Planning and Development of Distance Education Programme in New Born Care

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Introduction

The status of new born care in India is a matter of grave concern and has serious implications for the overall health status of children. Even though the improvements in health care services have resulted in bringing down the infant mortality rate, the neonatal mortality rate is still very high. The neonatal mortality is due to a combination of factors including poor health status of the mother during pregnancy, inadequate antenatal care, unsatisfactory delivery practices, and inappropriate handling of the new born.

This state of affair calls for well trained health workers mainly at grass-root level equipped with knowledge and skills of providing new born care services effectively because 80 per cent of rural population is catered to by these workers.

The need for improvement in quality of training of all categories of health workers has also been documented : there is a serious handicap in the learning and training environment. As per Report of High Power Committee on Nursing and Nursing Profession in 1989, the current training methodologies, training facilities and training situation reveals that health workers are not being sufficiently equipped to deal with the health problems including the problems of the new born. Considering the fact that there is an imperative need to equip them with the necessary resources and skills to enable them to work effectively in their own field it is required to devise an alternative strategy of training to enable them to discharge their duties effectively.

This need can be met by the use of a multimedia approach as part of distance education which is best suited for trial under current conditions. The distance education is of immense importance to meet the demand of well trained and skilled staff, because under current situation and facilities updating of professional workers cannot be met by conventional means.

Though the concept of distance education in health areas in both developed and developing countries is of a very recent origin, the literature has indicated quite a number of courses being offered through distance mode, in U.K.O.U., Athabasca, USA, Thailand, Scotland, etc. Similarly, in India CMC, Vellore, is offering a few programmes in hospital administration through distance learning in collaboration with Pilani (BITS) and Tulane. National Institute of Health and Family Welfare, New Delhi is offering a programme on health and welfare management through distance learning for Doctors. At present the Indira Gandhi National Open University, New Delhi, has taken the lead to launch B.Sc. Nursing for inservice Nurses, and is to have more programmes such as MCH, Geriatrics and AIDS.

The present paper focuses on modern cost-effective method of training that can be applied in any situation for various categories of health professionals, viz., doctors, nurses and other para professionals.

Concepts and Characteristics

A variety of terminologies have been used to designate distance education such as Telenseignment in France, Frenstudium in Germany, Education Distancia in Spanish speaking countries.

Distance Learning is an educational approach in which a significant part of teaching takes place at a distance, i.e., the teacher and the student do not need to be in the same place at the same time. The teaching is provided through study materials using a variety of educational media which may include print material, audio tapes, video tapes, radio, television or even satellite transmission combined with some face-to-face teaching, guidance and counselling.

Distance Education aims to fos-

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ter an independent and self-sufficient learner.

Characteristics of Learning

* The quasi-permanent separation of teacher and learner throughout the length of the learning process; this distinguishes it from conventional face-to-face education.

* The influence of an educational organization both in planning and preparation of learding materials and the provision of student support services.

* The use of technical media—print, audio, video or computer—to unite teacher and learner and carry the course.

* The quasi-permanent absence of a learner group so that people are usually taught as individuals and not in groups.

Besides these, three other characteristics that can be identified with distance education are :

* The teacher facilitates learning but does not have the major responsibility to teach.

* Learning in one's own home environment helps the student to develop a self-confidence which is mostly lacking in the conventional teaching environment;

* Any training which requires mainly community-based learning such as for the PH/HAF ANM, would be more suited to a programme of distance education.

Needs and Challenges

In India, new born care services are provided by various categories of health professionals at various levels of care : Neonatologists; Paediatricians / Paediatric Surgeons; General Medical Practitioners; Nurses; ANMs; TBAs; etc.

The curriculum of Medical and Nursing education does not give much input in neonatal training. Although the need for training has been realised by health planners, professional bodies (NNF, etc.) and Nurse educators, but so far there is no formal training (basic and continuing education programme) in this area except some short-term training courses being organised by various institutions.

The basic training programmes are designed in such a way that the new born care forms a part of training. The course content is integrated in various courses at basic and post-basic levels of training such as Paediatric Nursing, Community Health and Obstetric Nursing without any specification of hours allotted to course content in new born care.

It has been seen that the majority of these programmes are not relevant to current social and health needs of the community and there are serious handicaps in training (report of High Power Committee, 1989).

In most of the institutions, the most common method of teaching is didactic lecture. Training relies upon orientation of the student to textbooks, paper and pencil. The learners are not exposed to clinical and field practice area because of inadequate facilities in various institutions. The training is teacher-based and subject centred with no emphasis on learner-based training and problem solving. There is dearth of teaching and learning material. The material is mostly foreign publications which are not suited to our needs.

Due to all these reasons the health professionals (Nurses) posted in neonatal units suffer from large lacunae in their basic training. To overcome this, a holistic approach in training is needed to meet the health care needs of the new born in hospital, community and family. As such a distance education programme for target groups could be developed to address the needs of new born care.

Target Groups

The programme of new born care could be designed for various categories of health professionals, viz., Doctors, Nurses, ANMS and other health para professionals. But, under current situation and training facility, training needs and training status, it would be suitable for practising Nurses who form the majority of the Nursing manpower and have a pivotal role in the delivery of health care system as a whole in hospital and community. The programme could be developed after the identification of training needs.

The entry level for admission to this programme could be General Nurse Midwife or B.Sc.(N) (RNRM) with 2-3 years of work experience in the profession.

Objectives of the Programme

* Strengthen knowledge and skills in new born care.

* Improve essential new born care practices.

* Provide quality care to high risks and sick neonates.

* Develop clinical competence to provide quality care.

* Develop managerial skills in organising new born care units and services.

* Participate in training and research activity

* Develop an effective multimedia package of learning material (self-instructional material).

Strategy for Design

In the overall strategy of training, distance education could be adopted as an adjunct to the need-based orientation. To know its validity distance learning could be organised in specific areas of new born care on a pilot basis and later on developed to produce one's leading to the Diploma or the Degree. Such programmes will expose the learner to the society in which he/she is living and working. Hence, then the society with which health worker interacts is not a page of curriculum. It becomes a dynamic natural environment which the student can see, question, interact so as to develop practical experience to deal with the situation with confidence.

The following are the important steps in developing such a programme.

The course to be designed on the actual tasks to be performed by health professionals.

A multi-disciplinary approach would be far more effective than the traditional segmented approach of training programme.

The course contents are developed by a group of experts comprising specialists in (i) Subject matter; (ii) Educational technology; (iii) Media; (iv) Evaluation; and (v) Counselling.

The package so developed must be pretested before wide use.

Intra-departmental coordination would be needed with AIR, Doordarshan, UGC, IGNOU and University Department of Distance Education.

A careful monitoring of the programme and comparison of the students' performance with traditional courses would be the best way to judge the efficacy of a distance education programme.

Planning and Development

The steps in planning and development of the programmes are as under :

Designing of Material - Curriculum and Course Materials; Production of Course Material; Distribution of Course Material; Instructional System; Support Services; Assessment/Evaluation System; Systems Management and Maintenance of Records of Learners.

Designing of the Curriculum

The certificate 'Programme'[1] of 16 credits (8 credits in theory and 8 credits in practical) in new born care could be developed/organised for a target group on a pilot basis. Experts from the field could be involved in identifying the course content to be designed in the form of blocks[2] and units. Each course will be presented in the form of a multimedia package consisting of a number of texts, audio-video components, contact sessions, assignments, library work, laboratory work/clinical work and project work. The proposed course content could be designed in the following areas : (a) Physiology of reproductive system and foetal development. (b) Basic concepts and definition. (c) Organising neonatal care units. (d) Preventive neonatology. (e) Perinatal problems. (f) Assessment and care of normal and sick new born baby. (g) Systemic disorders in new born babies. (h) Surgical problems of neonates. (i) Therapeutic procedures and handling of equipments.

Course Preparation

Learning material in the form of self instructional material will be prepared by a team of experts drawn from various speciality areas such as Neonatologists, Paediatricians, Nurse specialists, etc. This material will then be subjected to content, language and format editing. Similarly, audio and video cassettes would be produced in consultation with the course writers, in-house faculty and producers. This material could be previewed and reviewed by the faculty as well as outside media experts and edited or modified, wherever necessary, before they are finally despatched to the Study Centres and Doordarshan.

Production of Material

The material designed by subject experts has to be produced in a form suitable for use by the students. This means that the course material is

1. In distance education, "Programme" refers to curriculum or combination of courses in a particular field of study; for example, B.Sc. Nursing Programme, Management Programme, etc.

2. One block is equal to 1 credit and 1 credit equals 30 study hours. Each block contains a number of units. Each unit is an individual interactive, self-instructional lesson. It contains orientation for topics covered and exercises to help the students learn the material. A unit generally consists of 15-17 printed pages of A4 size (5000-6000 words).

sent for composing and printing and also producing T.V. and radio programmes in the studio before it is distributed to the learners.

Distribution : Once the text material is produced/printed, then it has to be despatched to the learners by post. It may include open circuit or cable and a satellite transmission of Radio and T.V. programmes. Methods of delivery need to be efficient, reliable and cheap. Distribution can be direct to the students' homes or indirect to the centre wherefrom they collect, depending upon convenience of students and also the system followed by the institution.

The most important thing is to get the material to the point of use and in time by the students. The students must know exactly: what they will next receive; where they will receive it; how to go and get it if this is necessary.

Instructional System

Different methods will be used to communicate with students at a distance. Usually a multimedia approach in instruction is followed. It comprises: Self-instructional printed course material; Assignments for assessment and feedback; Supporting audio-video programmes; Face-to-face counselling by academic counsellors at Study Centres; Practical at designated Study Work Centres; Telecast of Video Programmes on National Network of Doordarshan; Broadcast of audio programmes by All India Radio; Teleconferencing.

Support Services

In order to provide individualised support to the students study centres/work centres are established throughout the country. At the study centres, the students interact with the Academic Counsellors/clinical specialists/laboratory demonstrators and other students, refer to books in the library, watch/listen to video/audio cassettes. They also have an opportunity to consult the Coordinator on administrative and academic matters. At work centres, students get practical experience and interact with the field staff.

Assessment of the System

Like any other educational system, the final criteria by which distance education is judged is the quality of its product be it for a certificate, diploma or a degree.

The assessment of the learners will be done by : (a) Self-evaluation exercises within each unit of study (need not be submitted for evaluation). (b) Continuous evaluation in the form of periodic assignments. These can be Tutor marked and Computer Marked assignments. (c) Term End examination which will be conducted every year at study centres.

Systems Management and Maintenance of Records

This includes appointment of staff, setting of budget, account for expenditure, purchase supplies, maintaining buildings and equipment, organising internal and external mailing services, etc. It also includes students' information system, such as : accurate information to students and public; quick and efficient response to queries made by learners and public; maintaining and updating the records of students pertaining to the registration, admission and evaluation; and quick response in terms of comments on assignments.

Conclusion

Distance education has enormous potential for extending educational opportunities and for transforming patterns of professional and vocational training mainly in the area of continuing education of health professionals.

In the context of technical advances in new born care there is a great danger of a health professional to become obsolescent. Consequently, these professionals need mid-career training to update, to upgrade, to broaden and diversify their knowledge and skills to remain competent in their profession.

Programmes leading to degrees or diplomas are to be offered to meet these requirements and often there is a limitation for meeting such requirements by conventional means because of problems of access, relevance and cost effectiveness. In such situations distance education offers a great challenge. These techniques could be seriously considered for training in new born care by keeping the following points in mind : (a) Regulation of admission on the basis of manpower requirement. (b) Organising and arranging intensive contact programmes. (c) Utilising a variety of communication technologies and collaborative effort within and among the country. (d) Establishing work/skill centres. (e) Identifying technical committees

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Wills

Nurses are often asked to witness a will for a patient. A will is a declaration of an individual's wishes regarding what is to be done with his property after his death. A will must be in writing and signed by the testator (individual making the will). It contains signature of two or three competent witnesses.

Controlled Substances

Nurses are also involved in the control and administration of narcotics and other potentially harmful drugs. Only physicians, dentists, veterinarians can prescribe and dispense narcotics and other controlled drugs and Nurses can administer if written instructions are given by the physicians. In some instances she may administer these drugs under 'standing orders' list. The Nurse must be careful when handling narcotics to see that they have been ordered in writing by a duly licensed physician and that careful records are kept of their use.

Defence in Law Suit

Many authorities in U.S.A. and Canada recommend that each Nurse must carry her own malpractice insurance to cover the cost of lawyer's fees and possible damages because citizens of their countries are aware of their rights as a patient from the health care agencies.

The best defence in a Nursing malpractice law suit is competent Nursing. However, Nurses should be aware of the legal and ethical basis of Nursing practice. Also, Nurses should know their legal status and responsibilities. Nurses must know their job fully and should be proficient workers to prevent damages to a patient. A Nurse should perform her job scientifically and must know the outcome of her activities.

Though in India a law suit against Nurses is not so common as yet because most of our countrymen are not aware of their rights, it is not far away, when Indian literacy rate will increase and people will be aware of their rights and Nurses will be questioned and lawsuits may be filed against them for their malpractice. So it is our responsibility to prepare our future Nurses on a more strong basis. Future Nurses should be taught to 'account' for their job since Accountability is the strong tool of any profession. Future Nurses should also be taught to record and report their activities performed properly. Because, documentation is the strong evidence of any activity. Nurses must be taught to speak to protect themselves and the profession, whenever required. This all will help us Nurses to ensure the existence of the profession and will help in further development of our profession.

References

Books

1. Du Gas B.W. and Barbara Marie Du Gas Dymond. *Introduction to Patient Care : A Comprehensive Approach to Nursing.* 4th Edition, W.B.Saunders Company; Philadelphia & London, pp. 87-103.
2. Murray Malinda. *Fundamentals of Nursing*, Prentice Hall, New Jersery, 1976.
3. Wolff *et al. Fundamentals of Nursing*, 1983, J.B. Lippincott Company, Philadelphia & London.

Journals

1. G.A.J., Rameshwara Rao, 'Jurisprudence and the Nurse', *The Nursing Journal of India;* November, 1985, pp 300-301.
2. Latifi, Danial, 'Legislation & Nursing', *The Nursing Journal of India,* May, 1987; pp. 123-124
3. Regu, Mehmooda, 'Legal Aspects in Nursing' *The Nursing Journal of India,* June, 1986, pp. 145-147, 163.

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at local and regional levels for quality assurance.

The programme being highly technical and skill-oriented in nature, quality can be ensured by producing quality print material (self instructional) with appropriate tutorial support, guidance and counselling and intensive practical contact programme, satellite transmission, electronic media projects, case studies, exercises, etc,, and proper feedback system to monitor the effectiveness of the programme.

References

(1) Parmaji : *Distance Education;* Delhi; 1984.

(2) Reddy, G. Ram: *Readings in Distance Education.* Nov., 1987.

(3) Govt of India : Report of High Power Committee on Nursing and Nursing Profession; Ministry of Health; 1989.

(4) Varghese, Sara, *et al.,* 'Innovative Distance Education Programme for Hospital Managers' *Indian Journal of Open Training;* Vol 2. No. 1; Jan 1993.