

# AWARENESS AND ATTITUDE OF MEDICAL COLLEGE LIBRARIANS TOWARDS HEALTH INFORMATION LITERACY IN PUNJAB AND CHANDIGARH

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**Abstract** Health information literacy (HIL) is essential for seeking preventive health, appropriate management of disease and improving the well-being of citizens as a whole. Health information literacy empowers the stakeholders with cognitive and social skills to gain access to, understand, evaluate, and use information to make good health decisions. The present study was undertaken to learn about the awareness and attitude of medical college librarians toward health information literacy; to know about the medical college librarians' perceptions of HIL promotion strategies; and to identify barriers to health information literacy. The librarians from 10 medical colleges and institutes from Punjab and Chandigarh were chosen as sample for this study. A structured questionnaire was designed and administered among librarians. The findings of the study are discussed and suggestions are also provided to strengthen HIL in medical college community.

**Keywords:** Health Information Literacy, Medical College Librarians, HIL Promotion Strategies, Barriers to HIL

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## INTRODUCTION

Health is an essential aspect of human life. For healthy living, health information is important. The healthcare system is also becoming "patient-centric" as it involves the active involvement of the patients and their family members in making decisions related with medical treatment. Sound health decision depends upon the quality of health information. Vast amount of health related information is available on the internet today and people are facing the problem of information overload. Today health information is everywhere. Getting the right information can be difficult (Medical Library Association, 2005). The information explosion and the rapid advancement in the information communication technology have made it essential for every individual to evaluate the information before putting it to use. Kickbusch (2008) pointed that today's health conscious consumer is deluged with information from various sources: news media, health institutions and organisations, peer reviewed literature, self-help books, health associations, healthcare providers, government health organisations, popular media, friends and family, and the Internet. Also, most of the people have problem in understanding health information. The developed countries are facing a critical new challenge in the 21st century: helping people understand and use health information (Medical Library Association, 2005). Same is true for the developing countries too. The health

information literacy can be a potential filter for information deluge and librarians can play a vital role to empower people with health information literacy.

## HEALTH INFORMATION LITERACY

Health information literacy (HIL) as defined by the Medical Library Association is the set of abilities needed to recognise a health information need; identify likely information sources and use them to retrieve relevant information; assess the quality of information and its applicability to a specific situation; and analyse, understand, and use the information to make good health decision. HIL is essential for seeking preventive health, appropriate management of disease and improving the well-being of citizens as a whole.

The libraries and librarians are recognised as the chief promoters of health information literacy around the world. The libraries especially the medical and the public libraries are the significant contributors of HIL. According to Medical Library Association, medical libraries are specialised information centers with librarians trained to search the best and most current information. Medical librarians have the training needed in any healthcare team. They are expert searchers and can help make their communities healthier. Medical and consumer health librarians can help navigate and evaluate health information. Medical libraries which fall under the category of special libraries are engaged in serving

the medical professionals. These libraries are an important part of teaching, research, clinical practice, and healthcare delivery around the world.

In India, there is a strong network of medical college libraries with the National Medical Library at the apex. The medical libraries are found in the medical colleges/ institutes only and these are catering to the needs of the medical professionals. The services of these libraries are restricted to health professionals and are not defined in context of patients' information needs. These libraries possess the resources and the library professionals possess the knowledge and skills to provide health information not only to the medical professionals but patients and their family members as well. The librarians as information professionals are more informed and literate about various resources, aware of the resources which are perhaps better than the open access internet based information. Also, they possess the skills to analyse, evaluate and filter information from the ocean of information that is apt for an individual. As we are living in the information age and people have become more conscious about their health, there is an increased demand of health information. So, the medical librarians need to develop their skills and competencies to empower their users with HIL.

Also medical science progresses rapidly and medical information grows at an explosive rate. The health professionals need to be aware of rapid advancements in their fields. The medical libraries are already providing access to a vast number of resources but the health professionals need to know how to use them and get the best out of these. In the medical profession, information skills are taught at various levels as the medical professionals are confronted with information. Similarly, medical professionals should themselves be empowered with health information literacy so that they can serve their communities in a better way. The medical librarians are the promoters of health information and can play a pivotal role in empowering medical professionals as well as people with health information literacy. The librarians are in the position to help people learn how to evaluate health information for its quality. An attempt is made in this study to explore the awareness, attitude and perceptions of medical librarians towards health information literacy. The study also highlights the role played by the medical college librarians in HIL and suggests measures that the medical college librarians can take in promoting HIL among health professionals.

## REVIEW OF LITERATURE

Numerous studies have been undertaken on health information literacy at international level, but there is paucity of literature in India on this concept. An attempt is made to cover few studies which highlight the role of medical librarians towards health information literacy.

Ghosh (2013) studied the initiatives taken for health information literacy in India. He opines that the development of health literacy is possible by ensuring quality information and the understanding of the information. The author laments on the healthcare divide in India. He highlighted various projects and initiatives undertaken by government as well as NGOs to spread preventive healthcare information in India. He proposes that the public libraries should take a lead in developing partnerships/ consortia with medical libraries to ensure that access to healthcare information is readily available across the country.

Gavani (2011) conducted an exploratory study of librarians and examined the information therapy (Ix) services rendered in hospital/ medical libraries in Iran and India, identified the role of librarians in providing health information to patients in the context of information therapy (Ix) services, and the problems and prospects for providing Ix services in hospital/ medical libraries. The study reveals that these services are rendered in the hospital/ medical libraries of Iran and India, formally and informally but there are various obstacles for librarians in rendering Ix services in both countries. It highlights that hospital and medical libraries can play a vital role in providing these services to patients as well as healthcare providers.

Shipman and Funk (2009) studied the role of librarian as health literacy educator for both healthcare providers and consumers. The paper presents an overview of health literacy and discusses the development and evaluation of HIL curriculum which can be used by librarians for better fulfillment of their educational role in health and health information literacy. The study highlights that the librarians can serve as cost-effective health literacy educators by enlightening patients, consumers and healthcare providers about the importance of health literacy and the information resources available on health.

Cobus (2008) reviewed the core competencies for public health professionals presented in the Institute of Medicine's (IOM) report. He describes improving information literacy as a mechanism for integrating core competencies in public health education and showcases IL as an opportunity for strengthening partnership between academic librarians and public health educators. The study stresses that the librarians can play a fundamental role in implementation of IOM's core competencies in shaping public health education for the twenty first century. Librarians and public health faculty can work in collaboration to implement IL into the curriculum so that the upcoming generation of public health professionals is educated to address future health information related problems.

Kloda (2008) describes the importance of teaching health information literacy to health professionals and states that the librarians can and should take the opportunity to integrate the subject of health information literacy into medical curricula.

Burnham and Peterson (2005) discussed the role which libraries can play in the dissemination of simple language and easy-to-read health information to the general public. Libraries and librarians can contribute to the health of their communities through their involvement with health literacy initiatives and by keeping literacy issues at the forefront. Libraries can work with organisations in their communities to improve the accessibility of materials.

Deering and Harris (1996) while summarising the findings of the U.S. Department of Health and Human Services commissioned preliminary assessment of consumer health information demand and delivery highlight the scope of consumer health information, patterns of consumer interests and needs and sources of consumer health information. The study reveals that the first source of information about specific health problems is usually a physician or librarian. The article concludes that public and medical libraries play a significant role in disseminating health information and suggest a new role for libraries as consumer health information providers and interpreters.

## OBJECTIVES OF THE STUDY

The present study focused upon the following objectives:

1. To learn about the medical college librarians' awareness and attitude towards health information literacy.
2. To know about the medical college librarians' perceptions of HIL promotion strategies.
3. To identify barriers to health information literacy.

## SCOPE AND LIMITATION OF THE STUDY

Presently, there are 10 medical colleges/ institutes in Punjab, and one medical college and one postgraduate institute in the Union Territory of Chandigarh. In addition to these, there is large number of institutions in the related disciplines. Out of these 12 medical colleges/ institutes, 10 were selected for the present study. The study is limited to librarians of these ten medical colleges. The selected medical college/institute libraries of Punjab and Chandigarh are listed below:

1. Adesh Institute of Medical Sciences and Research, Barnala Road, Bathinda
2. Christian Medical College and Hospital, Brown Road, Ludhiana
3. Dayanand Medical College and Hospital, Civil Lines, Ludhiana
4. Gian Sagar Medical College, Banur, Patiala
5. Government Medical College and Hospital, Sector-32, Chandigarh
6. Government Medical College, Circular Road, Amritsar
7. Government Medical College, Patiala

8. Guru Gobind Singh Medical College and Hospital, Faridkot
9. Postgraduate Institute of Medical Education and Research, Sector-12, Chandigarh
10. Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar

## RESEARCH METHOD USED

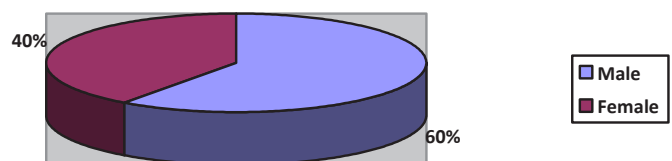
This study is based on survey method of research. A structured questionnaire was designed, developed and used for data collection. Population sample consisted of 10 librarians of 10 medical colleges/ institutes of Punjab and Chandigarh. All the ten librarians (100%) returned the duly filled-in questionnaires as the questionnaires were administered personally. The complete and duly filled in questionnaires were thoroughly analysed using appropriate techniques, and presented with the help of tables, pie charts, and bar graphs.

## DATA ANALYSIS AND INTERPRETATION

The data collected is analysed and results of the study are discussed below:

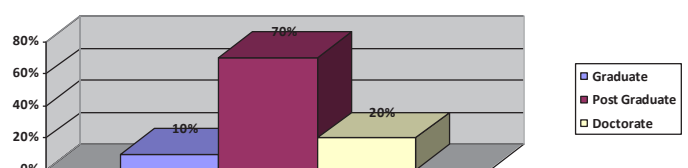
### DEMOGRAPHIC PROFILE OF LIBRARIANS

The introductory part of the questionnaire was an attempt to seek general information about librarians regarding their gender, age, educational qualification, total experience and the type of institution where they are working. This demographic information is analysed and presented below.



**Fig 1: Gender-wise Distribution**

Fig. 1 shows the gender-wise distribution of medical college librarians. Out of ten librarians, 60% are male and remaining 40% are female.



**Fig. 2: Educational Qualification**

The librarians were also divided on the basis of their educational qualification into three categories i.e. graduate, post-graduate, and doctorate. It can be seen from Fig. 2 that majority of librarians (70%) were post-graduate. The doctoral degree was possessed by 20% of librarians and 10% librarians had done graduation only.

**Table 1: Demographic Profile of Librarians**

Age Wise Distribution		
30-39 years	03	30
40-49 years	04	40
50 & above	03	30
Total	10	100
Total Experience		
Less than 10 years	01	10
10-19 years	06	60
20 & above	03	30
Total	10	100
Type of Institution Where Working		
Government	05	50
Private	05	50
Total	10	100

The librarians were grouped into three age groups and it was found that 40% fall in the age group of 40-49 years, 30% belong to 30-39 years, and equal number i.e. 30% come in the age group of 50 & above. The table above also reveals the working experience of the librarians under study and it was found that majority of them (60%) hold an experience of 10-19 years, 30% have experience of 20 years & above. Only 10% hold experience of less than 10 years. The librarians were categorised on the basis of type of institution where they are working and it was found that 50% belong to government institutions and remaining 50% to private institutions.

### Information Literacy (IL) Awareness and Perception

Librarians of the medical colleges under study were asked about their awareness and perceptions of Information Literacy. The responses received are presented in Table 2.

**Table 2: IL Awareness and Perception**

IL Awareness	%	
Aware	10	100
Not aware	00	00
Total	10	100

IL Awareness	%	
IL Perception (Multiple Options)		
Reading literacy	00	00
Information search skills	01	10
Computer literacy	00	00
Digital literacy	00	00
Network literacy	00	00
Cultural literacy	00	00
All of these	09	90

It was interesting to find that all the librarians (100%) are aware of information literacy (IL). Majority of the librarians (90%) said that information literacy deals with reading literacy, information search skills, computer literacy, digital literacy, network literacy, and culture literacy. Only 10% of them confined information literacy to information search skills, which is just one component of the umbrella term information literacy.

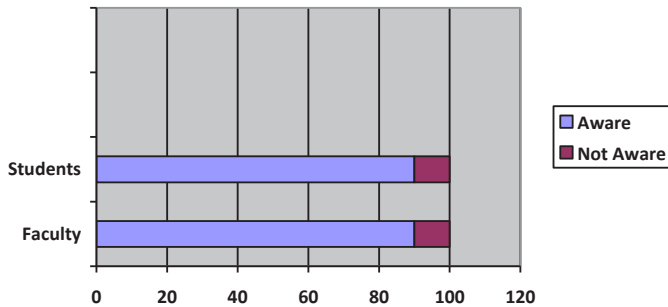
### HEALTH INFORMATION LITERACY (HIL) AWARENESS, NEED, AND PERCEPTION

The librarians' awareness, need and perception of HIL are shown in Table 3.

**Table 3: HIL Awareness, Need, and Perception**

HIL Awareness	%	
Aware	10	100
Not aware	00	00
Total	10	100
HIL Need (Multiple Options)		
Effective management of health conditions	08	80
Discussions with the health professionals	08	80
Reading and understanding health information	09	90
Ability to use healthcare equipment (e.g. thermometer, BP monitoring machines, etc.)	05	50
Understanding medical prescription labels	05	50
Increased patient awareness	07	70
Increased patient doctor participative decision making	06	60
Improved health outcomes	04	40
Increased service quality	05	40
Decreased medical negligence and errors	05	50
No response (NR)	01	10

It was encouraging to know that all the librarians (100%) under study are aware of HIL. The librarians were then asked about the need for HIL and it was found that majority (90%) of them agreed that HIL is needed for reading and understanding health information. Also 80% felt that it is needed for effective management of health conditions and discussions with health professionals. Increased patient awareness was attributed by 70% of the respondents and 60% felt that it is needed for increased patient doctor participative decision making.

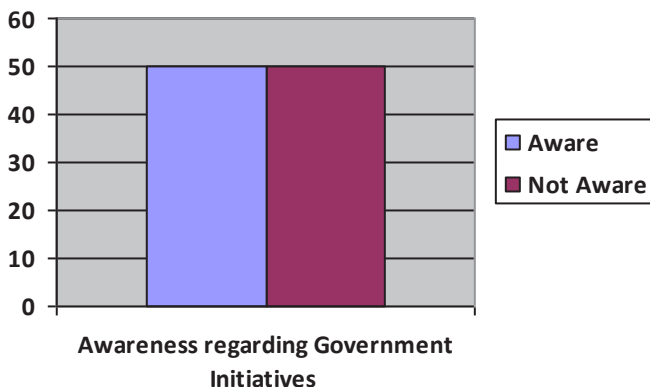


**Fig. 3: Librarians' Perception about Faculty and Students' HIL Awareness**

Majority of the librarians (90%) opined that the faculty and students of their college are aware of HIL whereas 10% said that the faculty and students are not aware of HIL (Fig. 3).

### Awareness of Government Initiatives

The Government of India has taken a number of initiatives to promote health information literacy but these are not directly under the category of health information literacy. Some of the significant initiatives are National Health Mission, National Knowledge Commission's working group on health information network, e-health initiatives, health information portals, community information centres, online chat rooms for health queries, health call centres, etc.



**Fig. 4: Awareness of Government Initiatives**

When the librarians were asked about these initiatives, it was found that 50% of the librarians are aware of Government initiatives promoting HIL but 50% are not aware of these initiatives (Fig. 4).

### Librarians' Attitude towards HIL

To learn about the attitude of the librarians' towards HIL, a few statements were provided. Table 4 presents the opinions of librarians towards these statements:

**Table 4: Librarians' Attitude Towards HIL (Multiple Options)**

Librarians' Attitude towards HIL	Agree	Disagree	Undecided
HIL to be integrated in medical curriculum	08 (80)	01 (10)	01 (10)
Formulation and implementation of policy by government.	10 (100)	00 (00)	00 (00)
Lectures/seminars/workshops can raise awareness	10 (100)	00 (00)	00 (00)
HIL will empower health professionals	08 (80)	00 (00)	02 (20)
Medical librarians can play vital role	09 (90)	01 (10)	00 (00)
Patients should have access to health information	08 (80)	02 (20)	00 (00)

Note: Figures in brackets represent percentage.

Table 4 shows that the medical college librarians possess a positive attitude towards HIL as all of them (100%) agree that Government of India should formulate and implement HIL policy. All of these (100%) also agree that the lectures/seminars/workshops can help in raising awareness of HIL. Interestingly, 90% of the librarians believe that medical librarians can play a vital role in promoting HIL. Moreover, 80% of the respondents agreed that HIL should be integrated in the curriculum of medical education and health information literacy will empower health professionals.

### Perceptions of HIL Promotion Strategies

Table 5 presents librarians' perception about the HIL promotion strategies and the role that medical college libraries can play in improving HIL.

**Table 5: Perceptions of HIL Promotion Strategies (Multiple Options)**

	Agree	Disagree	Undecided
HIL can be taught to medical students through			
Library orientation classes	08 (80)	02 (20)	00 (00)
Librarian imparting HIL training	07 (70)	02 (20)	01 (10)
Collaboration of faculty and librarians	09 (90)	01 (10)	00 (00)
Online tutorials	08 (80)	01 (10)	01 (10)
The hospital/college library can improve HIL by			
Providing health information services to patients	06 (60)	02 (20)	02 (20)
Raising awareness of HIL's impact on patient care	08 (80)	01 (10)	01 (10)
Recognising and responding appropriately to patients' HIL challenges	05 (50)	04 (40)	01 (10)
Becoming competent about HIL barriers within the hospital community	07 (70)	02 (20)	01 (10)
Improving health professionals' communication skills for better assistance to patients	06 (60)	02 (20)	02 (20)
Offering health information resources and services to inform patients	06 (60)	03 (30)	01 (10)

Note: Figures in brackets represent percentage.

It can be seen from Table 5 that majority of the librarians (90%) agree that HIL can be taught to students through collaboration of faculty and librarians followed by library orientation classes and online tutorials which were suggested by 80% of the librarians. The librarians imparting HIL training was also proposed by 70% of the librarians. It was also found that 80% librarians agree that the medical college libraries can play a significant role in improving HIL by raising awareness of HIL's impact on patient care followed by becoming competent about HIL barriers within the hospital community which was opined by 70% of the librarians. Providing health information services to patients, improving health professionals' communication skills for better assistance to patients and offering health information resources and services to inform patients were also suggested by 60% librarians.

### Types of HIL Programmes Attended and Implemented

An effort was made to investigate the involvement of library professionals in HIL programmes. The responses received are shown in Table 6.

**Table 6: Types of HIL Programmes Attended and Implemented**

HIL Programmes	%	
Training programme(s) on HIL/ seminar(s)/ conference(s) on HIL/ lecture(s) on HIL	04	40
Online tutorial(s) on HIL	01	10
None of the above	05	50

HIL Programmes	%	
<b>Application of HIL After Getting Training</b>		
Yes	05	100
No	00	00
Total	05	100
<b>HIL Programmes Organised in the College</b>		
Yes	04	40
No	05	50
No response	01	10
Total	10	100
<b>Initiatives Taken to Implement HIL in the Library</b>		
Yes	02	20
No	04	40
No Response	04	40
Total	10	100
<b>Can Librarians Promote HIL among Users?</b>		
Yes	07	70
No	00	00
Don't know	02	20
No response	01	10
Total	10	100
<b>HIL Implementation Strategies</b>		
<ul style="list-style-type: none"> <li>• By impressing upon the authorities</li> <li>• By convincing the colleagues</li> <li>• By acquainting students/faculty with HIL</li> </ul>		

It was appreciating to know that 50% of the librarians have attended programmes related with HIL in the form of training programme(s)/ seminar(s)/ conference(s)/ lecture(s) and online tutorial(s). All the librarians (50%) who have attended any such programme have applied the concept of HIL in their libraries by adopting HIL implementation

strategies which are shown in Table 6. When asked about the HIL programmes being organised in their college it was discouraging to note that 50% librarians have not organised any such programme. 40% librarians have organised lectures, seminars or workshops. The table reveals that 40% of the librarians have not taken any initiative to incorporate HIL in the college library and 40% provided no response to this query. 20% of the librarians provide HIL training to students and faculty to inform them about the availability of health information resources. It was hopeful to find that majority of the librarians (70%) agree that they can play significant role in promoting HIL among users.

### Barriers to HIL

A number of barriers/problems hinder the implementation of HIL. A question was asked about these barriers and the responses are shown in Table 7.

**Table 7: Barriers to HIL**

Barriers to HIL		%
Cultural	03	30
Language	05	50
Cost of information sources	05	50
Lack of funds	08	80
Lack of infrastructure	05	50
Lack of trained staff	09	90
Lack of government initiatives	08	80
Lack of support from higher authorities	07	70
Lack of awareness	07	70

Table 7 reveals that the lack of trained staff (90%) is the biggest barrier to HIL followed by the lack of funds (80%) and the lack of government initiatives (80%). Lack of support from higher authorities (70%) and the lack of awareness (70%) are other important barriers in HIL.

### CONCLUSION AND SUGGESTIONS

Health information is needed for patient care, health care, teaching/training, research and planning. Health information literacy empowers the stakeholders with cognitive and social skills to gain access to, understand, evaluate, and use information to make good health decisions. The libraries and librarians have a significant role in promoting HIL. It has been found from the study that medical librarians are aware of health information literacy and have positive attitude toward it. Lack of trained staff and funds, and lack of government initiatives are the main barriers to access and use healthcare information. Medical librarians are not much aware of Government of India health information initiatives

which need to be increased. More funds, high speed Internet connectivity, HIL training staff, and training opportunities should be made available. Faculty, librarians', and healthcare providers' collaboration for promoting health information literacy must be ensured by authorities. On the basis on above study, following suggestions are made:

- The medical library professionals can take the lead in promoting and providing health information literacy among their user community.
- The medical librarians should also raise awareness and promote the use of various web-based health information resources among their user communities.
- The Government of India has developed portals of credible health information which are providing valuable information on various health aspects. The librarians can play a vital role in raising awareness of information seekers about these portals.
- The library staff in collaboration with medical faculty can design interactive health tutorials in local languages to address the information needs of patients and providers. Health information should be tailored to meet the diverse values, beliefs, and cultural traditions of the Indian community.

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