# Health Care Information Needs and Behaviour of Home-Based Elderly People in Kenya: A Case Study of Nakuru District, Kenya

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# **Abstract**

This article reports on findings of a study which investigated the information needs of the home-based elderly in Nakuru District, Kenya. A qualitative approach was followed in data collection and analysis. Findings showed that personal factors, including literacy and language capacity, memory constraints, physical impairment, influence their Information Behaviour (IB) in varied ways. Similarly, environmental factors, including health-care services, financial resources, cultural traditions, and education, determine how they access, use or avoid information. Insights gained proved the value of understanding the role of IB in information services.

#### **Keywords:**

Health-Care Services, Home-Based Elderly People, Information Behaviour, Information Needs, Kenya, Aged People.

# Introduction

Aging causes physical, psychological and social changes and a great deal of uncertainty that elderly people need to cope with. Studies maintain that the elderly need information in order to cope with this uncertainty (Barrett, 2000; Popoola, 2000; Frase, 2004; Schwartz, Woloshin & Birkmeyer, 2005; Charles & Sevak, 2005). In African countries, such as Kenya, health-care of the elderly rests with individual people and/or their families (Apt, 1997; Kalasa, 2001). Most elderly people live in their homes, or with family members, because of cultural expectations that younger members of the family take care of the older members (Apt, 1997; Nyambedha, Wandibba & Aagard-Hansen, 2003). However, considering the concerns raised in research reports about caring for the elderly in African countries (Apt, 1991; Amuyunzu, Muniu & Katsivo, 1997; Oranga, 1997; Akanji, Ogunniyi & Baiyewu, 2002; Juma, Okeyo & Kidenda, 2004; Ahadzie & Doh, 2008; Okoth, 2010), it seems evident that many of the information needs of the elderly are either not recognised, or are not met satisfactorily.

In order to put into perspective the relationship between information behaviour and health-care of the elderly in a development context, it is necessary to approach the problem from two different angles. This includes a description of the existing state of health-care of the home-based elderly in the identified development context, as well as understanding the concepts of information needs and their impact on information behaviour (IB) of the home-based elderly. Societies and cultures define the concept 'elderly people' differently. For the purposes of this study, the United Nations definition of old age as anyone of '60 years and above' is used.

Demographic projections show that Kenya is among the sub-Saharan countries with the fastest

growing populations of older people (Velkoff & Kowal, 2007). The absence of reliable data on the elderly in Kenya makes it difficult to provide figures about the number of elderly people who live in homes and those that live on their own, or with family members in rural and urban centres. However, a literature study revealed that most elerly people in developing countries like Kenya live in their homes or with family members, and are vulnerable to poverty (Mba, 2004; Juma et al., 2004; Kalasa, 2005; Mathangani, 2005).

According to Khayesi (2011), there are only a few homes for elderly people in Kenya and the few that do exist can be found predominantly in urban centres. The majority of Kenyans upon retirement return to a home they have kept in the rural area, even though they have worked in an urban setting all their lives. However, personal observation indicates that this trend is changing with some retirees preferring to live in the urban centres in order to benefit from social amenities such as health-care, transport, piped water, opportunities to conduct private businesses.

Apt (1991, 1997) showed that there is a need for governments in African countries to prepare and implement policies for the care of elderly people. For example, the Kenyan government indicates that by 2050, 11.8 percent of the national population will be elderly people (Republic of Kenya, 2001). It seems evident that as the number of elderly people increases, their need for health-care will also increase. Furthermore, it is important to take into account that Kenya has not fully implemented a policy for the care of elderly people (Waithaka, Anyona & Koori, 2003; Juma et al., 2004; Mathangani, 2005; Muigana, 2006; Kenya National Commission on Human Rights (KNCHR), 2009; Okoth, 2010).

Under current conditions, the elderly receive care from both formal and informal health-care providers. Formal health-care providers include doctors, nurses, clinicians, pharmacists and other professionals trained to provide health-care services (Republic of Kenya, 2007; 2008). Informal health-care providers include immediate family members (spouses, siblings, children, friends and other relatives) of the elderly people (EUROFAMCARE, 2006; Bookman & Harrington, 2007; Khayesi, 2011).

From the literature reviewed so far, it seems that most of the studies on the elderly, in Africa and Kenya specifically, approach issues regarding the elderly primarily from a macro level. They focus mainly on demographics, policies and provision of general health care services that include the elderly amongst others. However, none of these studies approach the problem from the perspective of the elderly per sé. Very little is known about the elderly in everyday life situations and how they deal with uncertainty and the changes that come with growing old. Very little is also known about their needs and provision of information, except their exposure to information about medical treatment when visiting health-care services. It becomes apparent that there is an urgent need to look at the health-care of the home-based elderly people in terms of their information needs and behaviour, which may be influenced by personal factors as well as environmental factors. This article thus seeks to investigate the same. With regard to key issues such as information needs, personal and environmental factors, the most prominent publications like Hjørland (1997); Wilson (1999, 2005); Case (2007); Courtright (2007); Naumer and Fisher (2010); and Cole (2011) have been consulted among others.

#### **Information Needs and Behaviour**

Cole (2011) argues that the concept 'information need' is one of the most essential concepts in information science, but is a misunderstood concept. He adds:

Unlike the need for food, water, or shelter, or any of the other primary human needs, what is required to satisfy an information need is often not known to the individual concerned.

The reason for this is perhaps best explained by Hjørland (1997) who argues that what develops in the head [of a person] is not necessarily the need but knowledge about the problem-area which causes a need. The context or information situation of the user from which the information need arises is important (Cole, 2011). Both these authors suggest that factors prevalent in the person, as well as in the context (information situation) may be instrumental in triggering information needs.

In Wilson's (1999; 2005) models of information behaviour, he addresses the concept of information

need by categorising human needs into three groups, namely: physiological (e.g. the need for food), psychological (for example the need for attainment), and cognitive (the need to plan or learn a skill). According to Wilson, the three categories of human needs can influence each other, leading to experiencing a need for information. Wilson shows that information needs are linked to human needs. However, Wilson (2005) suggested that the term "information need" should be ignored and replaced with "information seeking behaviour." Wilson's definition focuses on observable constructs while needs are internal mental states that cannot be seen. However, inner experiences give rise to observable responses of human beings, as manifested in people's activities such as information seeking and sharing in order to respond to challenges and information needs. It seems thus obvious that information needs prevalent to elderly people could arise from the changes they experience as they age.

Although we might have some clarity on what causes information needs among the elderly, it is still not clear what the nature of the information needs might be and who within health-care of the elderly in a home-based context could help to identify and best address them. Regarding the nature of information needs, Case (2007) indicates that the concept information needs has to do with seeking answers, reducing uncertainty and making sense.

Although not much is known about how home-based elderly people experience or express their information needs, it is possible that they may experience their need for information in what Hjørland (1997) refers to as 'knowledge about the problem-area in their heads'. These problem areas may be linked to changes experienced in old age.

Although feelings of anxiety are often expressed by the home-based elderly in African communities (Mathangani, 2005; KNCHR, 2009), it seems unclear whether it serves as a strong enough motivation to consciously seek for information.

# Methodology

To investigate the information behaviour of the homebased elderly in Kenya, a qualitative research approach was followed. This enabled the researcher to gather data in a 'natural' setting, and to observe experiences, insights and actions of elderly people that would not have been possible with a quantitative approach such as a survey.

The snowball sampling technique was used as a data collecting technique to identify people who were prepared to share their own views; that were of different socio-economic levels, of the same or opposite gender; held different opinions and also come from different ethnic backgrounds to participate in the study (Mugenda, 2008). The snowball technique helped to obtain a balanced and objective view of the existing situation in the identified geographical area. Eighteen elderly people participated in the investigation. Respondents varied in gender, educational levels and economic status. Respondents from both the urban and the rural areas of Nakuru District Municipality participated in the study.

Open-ended face-to-face interviews were conducted with individual respondents in order to promote dialogue and narration. This approach helped to give respondents an opportunity to provide details and reflect on personal perceptions about individual and environmental characteristics and their influence on information needs of the groups in health-care of the elderly people. It also ensured high response rates as opposed to other data-collection techniques such as telephone interviews. In addition, interviews provided an opportunity to observe the non-verbal behaviour of respondents and correspondingly adjust the choice of language to be able to probe for details (Neuman, 2003; Cooper & Emory, 1995). English and/or Kiswahili were used to interview the elderly people as was found appropriate. An interpreter with research and work experience in library and information science translated some of the topics of discussion into Kipsigis, the local language widely spoken in this district.

In line with qualitative research procedures, the collected data was analysed and reported simultaneously (Mugenda, 2008; Neuman, 2003). Open coding was used to categorise and classify data and similarly recurring items from the scripts were highlighted. Field notes were also analysed and incorporated into the report summaries. Content analysis was used to categorise patterns emerging from the data and to help the researcher to identify themes based on the objectives of the study.

# **Discussion and Findings**

During the investigation, it became apparent that although the elderly of Nakuru District are intensely aware of physical, psychological and social problems they experience in old age, they did not appear to think of using information to alleviate their problems. These findings confirm Wilson's (1999) and Cole's (2011) viewpoints that information needs are often not recognised by the individual(s) concerned. The findings further showed that the elderly are concerned about medication, nutrition, financial aid, health status and spiritual and emotional support to prepare for the end of life. This awareness seems proof of their 'knowledge about the problem-areas in their heads' (Hjørland, 1997). In spite of this awareness, the underlying needs were not clearly articulated and therefore could be referred to as visceral needs (Taylor, 1968).

When viewpoints of respondents within the home-based context were compared, a pattern emerged of how personal traits and contextual factors interact to give rise to the information needs as will be discussed hereafter. Although findings regarding the impact of personal and contextual factors are discussed separately below, it has been found that their presence is not experienced in isolation. They seem to trigger different types of information behaviour among the elderly, which make it difficult to explain their impact in isolation. It also appeared that some of the needs and also the resultant information behaviour evolved due to the home-based situation.

In discussing the findings on how both personal factors and environmental factors may influence elderly people in terms of their information needs and behaviour, there is need to clarify what is meant by information needs, as already stated in the introduction. This will provide a foundational base for the arguments and discussions that follow.

#### **Personal Factors**

Physical, psychological and social changes and uncertainty that elderly people experience are viewed as personal factors that could influence their information behaviour. This viewpoint is supported by evidence from the literature such as Wilson's (1999, 2005) models of information behaviour, where he refers to the physiological, psychological and

cognitive inner experiences as influencing each other and leading to experiencing a need for information. Similarly, Hepworth (2007) too recognises different personal inner states, namely: cognitive, affective, and environmental (contextual) characteristics that can give rise to information behaviour. Under personal factors of the elderly, we further look at literacy and language levels, memory constraints and physical impairment and personal preferences as some of the personal factors that could influence their information needs and behaviour.

# **Literacy and Language Capacity**

The different levels of competency among the respondents regarding language and literacy are important personal factors that determine to what extent they access, interpret and use information that can solve problems such as making sense of the changes that come with the ageing process. In the comparison below, it becomes evident to what extent this group of factors influenced the information behaviour of the home-based elderly.

About half (10 out of 18) of the elderly interviewed, indicated that they were literate in English, Kiswahili or their own indigenous languages. They confirmed that they were able to follow some of the health care information on their own. They also indicated that the formal health-care providers did share information with them in the language of their choice.

However, the other half of the elderly respondents (8 out of 18) indicated that they were illiterate and thus could not access written information on health-care matters. It also meant that this group was unable to follow written health-care instructions, irrespective of language. Illiteracy therefore acts as a barrier to those who are unable to access written information on their own. This necessitates verbal communication of health-care information. Normally, these elderly request literate family members to accompany them to the hospital to take instructions on their behalf. Thus, it seems evident that the illiterate elderly require person-to-person sharing of information to benefit from existing health-care services.

Although the literate care providers could follow written instructions in at least three different

languages, the findings showed that they were not familiar with medical terminology. The literate care providers therefore needed information in lay terms to ensure they could assist the elderly in their care.

# **Memory Constraints**

Memory constraints are one of the physiological changes experienced by the elderly that can cause a lot of uncertainty in terms of taking medication, or keeping appointments to visit health care services for checkups.

Some of the elderly who participated in the survey reported that they were afraid of forgetting instructions conveyed orally, as they were unable to read written health-care information. Forgetfulness gave rise to emotions of uncertainty and anxiety among the elderly, and made them more dependent on informal and formal health-care providers.

The findings showed that the problem of failing memories was to some extent taken care of by health-care providers by writing instructions in a note book for patients to carry home (Republic of Kenya, 2007; 2008). The rationale behind this practice was to ensure that the elderly have at hand details of their medication and dates for checkups when needed for verification by either health-care professionals during check-ups, or their personal care providers. The note book proved to be a multipurpose information source that not only helped to address the memory and uncertainty problems on the side of the elderly, but also to streamline procedures to communicate relevant information to the respective professionals. Seemingly, it also alleviates the language problem in cases where the elderly are not conversant in any of the official languages, or familiar with medical terminology. Evidently, the note book practice is an example where personal and contextual circumstances shaped the information behaviour of the formal health-care providers in response to visceral information needs of the elderly (Taylor, 1968).

# **Physical Impairment**

Physical impairments such as poor eyesight, hearing impairment, and increasing immobility are personal factors that impact on the elderly person's need to find answers, to reduce uncertainty, or to make sense of the changes brought about by the ageing process.

Considering the argument that factors in the personal and contextual dimensions of information behaviour give rise to information needs, these conditions proved to be relevant in terms of the information behaviour of the elderly.

Findings showed that one-third of the respondents (6 out of 18) indicated that they suffered from poor eyesight, which hinders reading to access health-care information. Similarly, hearing impairment and loss of memory deprived them of opportunities to interact effortlessly with other people to access or recall relevant information; a situation which increases isolation and uncertainty.

In addition, half of the elderly (9 out of 18) reported that due to heavy workloads, family responsibilities and other commitments, they did not always have time to go out to find information about their health conditions. Immobility as a result of poor health also meant they were unable to seek information outside their homes, as indicated by the quote below:

"I do not go beyond this small compound. Poor health has denied me chances to visit friends, relatives and other places where I can get information on my own."

From the reference to 'friends and relatives' in the quote above, it seems evident that the elderly interviewed, preferred to turn to people instead of textual sources to access relevant information. Apparently, help from family members and friends create opportunities for some elderly people to overcome challenges of access to information. The elderly reported that family members hired taxis when they had to go to hospitals for treatment or checkups. They also obtained health-care information from visiting relatives and friends, as well as from health programmes presented on local radio stations. It seems that interaction with friends and listening reveal something of the preferred means of accessing information among the elderly.

#### **Personal Preferences**

Another personal factor that impacts on the acceptance and use of information among the home-based elderly proved to be personal preferences. Akanji et al. (2002) indicated that elderly people in African countries have a preference for complementary and alternative medicine (CAM),

since herbal medicines are traditionally used here, they were provided in a more acceptable format and on a more accessible level for them. These findings are consistent with those of Chui, Donohgue and Chenoweth (2005) on Chinese cancer patients in Australia who chose to use traditional Chinese herbal medication rather than conventional Western medication.

During the investigation, it was observed that the elderly often took their note books, issued by the health-care service to their local CAM dealers. Apparently, the latter understood enough of the medical terminology to enable them to suggest alternative products which they stock that they then offered to the elderly. As a result, the messages in the note book intended for pharmacists are now rerouted in a concealed manner to another actor who provides products that might not have been proven safe or effective for treatment of a particular health condition. From an information behaviour point of view, it seems that the elderly are indifferent to the value of scientifically tested information and are more concerned about the costs of medication, since many of them find it hard to make ends meet in terms of financial expenditure. The elderly also confirmed that they found the people working in CAM stores friendlier and more accessible than the doctors in government health care services. Apparently, staff working in CAM services listened to them and did not hurry them unlike the professional health workers. This seems to be evidence of how personal factors and contextual factors are instrumental in shaping the information behaviour of the elderly.

#### **Environmental Factors**

Various studies (Taylor, 1968; Courtright, 2007; Naumer & Fisher, 2010) show that an information need is best understood when it is viewed from the environment or context in which it originated. The findings showed that environmental characteristics such as financial support, interpersonal relationships experienced in health-care facilities, cultural traditions, the Internet and political decisions also influenced the need for information for health-care of elderly people. The influence of environmental factors is discussed in the sections below.

#### **Health-Care Services**

A combination of personal and contextual factors seems to contribute to information behaviour that results in strained interpersonal relationships. These factors also seem to be instrumental in the lack of consistency in exchange of information for geriatric care. Their perceptions of the interpersonal relationships seem to be rather negative as captured in the following quote:

"Most nurses in government hospitals are very useful, especially if you deal with the same one

regularly. But some of them seem to be impatient with elderly people, particularly if they

[elderly] are not accompanied by someone that understands the system in the hospital."

The elderly respondents' view of the government's approach towards their health-care situation was generally negative, based on the current services provided. The contextual factors impacting on information behaviour proved to be policies, political support and infrastructure, as indicated by the following quotes:

"Politicians in this country can help to raise funds for needy cases but not support implementation of a policy for care of elderly citizens."

"Some of the parliamentarians are our agemates, and others are much older than some of us. But they forget all about the welfare of elderly people as soon as they get to Parliament."

Another factor determining their perception seemed to be the waiting in long queues at health-care facilities. Respondents felt that time spent in queues at health-care facilities is not well compensated for when they finally meet with formal health-care providers on duty. The general perception is perhaps best captured in the following viewpoint of one respondent:

"It frustrates me sometimes when I go to the government hospital. I have to wait in a queue for a long time. And when I get to a nurse, she wants to spend very little time with me. Then I have to go to another queue for an injection or at the hospital pharmacy for drugs if they are available."

The elderly sometimes lose their note books in which the health-care providers wrote their diagnosis and prescriptions, and some occasionally came to the professional health-care facilities in company of different informal care providers – all conditions that

are not conducive for the smooth flow of information.

#### **Financial Resources**

Apart from education and reading skills to access and use textual information, financial resources are important when it comes to access of information beyond one's personal collection or personal interaction with people in one's immediate environment. The findings showed that the majority of the respondents (17 out of 18) had little or no discretionary income for purchasing resources such as books, magazines, and newspapers that provide health-care information. The findings also suggest that a combination of a high level of exposure and education during their active years and a stable income in retirement helped some elderly people to purchase information resources to help them in health-care.

#### **Cultural Traditions**

Cultural traditions constitute another contextual factor that manifests in people's information behaviour and proved to be significantly influential within the health-care context of the home-based elderly. The findings revealed some reluctance among elderly people to share information about their personal health status with younger people, people of the opposite gender, and sometimes their informal care providers. The majority of elderly respondents (12 out of 18) indicated that they were aware of cultural practices that prohibited sharing of certain types of information with younger people, or people of the opposite gender. Respondents, especially those from the rural areas, acknowledged that they found it difficult to discuss some of their health issues with younger people and people of the opposite gender. They indicated that they preferred to share their intimate health-care details with people who were closer to their age. This implies that elderly people might be more willing to approach older formal healthcare providers. Such preferences of whom to share information prevent them from accessing useful information that could address their health-care problems.

Responses from formal health-care providers also confirmed that some elderly were indeed reluctant to reveal details of their health conditions to formal health-care providers that were younger or of the opposite gender. It seems that the elderly people do not intentionally conceal intimate information from formal health-care providers but act in accordance with cultural practices that prevent them from sharing intimate physiological problems with outsiders. In this regard, formal health-care providers indicated that the elderly tend to use metaphorical or euphemistic expressions to communicate what they considered intimate information, because of their cultural traditions. This indirect form of communication resulted in a negative perception of elderly people, and affected the exchange of information between these two groups that are dependent on each other to make the right decision in terms of treatment.

Based on the findings, it seems evident that unwillingness to collaborate with other groups of people within the home-based context prevents free flow of information that can alleviate the need for geriatric information.

It seems that cultural factors such as norms and values were instrumental in obstructing access to health-care information held by professional members in the health-care context of the home-based elderly. These findings seem to be consistent with Courtright's (2007) findings on how cultural traditions can shape information behaviour.

#### Education

The findings showed that prior to retirement, some of the elderly people were professionals in various fields while others had no professional training. However, only three of the elderly people (one former health-care provider, a former science teacher in secondary school and an agricultural officer) indicated that they were able to understand information presented in medical terms. A lack of background knowledge in geriatrics and a need for information presented in lay terms determined to a certain extent the scope and nature of information needs of the elderly in health-care. Some of them indicated that they could access health-care information in lay terms on their own but needed help to access information written in medical jargon. It seems evident that professional training and knowledge gained through work experience helped some of the elderly later in life to search for information for their health-care with minimal help.

# Conclusion

Consulting information resources and the manner of accessing information is a prominent component of information behaviour which Wilson (1999) identified as information activities resulting from the impact of personal and environmental factors. From the findings, it became evident that personal factors such as language and literacy, and contextual factors such as education and financial resources had a profound effect on how the elderly in the home-based health-care context perceived information as a resource to help them to alleviate uncertainty, or to make sense of their everyday life experiences. This applies also to the manner in which information resources are consulted. The elderly whose literacy levels vary tend to prefer to approach knowledgeable people for advice, rather than consulting textual sources. Interestingly, some sort of denial seemed evident from their answers to the interviewers claiming that financial and time constraints were to be blamed for not seeking information from textual sources such as books.

It was also clear that all the elderly were unable to use the Internet which was available either through the cyber cafés or on their cell phones. Lack of digital skills among the elderly resulted in non-use, or indifference to the Internet as a potential resource to access information for health-care purposes. The findings showed that most of the current generation of home-based elderly (who have access to the Internet) may need intermediaries such as informal care providers to help them to access health-care information available on the Internet.

The investigation also proved how important it is to clearly understand what exactly causes information needs among a group of people in an everyday life situation before an information provision strategy can be launched.

Although the study highlighted the real life information behaviour in health-care of the home-based elderly in Nakuru District, more research will be required in order to design a strategy on how to engage the many stakeholders involved in health-care services and policies to help the home-based elderly and care providers to deal with uncertainty and anxiety when growing old.

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