Quality Monitoring and Quality Assurance in Distance Professional Education

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Abstract : *India is the second most populous nation with a population which has touched one billion mark recently. Out of this large population women and children constitute nearly 2/3 of our population. Moreover, 70 per cent of the total population lives in rural areas with inadequate medical care facilities. The qualified and trained medical and nursing personnel are largely concentrated in Urban areas. Whatever small number working in semiurban and rural areas, need to upgrade their professional skills. More so, keeping in mind the rapid developments and advancements taking place in health sciences and allied disciplines. This calls for urgent action to upgrade the knowledge and skills of medical, nursing and other health professionals, not only to keep pace with fast developments but also to provide better services to the community. As the experience has been, the conventional system of medical and nursing education will not be able to meet these challenges. The School of Health Sciences (SOHS), Indira Gandhi National Open University (IGNOU), has addressed itself to these issues. The SOHS first developed a 3 years duration Post Basic B.Sc. Nursing Programme for inservice diploma holder nurses through distance mode of education. The second programme for medical graduates is a one year Post-Graduate Diploma in Maternal and Child Health (PGDMCH). This paper deals at length about the PGDMCH programme with special emphasis on the quality monitoring and assurance.*

Introduction

In India, women of child bearing age and children under 15 years constitute 2/3 of country's total population. They are not only major consumers of health services but also constitute high-risk group. Besides, the high morbidity and mortality rates among these vulnerable groups are to a large extent preventable.

Inspite of huge investments in health infrastructure and health manpower training, the health scenario is far from satisfactory. Inspite of having 160 medical colleges with a capacity of about 16,000 doctors per year, the doctor population ratio is 1:2000, there is only one bed per 1000 population which is 1:10,000 in rural areas. The nursing and paramedical personnel are grossly inadequate. This scenario can not be changed so easily as there are only 32 nursing colleges having a capacity of about 1000 B.Sc. nursing seats per year. The 47 Health and Family Welfare Training Centres (HFWTC) and State Family Welfare Training centres are not able to cope with the auxiliary

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manpower training. Besides, all these vast manpower has to be oriented periodically to cope with the advancement of knowledge and techniques of health care delivery.

Due to the shortage of auxiliary staff, the medical manpower is not being utilised optimally. The referral system has become almost nonexistent. Health care delivery system is inaccessible to the common people. Similarly, lack of strengthening of the manpower training and quality care by indigenous system of medicine has only accentuated the situation.

To cater to the need of the mother and Child — the two most vulnerable groups, through primary health care approach, the Government of India has initiated Reproductive and Child Health (RCH) programmes which is being delivered as an integrated package through a large network of various health agencies all over the country. This modified version of Maternal and Child Health (MCH) programme has been accorded high priority both by government, implementing agencies and NGOs alike.

Role of School of Health Sciences, IGNOU

Realising the need of training for health manpower, IGNOU set up the School of Health Sciences (SOHS) in 1991 for launching academic/training programmes for various categories of health functionaries. SOHS launched a post basic B.Sc. Nursing programme in July 1994 for inservice diploma-holder nurses having 3-5 years of professional experience. Thus, a need based training programme in India was started for nursing personnel on a scientific basis through collaborative efforts by Indian Nursing Council (INC) and Planning Commission. All concerned nursing teachers and educators were involved in the planning and development process of the Programme. This effort has ensured the best quality of course material. Since the professional programme comprises large number of practical skills, more than 50% credits were earmarked for skills in practical components. Efforts are on to ensure recognition by the INC.

The second programme that the School launched in 1997 September is the Post-Graduate Diploma in Maternal & Child Health (PDMCH) for medical graduates. The first batch of students completed the programme in 1998 December and training of the second batch is going on. Emphasis is again on the quality skill training and its monitoring.

The other programmes that are in various stages of development are:

i) Post-Graduate Certificate Programme in Rural Surgery of one year duration for surgeons belonging to four Surgical Specialities viz. General Surgery, Obstetrics & Gynaecology and Orthopaedics.

ii) Auxiliary Nurses Midwife Upgradation Programme of one year

iii) Post-Graduate Diploma in Geriatric Medicine of one year

iv) Certificate in Health and Environment of 6 months

v) Post-Graduate Diploma in Hospital and Health Management

vi) Post-Graduate Diploma in Nursing administration

Post-Graduate Diploma in Maternal and Child Health

Programme Package

The Post-Graduate Diploma in Maternal and Child Health (PGDMCH) programme has been developed in the broad perspective of Reproductive and Child Health (RCH) programme. The syllabus covers components of Community Medicine/PSM, Obstetrics and Gynaecology and Paediatrics so as to provide comprehensive and integrated knowledge on the MCH care. The curriculum aims at practicing doctors and those placed in a peripheral set up like Primary Health Centre/Community Health Centre.

The programme package includes 18 theory Blocks, 6 Practical Manuals, 1 Programme Guide and 9 Assignments, teleconferencing, contact sessions at Programme Study Centres (PSC) and Skill Development Centres (SDC), audio video cassettes etc. The diagrammatic representation of the package is given below in Fig. 1.

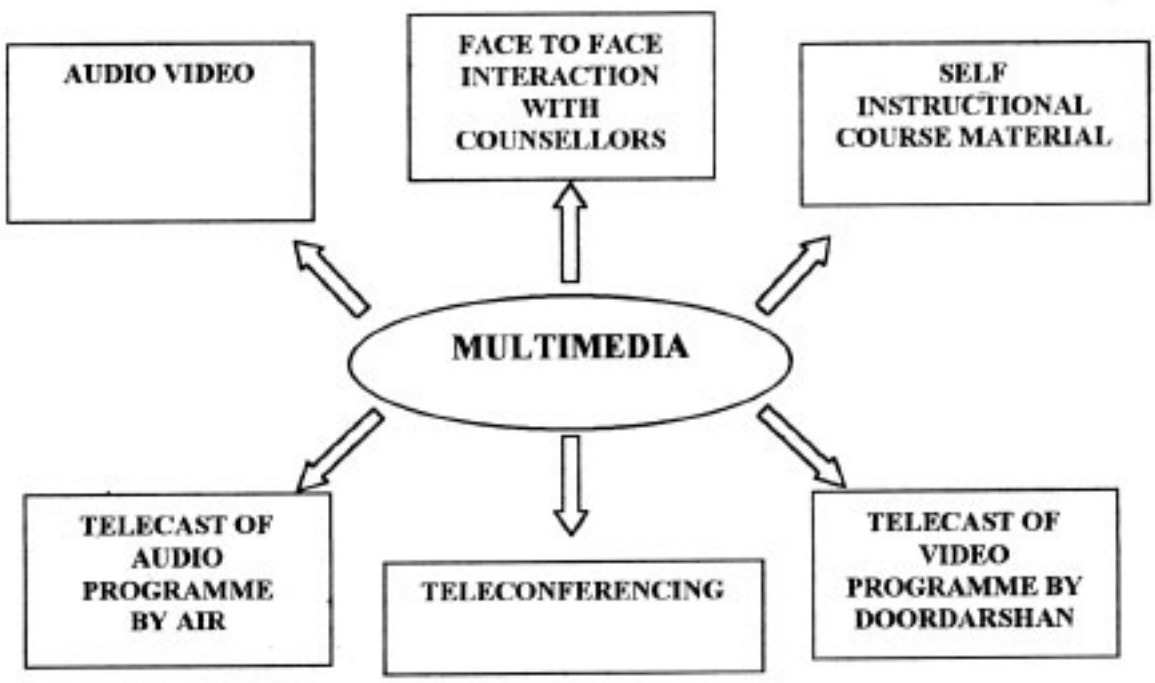

Fig. 1 : The multi-media package

Programme Structure

The programme is designed on the basis of learning hours required by an average student. One credit represents 30 hours of learning. So, the design of the PGDMCH programme in terms of credit distribution of the courses is given in Table 1.

Table 1: Programme structure of PGDMCH

Course Code	*Name of the Course*	*No. of Credits*	
		Theory	*Practical*
PGDMCH-1	Preventive MCH	4	2
PGDMCH-2	Maternal Health	4	3
PGDMCH-3	Reproductive Health	2	1
PGDMCH-4	Child Health	4	4
PGDMCH-5	Growth and Nutrition	2	2
PGDMCH-6	Planning and Management	2	2
Total		**18**	**14**

The PGDMCH programme consists of six courses as shown above. These represent three broad disciplines of conventional medical education system. Courses 1 and 6 are grouped under the discipline of Preventive and Social Medicine (PSM), Courses 2 and 3 are grouped under Obstetrics and Gynaecology (O&G) and Courses 4 and 5 are grouped under Paediatrics discipline. Hence, the issues related to programme implementation are dealt in the light of these three broad groupings, though each course is considered as a separate entity by itself.

Scheme of Study

In distance education system, in addition to self learning, contact sessions are held to facilitate the learning process of students. In this programme, where practical component is quite significant, the contact sessions will comprise of counselling sessions for the theory and practical components. For the convenience of study, the whole duration of these sessions are divided into three spells of 7 days each at the PSC and 90 hours hands on training at the SDC. The audio video planned for the programme could be purchased by the students to play them at their own set up or they could avail the facility at the PSC and could play them during counselling sessions.

Theory Component

The theory material includes the self instructional materials. Students could clear their doubts in theory related subjects during the counselling sessions. As most of the theory has a practical linking, the students could even clear their doubts during practical spells both at PSC and the SDC. For the same reason also, attendance in the theory counselling sessions are not compulsory and the theory counselling sessions are kept to minimum i.e. limited to only 9 sessions of two and half hours each in total .

Practical Component

Every course has a practical component. The skills that the students need to learn under each course are listed in their programme guide. The skill training is divided into three parts i.e. training at PSC, training at SDC and training at Work place. The students have to maintain record for each case as mentioned in their practical manual. For all the three places, the time division against each skill is also mentioned in the practical manual.

At the PSC, students are demonstrated each skill. To ensure that they have understood the steps involved in each of the skills demonstrated, they should also practice the skills on at least one of the sample cases. If they get opportunity, they are allowed to practice the same skill on more number of patients at PSC. However, if they do not get more chances, they practice the same procedure at their allotted SDC.

At the SDC, the students practice all the skills taught to them at the PSC. To guide them, there are counsellors at SDC from two disciplines i.e. Paediatrics and Obstetrics and Gynaecologist. As PSM specialist is not available at SDC, the skills related to those courses i.e. Courses 1 and 6 are adjusted at the PSC level.

Log Book Maintenance

The major headings/formats for recording the activities/case records is provided in the practical manuals. Students will be required to write down the details of procedures demonstrated in the PSC for at least one case each. They will have to maintain record for all the cases they perform at SDC and the work Place. The activities at SDC are supervisory in nature and are cross checked by the SDC counsellor as a proof of performance.

The logbooks are evaluated at the PSC by the respective subject counsellors and carry a weightage of 10% marks in the final evaluation.

Teleconference

In the teleconferencing sessions, subject experts are invited to deal on various subject areas as marked for that session. While dealing with the theory component, principles/concepts dealt in different units are highlighted and the questions arose by the students are replied with the help of examples so that they could link them to practical activities.

In the practical component, important clinical examination procedures are dealt with and attempts are made to deal with rare patients and where possible, show them live or get video clips. Discussions are also generated with the help of models or with the video clips of five to ten minutes on certain procedures. Attempts are also made to make model case presentation, case discussion and simulate clinical rounds/ seminars. Most of the presentations follow the format of panel discussion or lecture demonstrations.

Attempts are made to link the practical spells with the teleconference dates wherever feasible. This increases the participation of students. Some of the teleconference sessions are also recorded so that students missing important sessions could go through these cassettes.

Infrastructure for Implementation

The programme will be implemented through a network of health infrastructure all over India. IGNOU has 17 Regional Centers (RC) which are directly responsible for the programme related activities of that region.

The SOHS is responsible for the curriculum design, programme development as well as framing the guidelines for various aspects of the implementation process in consultation with the concerned divisions. Besides it will be monitoring the programme to ensure the quality training. The SR&ED is responsible for admission of students, maintenance of progress report and evaluation (both concurrent and end-assessment) including the certification. Computer division will posses the student data to provide address level of students for despatch of study materials and correspondence with students. MPDD is responsible for despatch of print materials. RSD is the coordinating division between the head quarter and peripheral set up (Fig. 2).

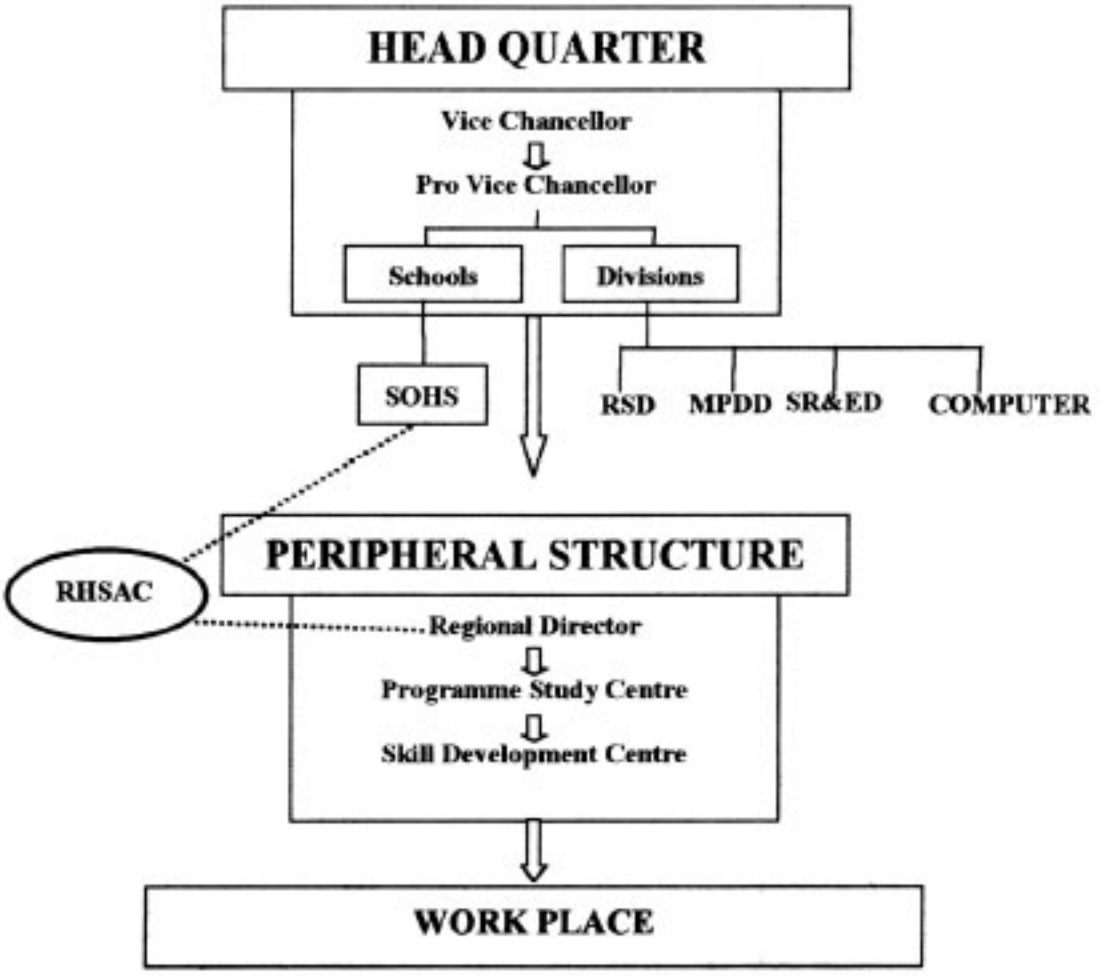

Fig. 2 : The programme delivery structure

Diversified Approach for Quality Monitoring and Assurance

The PGDMCH was designed in such a fashion so that students could acquire a large number of skills even remaining far away from teachers. The practical training is imparted in a three tier system i.e. Programme Study Centre (PSC) at Medical College Level; Skill Development Centre (SDC) at District Hospital/First Referral Unit (FRU) level and the third tier at one's own work place i.e. at Primary Health Centre level or at the doctors clinic itself. As mentioned earlier, 23 medical colleges in sixteen regional centres are identified to function as the PSC. A maximum of thirty students each are admitted per medical college having the total number of students to 680 in the first batch.

In a medical college situation the experts are supposed to demonstrate the various skills, where as in the SDC the students are supposed to practice under the supervision of a concerned specialist. 30 % of the practical components are to be practiced at PSC, 30% at SDC and the rest 40% to be practiced at his/her work place. The practical training at the Medical College is divided into three spells of eight days duration each. These spells are interspersed during one calendar year — usually at an interval of 3 months. In each spell the batch of 30 students is divided into 3 groups of 10 each. They rotate in every 2 days among the three specialities i.e. Obst. & Gyane , Paediatrics and Community

Medicine. On the seventh day all the students assemble for theory Counselling. Attendance in the three spells is compulsory.

After the practical demonstration, Counselling, field visits etc. at the PSC (medical college), the students visit their allotted skill development centres (district hospital). At the SDC, they practice hands-on training under the direct guidance of a paediatrician/ obstetrician and gynaecologist. For example they perform normal and abnormal deliveries, surgical procedures, resuscitate new born babies etc. The practical activities at the PSC and SDC are listed in the practical manual. At the end of the training, the counsellors at SDC and PSC give a certificate of completion which is an essential requisite for appearing in practical term-end examination.

A Regional Health Sciences Advisory Committee (RHSAC) has been constituted for each of the 16 regional centres. It is a programme (PGDMCH) specific committee to consider the implementation problems and also monitor the quality at the programme study centres. The RHSAC meets twice a year. In addition to the Director, SOHS/his nominee the other members from the respective State Governments/medical colleges include the Director Medical Education, Director Health Services, Programme in-charge, Dean medical college, two subject experts and the IGNOU Regional Director as member-Secretary.

Further, part time Regional Consultants are appointed for each of the IGNOU Regional Centres having the PGDMCH Programme. They are normally retired Professor/Directors from the respective States. They monitor the SDC level activities, help the PIC in monitoring the programme at the PSC and provide a linkage between the Regional Centre, PSC and the SDC.

In addition to the above, the periodic teleconferencing, feed back from students, log-book maintenance and certificate of completion of practical at PSC and SDC are other important features in the direction of assuring high quality of this programme.

Conclusion

Many of us would not have thought of imparting post-graduate medical education through distance education. Medical Faculty and Medical Schools all over the world still do not like the distance mode of education for education and training of medical students. The School of Health Sciences, IGNOU, has taken a pioneering step by launching a one year Post-Graduate Diploma in Maternal & Child Health (PGDMCH) through distance mode of education. It is a need based programme aiming at the health care needs of women and children which could solve the training need of doctors of the developing nations. The diversified approach of programme implementation could go a long way as a tool to implement the highly technical and professional programmes through distance education mode.

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