginning. Most of the female nurses in Rajasthan were migrants who came for employment from the south, predominantly from Kerala. It is therefore fitting to say that nursing in Rajasthan had its beginnings in male nursing. Male nurses were being trained in Rajasthan before independence and the tradition continued after independence also. At that time there used to be training for male health worker (HW) for six months and after passing they were designated as Compounder Grade III. The state had several Grade III compounders all over. This health worker training was stopped in 1960s. This person actually did not undergo any nursing curriculum. The Compounder Grade III was later given two years training through the Punjab Nursing Council and registered as male nurse. The remaining compounders grade III demanded that they too be registered as nurses. This request was not granted as they were not trained. This led to strikes and the individuals appealed to the Court. A judgment was given in their favor considering they had worked for many years in the health department. They were given promotion on condition that it was only one-time promotion and that they will not be considered for any further promotion without the requisite qualification. Now the post of AHW and the post of Compounder Grade III have been abolished.

The large presence of male students in nursing has had a major impact on midwifery services in Rajasthan. Additional midwifery for six months was not taught to the first batch of general nursing students in Jodhpur. The batch size was 40 – the course was for three years and seats were meant for both male and females applicants. An additional course for six months was to be taken to be called GNMs. Male nurses were not allowed in this course and were called general nurses. Registration was done in Punjab Nursing Council as nurses and not as nurse midwives. The second batch was admitted in three places - Jodhpur and Bikaner (male and female) and at Jaipur (only girls). The male students and nurses protested and made strikes and so in 1986 male students were also given chance to do the six months midwifery course. But this syllabus was not implemented regularly till 2000. Even after completion of the six months course, male nurses are not allowed in the labor rooms in many hospitals. Interactions with male students during this study showed that students themselves were not keen on entering the labour room and helping in childbirth.

The Government College of Nursing in Jaipur was started in 1963 with 20 seats and initially only females were admitted in all the 20 seats. Males were admitted for the first time from 1976 batch onwards. But several times, admission of male candidates was stopped and restarted ( stopped from 1981to 1984). Admissions started again in 1985 and it was observed that most of the applicants were male and so from 1986 onwards there has been 50% reservation for female students. In most years female seats were not filled and were filled by male students. In the meantime, many male candidates went to study nursing – GNM and B.Sc. in south Indian states, especially Karnataka. Many who completed B.Sc. Nursing went out of the State to study M.Sc. Nursing. Today, there is a considerable number of male nurses with M.Sc. qualification in both government and private sector.

When the M.Sc. Nursing course was started in Government College of Nursing at Jaipur, the first batch in 2007-2008 had 25 seats with 25% reservation in every specialty for females and the remaining 75% open for everybody. There are three male candidates for the MSc in midwifery specialty. Male nurses also play a key role in positions of leadership in associations and unions. The President of TNAI Rajasthan Branch has always been a male nurse.

In summary, there is a need to study nursing from a gender perspective in Rajasthan because the presence of a large male nursing workforce does not seem to have impact on raising the status of the profession. Career pathways are still not unfavorable, higher posts are negligible, higher education has been a recent phenomenon, working conditions are similar to other states.

# Section - IV
# Nursing Educations in Rajasthan: Availability, capacity and quality

### 4.1 Availability of nursing educational programmes

The Indian Nursing Council prescribes syllabi, sets standards, approves courses and thus regulates quality of nursing education in the Country. At present there are three entry level nursing courses in India and several layers of post certificate, post diploma and post graduate courses. The three entry levels courses are ANM training for 18 months leading to a certificate, GNM training for 3 ½ years leading to a diploma and BSc Nursing course for four years leading to a degree in nursing. All the above three basic courses in nursing are available in Rajasthan. However the number of institutions of nursing education in Rajasthan is disproportionately distributed with more GNM, B.Sc and M.Sc nursing institutes in the private sector and all ANM training institutes in the government sector. The State has only one college of nursing at Jaipur and the MSc nursing programme started in 2007-2008.

There were five schools of nursing attached to five medical colleges in the State upto 1985. In addition, the private sector also had five schools of nursing. Nurses passing out of the courses were registered in the Punjab Nursing Council in the initial years. The Rajasthan Nurses, Midwives, Health visitors and Auxiliary Nurse Midwives Registration Nursing Council Act was passed on 28$^{th}$ March, 1964 (Act 9 of 1964) and the regulations came into force by a notification of the Medical and Health department in November 1964.

**Table 19. Nursing and Midwifery Educational Institutions in Rajasthan**

| S no | Course | Government | Private | Total | All India |
|---|---|---|---|---|---|
| 1 | ANM or MPHW (F) training | 32 | 0 | 32 | 487 |
| 2 | GNM training | 15 | 112 | 127 | 1805 |
| 3 | BSc Nursing | 1 | 54 | 55 | 1069 |
| 4 | Post Basic BSc | 1 | Nil | 1 | 129 |
| 5 | MSc Nursing | 1 | 1 | 2 | 153 |
| 6 | BSc Nursing through IGNOU | 1 | Nil | 1 | |
| 7 | LHV training | ( 3 closed) | Nil | Nil | |

At present there are 32 ANM training centers in Government sector. ANMTCs do not exist in the private sector in Rajasthan. There are total 15 GNM training centres in the government sector. But there is a total of 112 GNM training institutions in the private sector taking the total to 127. These are attached to the Medical College Hospitals and District Hospitals. For example in Jaipur the school of nursing is attached to the SMS hospital and in Udaipur the school of nursing is attached to Maharana Bhoopal Hospital. Most of these were opened during this decade.

*Collegiate Nursing Education:* Currently, there is only one college of nursing in Rajasthan in the Government Sector. But 53 colleges were started within the last five to six years in the private sector. The government college of nursing is located at the SMS Hospital in Jaipur. The college was started in 1966 with Basic BSc Nursing program and some short term courses like DNEA. The college faced many hurdles since its inception related to the admission of male nurses. Sometimes it admitted boys and in other years it did not admit boys. This resulted in several protests and strikes. When it was started in 1966 there were 20 seats in the college. The seats were enhanced to 40 in 1985. Recently (in 2006) the seats were further increased to 60.

The College of Nursing introduced the Post-basic BSc program with 25 candidates in 1988. There is no reservation for any candidates and all are through the open channel. This College is also a study center for Post Basic distance education leading to a BSc Nursing degree by IGNOU since 1994. The annual intake of students in each batch is 30. There is no Post Basic B.Sc. Nursing programme in the private sector either through regular or distance education mode.

M.Sc Nursing Program was started in 2007 with 25 seats in all five specialties, with 25% reservation for females and remaining 75% kept open for all. If the 25% seats were not filled by females, there was provision for the vacant seats to be filled by male candidates. At present the college has 23 students in the M.Sc.

Nursing programme among whom only seven are females. One of the private colleges has just introduced M.Sc. nursing programme.

The nursing educational programmes in Rajasthan indicate a skewed distribution. Though the government gave permission to start 54 B.Sc. Nursing colleges in the private sector, the M.Sc. Nursing programme was launched in the government college of nursing only in 2007. Moreover most of the 112 GNM training institutes in the private sector also stared during the decade. This raises questions about the availability of nursing faculty and the subsequent quality of teaching and clinical skill training and guidance to students in these institutions.

### 4.2 Facilities for nursing education in Rajasthan: Findings from study

The research team visited 19 institutions to observe facilities and to interact with teachers and students. Institutions visited included six ANMTCs (all in the government sector), 10 GNMTCs (6 in government and 4 in private), and three colleges of nursing (one in government and two in private). The findings reveal many gaps and inadequacies in facilities. At a glance, the government centres had problems with space -the classrooms and living rooms were overcrowded and furniture and equipment were inadequate. In the private sector, many places were still under construction giving a disorderly appearance. The institutions did not provide accommodation for male students.

Six ANM training centres were visited in Amarsar (Jaipur), Dhaulpur, Kota, Salumber (Udaipur), Bikaner and Jodhpur. All the six centres were from government sector as there were no ANM training centres in the private sector. Four of the training centres were attached to district hospitals (Kota, Bikaner, Jodhpur and Dhaulpur). The training centre at Udaipur was attached to Salumber CHC which was around 60 kilometers away from district hospital. The ANMTC at Amarsar was 40 kilometers away from Jaipur city and was not attached to any health facility. A PHC was located nearby but the students were sent to Jenana hospital for practical experiences. Physical facilities in the ANM training institutions were poor with very little furniture and equipment for teaching. In one school students were found sitting on the floor in a crowded space with hardly enough space for taking notes.

This picture shows the room allotted for students at ANMTC, Kota. More than 20 students are residing in this room. The rest of the students are day scholars as room could not be provided for them in the hostel. There is no dining facility in the hostel. The students have divided the same room with almirahs to cook their food. They have only one wash basin and only two toilets and bathrooms. The lack of adequate toilets, bathrooms and washing facilities lead to students competing and quarrelling. This also leads to delay in attending classes and clinical.

Among the 10 GNMTCs visited six were from government and four were from private. The GNMTCs under Government sector were at Jaipur, Udaipur, Dhaulpur, Bikaner , Kota and Jodhpur. All these are attached to hospitals. The training centres under government were distinctly different from those in the private sector. They had better access to clinical training as they were attached to large hospitals. The students had adequate number of patients and antenatal mothers for providing care and learning.

This picture shows the dormitory of the first year students at GNMTC, Jaipur. Eighteen students sleep on the floor. There is no furniture. Other rooms cannot be used as old furniture is dumped. Students also cook in this room because there is no dining facility in the hostel. The walls are damp due to rain. The front door is broken. The windows are very low and one student complained that once somebody pulled her leg and dress from the window, but no action was taken even after she reported the incident. The hostel doesn't have a boundary wall. The warden does not reside in the campus.

They also had enough delivery cases to practice. But the students from private GNMTCs did not get as much clinical practice. They had to travel to other affiliated hospitals located at some distance and due to this they lost practice time. The number of cases was also not adequate. The picture was the opposite in terms of facilities for staying and classroom teaching – the private centres had better physical facilities, demonstration rooms, classrooms and hostels. Most of these were new buildings and the hostel and academic block were clean, spacious and pleasant. They had well furnished classrooms, well equipped demonstration rooms and libraries with updated information. Some were still under construction. In terms of living conditions, the government training centres fared extremely badly with 18-20 students crowded in one room with bare furniture and negligible facilities. In many places the government training centres did not have enough chairs or desks for all the students and they sat crowded together. They did not have library facilities or adequate models and teaching aids.

The only college of nursing in the government sector attached to SMS medical college and hospital in Jaipur was visited. Two more colleges in the private sector also located in Jaipur were visited. The differences were similar to those described in the case of GNM training centres. The students from the government college of nursing were sharing the same hostel as those in the school of nursing located in the same premises. The living conditions of the students from the college of nursing were slightly better. Their chances of practical experiences and number of delivery cases were also higher. But when compared to the new private colleges of nursing, the facilities in the government college were poor – library was not updated; midwifery demonstration room was not available and even the fundamentals of nursing demonstration room did not have adequate models and equipment.

In summary, the study showed that though the government facilities provided better opportunities for clinical learning, the living conditions of students and the teaching atmosphere in the training centres was not adequate or hygienic. A detailed analysis of all training centres needs to be taken up urgently for renovation, upgradation and strengthening so that students learn in a conducive atmosphere. On the other hand, strict regulations are needed to be formulated and enforced to ensure that students in private training institutions get adequate clinical practice.

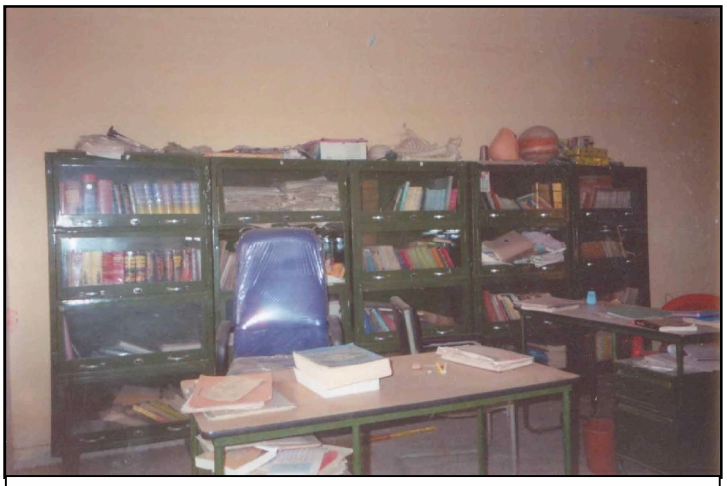
The Midwifery demonstration lab of a private GNM Training Centre

**4.3 Profiles, perceptions and practices of teachers:**

Fifty four nursing teachers were interviewed in the 19 institutions. Effort was made to include teachers involved in midwifery, community health and child health nursing. Only 8 out of 54 teachers had MSc nursing qualification. Majority had a BSc nursing degree, three had GNM Diploma. The average years of experience was low - 17 had less than 3 years experience and 13 had 4-9 years experience. Only 13 teachers had opportunity to attend in service education related to midwifery. Only 30 teachers had attended national conferences related to the subject that they were teaching.

It was observed that only 14 teachers conducted delivery regularly to demonstrate the procedure to the students posted in the labor room. Thirty three out of 54 teachers said that they supervised their students in the labor room. Supervision in antenatal and postnatal units was not as regular as that in labor room according to teachers. Only 16 out of 54 teachers participated in clinical teaching regularly.

Most of the teachers demonstrated steps of antenatal examination, care of breast and perineal care in the clinical area. Childbirth assistance was first demonstrated in the lab and then in the labor room by most of the teachers. Thirty five teachers said that they demonstrated partograph plotting in the demonstration room. More than half of the 54 teachers said that they demonstrated baby resuscitation, kangaroo mother care, and breast feeding and health education about home based care.



A Library at a government ANM training centre Amarsar Rajasthan. The number of books was few. Most were outdated and badly maintained.

Class test was the most frequently used method for evaluation of students. In addition to class test 24 out of 54 teachers used return demonstration to evaluate the student's skills. Less than half of them (23) used case presentation as a method for evaluation of students. Seminar and panel discussions were used by 11 and 18 teachers respectively. Very few teachers used case study method to assess students understanding of the condition and the care provided to clients.

**Faculty development:** Perceptions of teachers revealed their unhappiness with poor teaching facilities, very few opportunities for upgrading knowledge and skills and negligible career building options. Teachers get two years study leave with half salary if they opt for higher education. Since they are not getting promotion after higher education, they are not motivated for further studies. They are not deputed to attend conferences that are being held in other states. They do not get chance to attend even short term courses. They said they had to take personal leave to attend these. There were no journals or latest books in the library and teachers said they felt they were not updating their knowledge with latest information. The Nursing Journal of India published by the TNAI is the only source of professional information but this does not have enough research and technical information as it deals with issues related to the association. Teachers said that they did not feel confident to teach subjects like nursing research, which was not in the syllabus when they studied, so they strongly believed that refresher courses should be arranged. In the words of one teacher, "When we finished our graduation this nursing research and other new subjects were not in the syllabus and now they have been added in the new GNM syllabus. When we ourselves never studied these subjects, and we are not given any in-service training, how are we supposed to teach all these subjects?"

### 4.4 Perceptions and problems expressed by students:

The research team interviewed 198 students from various institutes - 61 students from ANM training centers, 105 students from GNM schools of nursing and 32 students from colleges of nursing. The students were selected from final year since most of the questions were related to maternal health.

Most of the ANM students received clinical posting and completed experiences in labor room and postnatal ward. More than half also had experiences in the antenatal ward and family planning unit. Most of the GNM students also fulfilled their requirement of clinical posting at antenatal clinic, newborn unit, antenatal ward and postnatal ward. Most of the BSc (Nursing) students also said that they completed clinical posting in postnatal ward, newborn ICU and antenatal ward, labor room and antenatal clinic. But only 19 out of the 32 students said they completed clinical posting in the family planning unit. Table 20 gives some details of the students' statements of completion of clinical experiences.

**Table 20. Student's performance in MCH care**

| | Learning area | ANM (n = 61) | | GNM (n=105) | | B.Sc. (n=32) | |
|---|---|---|---|---|---|---|---|
| | | Under Supervision | Independently | Under Supervision | Independently | Under Supervision | Independently |
| 1 | Conducting delivery | 19 | 2 | 74 | 21 | 20 | 10 |
| 2 | Antenatal examination | 24 | 9 | 78 | 29 | 25 | 10 |
| 3 | Postnatal care | 16 | 16 | 64 | 53 | 25 | 12 |
| 4 | Newborn resuscitation | 18 | 4 | 72 | 31 | 23 | 11 |
| 5 | Prevention of | | | | | | |
| | hyperthermia | 18 | 10 | 61 | 63 | 24 | 12 |
| 6 | Immunization | 14 | 8 | 69 | 54 | 25 | 10 |
| 7 | IUD insertion | 9 | 2 | 56 | 19 | 13 | 7 |

Though most of the students completed witnessing key components of maternal and child health, there were gaps in practicing the skills independently. While half of the B.Sc nursing students completed the required number in terms of delivery, this figure was less than one third even in case of the GNM students and only 2 out of 61 in case of the ANM students. Larger number of students witnessed deliveries compared to actually assisting (74 and 19 respectively). Very few students (7 out of 32) performed IUD insertion.

In short, students were not getting experiences in direct caring during pregnancy, delivery and postnatal period. Postnatal care experiences showed more gaps compared to antenatal or intranatal. Students did not get enough opportunity to practice resuscitation of newborn and hypothermia prevention. Reports of students also showed that most of them were not able to complete the required number of cases independently. This raises the importance of increasing time for clinical training and also the need to strengthen practice with models and simulators.

Patient care articles in a cupboard inside the classroom of a government GNMTC. These were filled with rust and cab webs.

Most of the students of all categories expressed satisfaction with classroom teaching. When it came to clinical guidance and supervision, only about half expressed satisfaction. They said they depended on staff nurses, ward sisters and doctors guided during clinical experience. Statements of students regarding quality of teaching are given below.

"In our clinical practice area there are medical students and GNM students. So we don't usually get a chance to practice as they are conducting all the deliveries and they also tell us that you are meant to do bed making and give bed bath, so stick to it." *ANM student.*

"We don't get proper theory classes in any of the subjects, we don't have a school bus and it is very difficult to go to field for community experience. There is no hostel facility for boys and it is difficult specially during evening and night duties." *GNM student.*

"The teachers come at the beginning of the year and tell us the syllabus and what textbooks we can use and then they say that we are supposed to study all these in one year. But they will not take regular classes in the whole year. We are only supposed to study. Only some theory classes they take. Even practical, we are not getting teaching". *BSc (N) student.*

The students of a government GNMTC sitting on the floor during the class as seating arrangements were not adequate for all the students. The students did not have adequate demonstration equipment

In summary, nursing education in Rajasthan is faced with a range of problems- poor facilities, inadequate teachers, incomplete practical experiences. Above all, students did not get adequate experience in practicing skills independently. Library and skill labs were almost non-existent and not fully equipped. Teaching aids and material were old and not updated. There is an urgent need to review the teaching methods and evaluation systems so that students have meaningful learning experiences.

# Section - V
# Recommendations for strengthening nursing in Rajasthan

Nursing personnel are required in every sphere and level of the health care delivery system. Nursing personnel work in a wide range of situations from sub-health centres to medical college hospitals. They are essential in health promotion and disease prevention in the periphery as well as to carry out sophisticated medical interventions in tertiary hospitals. Nurses are crucial to patient treatment and recovery because they provide continuity of care in hospitals due to their unbroken round-the-clock presence. Moreover, they are links in the continuum of care from preventive to rehabilitative, from community to hospital and back to community. The scope of work of nursing personnel is therefore enormous. Sufficient number of nurses equipped with appropriate skills and knowledge are essential for achieving goals set by NRHM. In Rajasthan, there are acute shortages in almost all categories of nursing personnel making it difficult to meet the NRHM goals. In addition, the issue of male nurses and general nurses who are not trained in midwifery complicates the issue since it influences the quality of maternal and child care.

> Government has recognized that the availability of human resources in rural areas "Is one of the serious challenges faced by the National Rural Health Mission" (official communication, GOI, 2006) and stated, "…..a possible solution to this problem would be to encourage the selection, recruitment, training and placement of nurses in a big way by the states. In fact, it would be desirable to constitute a Nursing cadre by all states, so that their selection, training, placement, career progression etc. could be taken up in a systematic way."

Rajasthan has 10612 health sub-health centres, 1499 primary health centers, 337 community health centers, 32 district headquarters hospitals, and 6 medical college hospitals. Besides the above, there are 32 ANM training centres, 15 GNMTCs and one college of nursing in the government sector alone. Nurses are required for the smooth functioning of each of these government health facilities and training institutions. In addition, there is a significant and rapidly growing private health sector including training institutions that are increasingly absorbing trained nursing personnel.

It is within this context that the assessment of nursing workforce in Rajasthan was undertaken by the Academy for Nursing Studies on behalf of the National Health Systems Resource Centre (NHSRC) in 2008-09 with the approval of the NRHM, Government of India and with support from the State Government. Findings showed that Rajasthan is facing an acute shortage of nursing, midwifery and public health nursing personnel at all levels. If not corrected, the current shortages could turn into major crises hampering service delivery with heavy negative impact on the poor and vulnerable communities in the State.

The findings of the situational analysis provide a framework for addressing shortages and designing strategies for strengthening nursing, midwifery and public health nursing in Rajasthan. Urgent action is required to address shortfalls and meet immediate needs and also prepare concrete action plans for preventing shortages, reducing discrepancies and inequities, and improving the quality of care in health centres and hospitals.

**Key issues related to nursing to be urgently addressed in Rajasthan:**

- Acute shortages in all cadres of nursing including the need to urgently revive abolished posts, create additional posts and upgrade key posts.
- Highly inadequate faculty at all levels and the aggravation of the faculty crisis due to rapid establishment of training institutions in the private sector within a short time
- Inadequate and poor quality of nursing education and the need for regulating nursing education to enhance quality of teaching
- Inadequate and weak career progression and promotional policies
- Weak nursing management at state and district level
- Discontinued courses in public health nursing and midwifery to be revived
- Issues related to male nurses – admissions and reservations, training in specific subjects such as maternal health, women's health and child care and channels of promotion and future requirements.

**Recommendations for addressing problems:**

Nursing workforce in Rajasthan consists of personnel working in three distinctly different areas: public health, clinical services and teaching. Recommendations for strengthening nursing workforce need to focus on all these areas. This section presents some recommendations for production of large number of nursing personnel in a short time and also a draft action plan for strengthening nursing in the State.

5.1 Proposals for addressing shortages in nursing personnel

5.2 Measures for addressing shortages of nursing teachers

5.3 Designing career progression for male and female nurses

5.4 Strengthening nursing management

## 5.1 Proposals for addressing shortages in nursing personnel

The findings of the nursing situation assessment revealed huge shortfalls in frontline workers and supervisors – ANMs and LHVs for delivery of public health services and staff nurses and head nurses for hospital based services. The findings also revealed the absence of PHNs and DPHNOs. In the teaching institutions there is a huge shortfall of tutors and clinical instructors. Table 21 presents a summary of the requirement for different nursing personnel in the State.

**Table 21: Overall requirement for nursing personnel in Rajasthan**

| Public health nursing personnel | | Clinical nursing personnel | | Teachers in ANM and GNM schools | | Faculty in college of nursing, Jaipur | |
|---|---|---|---|---|---|---|---|
| ANM | 11065 | Staff Nurses | 9490 | Principals | 47 | Principal | 1 |
| LHVs | 145 | Head Nurses | Nil | Vice Principals | 105 | Vice Principal | 1 |
| PHN | 187 | Assistant Matrons | 282 | Nursing Tutors | 168 | Readers | 5 |
| DPHNO | 66 | Matrons | 343 | PHN Tutors | 44 | Lecturers | 8 |
| | | | | | | Clinical Instructors | 19 |

### 5.1a. Proposals to increase the number of ANMs:

ANMs are vital frontline health workers, critical for programme implementation, technical service provision for mothers and children, first aid and treating minor ailments and gathering vital information. Most importantly, they act as agents of change and promote health through education and information. There is a shortfall of 11065 ANMs in Rajasthan. Different options are presented here to increase number of ANMs.

- Increase capacity of current training centers
- Start new ANM schools in the public sector

- All the 32 ANM training centers in the Government sector have the capacity to take additional students with some inputs, renovations, additional facilities and increased number of teachers. If the intake per year is doubled and admission done every six months instead of every year, then 3840 ANMs can be trained within 18 months. Students staying around these schools could be allowed as day scholars. ANM students could be selected from the local area so that they could join and complete the course from their home. In this way at the end of 2013 total 11520 ANMs will pass out from the 32 government training centers.

- The Government of Rajasthan could start one new ANM school preferably in Pratapnagar since it does not have an ANM training centre. In this manner another 60 ANMs can be generated every year so that at least 180 more ANMs will be ready to join service at end of 2012. This sill raise the nurses produced by government ANMTC to 11700. This method will help to take care of shortfall due to retirement, promotion also.

- Mission hospitals and NGOs with reputation and commitment to quality education may be invited to start ANMTCs in tribal and remote areas such as the desert region. Students could be selected from these areas itself so that they are available to serve in their own areas for a period of at least ten years.

**Table 22. Plan to produce adequate number of ANMs**

| | No. of schools | Current Batch size | Total Current intake (2010) | Proposed intake | | | Total |
|---|---|---|---|---|---|---|---|
| | | | | 2011 | 2012 | 2013 | |
| Current No. of Schools in Government | 32 | 60 | 1920 | 1920 | 3840 | 3840 | 11520 |
| Proposed school in Pratapnagar | 1 | 0 | 0 | 60 | 60 | 60 | 180 |
| **Total** | **33** | **60** | **1920** | **1980** | **3900** | **3900** | **11700** |

**5.1b. Proposals to meet the shortfall of LHVs:**

The shortfall of LHVs is 306. Three LHV training schools in the State that were closed need to be revived urgently so that LHV training can be taken up after a gap of more than a decade. Table 23 presents the proposal for training LHVs in Rajasthan. Since promotions are delayed, and training was not conducted many senior ANMs are working against the LHV post. They need to be trained on a priority so that quality of supervision in the field improves and subsequently quality of service improves.

**Table 23. Calculation for Total LHVs**

| S no | LHV Training Institutions to be revived | Proposed intake | | | Total |
|---|---|---|---|---|---|
| | | 2010<br>30 x 2 batches | 2011<br>30 x 2 batches | 2012<br>30 x 2 batches | |
| 1 | Ajmer | 60 | 60 | 60 | 180 |
| 2 | Jaipur | 60 | 60 | 60 | 180 |
| 3 | Kota | 60 | 60 | 60 | 180 |
| | **Total** | **180** | **180** | **180** | **540** |

The first step is to do a detailed assessment of the three schools and prepare proposals for reopening the schools with facilities and faculty. The HFWTCs at Jaipur and Ajmer have the physical structure and some facilities. Additional faculty need to be posted as required. Two batches with the intake of 30 per year per batch may be admitted in these two centres from 2001 onwards. At Kota LHV training can be started at the existing ANMTC by providing additional infrastructure, facilities and additional faculty. In all centres those already working against the post of LHV need to be trained first. By taking two batches of 30 per year in the three schools 540 LHVs can be prepared by end of 2012. The additional number (need is for 306 only) will take care of the PHN (BHS) requirement also.

**5.1c. Proposal to train PHNs and DPHNOs:**

At present Rajasthan needs 187 PHNs to work at CHCs according to IPHS recommendation. The old LHV training schools could be used to start the PHN course by renovating the physical facilities for both LHVs and PHNs. The admission capacity could be 25 per year so that at the end of three years the state could manage the shortfall of PHNs. Within two to three years all the posts of PHN will be filled up and better MCH care and supervision will be provided. In addition the senior most LHVs with more than five years of experience could be promoted to the post of PHN. The State can prepare performance appraisal formats or selection criteria for this such as the years of service left.

*Note: In the meantime the existing BHS and senior LHVs may be given a short course of four weeks to strengthen their supervisory skills.*

A qualified DPHNO is necessary for proper monitoring and supervision of the public health nursing services. In Rajasthan, not even a single DPHNO is available. The qualification for DPHNO is Diploma in Public Health Nursing or B.Sc (N). To overcome the immediate shortfall of 66 DPHNOs, government of Rajasthan could depute interested staff nurses for DPHN course every year to other states (like West Bengal) where the seats are not filled up every year. In long run DPHN and DNEA courses can also be started in the state for preparing qualified candidates who can be posted as DPHNOs. As an immediate step, PHN tutors (Female) may be promoted as DPHNOs since it is a district post, requires B.Sc (N) qualification, and has the key responsibilities of supervisor and administrator. The selected PHN tutor could be given induction training for three months and posted as DPHNOs.

**5.1d. Addressing shortage of staff nurses:**

Rajasthan needs additional 9490 staff nurses. The current capacity for intake of students into the General Nursing and Midwifery Course is too small to obtain such large numbers. Since there are 112 GNMTC in the private sector and 15 in the government sector with 40-60 intake per year, the requirement will be met within two years. The annual output from all the schools is 6350 per year.

**5.1e. Proposal to fill posts of Head Nurses and Matrons**

The shortage of nursing supervisors and administrators in hospitals affect quality of performance. Quality of supervision and guidance are essential in skill based professions. Rajasthan needs 282 Assistant Matrons and 343 Matrons. All these are promotional posts. Interviews with staff nurses clearly indicate their frustration at not being promoted even after 30 years of service on the same post. Career plan should first be prepared so that new posts are created.

Administrative steps have to be initiated to prepare eligibility or seniority lists and promote them. This will of course create further vacancies of staff nurse that need to be filled.

**5.2. Addressing shortage of nursing teachers:**

There is an urgent need to increase the capacity of the existing institutions as well as to start new institutions to meet nursing personnel shortages. The most critical issue here is the non availability of nursing teachers. The table below shows the overall shortfall of faculty for ANM training centers, LHV training center and GNM School of nursing. An additional number of 168 nursing tutors and 44 PHN tutors are urgently required in Rajasthan to prepare nursing personnel to fill up gaps that is 212 ( ANMs & GNMs).

**Table 24. Faculty requirement for new ANM and GNM Schools in Govt. Sector**

| Type and number of schools | Tutors required as per INC norms | Existing | Shortfall |
|---|---|---|---|
| ANM<br>Old – 32<br>New - 1 | 7x33=231 | 84 | 147 |
| LHV -3 | 6x3=18 | 0 | 18 |
| School of nursing - 15 | 30x15=450 | 57 | 393 |
| Total | 699 | 141 | 558 |

Rajasthan needs 231 nursing teachers to run the ANM course while only 84 teachers are available. There is a shortfall of 147 teachers for ANM schools. Similarly another 450 teachers are needed to prepare staff nurses through 15 government schools leading to a shortfall of 393 teachers for GNM schools of nursing. Moreover for the LHV training schools to be reactivated, another 18 teachers are required. The overall shortfall for nursing teachers is 558. However, one must remember that this requirement is only for government traiing institutions. Majority of the training centres are in the private sector. A detailed analysis is required to assess availability and requirement for teachers in the private GNM schools.

**5.2.a. Proposal for addressing shortfall of nursing teachers at ANM and GNM training centres:**

- A list of all nurses with B.Sc Nursing in government service needs to be prepared. They could be re-deployed to training centres for teaching. However, considering the unhappiness over delayed promotions – qualified candidates being asked to do the higher level work without position or pay – it is important to frame rules for promotion.
- Interested staff nurses could be deputed with salary for DNEA course to nearby states.
- DNEA and DPHN courses can be started in the existing HFWTC at Jaipur and Jodhpur.
- State could encourage the staff nurses for undergoing Post basic B Sc through IGNOU.
- At present Rajasthan has only one college of nursing in the government. So the state can recruit teachers from the 54 private colleges of nursing that are functioning in the State through open advertisement.
- State could give advertisement for getting nursing teachers from outside.
- The candidates passing from college of nursing after post basic B. Sc nursing with can be absorbed as teachers. The seats in the post basic B.Sc (N) course at Jaipur CON could be enhanced to 60.

At present there is only one college of nursing in Rajasthan. Other than this the state needs to start at least two more colleges of nursing immediately, one at Udaipur, Maharana Pratap district hospital. The hospitals in Udaipur having total bed strength of 2858. Another could be started at Jodhpur hospital because Jodhpur has bed strength of 3268 in the district. State could also start college of nursing in three more medical college and hospitals within the next 2-3 years.

**Table 25. Year wise plan for increasing number of nursing teachers**

| Course | Exist-ing | Propo-sed | Intake 2009 | Proposed intake / CON / Year 2010 | Candidates passing out | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 2009 | 2010 | 2011 | 2012 | 2013 | |
| Basic B. Sc | 1 | 2 | 60 | 60 x 3 = 180 | 60 | 60 | 60 | 60 | 180 | 420 |
| Post basic B. Sc | 1 | 2 | 25 | 30 x 3 = 90 | 25 | 25 | 90 | 90 | 90 | 320 |
| IGNOU | 1 | - | 30 | 30 x 1 = 30 | 30 | 30 | 30 | 30 | 30 | 150 |
| M. Sc | 1 | - | 25 | 25 x 1 = 25 | 25 | 25 | 25 | 25 | 25 | 125 |
| Total | 4 | 4 | 140 | 0 | 140 | 140 | 205 | 205 | 325 | 1015 |

**Note:** All these are available in the Government College of Nursing, Jaipur.

Increasing the colleges of nursing in turn means further requirement in collegiate faculty. As shown in the table below there will be a faculty requirement of 94 with the new proposals.

**Table 26. Requirement of faculty for the two proposed colleges of nursing**

| Category | INC Norms | Required faculty for 3 CON | Existing faculty | Shortfall |
|---|---|---|---|---|
| Principal | 1 | 1x3=3 | 0 | 3 |
| Vice Principal | 1 | 1x3=3 | 0 | 3 |
| Reader | 5 | 5x3=15 | 0 | 15 |
| Lecturer | 7 | 7x3=21 | 2 | 19 |
| Clinical Instructor | 18 | 18x3=54 | 0 | 54 |
| Total | 32 | 96 | 2 | 94 |

*(INC norms- 1:10- one teacher to ten students- with annual intake of 50 or less in B.sc nursing and 30 or less in Post basic BSc Nursing and 10 or less in MSc Nursing)*

**5.2b. Proposal for addressing shortfall of teachers for collegiate programmes:**

- There is a large number of nurses who have passed M.Sc (N) from other states. They could be listed and recruited.
- Interested candidates may be deputed for higher education to neighboring state with an intention to prepare faculty for proposed colleges of nursing.
- Launch a faculty development programme so that skilled and committed teachers are attracted to remain in the state and those working outside the state return back.

**5.2c. Faculty development programme:** One of the essential components in any teaching institution is faculty development. Retention of skilled, committed and efficient teachers is crucial for maintaining standards in the training institutions. As teachers are role models for students, their preparation and continuous updating of knowledge and skills is important. Details of faculty development programme need to be worked out in Rajasthan.

Lack of long term planning and administrative delays and miscalculations have resulted in Rajasthan having very low number of qualified nursing faculty. The M.Sc (N) programme was started only in 2007 though there are many college of nursing in the private sector. Candidates qualified to teach have been neglected or ignored. In the meantime nursing colleges and schools were started in the private sector and many qualified candidates moved out.

**5.3 Career pathways and progression**

Nursing personnel shortage has reached critical levels today because recruitment processes have not been standardized or streamlined, career development pathways have not been defined, and motivation and retention mechanisms have not been planned and implemented.

Recruitment must follow requirements and requirements must be based on norms and standards. Unfortunately, this principle was not followed. On the other hand key posts have been left vacant for too long- so long that they have been forgotten, abolished or handed over to others.

Career progress is crucial for satisfying the aspirations and needs of personnel. If this does not take place at regular intervals, staff turnover will be high and staff performance will be low. The two primary care providers in nursing –ANMs and Staff nurses – get very little opportunity to progress professionally in Rajasthan.

Career progression is built on the principle of fulfilling human aspiration for a higher and better life and self regulation.

- Employees must have equal opportunity to move upward in his /her cadre.
- Provision must be made for lateral mobility within the same career among different streams. This lateral movement helps to balance the different posts and the skills and experiences that staff have.
- Employees must have opportunity for climbing at least five steps on the career ladder during the entire period of service (30- 35 years) if they choose to remain in the same profession or occupation.
- Equity principle should be followed- equal remuneration and opportunity for equal work and qualification at the same facilities and encouragement must be provided to those who are disadvantaged.
- Those who do not attain the required higher skills or qualifications must also be facilitated to move on in their career ladder and adjustment must be made for experience.

**Proposed cadres for Nursing including Midwifery and Public Health Nursing**

1. General Nursing cadre
2. Public Health nursing cadre
3. Clinical specialization including midwifery
4. Teaching Cadre

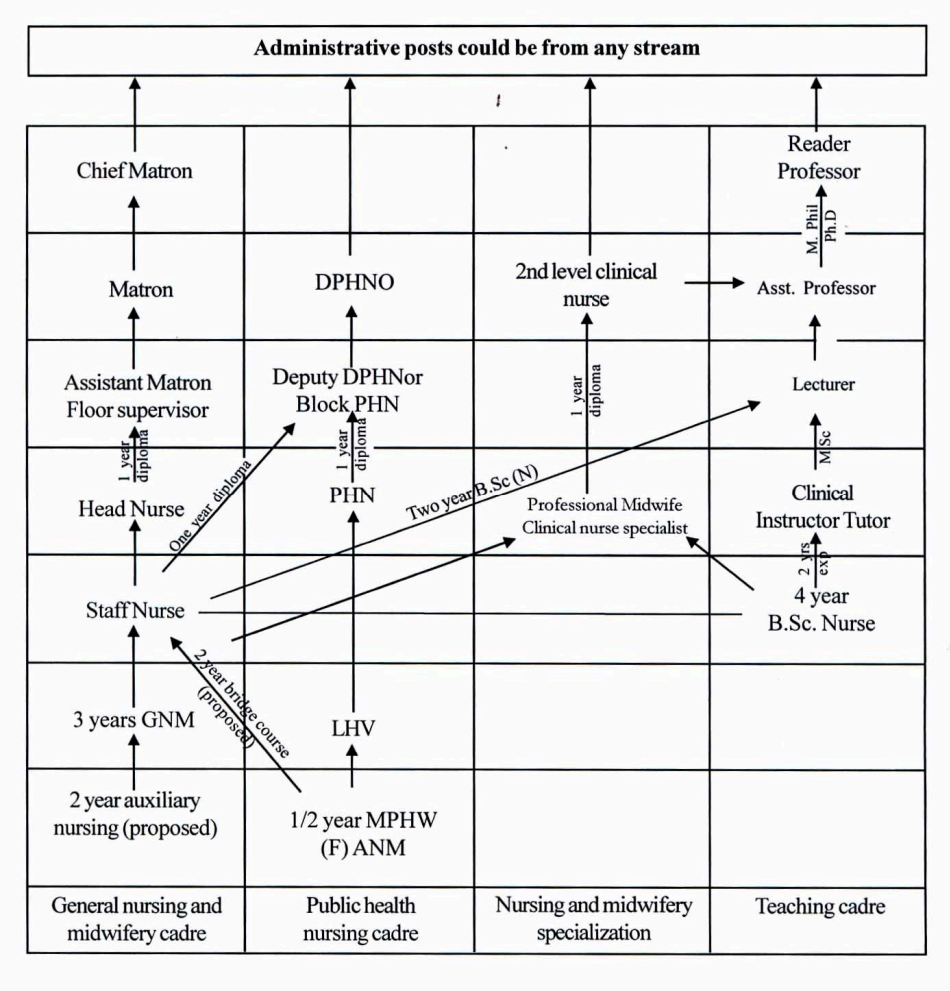
Note: Several posts in each cadre are required in the state. Posts may be added according to the current needs.

A detailed exercise is essential for formulating a career progression programme that clearly defines pathways for upward career mobility for each cadre. The first step in this direction is to define cadres. Nursing is a service profession just as medicine or teaching or armed forces. Clarity is required as to what cadres are needed and how they should be structured, positioned, paid and rented. Based on extensive discussions and review of the situation in Rajasthan today, and keeping long term need, four cadres of nurses are recommended in nursing: general nursing, public health nursing cadres; clinical nursing and midwifery cadre and teaching. Each cadre will have several posts.

It is proposed that both entry level posts – staff nurses and ANMs – have three pathways to move up on the career ladder and build a satisfactory professional career.

1. Clinical nursing specialization and midwifery
2. Supervision and management in two streams
3. Teaching

**Recommended cadres and career pathways for nursing personnel**




The proposed career progression from the two entry level posts of ANM and Staff Nurse is indicated in the figure shown above. The movement across the streams could be permitted only at first and second levels prior

to specialization. The ANMs should have options to become staff nurses and public health nurses or midwives. The staff nurses should have the opportunity to become a head nurse in 10 years rather than the present scenario of promotion few years prior to retirement. The staff nurses on completion of degree course could be promoted to faculty posts in teaching institutions. They could also opt to remain in the clinical field by studying one year course and become clinical nurse specialists.

### 5.4 Strengthening nursing management

The senior most position at the state level is that of Deputy Director Nursing. Although there are almost 30,000 nursing personnel in the State, there is no Directorate of Nursing in Rajasthan. The provision of adequate number of state level posts would facilitate improvements in health sector planning as well as monitoring and supervision of service delivery at various levels. Such a measure would also enhance the motivation and commitment of nursing and midwifery personnel in the entire State As part of this study an attempt was made to organize nursing services into four different levels according to qualifications, service seniority and posts.

**Functional levels of nursing personnel in Rajasthan**

| Level of functioning | |
|---|---|
| Administration | Joint Director Nursing, Deputy Directors - DDN (PH), DDN (HN), DD (NE), Principal CON, Chief Matrons in Teaching Hospitals (TH) |
| Management level | AD Nursing CNE and quality, AD (programmes), Principal - ANM, Principal LHV, DPHNOs, ADN - Training; ADN - Nursing care quality and CNA; Principal - SON; Matron of DHH, Vice Principal - CON; Matrons of THs |
| Supervisory level | Nursing Tutors, clinical instructors, Community Health Officers or Block Health Supervisor, Head nurses |
| Service providers and field supervisors | Staff nurses, LHVs, ANMs |

Foundation for professional autonomy can be strengthened by promoting an independent directorate of nursing in Rajasthan. The suggested chart illustrates that at the state level Joint Director of Nursing (JDN) will be the head of all nursing personnel and will be supported by three Deputy Directors of nursing (DDNs). One will look after MCH services in public health and another DDN will look after nursing service in the hospital and a third will look after nursing education. The joint director nursing has been strongly recommended by the Government of India (2006) in all states. All the Chief Matrons or CNOs of the teaching hospitals and the principal of the College Of Nursing will report directly to the JDN.

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