

Preparedness of NGO Health Service Providers in Bangladesh about Distance Based Learning

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ABSTRACT

This cross-sectional survey was conducted countrywide from 15 January to 01 March 2004 to explore the potentials of health care service providers (physicians, nurses, paramedics etc.) for using distance-based learning materials. Face-to-face in-depth interview was taken from 99 randomly selected direct service providers, 45 midlevel clinic managers/physicians and 06 administrators or policy planners. Quasi-open questionnaire was developed for three different levels. Pre-trained interviewer team assisted data collection at field level. Total procedure was stringently monitored for completeness and consistency to ensure quality data. SPSS software was used to process and analyze both univariate and multivariate multiple responses.

Identified need for training areas were- STD/HIV, tuberculosis updates, family planning, treatment of locally endemic diseases, behavioral change communication & marketing and quality management system for managers. About 76.7% clinic managers and 89.1% service providers had primary information about distance-based learning in spite showed interest. About 51.5% desired monthly, 20.6% biweekly and 26.8% wanted bimonthly circulation of the distance-based study materials. About 35.1% expected print materials with regular facilitators while 58.8% demanded stand-by facilitators.

The study suggested wide acceptance of distance-based learning methods as supplementary to the continuing medical education among the countrywide health service providers.

Keywords: Distance Based Learning; Health education need-assessment; Bangladesh

INTRODUCTION

This country wide survey was conducted for assessing the training need assessment and evaluation of the physician, nurse, paramedics, other categories of health service providers, NGO managers, leaders, employers and policy planners. The focus of the issue was possibility of providing continuing medical education to the service providers through distance based learning materials. Their knowledge attitude and awareness also were major concerns.

This study had the background of a pilot project¹ started for clinic physicians few years back through some fixed inner pages of a monthly journal 'Projonmo'. Because of the lack of sponsorship that program was aborted on the midway but the mid term review of that project was quite satisfactory.² Hence this study started as a continuation and successor of the previous program. The idea was revived hoping that previously developed expert human resources could be utilized for the purpose. The study incorporated the most of the partner NGOs of NGO Service Delivery Program (NSDP), NGOs involving in the last National Integrated Population and Health Program

(NIPHP) pilot program, NGOs not involving in the last NIPHP DBL pilot program, NSDP regions, all political divisions of Bangladesh, NGOs working for urban and NGOs working for rural population and NGOs for different programs like STI/HIV, TB.

Important accomplishment of the survey³ was conducting in-depth interview sessions with NSDP administration, key personnel of different clinical programs, management and quality improvement officials, organizing an orientation course for interviewer regarding DBL and taking a successful interview with total achievement of the objectives, country-wide survey and collection of data from field level NGO health service providers, processing and analysis of data through SPSS software, writing of the report and dissemination of the data at a NSDP DBL group meeting. For developing the research tool for this survey certain considerations were required. Those needed to review;

- fixation the in-service target group for DBL
- both actual and felt need of the service providers at different levels
- gap between need and actualization of the personnel
- learning skill of them
- learning habit of the target group
- resources available at the place of intended learning
- commitment of organization or the administration to meet up these needs

CERTAIN PRINCIPLES WERE FIXED FOR DOING THE SURVEY

A. Who are the respondents

- Key personnel at NSDP head quarter and Project Directors of different NGOs
- Project Managers or Physicians of partner NGOs
- Professionals like Paramedics/ Nurses engaged with NSDP
- Other Service Promoters who deliver services at different stations

B. Directionality of the TNA survey

- From formal to DBL format of dissemination of knowledge
- Center to periphery with uniform message and vertical feed-back

C. How much they know about DBL modalities

- They are expected to know very little or nothing about DBL
- Might be exposed to DBL with *Projonma* programme
- Might be briefed before by Ms. Catherine Murphy during her last time visit
- May have formal training on DBL

D. How TNA would get maximum benefit

- If The Questionnaire Is Objective Oriented And Precise
- If Interview Is A Successful Event
- If The Whole Process Remains Unbiased
- If Data Obtained Are Found Valid And Reliable

E. How to conduct TNA

- Throughout the country
- Well pre-trained interviewer group
- Careful sampling to have maximum representation of the population.

OBJECTIVES

Goal of the survey was to prepare and plan effective, efficient and need-based DBL material as continuing in-site medical education for NGO health service providers after assessing the learning need, skill & capability of learners in conformity to NSDP principle or philosophy along with evaluation of the learning resources available at true learning area. More specifically the study was conducted to identify the actual learning need for target learners, to prioritize the learning area, to stratify the target group, to assess the level of the target group, to plan the mode of presentation whether aided or unaided and also to evaluate the learning ability of the target population

METHODS AND MATERIALS

The assessment was done by stratified random sampling procedure method for better representation of the population units. Sound multiphase epidemiological procedure was followed with several considerations to reduce chance error or bias. Study period was from January 15, 2004 to March 01, 2004. Study area included;

- all political 6 divisions
- all 08 NSDP regions
- both rural and urban NGO groups
- NGO's attending or not attending the pilot projects
- representations from most of the partner NGOs.

Samplings frame was done with all 278 stations as documented in NSDP. From sampling frame 54 centers were selected randomly from 278 clinics for interviewing. In Stratum-I, 99 persons, in Stratum-II, 45 persons and 06 persons in Stratum-III were interviewed. Pre-testing of the questionnaires was done and was modified accordingly. The pre-trained interviewers took randomly supervised person-to-person interview while the researcher took Stratum-III level in-depth interview. Interviewers were recruited by NSDP from outside the NSDP premises to avoid measurement bias or information biases except in one case that was also reported to be very new in NSDP and knows less about the structure or functioning strategies.

Restrictions and matching were done to reduce confounding effects of any factor during data collection and processing.⁴ Trainees' need assessment reveals important things like basic modalities of the continuing education that has been planned.

RESULT OF THE SURVEY

Data were fed into SPSS program and interpretations were done according to standard statistical measures.⁵ Qualitative information was rated into quantitative scales in possible cases. Three type of questionnaires were used for data collection from field

- STRATUM-I for Service Providers
- STRATUM-II for Managers/Supervisors
- STRATUM-III for key NSDP Staff/NGO Headquarter Staff

In Stratum-I total 99 persons were interviewed for data collection from service providers. Among 99 interviewees 4 were physicians, 66 were paramedics, 20 were service promotion officers (SPO), one was counselor, 7 were service promoters (SP) and 1 was of other professions. Most of the respondents in Stratum-I (64 out of 99) were under graduates (63.6%) while 36.4% had graduations or academic qualifications above the graduation level. Among them 27% have good command in English while 73% are poor in English. About 41.9% respondents of Stratum-I received training on Family Planning while 40.3% on STI/HIV, another 40.3% on BCC

& Marketing and 19.4% on TB. Service providers of Stratum-II mentioned different level and training components they were given. Many of them have training on Family Planning (38.6%), QMS (31.8%), Other Reproductive Health (27.3%) and Behavior Change Communication & Marketing (25%). Among Stratum-I respondents 26% responses were for further training on STI/HIV, 11.7% for family planning, 9.4% for safe delivery and 8.8% for TB. Training need of the respondent of Stratum-II comprised CMT as most wanted one (21.1%) followed by Emergency Contraception (15.8%), Other Reproductive Health (13.2%), STI/HIV (13.2%) and TB & LCC (10.5%). Somebody even expected radiology and imaging at this Stratum through DBL. In Stratum-I, 74.4% respondents desired CME on counseling; referral system was preferred by 24.9%, treatment of locally endemic diseases by 16.8% and BCC & Marketing by 8.7%.

Delivery Interval of Education Materials

	Number	Percentage
Bi-monthly	26	26.8
Monthly	51	52.6
Bi-weekly	20	20.6
Total	97	100.0
Missing System	2	
Total	99	

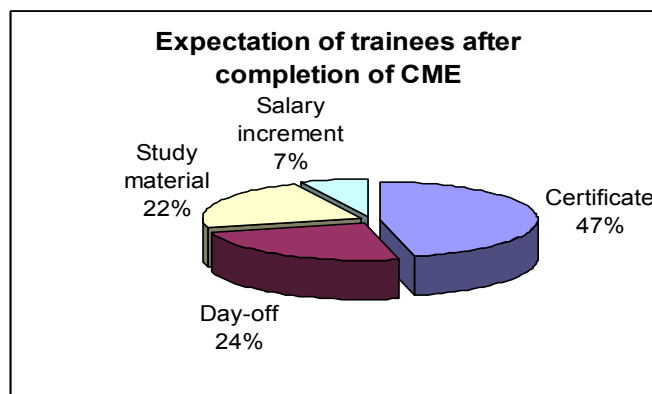
Average reading habit of the health service providers was found 7.60 ± 4.8 hours per week with a range from 01 hour to 21 hour. This factor is important for self-learning approaches. Most of the clinic managers (76.7%) and service providers (89.1%) were exposed to DBL just as information through media but have no working experience. However they showed interest to participate the DBL program if arranged for. More than half of the people (51.5%) desired monthly circulation of the learning materials. Other respondents wanted biweekly (20.6%) and 26.8% respondents wanted bimonthly. The table below shows the details. Most of the people (58.8%) gave their opinion on the provision of print format with stand by facilitators for delivery of program, while 35.1% people desired print media with regular facilitators for learning process.

Mode of Delivery of Education Materials

	Frequency	Percentage
Print Media Only	6	6.2
Print Media With Regular Facilitator	34	35.1
Print Media With Standby Facilitator	57	58.8
Total	97	100.0
Missing System	2	
Total	99	

Most of the service providers gave opinion that paramedics should take the training first (51.1%) followed by physicians (26.7%) and then other service providers (22.2%). Clinic manager or supervisors were available in most clinics (69.1%) who

can work as facilitators. Very few clinics (14.8%) OHP facilities but 57.3% clinics have the classroom facility for DBL training. The common expectations of the learners after a successful training course varied. The following chart represents their proportions.



The study revealed that good communication or personal relation of the clinic manager (28.2%) with the government administration was the main strength for program implementation followed by management skill (26.9%), knowledge (15.4%), experience (12.8%) and treatment skill (6.4%). Lack of up-dated information of the clinic manager (43.6%) was the main weakness for program implementation at their position. The next weaknesses were lack of training of some of their staff (16.4%) and lack of TOTs (14.4%). Most of the clinic managers (90.7%) desired NSDP herself to provide the program solely- planning, preparation of the materials and also delivery.

While only 9.3% respondents proposed the program to be delivered by some other institution or valid organization. But all the policy planners desired provision of the DBL program totally from NSDP. Regarding monitoring system of the DBL program, 42.3% respondents were in favor of developing a different quality control mechanism. The rest 57.7% wanted to incorporate it into the existing QMS or MIS system. Most of the policy planners (83.3%) of were in favor of incorporating it into the existing QMS system. About 42.9% respondents proposed updating of the supportive supervision system while 14.3% peoples were satisfied with the existing check-list. Very exciting factors were coming up about the successful sustainability of the DBL program. Below is a tiring list of their suggestions were—effective communication, highly motivation, incorporating monitoring system, Bengali medium of instruction, regular evaluation, good planning, appointing or preparing good facilitator, video mode followed by leaflets periodically. Training has been identified as the problem-solving tools in majority of the cases of Stratum-II. Training with good facilitators are the focus areas.

Examination of the results reveals that service providers of both Stratum-I and II have training on family planning and they need more exposure but have no or limited training on LCC and TB. In both cases STI/HIV is most wanted followed by TB and LCC. Simultaneously clinic managers' desire to have training on CMT and Emergency Contraception is note worthy.

DISCUSSION

Distance education is the process of system services and pedagogical approaches of education delivery or delivery of teaching and learning materials for a pre-determined target group of the population who are at potential distance from the education providers in respect of place and time and uses self-study learning materials with need-based contact with the teacher or mentors.⁶⁻⁹

Bangladesh has got a half the century history of evolution of developing distance education system.¹⁰ Open and distance learning programs are very popular in the

community. In this survey respondents of all of the categories of respondents heard about DBL but at the service provider level none of them worked with any DBL program but at the second Stratum with the clinic managers, some of were trained during the previous NIPHP program. Many of the service providers were trained up for family planning and STI/HIV and still they need further training on STI/HIV, safe delivery and tuberculosis. Clinic managers were trained on Family Planning, QMS, Other Reproductive Health and Behavior Change Communication & Marketing with further training need on CMT followed by Emergency Contraception, Other Reproductive Health, STI/HIV and tuberculosis & limited curative care for locally endemic diseases. Some respondents even expected radiology and imaging at this Stratum through DBL. The expected learners have on average something more than one hour day reading habit. Feedback from these groups of learners without any mentor may not be fruitful. Hence curriculum or instruction design should be prepared or planned to prepare in such a way that they need not to study for more than one hour per day. The respondents of the survey expected the monthly circulation of the learning materials and preferably in Bengali language.

They also desired to have standby facilitators along with the text materials. Facilitators can be prepared and trained o from the clinic managers who previously got orientation about the distance based learning. About modalities of delivery of the distance based learning materials, most of them gave opinion that NSDP should plan and prepare the materials herself. Then it should distribute learning materials among the target learners through its own distribution system. About monitoring of the outcome of the program, most of the respondents suggested that DBL component should be incorporated into the existing quality management system rather than introducing a separate quality assurance program. Preparation of the learning materials would be expected by the respondents to have of three-tier system.

The first chapters would be for all the three layers of health service providers. The second part of the volume would be a little bit difficult for the non-medical learners. And the last part would very much technical for medical experts. Thus the printing cost, distribution anomaly and uniformity of the information dissemination can be ensured.

CONCLUSION

In this survey most of the respondents felt DBL as the best alternative for continuing education keeping the trainees at their own place and without disturbing their time and service as revealed in other place experiences¹¹. Though these study subjects had little idea about DBL, still they were interested. They selected important topics and prioritized them. Everybody both at NSDP and also at the partner NGOs welcomed the program and initiative. The TNA survey was done systematically following standard research methodology. Data are tried to make valid and reliable. The outcome is almost close to truth and precise.

The need for DBL is without any doubt and topics selected were really important and reflects the actual need of the community. Starting of any DBL program seems to be attractive but monitoring, evaluation and continuation of the program is very difficult. NSDP has to keep in mind the high drops-out rate in DBL process especially in developing countries.

Resource materials have to be repeatedly assessed for logical relevance and understandability by the learners habituated with a formal system of learning. Resource materials will be prepared in printed text format supplemented and complemented by audio-visual or user friendly audio aids. Preparation would need attention to the areas like Semantics, Phonemics, Pragmatics, and Syntactic issues of learning material production.

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Associate Professor AKM ALAMGIR medical graduate from Dhaka University and specialized on Public Health Education pedagogy. Acquired Computer Basic and MS-DOS, BASIC and SPSS programming. His duties and responsibilities are summarized as well: Academic responsibility to take classes, organize tutorial and practical classes. Responsible for planning, monitoring and maintenance of standard of education under guidance of the head of the department. Conducting examinations as per college guidance. Conduct research work for further development of academic attainments of the students and guide the students for their dissertation and survey studies. Trained in Athabasca University, Alberta has much contribution in DE in Bangladesh. He was Associate Dean, School of Health Sciences till 20 November, 2005, State University of Bangladesh. He has editorial activity in some national and international publications such as: Behavioral Sciences, Nutrition & Dietetics. Dhaka: Bangladesh Open University. And also, Executive Editor: Journal of Dhaka National Medical College & Hospital.

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