# **Centre of Excellence**

BIMR Nursing College & College of Professional Studies Gwalior, MP

April 30, 2019



**MAMTA Health Institute for Mother and Child** 

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### **Background**

The Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities and sick or well. Nursing also includes promotion of health, prevention of illness, care of ill, disabled and dying people.

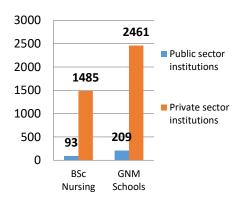
In addition, nurses are also responsible for promotion of a safe environment in the healthcare facility and health systems management (ICN, 2002). Thus, by definition a nurse is prepared and authorized (1) to engage in the general scope of nursing practice, including the promotion of health, prevention of illness, and care of physically ill, mentally ill, and disabled people of all ages and in all health care and other community settings; (2) to carry out health care teaching; (3) to participate fully as a member of the health care team; (4) to supervise and train nursing and health care auxiliaries; and (5) to be involved in research. (ICN, 1987).

This brings us to the critical role of Educators and Nursing Gillinstitutes in shaping and building future competent and efficient nursing work force. The global standards for nursing education are intended to serve as a benchmark to improve education and learning systems. In short, implementation of these standards will facilitate progress towards the highest level of education, assure equitable and appropriate placement of nurses in health-care roles and, potentially, simplify recruitment practices throughout the world<sup>1</sup>.

A study conducted by National Health Systems Resource Center (NHSRC) in 2008–09 highlighted the shortfall in number of faculties and inadequacies in teaching and clinical training of students during pre–service education (PSE) in nursing schools. Also flagged status

Graph 1: Number of public and private sector institutions in India

Number of public and private sector nursing institutions in India: INC-2012



of private nursing educational institutions in terms of inadequate training infrastructure and learning environments; limited number and poor faculty and use of outdated material in the libraries and

<sup>&</sup>lt;sup>1</sup> International Council of Nurses. Project Communiqué for the Global Nursing Review Initiative: Policy Options & Solutions, 2005. <a href="http://www.icn.ch/global/communique03\_05.htm">http://www.icn.ch/global/communique03\_05.htm</a> (accessed 31 July 2006). And Commission on Graduates of Foreign Nursing Schools. Building Global Alliances III: The Impact of Global Nurse Migration on Health Service Delivery. Philadelphia, CGFNS, 2007.

simulation labs. These poor resources get compounded when the students do not get hands on learning and thus adds to overall poor educational experience. Thus, the significant role of private sector nursing institutions highlights the need to strengthen the private Pre-Service Education (PSE) institutions to national and global standards.

MAMTA Institute for Mother and Child proposed a program for strengthening of PSE for nurse in BIMR Nursing Institute.

During this strengthening initiative, MAMTA Institute will help to institutionalize a system consistent with the INC and ICN established educational and clinical standards.

Goal: To improve the quality of educational processes in BIMR Nursing College, Gwalior

#### **Objectives - Phase 1:**

- To assess the training Infra-structure and enabling learning environment at the BIMR Nursing
   Institute against the established national and international standards
- To assess the gaps in course curriculum at the Nursing College
- To assess the availability and competencies of the Educators in College of Nursing
- To assess the scope of National and International affiliation/linkages/ certification and student exchange programs at the College of Nursing

### **Total Project duration – 4 months**

This is the end of First month report which consist of assessment of first objective: Training Infrastructure and enabling learning environment (including hostel).

#### **KEY ACTIVITIES UNDERTAKEN DURING APRIL'19**

#### 1. Review of Literature and Tool Development:

The objective of the project guides towards making BIMR College of Nursing into a Centre of Nursing excellence. To achieve this, extensive literature review was done of the available material in the public domain. The methodology for search terms comprised of Nursing; Nursing tools; GNM; BSc (N), PBBs (N) and MSc (N) courses; Indian Nursing Council; INC; International Council of Nurses; ICN; Course; Curricula; Infra structure, attached hospital etc. for both National and International standards.

Based on literature review and available standards in National and International public space, data collection tools were formed. The tools were tested for validity and reliability against Indian Nursing Council standards.

The current tool used for the assessment of performance standards for Objective 1 was broadly divided into two sections:

- a. Nursing School Infrastructure
- b. Hostel of Nursing Students
- c. Infrastructure of attached parent hospital

These two sections were again sub-divided into below listed areas\*:

S. No.	Nursing School Infrastructure	Infrastructure of attached parent hospital
1.	Lecture hall	Infrastructure-Departments & Beds
2.	Laboratories	Bed Occupancy & Patient Loa
3.	Library	Practical Curriculum
4.	Computer Laboratory	Coordination between Institute & Hospital
5.	Offices and other rooms	Other attached clinical facilities
6.	Hostel	

<sup>\*</sup>The section on Human Resource will be dealt with second objective of the project.

#### 2. Visit to BIMR - Data Collection

The team consisting of Dr Ritu Agrawal, Dr Reena and Dr Harsha visited the BIMR College of Nursing and attached parent hospital in Gwalior on April 12, 2019. During the visit the team measured the performance of the Nursing institute based on Indian Nursing Council standards and collected data.

### **Observations and Recommendations: BIMR College of Nursing**

#### SCHOOL INFRASTRUCTURE

#### **LECTURE HALL**

#### **Observations**

- The school has the basic infrastructure to function effectively with 9 classrooms for students of all the courses with space for teaching and group learning activities.
- Infrastructure of lecture halls was as per Indian Nursing Council (INC) guidelines.
- An Audio -visual (AV) room as per INC with an overhead projector and screen present and functional. However, it was not utilized for class room teachings for GNM or BSc Courses. The room was mostly utilized for seminar presentations and for other learning activities by MSc (N) students and faculty, as and when required.
- Student desks were in enough numbers for the largest class size, but out of 9 classrooms 2 class rooms had inadequate sitting facility. Spare desks were present, which was poorly maintained.

#### **Enabling environment**

- During the period of assessment, no Flipchart or tripod were in place.
- Lighting was inadequate in class rooms and it can be assumed to pose difficult situations to continue class room teaching in rainy and winter weather. The picture 1 showing poor lighting in class room.
- A schedule for each course and class was not seen on any display or notice board.

Picture 1. Poor lighting in class room

#### **Recommendations**

- Since desks were inadequate in two classrooms, the number can be maintained by repairing /replacing the spare desks.
- Provision of Flipchart or tripod to be made for teaching learning activity
- The lighting was inadequate as one could not read the black/green board, steps should be taken to improve the lighting with minimal reflection.
- Display of teaching schedule, weekly and monthly for lectures, demonstrations and practical classes of each course with name of faculty in-charge shall be on notice board.
- The teaching schedule should be accessible by all, students as well as faculty.
- For better utilization of AV aids for teaching and learning activities a schedule can be prepared detailing its availability and access.

#### **LABORATORY**

#### **Observations**

- As per INC guidelines there should be at least seven laboratories namely:
  - Nursing foundation and medical surgical,
  - o Community health Nursing (CHN), MCH lab,

- Nutrition lab, Computer lab,
- Advance skills lab
- Pre-clinical science lab (Biochemistry, Microbiology, Biophysics, Anatomy & Physiology)

However, the BIMR Nursing Institute consists of only Nursing Foundation, MCH, CHN, Nutrition and Anatomy laboratories.

- No schedule of Practical classes and rotation of labs was on display on notice board for the students.
- In foundation and MCH laboratory the number of beds to student ratio was maintained with dummies and mannequins in place.
- In the labs, the mannequins and simulators present were poorly maintained and non-functional. The skin was marked and torn at various places. The picture 2 and 3 shows the torn and broken manikins.
- Educational posters and anatomical charts related to MCH, RH or Newborn care, Nutrition and balanced diet were present but technically incomplete.
- Infection prevention protocol and medical waste management guidelines were neither on display, nor demonstrated. Picture 4 shows the same.
- The nutrition laboratory was equipped with cooking and food storage facility with minimal display of IEC materials. There was no food in storage for demonstration or practical exercise for the students and on cross verification with students it was found that no class/ demonstration has ever been scheduled in nutrition laboratory.
- The seating facility and information/ protocol on display were adequate in CHN lab, but equipment's for basic laboratory test were missing.
- The equipment's present were poorly organized, nonfunctional and not maintained, for example BP apparatus, Sahli's haemoglobinometer sown in picture 5.
- In all laboratories, Instrument kits were on display with labels. But a
  list of total available and functional equipment's was missing.
  However, all the equipment's were placed appropriately in the
  cabinets.
- The faculty to student ratio was high during lab demonstration (INC recommends 1:6) and the batch observed had more than 15 students. (Picture 6)
- In addition, INC suggests access to learning labs for independent practice beyond college hours. However, the labs get closed at 4 pm or earlier sometime. The students informed that usually the labs remain closed even during college working hours.



Picture 2. Broken mannequins



Picture 3. Broken mannequins



Picture 4 Infection prevention Protocol



Picture 5 Nonfunctional Sahli's haemoglobinometer

#### Recommendations

- Nursing foundation lab and MCH lab: The manneguins and dummies were not in a condition to be used, require urgent repair/ replacement. (INC guideline 1 bed:6 Students)
- MCH laboratories educational posters, protocols and anatomical charts to be placed on display with technical information.

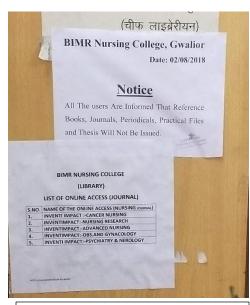
Picture 6 High faculty to student ratio

- Nutrition lab: Basic information/ protocol on balanced diet, infant and young child feeding practices, diet in pregnancy, etc. should be on display. Food storage should be in place to facilitate timely demonstration classes for the students.
- Community Lab: Each community bag for the students should be prepared with basic equipment's for practice and simple lab tests.
- In each lab a list enumerating the models, equipment's and usable to be placed on display on the storage cabinet or in records.
- Appropriate infection prevention (IP) supplies and equipment for hand washing (running water into sinks or buckets, soap, towel) to be used.
- Install color coded bins based for biomedical waste management in each lab for adequate demonstration and practice of students.
- Prepare a schedule (weekly/ monthly) for demonstrations and clinical practice for each course with faculty in-charge. The schedule should be shared with the departments in the parent hospital to facilitate the smooth conduct and functioning of class in clinical practice area.
- A mechanism to initiate and allow the students to practice independently in the laboratory needs to be set in function.

#### **LIBRARY**

#### **Observations**

- The physical infrastructure to operate a library was present with one hall for faculty and students.
- The library had 5000 books, subscription to 13 hard journals and 5 E journals (picture 7). Also, dissertations of all students were available from the time this institute has been established. However, students were not allowed to get them issued for reading and referencing.
- Lockable cabinets for storing books and table to allow for reading or studying were adequate.
- A dedicated person for routine operations of library was available.
- A well maintained system was in place to record and cataloguing of materials. A system of accountability exists for ensuring security of materials.
- Access to library after college working hours is denied. Schedule did not show that library is accessible to students for at least two hours per day outside of regular class hours as



Picture Notice: Non-issuance of any library material

#### **Recommendations**

- Access to library beyond class hours should be allowed.
- Protocol to access the E journal to be shared with the students.
- A collection of publications by college members can also be assembled.
- Lighting in the library hall needs improvement.

#### **COMPUTER LABORATORY**

#### **Observations**

- A well-equipped computer lab exists for the students and faculty with 30 computers.
- Out of total 30, however 10 were non-functional and some had missing keyboard or mouse.
- The Housekeeping was minimal.
- The time table did not show regular computer classes being arranged for the students.
- There was no reliable internet access for students.
- Basic software for learning were available but Statistical package like SPSS or STATA for student and faculty use has not been purchased.

#### **Recommendations**

- Non-functional computers to be repaired and maintain a computer: student ratio of 1:5 as recommended by INC
- Access to reliable internet is essential
- As recommended by INC, to support research and learning statistical package for the students and faculty should be made available.
- Time table for all batches and all courses shall be on display. Further, an activity record of the lab shall be kept inside the lab.

#### **OFFICES AND OTHER ROOMS**

	Availability	Remarks
Principal's office	Present	
Office for vice principal	Present	
Office for faculty members	Present	One room for 18 faculty members
Common room for faculty	Present	Non-functional
Separate office room for the office staff	Absent	No separate room was available for the staff
Common room for office staff	Absent	
Common room for students	Absent	
Welfare hall/ auditorium	Present	Inadequate lighting and ventilation
Student indoor game room	Present	Access available after college hours

#### **HOSTEL**

- The hostel is present within the premises of educational institute.
- It provides occupancy to 140 students and rooms were allotted for three and four occupancies with adequate furniture.
- The written rules and regulations for the hostel were not on display.
- The hostel is adequately furnished and suitable for student. They provide a bed, mattress, pillow, blanket and sheet for each student. Has cupboards where students can lock personal belongings.

- The artificial ventilation was adequate and electricity in each room was reported to be available for more than 10 hours a day and more than 5-6 hours in the night.
- Although pantry was not available on each floor, but students have access to the kitchen facility where breakfast, lunch and dinner are available for hostel students every day.
- The meals were prepared in a clean and hygienic manner.
- A functional bathing (n=16) and toilet (n=16) facility is available with minimal housekeeping. As per INC the number of toilets and bathroom should be one for 5 students, and this criterion was not met in the hostel.
- As recommended by INC, space for washing and drying clothes is available in the hostel and accessible by the students.
- A room for recreational activities with TV was observed for the students.
- The hostel does not have a warden (Recommended by INC: 3 for 150 students).
- The hostel and Nursing College does not have a security guard.

#### **HUMAN RESOURCE**

Staff for the hostel	INC norms	Availability and Number
Warden	3 for 150 Students	Absent
Cook	1 for 20 Students	Present; 8
Kitchen and dining room helper	-	Present; 3
Sweeper	2	Present; 2
Security Guard	2	Absent

#### **Recommendations**

- A full time warden should be recruited. The qualification recommended by INC for warden is B.Sc. Home Science or Diploma in Housekeeping/ Catering.
- A security guard for the hostel block for safety of the students should be hired.
- The rooms which were found to be non-functional could be utilized to allot them to students and reduce their occupancy from 4 students per room to 2-3 students per room.
- Display written rules and regulation as per INC in the hostel and set in place rules for visitors.
- Fire exit plan and fire extinguisher to be installed in the institute and the hostel.

#### Attached BIMR HOSPITAL

#### 1. Infrastructure: Departments & Beds

The attached parent hospital is a 300 bedded hospital with major departments including Medical, surgical, Obstetrics & Gynecology and Pediatrics and other facilities like ICU, ICCU, OT, Neonatology, Oncology etc. being available. However, as per the INC norms the parent hospital also must have Department of Ortho and Psychiatric along with other specialties including Nephrology, Dental and Cardiology.

The infrastructure in terms of availability of tests/diagnostics, procedures and facilities in the clinical practice area were conducive of accommodating students from all the four courses of the institute. However, it was observed that the infrastructure available was not being adequately utilized by the nursing institute to impart practical training to the students.

#### 2. Bed Occupancy and Patient Load

- a. In order to meet clinical objectives of the courses, INC has laid down the norm of 75 percent bed occupancy across departments which was found to be slightly lower in the hospital. The overall bed occupancy was about 65 percent as per the data shared by Head Nurse of the hospital. The Medical, Surgical, Oncology and ICU/ICCU had average bed occupancy above 75 percent but the Departments of Gynecology and Pediatrics was only around 61 and 50 percent respectively.
- b. The delivery load as per the INC norm for BSc Nursing should be 100 per month but the same was found to be around 50 per month (for last three months only data was observed).

#### 3. Practical Curriculum

- a. Although the Vice Principal shared a copy of the curriculum being followed but the students were not able to convincingly respond when asked about the schedule of clinical postings. The Clinical rotation plans were not in place and none of the information regarding postings was shared with the parent hospital. It was clear from the conversations with Faculty of the institute, students and staff in the parent hospital that the theory and practical as well as clinical trainings did not have any association/linkage. Students were neither oriented before postings nor were asked any questions after the completion of their respective postings.
- b. Nursing faculty/tutors/clinical instructors did not have necessary teaching materials and equipment to guide students during their clinical postings. Neither did the students have relevant job aids or checklists to be used/followed during their posting.

#### 4. Coordination between Institute and Hospital

- a. The overall coordination between the Nursing Institute and the Parent Hospital was found to be missing as the parent hospital did not have any information of the students' postings in various departments and the services/procedures that they are supposed to be trained on. The Head Nurse could-not identify students by their name.
- b. The Clinical Instructors (as informed by Vice Principal) were supposed to accompany students during their postings; however, none of the clinical instructors could be seen in the parent hospital.
- c. The students were neither able to give details about the schedule of clinical postings nor carried any log book.

#### 5. Other Attached Clinical Facilities

a. Apart from the parent hospital, the Nursing Institute failed to provide details of the attached facilities for Community Health Nursing including CHC, PHC and SC. The institute also could-not provide details of the Psychiatry hospital attached to the institute which is critical for MSc Nursing Psychiatric.

#### **Recommendations**

1. Number of clinical facilities attached: The institute is advised to utilize the associated linkages with the clinical facilities for hand on learning of students.

"One of the students responded that they are not exposed to any hands-on training only few MSc student's final year get some hands-on experience regarding patient care. Earlier it was not like this".

To the above statement – MAMTA team didn't find any records stating X number of students observed/independently done Y types of clinical cases.

The attached hospital shall provide enough practice to all the students to meet the clinical objectives. The attached facilities should sign a Memorandum of Understanding explicitly agreeing on the trainings to be provided as per the curriculum with details. An immediate necessity is to attach to:

- a) Psychiatric Hospital as the same is missing in the parent hospital
- b) Obstetrics and Gynecology as the number of deliveries as well as bed occupancy is not

- enough to provide sufficient practice to the students (if linkage already exist then kindly keep the records).
- c) CHC, PHC and SC for community nursing.
- 2. Curriculum-wise Planning for Clinical Postings: The relevant theory classes should always be completed before the students are sent for clinical postings. It is recommended that an alternate schedule of theory and practical biweekly is followed; for example, if the Students are being taught about the Pediatrics Nursing care in theory classes then the students after completing two weeks of theory classes should be posted in pediatrics department to revise and correlate the theoretical knowledge and also practice the same.
- **3. Strengthen the Systems and Processes for Clinical Postings:** The processes being followed were not clearly defined and hence was leading to confusion. The following is suggested to resolve the same:
- a) A committee needs to be set-up (with representation from Institute and Hospital administration) which shall meet thrice a year at least to discuss the issues related to clinical postings and provide solutions for the same.
- b) The documentation in terms of MOU with attached clinical facilities needs to be in place.
- c) The log-book needs to checked on a regular basis and a system for marking attendance as well as submitting weekly posting reports (from students) to track the students should be started.
- d) Clinical rotation plans with schedule of postings needs to be developed and followed.
- **4. Establish Mechanisms of Coordination at all Levels:** Since the coordination between clinical staff and nursing faculty was found to be missing, the following is suggested to rectify the same:
- a) A Clinical In-charge (from the hospital staff) needs to be identified who shall coordinate with clinical instructors on a regular basis.
- b) The clinical Staff must be oriented (by the Clinical In-charge) on the expectations from them in terms of support required to train students while they are posted.
- c) Institute's clinical instructors must accompany all the students while they are posted in various departments, he/she shall clarify the objectives of the postings, expectations and also convene a meeting after the completion of posting to understand issues/challenges if any and resolve the same.
- d) The Clinical Schedule of Postings should be developed which needs to be shared with Clinical Incharge well in advance.

#### **Further Activities**

- 1. Completion of Data collection activity for assessment of Nursing Institute: A one-day visit to BIMR Nursing College, Gwalior has been planned to complete the assessment of nursing institute. It will be carried out in the next month on the following remaining heads:
  - Review of Curriculum at Nursing College
  - Review the College management
  - Evaluation of Formative and Summative Assessment Criteria
- 2. Share the report on assessment of Nursing College: Report on performance of BIMR Nursing College based on remaining standards laid by Indian Nursing Council will be shared with the trust for their review and inputs.
- 3. Literature review for standards of Paramedic courses: Literature search to formulate a tool for assessment of College of Professional Studies will be conducted. The tool will be developed based on the available national and international guidelines for para-medic/ para-clinical courses.
- 4. Assessment of College of Professional Studies: Visits to the BIMR College of Professional Studies, Gwalior will be scheduled to review their performance and standards followed. This will help in complete assessment of the institute and build a path towards improvement in their performance.
- Affiliation / Certification and Student Exchange Programs at the College of Nursing and College of Professional Studies.