

Full Length Research Paper

Provision of consumer health information: A case of Kenya Medical Training College and Provincial General Hospital, Nakuru County, Kenya

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Debates on health information provision challenges resulting from rapid changes in information service access and use have moved from the global sphere to the local scene. This has negatively affected the ways in which librarians provide information to the public. Librarians are exposed to use of unauthoritative and inaccurate information, leading to serious health problems. Because of Librarians' knowledge on identification, selection, organization and dissemination of evidence-based information, they ought to play an important role in information dissemination, which is not the case for now. This is because their profession has not been oriented towards producing a healthy society as well as assisting users in making informed health decisions. These inadequacies continue to hurt the health information consumers unabated, yet little has been researched up to today. This study was conducted at the Kenya Medical Training College Library (KMTCL) and Provincial General Hospital (P.G.H), Nakuru County in Kenya. A descriptive research design with survey techniques was used to determine the ways in which health information services were offered. Face to face interviews were used to collect data from two physicians, twenty nurses and four librarians. Structured questionnaires were used to collect data from thirty users of the facilities. The study findings revealed that health workers and librarians provided consumer information. However, they experienced challenges mainly; inadequate human resources, insufficient funds, legal issues and lack of awareness of available services. The study recommends that health institutions with librarians help should set up information centres and create user awareness.

Key words: Health, librarian, information, consumer.

INTRODUCTION

Over the past two decades, health information has expanded exponentially and the public, health science and hospital libraries have continued to acquire resources, develop services and programs to meet the growing numbers and information needs of the general public. Health information encompasses the continuum extending from the specific information needs of patients

to a broader provision of health information for the lay user. Grant (2002) defines consumer information as any information that people require to make informed decisions and choices about their health or the health of those close to them. Access to health information should be timely, relevant, accurate, and authoritative for the use not to suffer serious health consequences. Inability to

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access and use accurate health information effectively can directly affect the health and safety of the users. Health information consumers encounter a lot of information from different sources and are unable to differentiate between what is right and what may not be right. It is on this basis that the study critically examines the provision of consumer health information: a case of Kenya Medical Training College and Provincial General Hospital, Nakuru County, Kenya.

Historical development of consumer health information provision

Consumer Health Information Network that started in the late 19th century saw the emergence of social justice movements like the National Consumers League. The main issues that were addressed at that time included improved food and drug safety, health insurance and packaging legislation. In the 1970s increased attention was given to consumer education through the 'Assertive consumer' project which promoted consumer participation in government decision making. This allowed consumer input to health agencies. In the 1980s significant changes started to develop in healthcare systems (Medical Library Association, 1999).

Unfortunately, even in this information age, scientists and researchers in developing countries, Kenya included have not effectively communicated their researches as widely as those in developed countries. In recent years, the National Library of Medicine (NLM) announced a commitment to play a bigger role in providing health information to the general public. Furthermore in June, 1997 it began providing free access to MEDLINE via the Internet. MEDLINE, the major medical database in the world today, was previously used primarily by librarians, related information professionals, health care professionals and students. It is now available to patients seeking health information as well.

Most health information seekers are increasingly using the internet to search for health information relevant to their diagnosis. Although the internet has greatly empowered patients, they frequently have no idea about the reliability of the information they access since no one evaluates what is posted on the internet. This leads to the use of unauthoritative and inaccurate information. It is important that information seekers become health literate to effectively access and use health information that will enable them to make informed health decisions.

Furthermore, their understanding of the link between their behavioral changes and health is essential. This implies that medical librarians and other information experts have a moral obligation to make relevant health information readily available to all consumers.

Many scholars have examined the provision of health information services by hospital libraries. Broadnax (1995) studies on the extent to which consumer health

information is provided and points out to the need for libraries to be part of the network of health information delivery. He also observed that in many communities, health libraries are struggling with slashed budgets, reduced staff and competing priorities. Bates (1995) assessed the role of the medical librarians in safe medication information delivery and his findings showed that there were barriers to effective offering of health information due to inaccessibility to comprehensive reference information on medications and health.

LITERATURE REVIEW

Making informed choices about one's health calls for critical thinking. For one to make a choice and implement healthy behavior, the information seeker must have the ability to identify accurate and relevant information on general health and the risk involved in the choices made. Healy (2008) observes that the information consumer must have the ability to adequately evaluate health related products and services such as fast food, health insurance and medical treatments.

The 21st century information surge has brought about several technological changes that have created an impact on library systems that provide health information to the public. They include increased internet connectivity and the amount of quality information available. This has been witnessed by the high number of health news available in both print and electronic formats, less time for physicians and nurses to provide health information, patient education during regular office visits and popularity of complementary therapies (Cobus, 2008). Librarians should therefore proactively play their role as information experts in providing the highly needed health information to consumers.

Health information literacy

Librarians working in health institutions provide valuable information to consumers by marketing and creating awareness of their services. This is achieved through selecting; personalizing and filtering quality information to specifically meet their unique needs. However, having access to increased volumes of information does not guarantee one best information access (Gillaspy, 2000). There is therefore an urgent need to eliminate incorrect information that could have a negative impact on an individual patient's health.

Many scholars have argued that low health literacy levels and ineffective communications can compromise patient's safety and emphasize the fundamental need for patients to locate and evaluate health information in order to self-manage their own health care. To do this, an individual user must be able to locate health information, evaluate its relevance, credibility, and analyze risks and

benefits. For those patients with limited literacy skills, this is a significant challenge. However, information consumers with high information literacy can have low health literacy and a compromised understanding of health care information, because the information is outside their field of specialization or they are challenged by age, sickness and feelings of vulnerability. Assisting patients to obtain the best health information at their point of need is only one of the valuable services provided by librarians. Healy (2008) argues that at many health institutions, librarians have expanded their roles to providing classes in health literacy and cultural literacy competencies. Lack of access to accurate health information is largely the cause of many diseases; because most of them are caused by ignorant changes in human lifestyles. On the other hand, Wood (2000) acknowledges that an unguided search for medical information can be confusing as well as terrifying to information seekers. Healy (2000) states that:

We are inundated with health related information, some reliable and some not. We are immersed in a culture that overwhelms us with unhealthy but attractive options at every turn. We are confronted with perplexing ethical, social and political issues in association with the concept of health promotion. How do we meet the challenges?

Roles of the Librarian

Librarian roles in health institutions include:

1. Collection management that involves identifying available consumer health education materials for review, purchase, acquisition and organization. The Librarian should also deal with building an authoritative relevant collection (print and electronic form), routine evaluation and collection weeding.
2. Knowledge and information resource sharing through networking, consultation, identification, selection and organization with relevant organizations and individuals. The Librarian serve on institutional information resource development committees, offering professional advice and assistance, assessing and evaluating literacy and learning levels of information seekers in order to provide appropriate materials to them.
3. Dissemination of information therapy service, identifying and filling health information needs, providing current awareness services, creating information reference and referral centres. Offering interlibrary loan requests and selectively providing high quality information to consumers.
4. Information advocacy at local, national and international levels to promote open access, protection of individual rights to confidentiality and unrestricted information access, adherence to medical ethics, promotion of patients' safety and encouraging the gathering of evidence-based information for health information seek-

ers. The librarian should also be involved in advocating for the right of information seekers to access information independently through patient education programs.

5. Provision of education through awareness creation that includes, but not limited to information literacy and preferences. The information professional should also be involved in the introduction of education programs on effective provision of health information.

6. Research initiatives and participation that involve applying health information, while supporting patient-centered care, medical home model and practices to enhance shared decision-making and informed consent by patients and caregivers.

7. Librarians are experts in identifying and providing health information; however, they are not practicing health professionals who interpret information and give advice. It is important that librarians avoid suggesting diagnoses and recommending particular health procedures to information seekers. This is informed by the fact that librarian's role is to provide access to a range of authoritative materials, but not to be held responsible for the scientific accuracy or currency of diagnosis.

8. Librarians should provide services that create value for their health organizations, thus enhance the facilities as a trusted hub of learning and community. Weightman and Williamson (2005) alluded that professionally led medical library services have a positive impact on health outcomes of their users. The trust that patients place on health information sources and librarians is the key factor affecting consumer use of such information. Librarians should assist remove information barriers that could have otherwise denied patients' access to quality health information. They should also provide information services that enable patients to be partners in making decisions that affect their own health outcomes and thus increase their satisfaction.

9. Information technology has altered traditional medical librarianship. Annunobi (2008) pointed out that before the advent of information and communication technology (ICT), medical libraries were custodians of information, which was mostly in print. However, ICT has had an impact on librarians where the internet makes provision and communication on an unprecedented scale.

According to Zipperer et al. (2006), medical librarians can play an expanded role in health information provision by accessing and reviewing medical information and disseminating it promptly to healthcare practitioners. Librarians are therefore resource and strategy experts in identifying and disseminating reliable information to different health information seekers.

RESEARCH DESIGN AND METHODOLOGY

A descriptive research design with survey techniques was used to determine the ways in which health information services were offered. Face to face interviews were used to collect data from two (2) physicians, twenty (20) nurses, four (4) librarians, while

Table 1. Stream preference as collected from the students in their 1st semester.

1 st choice preference of the streams – survey from semester one	Students' number	Allocated stream in semester two	
		Western medicine	Chinese medicine
Western medicine	76	45	31
Chinese medicines	7	0	7
No stream preference	3*	0	3

*One of the students from this group withdrew from the school in semester 2. In general, most students (> 88%) opted for western medicine as their first choice. Only around 8% of the students took Chinese Medicines as their preferred stream. The result indicated that most of the students regarded Chinese Medicines stream as second choice.

Table 2. Total score of best six subjects in HKCEE with respect to their streams.

	No of students	Total score of best six subjects in their HKCEE (means \pm standard error)
Western medicine stream	45	13.22 \pm 0.33
Chinese medicine stream	40	12.53 \pm 0.31

structured questionnaires collected data from thirty (30) local users of the two health facilities in Nakuru County: namely Kenya Medical Training College (KTMTC) and Provincial General Hospital (PGH). Therefore the total study respondents were fifty six (56).

The study was guided by the following four research questions:

1. What information sources are used by librarians in providing information health to consumers?
2. What methods are used by librarians to adequately meet the health information needs of the consumers?
3. What challenges are faced by librarians and consumers in accessing and using health information?
4. What recommendations would you make to improve provision/access of information at KTMTC and PGH?

FINDINGS AND DISCUSSION

According to Table 1, books were the highly used sources for providing consumer health information at the Kenya Medical Training College library as stated by 16(80%) of the respondents, followed by journals both at the Provincial General Hospital and at the KTMTC library as pointed out by 11(55%) of the respondents. The internet is rated by 8(40 %) of the respondents, while newspapers, research materials were rated by 8(40%) and 6(30%) of the respondents respectively. The professional literature was the lowest used as rated by 3(15%) of the participants. At the Provincial General Hospital, newspapers were rated by 7(35%), professional literature by 8(40%), while research materials were rated by 9(45%) of the respondents. The respondents further indicated that the available information sources helped them make right decisions in health issues.

Responses in Table 2 indicate that consumer health information providers use several methods to meet information needs of their clients. The most commonly used method are lectures/talks that were rated by 16

(80%) of the respondents at PGH and 14(70%) at KTMTC. Information desk method was rated by 12(60%) of the respondents at KTMTC library and 6(30%) at PGH. Programs/events were rated by 4(20%) of the respondents at KTMTC library and 10% at PGH. Exhibitions were lowly rated by 2(10%) of the respondents at KTMTC library and 1(5%) at PGH.

Of the 30 local resident respondents, 19(65%) of them indicated that they accessed health information through the internet, 5(15%) through lectures, while 6(20%) used other means. On the other hand, physicians and nurses expressed the fear of uniformed patients falling into hands of quacks that are out to make a living. They further acknowledged that they had less or no time to provide health information to the community due to their busy schedules.

As shown in Table 3, when the respondents were asked where they had accessed and used health information, an overwhelming 14(39) of the respondents indicated that they accessed and used information in their homes, 10(17.9%) of the respondents mentioned their offices and 9(16.1%) of the respondents cited cyber café, 3(5%) mentioned libraries/ information centers, 2(4%) mentioned friends, while 12 (21%) of the respondents indicated that they did not know where to get information for their health related issues.

These findings imply that majority of the respondents used the internet in accessing health information. The internet information is accessed in homes more than it was five years ago (Fox and Fallows, 2003). It also means that the internet is far more ubiquitous in society today than it was before. Unfortunately, patients do not pay attention to items such as the authority of the sources and the accuracy, relevance and currency of the information. Many scholars in health matters have

Table 3. Percentage change of students' SMA between semesters 2 and 1 with respect to their streams.

	No of students	Percentage change of SMA (%) (means \pm standard error)
Western medicine stream	45	-13.29 \pm 1.62
Chinese medicine stream	40	-27.8 \pm 3.63*

* P < 0.001 when compared with the corresponding values of the students from the Western Medicine Stream who studied the same subjects in both semesters 1 and 2.

Table 4. R-square value between percentage change of students' SMA and the student's SMA in semester 1 with respect to their streams.

	No of students	R-square
Western medicine stream	45	0.010
Chinese medicine stream	40	0.153

reported that more than half of the health information consumers check authority and timeliness 'only sometimes' or 'hardly at all'.

Physicians, nurses and other medical practitioners are unquestionably the best possible sources of health information and education for their patients. They remain the front line purveyors of such information. However, a number of factors including medical specialization, vocabulary, literacy, language, and time work against them to effectively respond to all health information needs of their patients. While, librarians can never diagnose or prescribe or recommend one course of treatment over another, they can however, provide the expertise in health information resources that will direct consumers to trusted sources that will eventually aid them to work with their health care professionals in making decisions about their health status.

Challenges in the provision/access of health information

Respondents cited several challenges in the provision of health information as shown in Table 4.

Reliability of information

Majority of the respondents 39(70%) indicated that the internet was their preferred source of health information. Although the internet is making a great deal of health information widely available, not all of its information is reliable and accurate (Medical Library Association, 2004). Consumers continue to require assistance in sifting through the sheer volume of information available on the internet in selecting reliable and relevant information sources to meet their needs.

Inadequate human resources

Recruitment and retention of staff as a challenge to provision and access to information was rated by 27(49%) of the respondents, distribution of staff functions was rated by 8(15%) of the respondents, inadequate training stood at 11(18%) as indicated by the respondents. High staff turnover of qualified staff was also cited by 10 (17%) of the respondents. The above aspects seem to be the key human inadequacies in the provision of health information services.

Inadequate funding

Inadequate funding was indicated by 43(76%) of the respondents. This is a major problem in Kenya where there is over dependence on external and domestic borrowing of funds. The study noted that funds are allocated to go into the purchase of drugs and hospital equipments with little attention given to health information service provision (Fox and Fallows, 2003).

Competition

There is high competition among health information providers from alternative medicine providers, mainly acupuncturists, naturotherapists and ayurvedic as indicated by 20(35%) of the respondents. This has caused disharmony between consumer health information providers and alternative medicine providers who claim conventional medicine/ methods of treatment have scientific side effects. On the other hand, conventional health information providers claim that alternative medicine has no scientific basis, other than lowering improved healthcare system performances.

Healthcare quackery and fraud

Healthcare quackery and fraud was cited by 11(19%) of the respondents. According to Longman Dictionary (2003), quackery refers to activities of someone who pretends to be a doctor. Fraudsters/ quacks refer to persons who earn money by marketing inaccurate health information, unreliable healthcare, and ineffective health products. This is rampant in public means of transport;

local dailies, ghetto press and back streets. Quacks have found health products and services to be perfect avenues to maximizing their monetary gains with minimal efforts. Patients have a strong desire to live and when disturbed with ailments that do not seem to heal fast they are easily convinced by quacks. They are so vulnerable to promises of health improvement and life saving solutions.

Lack of bibliographic control

Lack of unified bibliographic control was cited by 9(16%) of the respondents. This is due to high increase in publications of articles in micro documents both at national and international level in different fields. Health information centres do not have authoritative information materials written specifically for non medical persons. Relevant and adequate information materials for the general public are hardly available at government agencies and voluntary health organizations. In line with this finding, Charnock and Shepperd (2007) observed that some authors may be authorities in their fields, respected health educators, while others may even be without apparent credentials. It is not possible to judge quality of content from a title or source of a document, yet there is no comprehensive mechanism by which content may be judged.

Communication/ language barrier

Communication/language barrier was indicated by 6(11%) of the respondents. Much of the health information available in print and electronic formats is written for a level well above the ordinary individuals using it. Medical information is often complex in terminology and written at an education level beyond what the general public can understand. Librarians must therefore be sensitive to the users' needs and capabilities when guiding them to sources of information.

Insufficient knowledge

Insufficient knowledge in health information exchange was stated by 6 (11%) of the respondents. Some respondents pointed out that they were not aware of the availability of readership in health education information, security and privacy. There is general lack of ongoing education for librarians and information seekers to understand the ramifications and emergence of new health information (Cobus, 2008).

Way forward

There is need for more funding of healthcare information

services to enable investment in adequate and qualified human resources. The sufficient information experts will help expand healthcare information services through campaigns/ health programs, teaching, exhibitions and repackaging of health information to effectively meet the growing needs of large information seeking populace.

Health institution administrators in collaboration with librarians should set up sections in their facilities to serve as health education centres. They should further market their services through outreach services to create awareness of information availability and accessibility. Consumer education efforts are important grounds in health information formulation policy. Whether information centres are 'pro' business or 'pro' consumer they should be able to support efforts to fairly inform consumers on how to make good decisions and what to do when they make uniformed mistakes.

Information specialists should play an important role in implementing consumer health information competencies in shaping public health education for the 21st century partnership between public health educators and information specialists through trans-disciplinary approach. Making current, accurate health information available in multiple formats, where and when customers require it, remains the goal for which all health libraries and information centers must strive to achieve. A combination of strategic partnerships and carefully built collections is the best assurance that libraries and health institutions will meet the consumer health information needs of their customer base and satisfy the moral imperative for such a service.

Conclusion

Given the great complexity of the issues connected to health care that affect people in Kenya and around the world today, the importance of providing health information is clear. Dissemination of relevant information is one of the most important ways to combat consumer con-manship and fraud. The consumer's first line of defense is knowledge. An informed consumer is less likely to be victimized. Consumer informed knowledge about specific product or service, legal rights and how other consumers have been victimized in the past is essential. Librarians in health institutions should do more in utilizing technology to build virtual libraries; libraries without walls; anticipate health users' needs; personalize and filter information sources for varied consumers' needs.

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