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An overview of health literacy status in Udupi district, Karnataka, India

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ABSTRACT

Introduction

Health Literacy has been defined as the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health. Health Literacy means more than being able to read pamphlets and successfully make appointments. By improving people's access to health information and their capacity to use it effectively, health literacy is critical to empowerment.

Methodology

Stakeholders, including community health workers, education officers, and policy makers in various institutes situated in Udupi district, Karnataka were included in the study. In-depth interviews were conducted after obtaining informed consent. Questions regarding understanding of HL, perception of the level of HL, barriers and strategies to overcome them were covered.

Results

The need for intersectoral collaboration was highlighted by all stakeholders, focusing on the spread of information to the masses through education and enforcement.

Keywords: Health Literacy, Informed Decision, Stakeholders, Health, Decision Making

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INTRODUCTION

Health literacy (HL) has been presented by a number of scholars as the ability to access, understand and utilize health knowledge to achieve good outcomes, as well as effectively operate within health systems.[1,2] Through attaining higher HL, individuals are expected to be better equipped to prevent illness[2]. There are numerous factors that influence HL, that subsequently affect the functioning of the system itself. Sorenson et al.[3] described a conceptual framework for understanding the process of improving HL; the study categorizes these as distal factors (such as cultural, political and societal systems); proximal factors (which are more concerned with personal attributes, such as age, education, literacy); and situational determinants (which are concerned with family support, use of the media, and peer influences). Multiple factors have been identified as obstacles to achieving positive HL. As identified in literature, they include: overly technical printed media, culture barriers, language barriers, and general illiteracy, among others.[2, 4, 5]

HL is vital to public health; for instance, low HL has been associated with poorer health outcomes and the reduced use of health services in various populations.[1] One systematic review conducted by Berkman et al.[1] found that those with lower HL were more likely to take prescription medications incorrectly and misinterpret messages related to health. Furthermore, poor HL in the elderly was positively associated with higher mortality rates. The

review identified that those with low HL sought hospital care more often at an emergency stage, and were less likely to access preventive care strategies, such as receiving immunization.[1] A second study by D'Cruz and Shankar further demonstrated the challenge of achieving HL on a wide scale, across varying educational backgrounds.[2]

METHODS AND MATERIALS

Various stakeholders, including community health workers, education officers, and policy makers in various institutes situated in Udupi including areas such as Manipal, Brahmavar, Padubidri and Kaup were included in the study. In-depth interviews were conducted after obtaining informed consent through written and verbal means. These individuals were asked questions pertaining to both their understanding of HL, as well as perception of the level of HL in their respective communities. Furthermore, barriers to achieve higher HL and strategies that are being implemented to improve HL status were identified. Finally, recommendations to improve the HL were collected.

RESULTS

Conditions Relevant to System Functioning

Rathnakar et al. demonstrated that in Mangalore, Karnataka, HL status was below adequate level.[6] Importantly, scientific literacy, English-medium schooling, and the availability of a family physician were associated with improved HL within the study population. These results illustrate some important conditions that are relevant to the HL system functioning.

As Mancuso describes, it is important that individuals have certain skills in order to become health literate. Firstly, individuals must have the ability to use tools and techniques, such as language, literacy and numeracy in order to understand and act upon health information.[6] The results of Rathnakar et al. support the suggestion that English language proficiency and general literacy affected HL status.[1] Moreover, HL has been linked to educational attainment and general literacy elsewhere, implying that general literacy is a relevant condition to the system.[3] The literacy rate in Karnataka is 75.36%.[8] This is higher than the national literacy rate which was 74% in 2011, representing an improvement from 12% in 1947, as a result of the National Literacy Mission.[9] However, this is still below the global average and demonstrates how this condition may affect the system functioning.

A study by D'Cruz and Shankar, which evaluated HL of 500 dental patients attending a clinic in Bangalore, demonstrated that over 60% of patients had poor HL, including those who had attained 12th grade education or postgraduate education.[2] This indicates that higher education may not directly correlate with high HL. As Rathnakar et al. showed scientific literacy was associated with higher HL than other forms of higher education within this field.[1] Mancuso explains other individual competencies, including that individuals must be able to combine the aforementioned tools with social skills to be able to work in partnership with health professionals.[6] They must have autonomous competence and self-empowerment, to be able to assume responsibility for their health related decisions; individuals must have the ability to understand the healthcare setting.

The availability of a family physician was also associated with improved HL, representing an important condition in the field. Furthermore, doctor-patient interactions can lead to improved health literacy skills, possibly through familiarity with the setting, and through the use of health promoting activities from the doctor.[1] Nutbeam describes the importance of health promotion actions as a prerequisite for improving HL, including patient education and school education, broadcast and print media communication, as well as community development and advocacy.[4] Within India, there are no government policies dedicated specifically to HL, in the health sector and the education system.[9] Health promoting actions, in the form of health related information are carried out in the healthcare setting, the education setting and in media communication as part of the Information, Education and Communication (IEC) campaign, implemented by the Government of India. The aim of this campaign is to improve awareness, and provide information regarding availability and access to public health service.[10] Policies related to the understanding, processing and application of health

information were not identified. This may also be an important condition affecting the functioning of the HL system.

Stakeholder Perceptions, Challenges and Suggestions

Of the stakeholders interviewed, many had different concepts of HL. For those more involved in education, HL resembled knowledge transfer, whereas for those involved in provision of healthcare, HL had a higher emphasis on the application component. Various other interviewees mentioned that disease prevention is a key part of HL. Once HL as a holistic concept was explained to the interviewees, there was a general consensus that the current HL status is not adequate and needs to be improved. Each of the stakeholders had specific ideas on why the HL of the population was inadequate; explanations include lack of regulation, resources, education or policies.

Based on their understanding of the current context of HL, the stakeholders that were interviewed provided insight on their perceptions of the challenges to the system of HL, and their own recommendations for changes based on their experiences. The policy makers that were interviewed included a Panchayat District President, Panchayat District Officer and a medical officer. According to the Panchayat District Officer, there are few programs related to HL, is and limited enforcement of the certain policies in place. Promotion of HL was suggested to be accomplished through multiple avenues including the education system, communication of information through street performances, and media. It was also noted that there is a need for more involvement from NGOs to facilitate this promotion of awareness. In accordance with this opinion, the medical officer also suggested that NGOs should be involved in awareness promotion. However, the medical officer noted that the main barrier in accomplishing awareness is that people are more concerned about "basic needs". This is to say that individuals will prioritize essential needs such as food over health education. In addition, the medical officer highlighted the importance of women empowerment groups, since they are highly influential among the community and they directly influence children. Education was also noted as an important means of promoting HL because literacy needs to be addressed prior to facilitating HL. Similarly, the Panchayat District Officer stated that HL is the responsibility of everyone and should therefore involve collaboration among various stakeholders such as NGOs, self-help groups, and women empowerment organizations. Despite the government allowing health education programs, they do not offer additional support, which was stated as the barrier to establishing targeted programs. It was noted that the medical officer of the primary health centre could promote HL by appointing a nodal officer to monitor specific changes. In doing so, the establishment of mandatory rules to organize village meetings every three months can address the current lack of regulation. The need for specific regulation of a program was also expressed by the pulmonologist at KMC. This was suggested to allow people to work toward specific objectives by establishing a comprehensive and more effective plan of action. This plan was recommended to be multidisciplinary and involve greater political involvement in order to promote HL. However, the pulmonologist highlighted the importance of implementation at the education level, by teaching young children about the prevention of diseases.

The educational officer interviewees stated common themes and challenges that affect their ability to improve the HL of their community as well as the larger context. Some of these challenges included the lack of a HL/education curriculum, shortage of specialized HL educators, conflicting parental and cultural influences and weak political/financial support by policy-makers. Both the vice president and the public school educational officer found that students often receive conflicting health-related information from parents, their cultural environment and what the education system provides. This perspective is shared by the School of Communication's Director who stated that the literacy of parents, particularly the mothers, acts as a surrogate for the HL of children. This issue can be further compounded by cultural barriers, poverty and 'blind beliefs' that create opposition in the dissemination of essential health information, such

as sexual education. These stakeholders recommend the need to address the HL of parents and to create a demand for health literacy from a bottom-up approach, starting with the family. The vice president recommended building a partnership between parents and schools to overcome these challenges as well as the healthcare system. They further suggest that the government should play a role in improving the socioeconomic conditions and addressing the socio-cultural barriers.

All the education officer interviewees felt that the education system's role is to reach the poorest and those who lack access to basic resources. Both the vice president and the educational officer felt that while the education system plays an important role in teaching children health literacy, the lack of curriculum dedicated to health education/literacy was a problem. Furthermore, they are limited by the number of in-school hours in which they can devote time to health literacy. For this challenge, they recommend the development of a national policy and health education curriculum which requires significant political support. In addition to this, all the stakeholders recommended the development of a workforce specialized in providing health literacy. This includes, in the opinion of the educational officer, incentivizing healthcare providers to work in rural and poorer areas. In addition, all the educational interviewees state that while the health-related information was adequate, the methods used to disseminate them were seen as barriers. These methods are textbook-based with complex jargon for the common student/community people to understand and process. In sharing health information with the masses, they recommend the use of more interactive and visual approaches that is both in the local languages and relevant to the cultural context. These models can help with the diffusion of basic health information as well as to create a culture of health, which the School of Communication Director felt was lacking within India. The Communication Director felt that health literacy was low in the community because health is viewed from an emergency/sickness perspective with less focus on preventive measures. It was also stated that health in India is calendar-based and health issues are often discussed once a year on their scheduled date. For this challenge, increasing the frequency of the message through the use of the media and other methods was recommended.

The perceptions of HL differed between community stakeholders. The ASHA worker and one of the Anganwadi workers stated that local people were educated enough to be able to assimilate the information imparted to them. However, the other Anganwadi felt that the government was placing excessive burden on community workers by having different programmes but not enough funds to carry them out. The perceived barriers of HL were identified as those of culture and language; these factors make it difficult for the community workers to be able to impart any health information. The community workers felt that media and education provide a false sense of confidence regarding HL. The other challenge is that most people living in the rural areas have low socioeconomic status, which makes it difficult to prioritize their health. A solution to this, as suggested by the community workers, was to give proper education to children which in turn will reduce poverty and thereby indirectly increase HL. There could also be an active involvement of media such the local newspapers and advertisements, among other mediums. The health workers also felt that the private sector must be regulated with the input from all stakeholders and integration with media. Another issue that was identified was that some migrant workers do not cooperate with community health workers. HL may be improved by targeting these high-risk populations, which also include girls, as they are vulnerable, and beyond the scope of the media or the community workers.

Some common themes between all three groups of stakeholders include the importance of education and a collaborative approach. All the interviewees recommended collaboration as a means to improve HL, and that education should be the key focal point which all efforts should address. However, there is a discrepancy on responsibilities: the policy makers interviewed re-stated the need for a collaborative effort, whereas the community and education group cited a need for government policy and leadership in spearheading real changes for HL.

DISCUSSION

This report is the output of a five day field orientation in Manipal (Karnataka, India) and surrounding communities. In topical subgroups data was gathered on HL through key informant interviews and literature research. The collected data was reported and integrated with theoretical knowledge derived from available literature and practical experience. Questions had to be adjusted in order to collect valid and applicable data for the final report. Difficulties were encountered in the field, such as a lack of willingness to participate and possibly inappropriate interview situations.

On the political level it is evident that, from the interviewees' point of view, there are many rules and regulations. However, a lack of enforcement on account of shortage of funds and appointed staff impedes these regulations from being properly implemented. Policies are being funneled down from the national and provincial government, but enforcement and monitoring is very limited. Furthermore, a general consensus was found in terms of the importance of education in halting health illiteracy. A clear call for more attention towards the topic of HL was mentioned regularly, as was the general need for literacy, which is seen as the basis for HL.

The stakeholders on the education level also acknowledge the need for this topic in the education sphere, but describe inappropriate information from the civil society, and lack of time as limitations. Furthermore, they describe a lack of political effort regarding incorporation of the topic in the curriculum set-up.

On the community level, a burden is felt regarding the discrepancy between policy development and policy implementation. Interventions are created by policy makers, without the funding and manpower to execute them, leading to a burden of activities. In a practical sense, cultural notions and language are perceived as a barrier to HL. The interviewees also emphasize the fact that the low SES of the communities and complementary day-to-day issues make it difficult to prioritize health literacy.

In summary, the need for intersectoral collaboration was highlighted by all layers of stakeholders, focusing on the spread of information to the masses, being through education and enforcement.

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