www.ijpm.ir

Role of Private-Public Partnership in Health Education: A Survey of Current Practices in Udaipur City, Rajasthan, India

Jaddu J. Reddy, Suraj Multani, Nagesh Bhat, Ashish Sharma, Sopan Singh, Rahul Patel

Department of Public Health Dentistry, Darshan Dental College and Hospital, Ranakpura Road, Loyara, Udaipur, Rajasthan, India

Correspondence to:
Dr. Jaddu J. Reddy,
Department of Public Health Dentistry, Darshan Dental College and Hospital, Ranakpura Road, Loyara, Udaipur, Rajasthan, India.
E-mail: drjoe218@yahoo.com

Date of Submission: Jan 28, 2012

Date of Acceptance: Apr 26, 2012

How to cite this article: Reddy JJ, Multani S, Bhat N, Sharma A, Singh S, Patel R. Role of private-public partnership in health education: A survey of current practices in udaipur city, rajasthan, india. Int J Prev Med 2013;4:1086-94.

Brief Communication

ABSTRACT

Background: The concept of a public-private partnership (PPP) has been proposed as a potential model for providing education services besides public finance and public delivery. The present study was conducted to survey the current practices of Private-Public Partnership (PPP) in health education in Udaipur city, Rajasthan, India.

Methods: A questionnaire survey was conducted among organizations involved exclusively and actively in health education in Udaipur city, Rajasthan, India. The pretested self designed structured questionnaire consisted of 21 items pertaining to the current practices of private-public partnership (PPP) in health education. Descriptive statistics were used to describe the data.

Results: On the basis of inclusion criteria, 50 personnel from 2 private dental colleges, 1 private medical college, 2 Non Government Organizations (NGOs) and 1 health museum were selected. Only 15 (30%) of participants agreed that they have a written reference policy that outlines the services they provide to the general public. Regarding the collection of health education materials available, majority 35 (70%) had printed books followed by audio visual (AV) materials (slides, videos, audio cassettes) [22 (44%)]. 35 (70%) of participants reported that they loan only pamphlets and broachers to the public. Thirty four (68%) of participants provide information about oral health. Only 23 (46%) of participants reported that their institution/organization undergo periodic evaluation.

Conclusions: Results of this survey show that that most of the PPP were involved in delivering health education, mostly concentrated on general health. Only few of them were involved in oral health education. The role of PPP in health education is integral to the effort of promoting a healthier population. This effort continues the trend and broadens the scope of involvement for further studies.

Keywords: Health education, public-private sector partnership, role

INTRODUCTION

"To address emerging threats to health, new forms of action are needed. There is a clear need to break through

traditional boundaries within government sectors, between governmental and nongovernmental organizations, and between the public and private sectors. Cooperation is essential; this requires the creation of new partnerships for health, on an equal footing, between the different sectors at all levels of governance in societies".[1]

Globalization has been accompanied by a reassessment of the strengths and limitations of public/governmental, private/commercial, and civil society institutions in grappling with world problems. Particularly in the health arena it seems to be recognized that intractable problems require not just better coordination of traditional roles but also new ways of working together in order to achieve a synergistic combination of the strengths, resources, and expertize of the different sectors.[2] According to the United Nations Development Program (UNDP), the broadest definition of PPPs includes agreement frameworks, traditional contracting, and joint ventures with shared ownership.[3] Public-private partnerships are being increasingly encouraged as part of the comprehensive development framework.[4] The concept of a public-private partnership (PPP) recognizes the existence of alternative options for providing education services besides public finance and public delivery.[5]

In the last two decades, there has been a growing concern over the performance of the health care delivery system in India. A number of Public-private partnerships (PPPs) have entered the arena of health care delivery.[6] Health spending in India at around 4.8% of GDP is not considered at par with spending in Organization for Economic Co-operation and Development member countries. Therefore, while there has been considerable success in developing physical infrastructure and coverage of primary health care provision, significant challenges remain across the country in health care provision, especially in terms of accessibility, coverage, rural areas, ineffective management, and inadequate quality and availability of health care professionals. Public-private partnership (PPP) models have been successful internationally in helping alleviate some of these challenges. A number of PPP models have been proposed for the health care sector.[7] The Potential public-private partnership models in health care are: (1) Primary Healthcare Center Adoption, Management Contracts, and Mobile Clinics, (2) Build, Own, and Operate Diagnostic Centers, (3) Hospital Private Finance Initiative (PFI) Scheme.[7]

Health education in India has a long history, however its formal integration into health services is less than fifty years old.[8] Health education is a fundamental necessity in a welfare state. People need health education consistently. Formal programs in health education did not develop until recent times in India and other developing nations.[9] World Health Organization defines it thus: "Health education is the part of health care that is concerned with promoting healthy behavior".[10] The mandate of health educators in India is to bring about changes in health behaviors on both the individual and community levels as agents of social changes.[8] NGOs and other professional organizations have joined with government agencies all around the country to improve health education.[11] Hence, the aim of the present study was to survey the current practices of private-public partnership (PPP) in health education in Udaipur city, Rajasthan, India.

METHODS

Study design and study population

The cross-sectional self administered structured questionnaire survey was conducted during the months of September and October 2010 among organizations involved exclusively and actively in health education in Udaipur city, Rajasthan, India.

Study sample

The organizations were selected on the basis of following criteria: (1) Should come within the definition of private- public partnership. (2) Be exclusively and actively involved in health education activities. The organizations selected for the study were: (1) Narayan Sewa Sansthan, Trust, Udaipur, Rajasthan.(Health Museum) (2) Seva Mandir, Udaipur, Rajasthan. (Health Library) (3) Arth, Udaipur, Rajasthan,(NGO). (4) Department of Preventive and Social Medicine, Geetanjali Medical College and Hospital, Udaipur, Rajasthan. (Private Medical College) (5) Department of Preventive and Community

Dentistry, Pacific Dental College and Hospital, Udaipur, Rajasthan. (Private Dental College) (6) Department of Preventive and Community Dentistry, Darshan Dental College and Hospital, Udaipur, Rajasthan. (Private Dental College) All the personnel from the above institutions (those who were present at the time of the survey and those who were actively involved in health education) were selected for the survey.

Sampling tool

Ethical clearance

The ethical clearance was obtained from the ethical committee of Darshan Dental College and Hospital Loyara, Udaipur, Rajasthan, India.

Permission from consent authorities

Prior to study concern authorities were approached, explained the nature of the study and permission sought.

Informed consent

The written informed consent was obtained from the participants.

Proforma

The 21 item self designed structured questionnaire pertaining to current practices of private-public partnership (PPP) in health education (such as source of finance, beliefs about private-public partnership in relation to government sector, services for general public, collection of people oriented materials, delivery of information regarding oral health and promotion of use of library/museum) was used.

Pilot study and pretesting of questionnaire

The questionnaire was pretested in a pilot survey comprising of 06 (20%) participants. Kappa (*k*), weighted kappa (*kw*) were used to evaluate the test-retest reliability of the questionnaire and internal consistency was assessed by Cronbach's alpha (*a*) coefficients ($k = 0.86$), ($kw = 0.9$) ($a = 0.78$). Single trained interviewer described the purpose and process of the survey to the participants and gave standardized instructions for completing the questionnaire.

QUESTIONNAIRE DISTRIBUTION AND COLLECTION

The questionnaire was distributed among all the designated people in these organizations who were actively involved in provision of health education. The questionnaires were collected back by the following day. The questionnaires were checked for completeness and partially filled questionnaires were returned back to the study participants to complete it.

Data compilation and statistical analysis

The data was compiled systematically, transferred from a pre-coded proforma to a computer and a master table was prepared using Microsoft Excel 2007. Data was statistically computed by using simple descriptive statistics.

RESULTS

Out of total 54 personnel from 1 health museum, 1 health library, 1 NGO, 2 private dental colleges, 1 private medical college; 50 participants completed and returned the questionnaire resulting in a 93% response rate.

Table 1 shows the knowledge about private-public partnership, finance and funding of projects. Majority [42 (84%)] of participants reported that their institution and organization is a type of PPP. Seventeen (34%) of participants had long-term loans (restricted to large, corporate, non-profit organizations) as the source of finance for their PPP. In the present study, 37 (74%) of participants have currently have or had in the past, a well-defined or longstanding relationship, with a non health sciences library or other agency to provide consumers with health information. Majority [25 (67.5%)] of participants reported that these health projects/programs were supported through funding by each partner followed by grant fund [17 (45.9%)].

Table 2 shows the beliefs about private-public partnership in relation to government sectors. In the present study, 35 (70%) of participants reported that they had knowledge about Government Organization providing health education. Majority [49 (98%)] of participants believe that private-public partnership is better than government initiatives. While 46 (92%) of participants believe that private sector is intrinsically superior at delivering goods and services.

Table 3 shows the target group in health education by private-public partnership. All [50 (100%)] of participants had reported that

Table 1: Knowledge about private-public partnership, finance and funding of projects

	N (%)	Total *N* (%)
Q1. Is your institution/ organization a type of PPP?		
Yes	42 (84)	50 (100)
No	08 (16)	
Q2. What is the source of finance for your PPP? (please check all will apply)		
Central government	05 (10)	50 (100)
State government	04 (08)	
Local government	03 (06)	
Public sectors banks	04 (08)	
NGO'S	0 (0)	
Publicly guaranteed or subsidized bonds	0 (0)	
Private finance with a government guarantee (or quasi-guarantee)	0 (0)	
Retained earnings	06 (12)	
Donations	15 (30)	
Long-term loans (restricted to large, corporate, non-profit organizations)	17 (34)	
Q3. Does your institution/ organization currently have, or have you had in the past, a well-defined or longstanding relationship, e.g., a grant funded program, with a non-health sciences library or other agency in your community to provide consumers with health information?		
No	13 (26)	50 (100)
Yes	37 (74)	
Q4. If yes, how are (were) these projects/programs supported? (Please check all that apply)		
Grant funded	17 (45.9)	37 (100)
Community funded	06 (16.2)	
Institutionally funded by each partner	25 (67.5)	
Institutionally funded by one partner	0 (0)	
Other	0 (0)	

N=Number, %=Percentage, PPP=Private-public partnership

Table 2: Beliefs about private-public partnership in relation to Government sector

	N (%)	Total *N* (%)
Q5. Do You know about any Government Organization providing health education?		
Yes	35 (70)	50 (100)
No	15 (30)	
Q6. Do you believe that private-public partnership is better than government initiatives?		
Yes	49 (98)	50 (100)
No	01 (02)	
Q7. Do you believe that private sector is intrinsically superior at delivering goods and services?		
Yes	46 (92)	50 (100)
No	04 (08)	

N=Number, %=Percentage

Table 3: The target group in health education by private-public partnership

	N (%)	Total *N* (%)
Q8. Does your institution/ organization provide service to the general public?		
Yes	50 (100)	50 (100)
Yes to specific groups	0 (0)	
No	0 (0)	
Q9. Do you have a written reference policy that outlines services you will provide the general public?		
Yes	15 (30)	50 (100)
No	35 (70)	
Q10. Are general public included in your mission statement?		
Yes	15 (100)	15 (100)
No	0 (0)	

N=Number, %=Percentage

their institution/Organization provide services to general public. Only 15 (30%) of participants had reported that they have a written reference policy that outlines services they will provide the general public.

Table 4 shows practices of private-public partnership regarding their collection of health education materials. All 50 (100%) of participants reported that their Institution/Organization house a collection of people oriented materials and had

plans to add more materials to their collection or expand their existing collection, in the near future. Majority of 35 (70%) participants reported that they have printed books in their collection followed by audio visual (AV) materials (slides, videos, audio cassettes) [22 (44%)]. 35 (70%) of participants will loan only pamphlets and broachers to the public.

Table 5 shows current practices of private-public partnership regarding delivery of information of oral health. In the present study, 34 (68%) of participants provide information about oral health. Among which 23 (67.6%) of participants covered topics related to oral cancer/harmful effects of tobacco. While 01 (2.9%) of participants had covered infant oral care and levels of prevention, respectively. Among the study participants, 18 (52.9%) of participants use Oral and Audio-Visual aids and 04 (11%) of participants performed skits to deliver information about oral health.

Table 6 shows the current practices of private-public partnership regarding provision of feedback, periodic evaluation and promotion of use of library/museum. Among the study participants, 40 (80%) of participants had provision for feedback from the public, 23 (46%) of participants reported that their institution/Organization undergoes periodic evaluation, 30 (60%) of participants had their institution/Organization actively solicit or promote public use of their library/museum and 20 (66.6%) of participants had promoted the public use of their institution's/organization's library/museum through meeting with the various community groups.

Table 4: Collection of health education materials

	N (%)	Total *N* (%)
Q11. Does your Institution/ Organization house a collection of people oriented materials?		
Yes	50 (100)	50 (100)
No	00 (00)	
Q12. What is included in this collection? (Please check all that apply)		
Print books	35 (70)	50 (100)
AV materials (slides, videos, audiocassettes)	22 (44)	
Electronic resources, e.g., database such as health reference center	10 (20)	
Other	04 (08)	
Q13. Which of the following materials will you loan to the public? (Please check all that apply)		
None	00 (00)	50 (100)
Print books	25 (50)	
Only pamphlets and broachers	35 (70)	
AV materials	10 (20)	
Other	00 (00)	
Q14. Do you plan to add more materials to your collection or expand your existing collection, in the near future?		
Yes	50 (100)	50 (100)
No	00 (00)	

N=Number, %=Percentage

DISCUSSION

Widdus urges one to view public-private partnerships as social experiments that are attempting to learn how to tackle intractable health problems in better ways.[2] In the present study, 08 (16%) of participants failed to recognize that their institution and organization is a type of PPP.

Table 5: Current practices of private-public partnership regarding delivery of information of oral health

	N (%)	Total *N* (%)
Q15. Do you provide information about oral health?		
Yes	34 (68)	50 (100)
No	16 (32)	
Q16. If yes: which topics are covered?		
Comprehensive oral health	03 (8.8)	34 (100)
Dental caries and periodontal diseases	17 (50)	
Oral cancer/harmful effect of tobacco	23 (67.6)	
Infant oral care	01 (2.9)	
Oral hygiene maintenance	15 (44.1)	
Levels of prevention	01 (2.9)	
Q17. Aids used		
Oral and audiovisual aids	18 (52.9)	34 (100)
Posters and pamphlets	10 (29.4)	
Power point	06 (17.6)	
Skits	04 (11.7)	

N=Number, %=Percentage

Table 6: Provision of feedback, periodic evaluation and promotion of use of library/museum

	N (%)	Total *N* (%)
Q18. Have you any provision for feedback from the public?		
Yes	40 (80)	50 (100)
No	10 (20)	
Q19. Does your institution/ Organization undergoes periodic evaluation		
Yes	23 (46)	50 (100)
No	27 (54)	
Q20. Does your institution/ Organization actively solicit or promote public use of your library/museum?		
Yes	30 (60)	50 (100)
No	20 (40)	
Q21. If yes, how? (please check all will apply)		
Advertise	00 (00)	30 (100)
Encourage affiliated health professionals to refer patients to the library	00 (00)	
Encourage public and other libraries to refer public to you	05 (16.6)	
Meet with community groups	20 (66.6)	
Others	07 (23.3)	

N=Number, %=Percentage

This may be due to lack of awareness about PPP, and what types of organizations come under the definition of PPP.

To evaluate PPPs, it is important to understand the actual policy-making and implementation processes so as to maximize their health benefits. By building on these actions, collaborative efforts between the public and private sectors would yield added value.[12] In many countries, governments have managed to mobilize private investment to finance needed capital stock in utilities and other public services.[5] Financing determines the efficiency and effectiveness of a health care system. The nature of financing determines a system's structure and incentives, drives the behavior of different stakeholders, and ultimately the quality of outcomes.[7] In the present study, about 1/3rd [17 (34%)] of participants had long-term loans (restricted to large, corporate, non-profit organizations) as the source of finance for their PPP, which was followed by donations [15 (30%)]. In terms of health expenditure, National Health Account framework (NHA) reported that has central government (7.2%), state government (14.4%), and local government (2.2%), public sector banks (0.2%), NGO (90.3%) together spending about 1/4th of the total health expenditure.[13]

In the present study, 49 (98%) of participants believed that PPP is better than government initiatives and 46 (92%) of participants believed that private sector is intrinsically superior at delivering goods and services. The reason behind that may be due to belief that the constraints on government borrowing, and a reluctance to increase taxes or charges, projects such as new schools and hospitals could not go ahead at all without PPPs. The second key assertion is that PPPs are better because somehow they do not cost the public, or the public sector, anything. This myth takes various forms: The idea that the public – or the public authorities – do not have to pay for schools or hospitals developed by PPPs; the idea that the government or municipality will have more money left to spend on other services; and the idea that PPPs mean a reduction in borrowing. But in PPPs like hospitals or schools, the government pays for the cost of the PPP from taxation – by paying for the cost of construction, and then the cost of running the service. So, PPPs are paid for by the public sector in just the same way as projects carried out directly by public authorities. The final claim is that the private sector is more efficient in all areas than government and public sector employees. These assumptions are false. And empirical evidence shows that the private sector is not overall more efficient than the public sector.[14]

Only a handful of studies were found that report on policies and practices of health sciences libraries as a whole in providing access or service to the general public. In the mid-1970s, at the beginning of the consumer health movement, Jeuell and colleagues surveyed publicly and privately supported libraries associated with medical schools listed in the American Association of Medical Colleges Directory (1975-76) to determine whether they provided access and, primarily, reference service to the general public. At that time, they found more than 90% of respondents from both publicly supported and privately supported academic health sciences libraries provided access to *some* or *all* of the general public.[15,16] In the present

study, 50 (100%) of participants had reported that their institution/Organization provide services to the general public. Several years later, in an effort to understand public access policies of medical libraries better, Schell conducted a survey of the largest medical library in each state. This survey included both hospital and academic health sciences libraries. The then current Directory of Health Science Libraries in the United States was used to identify this sample. Schell found while 91% of respondents provided access to the public, only 20% provided the public with full service.[17]

In their 1988 publication, Landwirth and colleagues,[18] offered several suggestions for maintaining the balance between meeting the needs of the general public and fulfilling their obligation to their primary clientele, including scheduling hours around primary users needs, setting reference guidelines to ensure that primary users receive top priority, implementing charges for certain services beyond basic level reference assistance, and placing increased emphasis on training library staff in providing reference assistance. They also suggested that those academic medical libraries without written reference services guidelines were vulnerable and in danger of letting outside demand overshadow the university's obligation to its primary clientele. In the present study, only 15 (30%) of participants has a written reference policy that outlines services you will provide the general public. And, all 15 (100%) participants had general public included in their mission statement.

Pertaining to the type of health education materials, 50 (100%) of participants reported that their Institution/Organization house a collection of people oriented materials and had plans to add more materials to their collection or expand their existing collection, in the near future. In a survey of a health science library, Hollander SM,[19] reported that a significant number of surveyed libraries (44.4% private and 36.5% public) housed a collection of consumer-oriented resources. Almost half of the libraries (48.6% private and 44.3% public) indicated they planned to add consumer materials to an existing collection or develop a consumer health collection in the near future.

Circulation practices were also examined. In a survey, Hollander SM reported that 35 (61.4%) and 5 (13.9%) institution/library circulated print books to the public.[19] In the present study, 35 (70%) of participants will loan only pamphlets and broachers to the public. Twenty five (50%) and 10 (20%) will loan printed books and AV materials to the public.

According to Malamborg R *et al*. most PPPs are currently poorly regulated as developing countries do not have the resources to monitor the quality of health services provided.[20] Buse and Waxman state that an organization should draw lessons from its own experience of partnership and develop indicators of success.[21] In the present study, 23 (46%) of participants reported that their institution/organization undergoes periodic evaluation.

The data of present study revealed that 34 (68%) of participants were providing information about oral health. Among which 23 (67.6%) of participants covered topics related to oral cancer/harmful effects of tobacco. Eighteen (52.9%) of participants use Oral and Audio-Visual aids. Over the past two decades, health information has expanded exponentially.[19] A new development started, around 1900 where popular health education was given by visual means.[22] In the present study, one organization had even adopted a newer innovative technique; the health education train to deliver the information to general people.

In the mid-l980s, Paterson conducted a review of the literature to determine the level and type of health information available to the lay person and urged all libraries to take a more active role in providing health information to the general public. In her report, she stated, "Medical libraries do not encourage public use of their collections and usually refer questions to the public library".[23] While the vast majority 30 (60%) of participants had reported that their institution/Organization actively solicit or promote public use of their library/museum. 20 (66.6%) of participants had promoted the public use of their institution's/organization's library/museum through meeting with the various community groups. In the survey done by Hollander SM, it was reported that promotion was accomplished in a number of ways. Almost all encourage public and other libraries to refer patrons to them; two-thirds encourage affiliated health professionals to refer patients to them; and half meet with community groups, advertise their services, work with patient education committees, offer workshops or seminars, or promote use of their library via a web page.[19]

The present study was an attempt to comprehensively survey the current practices of private-public partnership (PPP) in health education in Udaipur city, Rajasthan, India. Comparison of the present study with other data groups is difficult due to the paucity of literature/availability of similar studies.

CONCLUSIONS

The importance of education cannot be overemphasized. Education participates critically in building individual endowments and abilities, and it drives social and economic development at the national level. Health education encompasses all strategies and activities, which are meant of the attainment of better health status of the people. The results of the present study revealed that most of PPP were involved in delivering health education mostly concentrated on general health. Only few of them were involved in delivering oral health education. Majority of them housed printed books and AV materials in their collection. One organization had even adopted an innovative health education train to deliver information to the health information-seeking public. Implementation requires long-term commitment. There is the need to continue these efforts in future prospects of involvement of PPP in health education.

ACKNOWLEDGMENTS

We sincerely thank Dr. Shital Hungund (Principal of Darshan Dental College and Hospital, Loyara, Udaipur, Rajasthan, India) and most importantly the study participants who participated in the survey.

REFERENCES

1. Jakarta declaration on leading health promotion into the 21st Century. WHO 1997. (The Fourth International Conference on Health Promotion: New Players for a New Era-Leading Health Promotion into the 21st Century, meeting in Jakarta from 21 to 25 July 1997). Available from: http://www.who.int/hpr/NPH/docs/jakarta declaration en.pdf. [Last retrieved on 2010 Nov 02].
2. Widdus R. Public-private partnerships for health: Their main targets, their diversity, and their future directions. Bull World Health Organ 2001;79:713-20.
3. Thomas A, Curtis V. Public-private partnerships for health: A review of best practices in the health sector. Washington DC: World Bank, 2003:2-11. Available from: www.bvsde.paho.org/bvsacd/cd27/private.pdf. [Last retrieved on 2010 Nov 03].
4. Nishtar S. Public-private 'partnerships' in health-a global call to action. Health Res Policy Syst 2004;2:5.
5. Patrinos HA, Osorio FB, Guáqueta J. The role and impact of private-public partnership in education. Washington DC: The World Bank e-library, 2009:1-97. Available from: www.ungei.org/files/Role_Impact_PPP_Education.pdf - United States. [Last retrieved on 2010 Nov 03].
6. Birla B, Taneja U. Public private partnerships for health care delivery in India: Assessing efficiency for appropriate health policies. Internet J World Health Societal Politics 2010;7:1-17. Available from: http://www.ispub.com/health/public-private-partnerships-for-healthcare-delivery-in-india.html. [Last retrieved on 2010 Nov 02].
7. Mehta A, Bhatia A, Chatterjee A. Improving health and education service delivery in India through public–private partnerships. PPP knowledge series under the ADB–Government of India PPP Initiative. Asian Development Bank; 2010. p. 1-95. Available from: http://www.adb.org//health-education-delivery-india/health-education-delivery-india-ppp.pdf. [Last retrieved on 2010 Nov 02].
8. Hiramani AB, Sharma N. Health educators in India: A profile. Hygie 1989;8:34-7.
9. Mahesh Chandra Guru BP, Sapna MS, Madhura Veena ML. Health education in India: India news service. Available from: http://www.whatisindia.com/./wis20050209 healtheducation in indiachandraguruetalmysorevarsity.html. [Last retrieved on 2010 Nov 03].
10. Education for Health- A Manual on Health Education in Primary Health Care. Geneva: WHO; 1988. Available from: http://www.greenstone.org/greenstone3/nzdl;jsessionid. [Last retrieved on 2010 Nov 03].
11. Country Health Profile- India. Geneva: WHO; 2002. p. 1-20. Available from: http://www.searo.who.int/LinkFiles/India_india.pdf. [Last retrieved on 2010 Nov 02].
12. Widdus R. Public–private partnerships for health require thoughtful evaluation. Bull World Health Organ 2003;81:235.
13. Rao KS, Salveraju S, Nagpal S, Sakthivel S. Financing and Delivery of Health Care Services in India. Ministry of Health and Family Welfare: New Delhi. 2005. p. 239-55. Available from: http://www.whoindia.org/./Commision_on_Macroeconomic_and_Health_Financing_of_Health_in India.pdf. [Last retrieved on 2010 Nov 02].
14. Hall D. Public private partnerships (PPPs) summary paper. A report commissioned by the European Federation of Public Service Unions (EPSU). PSIRU University of Greenwich; London 2008. p. 1-26. Available from:http://

www.psiru.org/reports/2008-11-PPPs-summ.pdf. [Last retrieved on 2010 Nov 02].
15. Jeuell CA, Francisco CB, Port J. Public information services at state-supported medical school libraries: A brief survey. Bull Med Libr Assoc 1976;64:415-7.
16. Jeuell CA, Francisco CB, Port JS. Brief survey of public information services at privately-supported medical school libraries: Comparison with publicly-supported medical school libraries. Bull Med Libr Assoc 1977;65:292-5.
17. Schell C. Preventive medicine: The library prescription. Libr J 1980;108:929-31.
18. Landwirth TK, Wilson ML, Dorsch J. Reference activity and the external user: Confluence of community needs at a medical school branch library. Bull Med Libr Assoc 1988;76:205-12.
19. Hollander SM. Providing health information to the general public: A survey of current practices in academic health sciences libraries. Bull Med Libr Assoc 2000;88:62-9.
20. Malmborg R, Mann G, Thomson R, Squire BS. Can public-private collaboration promote tuberculosis case detection amongst the poor and vulnerable? Bull World Health Organ 2006;84:752-8.
21. Buse K, Waxman A. Public-private health partnerships: A strategy for WHO. Bull World Health Organ 2001;79:748-54.
22. Gebhard B. Health museum as a visual aid. Bull Med Libr Assoc 1947;35:329-33.
23. Paterson ER. Health information services for lay people: A review of the literature with recommendations. Ref Libr 1986;16:141-9.

Source of Support: The present study was self funded,
Conflict of Interest: None declared.