Health Education In India: A Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis
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Abstract

English: The purpose of this study was to conduct a strengths, weaknesses, opportunities, and threats (SWOT) analysis of the health education profession and discipline in India. Materials from CINAHL, ERIC, MEDLINE, and Internet were collected to conduct the open coding of the SWOT analysis. Strengths of health education in India include an elaborate tiered infrastructure, well trained workforce in health education, resources for information dissemination, school health education programs, and ability to conduct systematic needs assessments. Weaknesses of health education in India include focus on only knowledge-based interventions, primary reliance on print media, inability to reach rural and vulnerable areas, no quality assurance, no promotional avenues for health educators, no organization, and outmoded training of health educators. Opportunities include need to involve folk media, enhance participation of unconventional functionaries such as religious leaders, traditional healers, traditional birth attendants (dais), build systematic patient and worksite health education, apply theoretical approaches such as social marketing, involve physicians, and organize health education and health educators in India. Threats include criticism as motivational manipulation and delivery of health education campaigns as techno-managerial, vertical programs without building the infrastructure at the grassroots level.

Key words: Health Education, Health Promotion, India

Introduction

India is the largest country in South Asia with the second largest population in the world that surpasses one billion. The region is the home of Indus valley civilization which is among the oldest in the world and dates back to more than 5,000 years. The era of modern India begins from 1947 after its independence from being a British colony. The median age of the population is 24 years with 32% of the population below 14 years. The infant mortality rate is 58 per 1000 live births and life expectancy is 64 years. Only 60% of the population is literate. India is a democracy with multiparty system. The economy is also diverse ranging from traditional rural farming to modern agriculture to handicrafts to a variety of modern industries to a multitude of support services. In 2003, the per capita GDP with purchasing power parity was estimated at $2,900. Approximately 25% of the population lives below poverty line.

The purpose of this article is to present a qualitative case study of the discipline and profession of health education in India discussing the present status and predicting future trends. The framework of strengths, weaknesses, opportunities, and threats (SWOT) analysis has been used in this study.

Methodology

In order to collect the materials for the study a search of ERIC, CINAHL, and MEDLINE databases was done in addition to the Internet search through search engine, “Google.” A search of the terms “health,” “educator” and “India” in MEDLINE revealed 6 articles and “health,” “educators” and “India” revealed 8 articles, of which 2 were repeats. A search in CINAHL returned no results. A search in ERIC revealed 14 articles but none of them were directly relevant to this study. A search of “health,” “education,” “India” for 2003 and 2004 in MEDLINE revealed 24 articles which provided a glimpse of the kinds of health education studies that are being published in India. A paucity of publications in this area indicates that this is an area of research in which not much has been published or found in databases and this case study would fill an important void. Collected information from these sources was categorized into the conceptual categories of strengths, weaknesses, opportunities and threats in open coding of the data.
Health Education In India

Health education in India has a long history however its formal integration into health services is less than fifty years old. In the government, Central Health Education Bureau (CHEB) is the apex institution for health education in India. The Bureau was set-up in 1956. The Bureau has seven technical divisions namely, (1) training, (2) media, (3) editorial, (4) health education services, (5) research and evaluation, (6) field study & demonstration centre, and (7) school health education division. The Bureau conducts a one year postgraduate diploma in health education (DHE).

The training division conducts in-service training to various categories of personnel in health and related fields. The trainees include medical and non-medical personnel deputed to the Bureau for training in health education. The media division organizes exhibitions on various health topics and celebrations of important days such as World Health Day, No Tobacco Day, and World AIDS Day. It also organizes exhibitions on various occasions at the request of the Ministry of Health & Family Welfare, voluntary organizations and other government departments such as Central Reserve Police Force. It also participates in international fairs at Pragati Maidan, New Delhi. The editorial division brings out periodicals namely Swasth Hind (English monthly) Arogya Sandesh (Hindi monthly), and Swasthya Shiksha Samachar (Hindi quarterly) to disseminate health education information. The health education service division provides technical guidance to state health education bureaus and strengthens their activities. It also assists in developing health education programs and material for the government and non-governmental agencies in promotion of health education. The research & evaluation division conducts behavioral studies on various aspects of health. It has also developed and conducts a social science research methods course. The field study & demonstration centre serves as a field laboratory to test methods and media of health education which can be adopted elsewhere. It provides opportunities for various divisions to undertake field trial, conduct research, test and develop methods, media and train health personnel in actual field situations. The school health education division promotes health education in the school system of education in the country. It has developed & revised curricula from primary to higher secondary level including health education materials. It coordinates with National Council of Educational Research and Training (NCERT) & Central Board of Secondary Education (CBSE) for inclusion of health education subjects in formal and non formal education.

Most of the states in India have state health education bureaus that are patterned after the Central Health Education Bureau. Besides, the Central and State Health Education Bureaus there is also the Family Welfare Training and Research Centre (FWTRC), in Mumbai that was established in 1957 as the first Family Planning Training Centre. It has the responsibility for the training needs of state and district level categories of health personnel from the Western zone. The centre also conducts a one year postgraduate diploma in health education (DHE).

Another health education institution is the Gandhigram Institute of Rural Health and Family Welfare Trust (GIRHFWT), Gandhigram, Tamil Nadu. The Gandhigram institution is also functioning as one of the Central Training Institutions in India to provide training to functionaries of Health and Family Welfare of Kerala, Karnataka, Pondicherry, Andaman & Nicobar Islands as well as Tamil Nadu. The institute also conducts regular diploma in health education (DHE) of one year.

Another such institution is the All India Institute of Hygiene and Public Health (AIH&PH), Calcutta that was established in 1932 with the assistance of Rockefeller Foundation. The objectives of the Institute are: (a) To develop health manpower by providing post-graduate training facilities; (b) To conduct research relating to various health problems and disease in the community; (c) To provide the support services in urban(slim) and rural areas; and (d) To support and guide various programs at National level. The Institute has eleven academic departments and two field practice areas at Urban Health Centre, Chetla, Calcutta and Rural Health Unit and Training Centre, Singur, District Hooghly.

Health education in the governmental sector is performed by several categories of functionaries. Hiramani & Sharma identified these categories that have health education as part of their responsibilities as health educator, health education officer, health extension education officer, health education instructor, assistant instructor, extension educator, block extension educator, block family extension educator, block family welfare officer, extension training officer, health extension education worker, social work inspector, social science instructor, social education organizer, tutor, demonstrator, assistant professor, reader, professor, medical officer, social worker, social welfare officer, public health assistant, nutrition assistant, sanitary inspector, filed worker, case worker, district extension educator, district family welfare officer, district family welfare extension officer, mass education and media officer, deputy health education officer, media education officer, etc.
officer, education and information officer, education and publicity officer, district health education and information officer, deputy mass education and information officer, state health education officer, project leader, and regional health educator. From a survey of 410 such professionals they found that only 7.32% were undergraduates and the remaining functionaries were either graduates or post graduates. In addition slightly less than two thirds were specifically trained in health education. Only 20.9% were placed at the rural level which is ironic because 74% of the population is rural and only 26% is urban. More than two-thirds of the functionaries were found to perform family planning activities that are again disproportionate compared to the enormity of health problems.

The apex institution for health education in the nongovernmental sector in India is Voluntary Health Association of India (VHAI) that was established in 1970. It is a not-for-profit federation of 24 State Voluntary Health Associations (VHA) that links more than 4,000 health care institutions and grassroots level community health programs spread across the country. The organization has a State VHA unit, communications unit that publishes health education materials, community health and development unit that conducts training programs, information unit that maintains health, development, and family welfare related information, and women’s health and drugs unit that deals with these two issues. Some other prominent health education NGOs are Centre for Health Education, Training, and Nutrition Awareness and Child in Need Institute.

Strengths

One of the strengths of the health education in India is an elaborate multi tier infrastructure of functionaries in the government and nongovernmental sector. In the governmental sector the Central Health Education Bureau and its network with State Health Education Bureaus that link the districts blocks, and communities is quite praiseworthy. In the nongovernmental sector also the Voluntary Health Association of India and its network with State Voluntary Health Associations that link grassroots organizations is commendable.

A well trained workforce in health education is found. Hiramani & Sharma found that most health educators were either graduates or post graduates with more than two thirds having been trained in health education. While there is no degree offered with a major in health education, yet there are many well qualified health educators.

Another strength of the health education in India is its strong emphasis on information dissemination. India is a vast country with 15 official languages and several hundred dialects. In this backdrop it is very difficult to reach the masses and despite this challenge the health education campaigns have been informing the public regarding health and family planning messages.

One of the settings for health education is in schools. In India, several health education programs for children have been designed including incorporation of health education in curricula. An innovative approach has also been implemented – the child to child program -- where children actually educate each other about health. School health education programs have been among strengths of health education in India.

A search of recent health education articles indexed in CINAHL and MEDLINE revealed that knowledge, attitude, practice surveys are very common. Though most of these are not theory based and are relatively few given the magnitude of health and family planning problems in the country even then this is indicative that there are systematic attempts at accomplishing needs assessment function of health education.

Weaknesses

A search of recent health education articles indexed in CINAHL and MEDLINE revealed that most of the current health education interventions are knowledge based interventions. Further, to the best of our knowledge we could find only a solitary intervention that used community diagnosis and participation in planning the intervention and another one that used information, motivation and behavioral skills model in designing the intervention. Otherwise most of the interventions were atheoretical. Finally, to the best of our knowledge we could find only a solitary policy intervention that worked on school policy to influence tobacco use. It is well known that knowledge is necessary but not sufficient for behavior change. There is a definitive need for more robust theory-based health education interventions for behavior change and more health promotion interventions that influence policies and organizational constructs.

Most of the campaigns of information dissemination in the government sector as well as the nongovernmental sector use newspapers, posters, and pamphlets. Almost 40% percent of the Indian population is illiterate and use of print media to impart health messages is controversial. Further, 60% of promotions do not exhibit adequate information. Hence the information dissemination campaigns fall short in reaching the vulnerable sections of the community.
Mass media campaigns have not been successful in reaching rural populations living in far-flung and vulnerable areas.\textsuperscript{10} Hiramani and Sharma\textsuperscript{4} found that only one fifth of health education functionaries in the government sector were placed at the rural level while three fourths of the population is rural. This lop-sided allocation of resources is a weakness of the health education in India.

Another weakness of health education in India is that despite having a large work force of functionaries that perform health education there is no quality assurance. The system of continuing education is largely non-existent. There are no avenues for promotion of health education functionaries.\textsuperscript{4} The profession is largely disorganized with no association or holding of annual meetings.

Mendis and colleagues\textsuperscript{23} have pointed out weakness of postgraduate medical and health education in India. They observe that training is in apprenticeship style format rather than appraisal style format and selection of assessment tools is not guided by modern educational theory. This is also a weakness of health education in India, where more emphasis on current theories in teaching health education needs to be done.

**Opportunities**

India has a rich cultural heritage and in reaching rural populations folk media (puppets, drama, story telling, and music) provide an effective means.\textsuperscript{10} Most suitable for working with tribal populations appear to be the media of the spoken work, song and drama, games, exhibitions at the weekly market and yearly festivals, and pictorial aids.\textsuperscript{24} There is need to tap into the potential of folk media in health education.

Health educators have not yet tapped perhaps the greatest resources such as religious leaders, traditional healers, and traditional birth attendants (dais).\textsuperscript{10} India is a pluralistic society and there are a vast number of community resources that can be harnessed for health education. There is a need to enhance the involvement of many of these functionaries in health education.

Patient education is in its infancy stages in India. Ill people and family members in a hospital are a captive audience and tend to be receptive to public health messages. Further health workers at clinics and during home visits can inform clients about health.\textsuperscript{10} The setting of worksite-based health education is non-existent in India and needs to be developed more.

Recently, the World Health Organization has introduced the Communication for Behavioral Impact (COMBI) approach based on social marketing principles to the prevention of lymphatic filariasis in India.\textsuperscript{25} There are plans to extend this approach for achieving behavioral impact in combating HIV/AIDS, tuberculosis, and malaria. There is need for more theoretically robust health education interventions.

Some medical colleges have initiated systematic training and application of health education by physicians. For example, the department of community medicine of Kasturba Medical College in India has initiated two programs to train medical interns as health educators.\textsuperscript{26} One of the programs is community center based program where interns systematically undertake needs assessment and then provide health education. The second program is training of school students (aged 9.16) by interns to become school health guides. The training covers the modes of disease transmission, the role of nutrition, environmental health, first aid, lifestyle-related diseases, and the value of yoga as a health-promoting activity. Likewise, All India Institute of Medical Sciences and some other medical colleges have community-based teaching in rural areas that includes emphasis on health education.\textsuperscript{27}

Involvement of family physicians in health education has also been done by a private WONCA Foundation.\textsuperscript{28} Greater systematization of these efforts by all medical colleges would strengthen health education efforts in the country. In India, 136 medical schools admit more than 6,000 postgraduate trainees in their programs.\textsuperscript{29} Involvement of postgraduate physicians in health education would also be quite beneficial.

There is a need to organize health education and health educators in India. A professional organization and a system of credentialing health educators on the pattern similar to United States\textsuperscript{30} would go a long way in strengthening the profession and quality of health education.

**Threats**

Delivery of health education programs as vertical programs relying on techno-managerial approaches has been pointed by some thinkers particularly Banerji\textsuperscript{25} as a potential threat. Banerji\textsuperscript{25} points out that delivery of several programs such as Universal Immunization Program (UIP), control of diarrheal diseases, acute respiratory infections, AIDS, tuberculosis, leprosy, malaria have been a dismal failure because these programs fail to build the essential infrastructure at the grassroots level and merely provide “band-aid” kind of token solutions. In a classic study done in sixties, Banerji & Andersen\textsuperscript{31} found that in the midst of a “behavior change campaign” half of all sputum-positive tuberculosis patients in a community had sought help from health institutions, where they were
summarily dismissed with bottles of useless cough mixture. Banerjee\textsuperscript{25} argues that the situation has not changed much over the last forty years where still the basic health infrastructure in the rural areas is lacking. There is a definitive need to alleviate poverty and improve basic infrastructure in order for health education to be successful.

Health education in the Indian context has been criticized as “motivational manipulation.”\textsuperscript{32} Dorothy Nyswander worked in India as a Ford Foundation consultant for several years. Looking back at her work she wrote, “My efforts were expanded in working out the symptoms of closed societies, the basic conditions giving rise to the symptoms were untouched … Have I actually helped to maintain the status quo in these situations? Have I not taught people to accept those gifts approved by the establishment which would make life more bearable but which would not threaten the power of establishment itself.”\textsuperscript{33} Health education without health promotion or necessary policy, organizational, and regulatory changes has the potential to become a threat in developing countries like India.

Summary And Conclusions

The purpose of this study was to conduct a strengths, weaknesses, opportunities, and threats (SWOT) analysis. A secondary analysis of the published studies from three databases and information from the Internet was done. There are several limitations in this analysis. Firstly, the search was confined to published studies from three data bases and the articles located were somewhat related to the study but none of the articles dealt specifically with the situation of health education in India. Unpublished studies and accounts not found on the Internet were excluded from the analysis. So selection bias would have played a role. Secondly, in some publications there is sometimes a bias of either writing positive aspects or negative aspects and there were very few studies to check as to which was the predominant view in the literature. As a result there could have been a classification bias in the categorization of strengths, weaknesses, opportunities, and threats. Finally, India is a very large country with several micro level projects and efforts in health education. In this analysis it has not been possible to include a comprehensive analysis of successes and failures of these micro projects.

Based on this analysis it was found that there is adequate infrastructure for health education in India but that focuses mainly on information dissemination. There is need and scope for designing theory-based interventions for behavior change. There is high prevalence of both communicable and non communicable diseases and behavior change interventions would be quite useful for the country. There is large trained workforce of health educators in India but they are not organized. An organization and a system of credentialing health educators would go a long way in strengthening promotional avenues, job security, and quality assurance for the public.

Health education is being practiced mainly in community and school settings in India. In the setting of patient education the practice of health education is in its infancy while worksite-based health education is non existent. Health education in India could benefit by extending its services in all the sectors. Finally, health education needs to be practiced in the context of health promotion where organizational, policy, and regulatory changes are made along with behavior change efforts.

References

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