

Information sharing and use by health care workers in primary health care workers in Oyo State, Nigeria

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Abstract

This study investigated information sharing and use by health care workers in primary health care centres in Oyo State, Nigeria. The descriptive survey research design of the correlational type was adopted for the study. The population of the study comprised 1787 health care workers spread across 33 primary health care centers (PHCCs) in the headquarters of the Local Government Areas (LGAs) in Oyo State, Nigeria. Sample size of 631 was used for the study and questionnaire was used for data collection. Findings from the study revealed work related issues, problem solving, provision of forum for discussion of ideas and exchange for a reward as major purposes for which primary health care workers in PHCCs Oyo State, Nigeria shared information among themselves just as a high level of information sharing was established amongst them. Also, findings from the study established major purposes of information use by the health care workers as including performance of difficult and technical tasks, helping to influence others to translate vision into action, to come up with unique ideas and to adapt, and work with colleagues and other stakeholders in the sector. On the frequency of use of information by the health care workers, the study revealed occasional use but a positive significant relationship was established between information sharing and use. The study recommended the provision of relevant information management facilities such as computers and related technologies by the management of primary healthcare centres in Oyo State, Nigeria for effective information sharing and use among the primary healthcare workers.

Keywords: Information sharing, information use, health care workers, primary healthcare centres, Oyo State, Nigeria.

Introduction

Information dissemination and use are key to qualitative health care provision and access to all. Hence, universal access to quality health care and optimum patient safety which usually be the goal of health institutions is a function of adequate and proper management of health information by health care workers. is paramount to the achievement of this goal. In other words, for health care provisions and access to be effective, there should be adequate dissemination and use of accurate and relevant information among health care workers. Unfortunately, health care provision and access continue to face serious challenges due to several factors including information management related factors (Ayankola, 2021). Despite the fact that developed countries have made tremendous achievements towards provision and access to qualitative health care through effective health information management, most developing countries including Nigeria are

bedevilled with poor health care provision resulting from poor information management (Stevens and Rancourt, 2014).

Good health care depends on prompt information or adequate records keeping, and without accurate, comprehensive, up-to-date and accessible patient case notes, medical health care workers will always find it difficult to offer the best care. Therefore, good health information management ensures that health care workers are able to have access to and share relevant information for qualitative health care delivery. Consequently, the management of health information gives proof of health care accountability for their actions as they form a key source of data for medical analysis, statistical reports and health information systems.

Effective and economic health information management method may be a necessary ingredient for proper coordination of human, material and infrastructural resources in health establishments and

hospitals. The provision of health information is crucial in achieving health establishments' goals but much more vital is the proper management of this health information and medical information (Akporhonor & Iwhiwhu, 2007). In other words, to be of maximum value, health information should be properly managed and organised. Health information management or medical records management, according to Healthcare Records Management Steering Committee (NHO, 2007) is the systematic and consistent management of all health records held throughout their lifecycle. However, it takes health information personnel that are committed, dedicated and fulfilled in their job to ensure the efficient management of health information or health records in hospitals.

Health information provides proof of the hospital's accountability for its actions and forms a key source of data for medical research, statistical reports and health information systems (Yaya, Asunmo, Abolarinwa & Onyenekwe, 2015). Therefore, it may be said that each tending healthcare institutions such as federal teaching hospitals particularly have nearly the whole product of administrative decision-making and service delivery in the form of information and records that typically represent their corporate memory. Likewise, the hospital's supplementing human memory that function as guides for effective planning and decision-making. Such health information could consider vital, active, semi-active, inactive, current or non-current.

Meanwhile, health information management could be represented as a useful tool in hospitals administration and in order to take advantage of past experiences, accurate information and good records keeping ought to form the bedrock of designing for the future in hospitals. The

tasks engaged in by hospitals are sometimes documented as official records containing essential and crucial information of actions and events that are kept and preserved for easy retrieval and utilization, once required. Thus, Nwaomah (2014) describes health information as a vital resource for health establishments and hospitals.

Health information management has, therefore, been delineated as the management science of controlling the quantity, qualities and prices of medical information that encompass the procedural system operations, space, equipment, and employees needed to administer the information (Mohammed, Tetteh & Azumah, 2018). Thus, accurate health information goes a long way in enhancing the effectiveness of teaching hospitals administration. In spite of the indispensable price of health information and the quantity of money spent on its creation and maintenance, the management of health information by health information management personnel would result in economy and efficiency in creation, use and maintenance, as well as disposition that is rarely thought of as the highest priority of tertiary health care system (Popoola, 2009).

Health information management processes involve the creation, capturing, maintenance, use, retention and disposal, among others. These processes require the attention of health information management personnel whose job apart from development of filing and retrieval systems embrace files management, mail, and telecommunications management. The selection and management of office copying machines, the development, maintenance of important records and information programmes, as well as determining whether or not centralised or decentralised filing systems are applicable, are all parts of the assigned duties of the personnel. In short, for

health service delivery to be effective in teaching hospitals, there must be an effective health information management system.

In the midst of the activities of doctors, nurses and hospital patients in the federal teaching hospitals are the health information management personnel working assiduously and competently right in the middle of all the activities in the hospitals. According to Mohammed, Tetteh and Azumah, (2018), this category of personnel serves as the information nerve that links all the essential activities in the healthcare field. Garcia (2011) emphasised that health information management personnel provides security of information, disaster preparedness plans, the operation of records centres, and the application, as appropriate systems analysis, automation, and reprography to these processes. There is a need for fulfilment on the part of these health information managers for effective, efficient and proper management of this health information. Such fulfilment required by the personnel can only be guaranteed when their salaries are promptly paid, the hospital provides conducive work environment, and workers welfare package is assured (Akor & Udensi, 2013).

The sharing of relevant, work related, and health important information among health information management personnel is a signal of team work in the profession, and which might be considered as the key ingredient for hospitals that seek to remain competitive in healthcare management. Information sharing within the context of this study is the exchange of health information among health information management personnel, pharmacists, nurses, medical practitioners, and other staff in order to boost the quick, economical and effective provision of health information and health service delivery to the hospital's prospective information users.

The sharing of health information among health information management personnel and other stakeholders in federal teaching hospitals is done electronically, interpersonally, at workshops, conferences, seminars, and meetings. This is done in order to improve the quality, safety and effectiveness of healthcare, and to stimulate the personnel in fulfilling their career ambition. The sharing is a vital component of health information management practice that also takes various forms such as interactions, brainstorming, personal relationship, exchanges and dialogue, social networks, meetings and workshops. Hatala (2009) averred that organisations have to understand the role of information sharing if they intend to remain competitive and also to boost their profitability.

On the other hand, Vidal and Moller (2007) declared that information sharing enables subordinates to regulate their efforts to the organisation's prospects, as much as their self-development. It could, therefore, be inferred that some informed health information management personnel would be equipped to use the shared health information to have a significant competitive advantage to improve self in decision-making, communication, cost reduction and coordination, among other benefits, and could as well be able to achieve career fulfilment through the use of appropriate information. A good health information system brings together all relevant partners and stakeholders to ensure that users have easy access to a reliable, authoritative, useable, understandable, and comparative data (WHO, 2008). Thus, every member of the profession, irrespective of their hospital, is involved in a process of health information sharing for appropriate use and for a broader healthcare system.

The use of shared health information is one of the three core components of

information behavior, together with information needs and information seeking (Ojedokun, 2007). Information use depends on the necessity for it and that for information use to exist, the need has got to be defined. The necessity for health information use within the context of this research has got to do with the well-being of the hospital patients in federal teaching hospitals in Nigeria, especially in the Southern part of the country. It can, therefore, be inferred that health information use is dependent on the information need of an individual patient, which might be seen as a dynamic, interactive, and social process of inquiry that will end in the creation of that means or in decision-making, as well as to communicate to other stakeholders to reduce cost of service and to stimulate staff in fulfilling their career. Information use among health information management personnel in federal teaching hospitals involves the method of interpretation that will evolve into the process of inquiry and discussion that might ultimately leads to the proper management of health information, for instance; records creation and management. Ogbomo and Ogbomo (2008) opined that without the consideration of information use, the thought of activities like information seeking or information retrieval is incomplete.

However, the purpose of sharing health information is for its use but in a situation where such information cannot be use, then the purpose is defeated. In that case, such a staff will not be satisfied, which implies that such a worker is not fulfill in the job. Thus, the availability of relevant and acceptable information for use among health information management personnel might make them fulfilled in their career whereas lack of its relevant and acceptable use might cause frustration and lack of fulfilment. In a bid to have the right health information

within the right place, in the right order, at the proper time, and for the right individual, health information management personnel within the numerous federal teaching hospitals ought to be adequately catered for in terms of promotion, salary package, training, and other benefits so as to be motivated and fulfilled in their chosen careers.

Several studies have been done on health information management in Nigeria (Popoola, 2000; Ajuwon, 2003; Ajuwon, and Rhine, 2008; Welcome, 2011; Ojerinde, and Iroju, 2015; Yaya, et al. 2015; Asunmo, and Yaya, 2016; Makinde, Mami, & Oweghoro, 2016; Ojo & Owolabi, 2017). These studies focused on health information management and medical records management practices, systems and strategies in health institutions and hospitals but little of the existing studies has focused on career fulfilment of health information management personnel in federal teaching hospitals in Southern Nigeria. Also, some of the studies found on health information management personnel concentrated mainly only on organisational and career commitment (Popoola & Oluwole, 2007; Popoola, 2009; Igbeneghu & Popoola, 2011; Mensah, 2011), work motivation (Ayub & Rafif, 2011) and self-esteem (Iqbal, 2012).

Studies found on career fulfilment were either done in relation with other factors such as leadership (Hetland, Andreasson, Pallesen, & Notelears, 2011) or other categories of employees such as nurses (Banks & Bailey, 2010) and school principals (Brown, 2010). Some other studies have looked into the individual contribution of factors such as the motivational basis for performance (Baard, Deci & Ryan, 2004). The researcher is unaware of any study that has investigated the combined effect of work motivation, self-esteem, information sharing and use on

career fulfilment of health information management personnel in federal teaching hospitals in Southern Nigeria.

Objectives of the study

The objectives of the study are to:

1. determine the purpose of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria.
2. find out the frequency of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria.
3. ascertain the purpose of information use among health care workers in selected primary healthcare centres in Oyo State, Nigeria.
4. determine the frequency of information use among health care workers in selected primary healthcare centres in Oyo State, Nigeria.
5. ascertain the relationship between information sharing and use among health care workers in selected primary healthcare centres in Oyo State, Nigeria.

Research questions

The study answered the following research questions derived from the objectives:

1. What is the purpose of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria?
2. What is the frequency of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria?
3. What is the purpose of information use among health care workers in selected primary healthcare centres in Oyo State, Nigeria?

4. What is the frequency of use of information among health care workers in selected primary healthcare centres in Oyo State, Nigeria?

Hypothesis

The following null hypothesis was formulated and tested at 0.05 level of significance:

There is no significant relationship between information sharing and use among health care workers in selected primary healthcare centres in Oyo State, Nigeria.

Literature review

Information sharing is a common activity for everyone but information sharing within an organisation, especially health institutions, is a complex issue. An organisation's employee's ability to share knowledge with their colleagues and other members of the organisation could be seen as a key to their competitive advantage. For an organisation to remain competitive and to boost profitability, undistorted and up-to-date information has to be shared among its workforce together with the organisational free flow of information. Mashiloane, Mafini and Pooe (2018) referred to information sharing as direct communications and information exchanges among those involved in solving a problem. As an important component of information behaviour, sharing of information is all about sharing acquired information by incorporating both active and explicit, and less goal oriented and implicit information sharing among members of an organisation.

According to Gaal, Szabo, Obermayer-Kovacs and Csepregi (2015), information sharing is the method by which information of individual personnel is regenerated into a type that will be

understood and utilised by others, Wang and Noe (2010), to solve issues, develop new concepts, and implement processes. Rafaeli and Rubar (2005) viewed information sharing as the act of providing a useful answer to the request for information. These scholars believed that information sharing is the provision of task information and the ability to assist others in their quest to grasp and to collaborate with others to resolve issues and to develop new ideas, and to probably implement policies or procedures. Paulin and Suneson (2012) believed that information sharing is the exchange of knowledge between and among individuals or co-workers, and within and among groups, organisational units, and organisations.

Accordingly, information sharing among health information management personnel is seen as the method of exchange, skills, expertise and understanding among personnel, and with medical practitioners, nurses, medical laboratory technologists, pharmacists, medical educators, legal consultants, health insurance industries, microbiologists, and nutritionists (Henderson, 2015). Estabrooks, Thompson, Lovely and Hofmeyer (2006) posited that information sharing could be a tool that is used to promote evidence-based practice on decision-making, likewise to promote exchange and dialogue among staff, and or other service providers. Mohammed, Maroof, Thamer and Huda (2015) believed that information sharing could be a key component of total quality management that improves organisational efficiency, learning, innovation, flexibility, and understanding of the organisational goals.

In their contribution to the definition of information sharing, Lotfi, Mukhtar, Sahran and Zadeh (2013) contended that information sharing is the distribution of useful information for systems, people or

organisational units. Meanwhile, in order to enhance the results of information sharing, organisations should endeavour to answer these four main questions on what to share, whom to share with, how to share, and when to share? The quality of answers will, however, help to avoid redundancy, reduce the cost of sharing and invariably improve responses. The term information sharing could well be referred to as knowledge sharing or information integration, says Lofti, et al (2013).

However, various researchers on information sharing (Rafaeli and Ruban, 2005; Estabrooks, et al., 2006; Wagner, 2006; Hatala & Lutta, 2009; Wang & Noe, 2010; Paulin and Suneson, 2012; & Mohammed, et al., 2015) agreed that the sharing of information in organisations could occur via written correspondence, face-to-face communications, documenting, organising or capturing information for the use of other members of staff. In this current information-driven and technology-based global economy, therefore, organisations are getting more and more addicted to the cumulative knowledge of their workers, and different key stakeholders within the organisation, opined Hatala and Lutta (2009). According to Wagner (2006), the restriction of information flow through the application of tight rules will not solely renders organisations unprepared for unexpected changes within their environment but will also impedes their adaptation to environmental changes. Thus, the free flow of information relates to the movement of information among members and different key stakeholders of the organisation.

Gaal, et al (2015), enumerated factors such as the nature of information; tacit form which is located in the mind of individual worker; the explicit form that is embedded in organisational routines and

norms, motivation, internal factors – perceived power and reciprocity. Other factors, according to the researchers include external factors that relate to the relationship between the recipient and rewards for sharing opportunities. The formal factors include training programmes, team-work, and technological-based systems, while the informal factors include the personal relationships and social networks, as well as the culture of the work visibility and organisational culture that determines values, beliefs, and work systems that could influence and encourage the sharing of information are all factors that influence information sharing in an organised organisation.

Organisations have urgent need to pay specific attention to effective information sharing, which is important for their success and for achieving competitive advantage. In addition to this, information sharing could be materialised in written form through information technology systems or via face-to-face communications. According to Wang and Noe (2010), it is important for the next generation of health information management personnel to provide opportunities to share their knowledge. Organisations have to stimulate a need to share information among a group of workers. When this need appears, physical or electronic spaces are likely to be used for information sharing purposes.

Ghobadi and D'Ambra (2011), while researching on sixty-four students with reasonable knowledge on Hyper TextMarkup Language (HTML) and Java programming drew attention to two consequences of information sharing that include cooperative and competitive benefits. The researchers averred that the cooperative benefits of information sharing refer to the joint use of the shared information in pursuing collective interests,

whereas the competitive benefits refer to the use of the shared information for private gains in an attempt to out-perform other colleagues. They, therefore, concluded that those that possess specific information could enjoy some benefits and unique positions that could be lost when shared. Thus, the types of information shared among workers in an organisation could be as a result of which casual interactions which is the most frequent and informal conversational exchanges that occurred when workers run into each other in person or see each other in a common workplace. Wang, Wakkary, Neustaedter and Desjardins (2015) see this type of information sharing as usually held together by informed awareness, a naturally gained understanding of who is around and what they are up to.

Another form of sharing information in an organisation, as examined by Asrar-ul-Hag and Anwar (2016) in their research work on a systematic review of knowledge management and information sharing is in form of meetings and workshops where workers generally have training on ways to use programming tools and equipment. Hobson, Anand, Yang and Lee (2011) referred to the assorted sorts of sharing information as static and dynamic. They opined that static information is needed and obtained by multiple groups but remains unchanged in its representation or very minimally changed in its representation but unchanged in its function.

Meanwhile, healthcare records or health information management collected, processed and held health information in both manual and electronic formats pertaining to patients and their attendant care. Asunmo and Yaya (2016) stated that the records contain health information such as demographics, clinical data, images, unique identification, investigation, samples, correspondences and communications that

relate to the patients and their care. It was further reported that the record is a legal document that is designed to provide an overview of the patient's state of health before, during, and after a particular therapy must have been administered.

When highlighting the benefits that accrued to adequately shared information, Li and Lin (2006) contended that information sharing is fostered by top management support, trust among work-groups or individuals, and shared vision among supply chain partners. Omar, Ramayah, Lo, Sang and Siron (2010) also declared that information sharing among workers that include health information management personnel influences the personnel's behaviour and decision making. Thus, the provision of information at the correct time and place is crucial to confirm the seamless flow of activities and processes. The quality of information would assist organisations to enhance the exchange of information among their workforce.

However, the free sharing of health information is part of the motivating factors in hospitals where the health information management personnel would be constantly placed on the-know on policy directions and programmes of the hospitals. Abah and Nwokwu (2016) claimed that unnecessary administrative bottleneck, as it concerns withholding of vital organisational information from some concerned members of staff should be avoided. They buttressed that organisational politics which could lead to hoarding of important information from certain groups of workers simply because they are not networked with power blocks in the organisation should be eschewed as such development breeds erosion of morale among members of an organisation.

Meanwhile, the continuous dissemination of information to key individuals within an organisation is

probably going to steer to improved performance since quality and timely information facilitate high management in decision-making. Hatala and Lutta (2009) contended that information sharing is inspired among organisational members due to its probability to steer or reduce product development cycle times and client service response times that may lead to augment organisational productivity. Organisations that, therefore, encourage information sharing among its workers are believed to gain a competitive advantage within the long term. Li and Lin (2006) assured that contextual factors such as industry type, organisational size, and type of organisational structure would possibly influence the standard of information that is being shared among its workforce.

Information use is one of the three core components of information behaviour alongside information needs and information seeking. Invariably, information use has received less attention in research literature but it is usually linked to information need, in that information is required in order that it can be used as a result that use is the final step in an information seeking method. Chou and Lo (2015), in an empirical research on exploring information use behaviour in the context of knowledge construction, discovered that supposing the amount of researchers on information use is restricted compared to other researchers regarding information behaviour, that information use is usually one among the involved problems in finding out information behaviour.

Information is seen as an important part of all aspects of life. It is such a very important raw material, that its acquisition and understanding is germane in decision-making, policy formulation, as well as implementation for growth and survival. Without adequate information, not much is achieved particularly once it involves

decision-making or acquisition of information (Adekanye, 2014). There is, however, invariably a desire for workers in any organisation to have access to relevant information, which will facilitate in reducing or bridging the degree of uncertainty in their operation surrounding. Unegbu and Runo (2013) in other research work on the administrative staff's use of information in decision-making opined that information should be in a form that is short enough to permit for straightforward and quick use, and may contain the simplest quantity of details in keeping with effective decision-making. Therefore, an efficient use of information can, therefore, facilitate easy and quick decisions among the varied classes of workers, mostly health information management personnel.

Unegbu and Runo (2013) in their research on information use on decision-making process of administrative staff of federal university of agriculture, Abeokuta, Nigeria supported Chou and Lo (2015) that information use is central to sense-making therein knowledge gap might be stuffed by exploitation information. Choo, Detlor, Bergeron and Heaton (2008), in their research work on information culture and information use succinctly outlined information use as an elementary idea that has no definitional or method approaches that are generally accepted or applied. Although information use has been widely studied, several researchers acknowledged it as an important part of information behaviour that will solely be understood within the context of how the information is used (Kuhlthau, 2008). Spink and Cole (2006) in Chou and Lo (2015) then advocate a holistic approach where information behaviour includes the atmospheric factors of human information condition to the instant where the information environment

directly connects with the individual user for information use.

Choo, et al. (2008) went further to look at eight categories of information use that include: enlightenment, problem understanding, instrumental, factual, conformational, projective, psychological feature, and private or political. They invariably buttressed that user of information experienced information use in five other ways that refers to information use as repackaging existing information in an exceedingly complete type and format for it to be accessible to other users. Another way of information use as described by the researchers is the information flow that may change the flow of information by transmitting it among workers or the exchanging among them. The event of latest knowledge and insights is another kind of information repackaging that concerns information use as a professional method that makes new concepts and meanings. Lastly is the shaping judgments and influencing of others that each brought up the utilisation of information to guide decision-making and to influence the behaviour of others.

Furthermore, in promoting information use, Kyakulumbye, Olobo and Kisenyi (2013) urged that information use as potentially contributed to the democratisation process in societies and organisations. This argument affirms that information use leads to an increase in its dissemination and accessibility. In essence, the use of information among organisational workers, mostly health information management personnel, will raise their awareness, facilitate their participation process and spread democratic ideas among the workforce. This, therefore, as opined by the researchers raises workers' awareness and their expectations in generating what will enhance dialogue between the

management organisations and the public, and invariably lead to greater accountability.

The use of information according to Unegbu and Runo (2013), involves among others, the development of documents in a variety of forms, which includes papers and reports, training manuals and action plans. Information use must, therefore, have evidence to show its usage. Bates (2005) asserted that the most used information is generally those that are close-by, that have a high standard, easy to use, available at low cost and which the seekers are used to. For information or records to have these values, it must be used, and for it to be used health organisations, medical practitioners and other health workers must have confidence in its source and usage for qualitative healthcare system.

In the present day information-driven and technologically based, global economy has become more and more hooked into the cumulative information base of staff and other key stakeholders in accomplishing the organisational aims and objectives. According to Hatala and Lutta (2009); Small and Sage (2006); Bock, Zmud and Lee (2005), the ability of an organisation to expedite information sharing among its workers is key to its competitive advantage. Undistorted and up-to-date information sharing is, therefore, essential to an organisation's competitiveness that needs a free flow of information among members of staff (Li and Lin, 2006), especially when it has to do with health information management. The increasing information sharing and use within organisations still appear to be the exception rather than the rule, continued Li and Lin (2006).

Li and Lin (2006) concluded that competition and globalised environments are a number of the challenges related to obtaining products and services to the correct place at the right time and at all-time

low value. These challenges, for instance, had forced organisations to realise that it is not enough to improve their efficiencies rather, their entire operating environments must be made competitive and one of such ways to do this is to support information sharing within and among staff. Thus, for efficiency and effectiveness of health information management in federal teaching hospitals in Southern Nigeria, there is a need for a platform that would facilitate the information sharing and its use among these classes of personnel. Moberg, Cutler, Gross and Speh (2002) in Anju and Sampath (2014) averred that information sharing involves a key ingredient for organisations seeking to stay competitive. The understanding and practice of information sharing and its use are becoming increasingly important for organisations to stay competitive in a bid to boost profitability. This is made attainable by creating undistorted and up-to-date information by each health information management personnel within the health sector (Childhouse & Towill, 2003; Li and Lin, 2006; Rahman, 2004). While Mohammed and Norman (2017) suggested that the activities of information sharing are entwined with other types of information practices that include seeking and use. This is to say that employees will seek information, use it and eventually share with other members of the organisation if it is deemed to be useful to them.

Many others have also listed different forms of information practices which the use of such information is considered to mean: 1) How people approach sources of information and adopt the available information in them (Savolainen, 2009); 2) Reading and thinking about the acquired information as well as comparing their different sources; analysing and evaluating the information; doing

syntheses and creating meaning from information (Limberg 1998); 3) Receiving and internalising information (Machulp, 1980); 4) Sending and receiving information (Machulp, 1980); 5) Decoding and coding stimuli in a symbolic system (Spink and Cole, 2006); 6) Interpreting the value of information sources more generally, and directing action (Savolainen, 2009); 7) The resolution of a process of becoming informed, to get to know a matter, or applying the information (Giannini, 1998); 8) Evaluating, adopting and applying new information (Choo, 2006); 9) The reception and interpretation of information, and on the other hand the functional utilisation of the information (Tuominen, 1996); 10) Applying specific social scientific research programs, making decisions to influence matters, consuming and actively adopting information (Todd, 1999); 11) Information search and retrieval, the application of information to different purposes, as well as the creation and storage of information (Huvila, 2008); 12) Applying information in some specific action or in satisfying a more general need, as well as sharing the information with other interested individuals, or some activities of information management (Erdelez, 1997).

Li and Lin (2006) reported the non-significant relationship between information sharing and its use. They concluded that the sharing of information among industrial workers, as same for health information management personnel, does not translate to actual use of the information. So, further researches by Johanson (2000); Wagner (2006); Barua, Ravindran, and Whinston (2007) demonstrated that restricted information flow in the nature of sharing and utilisation through application of rigorous rules will not solely deny health information management personnel access to helpful patients' health information but will as well

make the hospitals unable to organise for sudden changes in the environment, which may impede their adaptation to environmental changes.

Meanwhile, the free flow of information among health information management personnel relates to the movement of health information or data among these classes of personnel within the federal teaching hospitals in Southern Nigeria. These information sharing needs have been found to be driven by their characteristics as employees and the organisational culture, likewise its sub-cultures (Yang & Wu, 2015). Dantas and Serville (2006); Fairchild (2006); and Wagner (2006) emphasised that to have an increase performance in an organisation, information needs to be disseminated continually to key individuals within the organisation and as a result, it is treated as an economic resource. If the information is an economic resource, observed Fairchild (2006), then it has a number of characteristics that makes it unique.

Furthermore, Yang and Wu (2015) related information sharing to a value chain within organisational sub-cultures. That each of the sub-culture tends to need totally different information and knowledge to try and do its work in order to possess different skills and propensities to gather and acquire its own information; to assemble information in different forms, and to have different requirements for and uses of the outputs of its information. They claimed that each sub-culture of the organisation sees itself with different roles in, contributions to, and purposes for the value chain, with differences leading to challenges in coordinated and productive information sharing. The continuous dissemination of new information to individual and groups of staff within organisations is likely to lead to improved performance since quality and

timely information helps top management in accurate decision making (Li & Lin, 2006; Small and Sage, 2006; & Wagner, 2006).

Eguavoen (2017) in a research on perception and use of social media for information sharing among health workers in general hospitals in Ibadan, Oyo State, averred that social media are vital tools for information sharing geared towards resolving social and environmental issues in hospitals as they need impetus to solve advanced problems in service delivery. The research found that specific professional social media must ensure that professional interactions among other healthcare professionals, to include the transmission of health information are done in line with the hospital's policy.

Research on information sharing in social networks by Shi, Rui and Whinston (2010) demonstrated that if information sharing and its use are inspired among workers, mostly health information management personnel, it will cut back errors in managing the hospital records that might lead to increased organisational productivity. From the foregoing, developing positive information sharing and use behaviours among health information management personnel may lead to increase productivity among the various personnel. These information management personnel in teaching hospitals could speed up information flow, efficiency and workers' effectiveness, and invariably lead to quick customer response or rather the personnel changing needs. Organisations that thus, encourage information sharing and use are found to gain a more competitive advantage in the long term (Wagner, 2006; Kamal, Singh & Ahmad, 2012).

Information has become a crucial foundation of competitive advantage associated with a primary driving force behind an organisation's success. Contextual

factors like a business, organisation size, and sort of organisational structure can influence the standard and type of information to be shared (Shaari, Barki & Rahman, 2015). The stratified structures typically lead to information overload due to the restrictions on the acquisition of recent information and rules that result in functionary procedure, causing delays in decision-making. Useful information according to Grant (2008), resides within individual's personnel who produce, recognise, archive, access, and apply it in carrying out their tasks. Thus, health information management personnel in federal teaching hospitals require useful health information dissemination and utilisation in carrying out their tasks effectively and efficiently.

Therefore, the movement of health information across individual health information management personnel in hospital sectors routines and practices is heavily addicted to health information management personnel health information-sharing behaviours but the restricted sharing of information across an organisation is presumed to lead to information gaps (Teece, 2000 in Laursen and Foss, 2013). The information exchange among health information management personnel typically involves networks of teaching hospital members of staff, like doctors, nurses, laboratory technicians, pharmacists; etc. While Shi, Rai and Whinston (2010) believed that personnel with high-intensity networks are likely to access higher-quality information than those with lower-intensity networks. Nuroglu (2016) claimed that information may thus, be acquired from direct experience of individual health information management personnel, the experiences of other members of staff, hospital patients, or from the memory of the organisation. Seeking and obtaining information from others encompasses

common practices such as benchmarking, forming joint ventures, networking, making strategic alliances, and working with customers and other important stakeholders (Li & Lin, 2006).

However, information sharing and information use among health information management personnel are both seen to be the crux of the overall building blocks of health information management strengthening power, which availability will enable workers to utilise same for a better policy-making, planning, implementation and monitoring. As a result of this, the appropriate utilisation of information among health information management personnel will modify them to the strengthening of information sharing, analysis and utilisation in an exceedingly localise system, as supporting research proof, and also the guarantee of adequate information management. Pujara and Kant (2015) contended that information sharing alone does not improve workers' performance but that it needs to be utilised because its judicious utilisation reduces demand augmentation. Thus, in order to be competitive and relevant in the proper management of medical information, likewise delivery of qualitative healthcare, health information management personnel sharing and using of health information are very crucial.

Theoretical underpinning

Information utilisation capacity theory

Information utilisation capacity theory which was postulated by Curras (1986) is relevant to this study. This theory indicates that the utilisation of information is dependent on the ability of the users to access information. According to Wilson (1999), personal characteristics such as beliefs held by a person, interests, needs or existing attitudes, personal cognitive need

(knowledge base) may make up barriers to access and use of information. This implies that the personal characteristics of health information personnel, their level of intelligence and self-esteem could influence use of information.

Information utilisation capacity theory is a paradigm that moves information from availability to access, sharing and finally to utilisation level. Havelock (1975) examines the tasks of generation, dissemination and use of information. He sees dissemination of information as the mode of moving information from one place to another. Meaning that, information already exists and that the components can be transmitted from one point to another. The theory is relevant to this study because, it indicates that, the use of information is dependent on the ability of the health information personnel to search for relevant information, access information, share information, and use information to achieve a particularly purpose.

Information Utilisation Capacity Theory states that users will keep on demanding and using information sources, provided that maximum satisfaction is derived from the usage, or that the sources meet the required needs. This theory could guide the process of information use and its sharing among users, mostly health information management professionals in federal teaching hospitals in Southern Nigeria. The use of this information, according to Savolainen (2009a) in Kari (2010), is an event that appears everywhere in the contexts of workers daily activities and life. Thus, Cole (2008) opines that the broadest possible matter for which information is used has to do with the survival of human species. Varieties of theories that have relevance to the independent variables of work motivation, self-esteem, information sharing and use.

The theory of Littlejohn's (2008) is as relevant to this study, because "it is expected that health information personnel who are highly motivated and with high self-esteem will be willing to share and use information.

The use of information and sharing are also widely considered key to success criterion (Kari, 2010). In other words, information could either be raw material for knowledge, or externalised knowledge. It is seemingly difficult to capture information use as the concept is often vaguely defined even in research studies, or not in any way defined (Savolainen, 2009b). Thus, information use is that seeking behaviour that leads to the use of information in order to meet an individual's need as opined by Wilson (2006). In an interview study, Maybee, Bruce, Lupton and Rebmann (2013) enumerated four different ways to understand the use of information. From one of them, one can get a fairly good, general idea of which kind of function can belong to information use. In the study, the participants experience the use of information as building a knowledge base to facilitate sharing which can then be used for different purposes. The information uses, contained decision-making and problem-solving, forming a personal point of view, sharing the information to others and creating new knowledge. The properties described in the knowledge base category were directed at the need to understand the viewpoint of the information provider. However, Maybee, et al (2013) concluded that the primary focus of the consciousness structure was on how the information is utilised and building one's knowledge base was secondary.

Information Utilisation Capacity Theory is, therefore, seen as a fundamental concept in the discourse of information seeking and use behavior. Bertram Brookes' fundamental equation of information science

as reviewed by Todd (1999) in Popovic, Hackney, Coelho and Jaklic (2014) provides a theoretical framework for furthering our understanding of the cognitive aspect of information utilisation. Ford (1986) in Madden, Webber, Ford and Crowder (2018) presents models of what is to satisfy an information need. Educational models have emphasised users' introspective perceptions of their own learning needs processes (freedom) while information scientists have developed models more on the line of a tutorial exchange (authority) in which information is presented to the information seeker not only in response to his stated need but also on the basis of relativity more extensive and objective assessments of the relationship between his own cognitive structures and those of the information sources represented in the retrieval system. Method and problems of representing information structures of information seekers and information sources using systematically rich vis-à-vis more economical statistical systems are provided. Implications are drawn for user education, in particular the need for the development of individuals' mega-retrieval skills. Information Utilisation Capacity Theory has relevance to this study in the sense that the major role of health information management personnel in federal teaching hospitals revolves around making information available for use and shared to support proper and adequate management of patients' medical records and healthcare.

Conceptual model

The conceptual framework indicates that there is interaction among the four independent variables. There is likewise a link between information sharing and information use of health information managers. The underlying principle of the model is that the relationship between work

motivation, self-esteem, information sharing and use may strongly affect the level of career fulfilment of health information

management professionals in federal teaching hospitals in Southern Nigeria, (Fig. 1).

Independent variable

Dependent variable

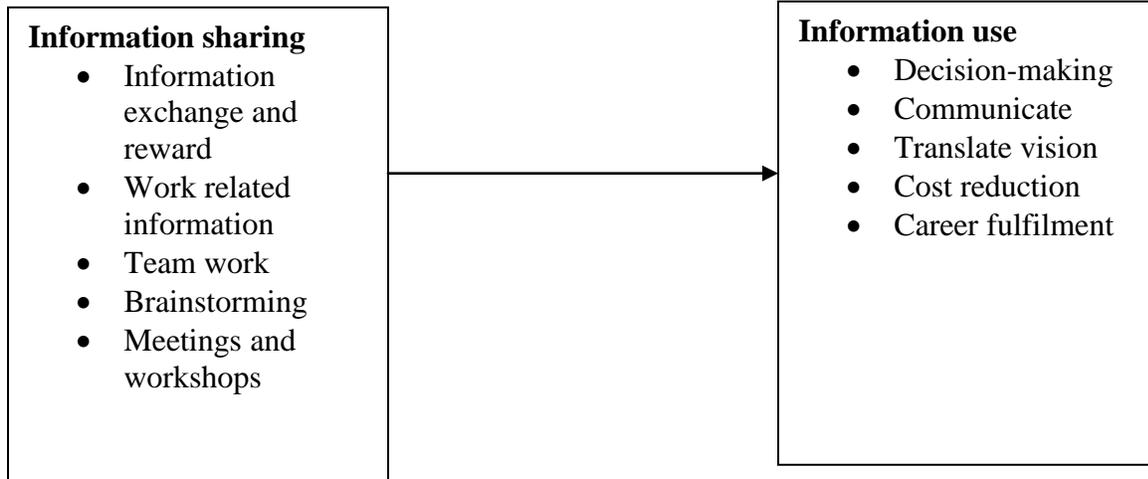


Fig. 1: Conceptual model showing relationships between information sharing and use

Methods

This study adopted the descriptive survey design of the correlational type. The population of the study comprised 1787 health care workers spread across all the primary health care centers (PHCCs) in the headquarters of the 33 Local Government Areas (LGAs) in Oyo State, Nigeria. The simple random sampling was used to select 17 of the 33 PHCCs in the LGAs headquarters representing 50.0% while the total enumeration procedure was adopted to include all the health care workers in the selected PHCCs selected for the study. Therefore, a total of 631 health care workers constitutes the sample size for the study. The research instrument that was adopted for this study is the questionnaire tagged “Information Sharing and Use Questionnaire” (ISAUQ) comprised of three sections. The first section, Section A, of the questionnaire labeled ‘Demographic Information of Health Care Workers Scale’

(DICWS) aimed at gathering data on the personal information of the respondents such as Age, Sex, Institutional Affiliation, Designation, Highest Educational Qualification, and Work Experience, among others. Section B was tagged ‘Information Sharing among Health Care Workers Scale (ISAHCWS) and was designed to gather data on information sharing among health care workers’ information. The scale contained 10 items to which the respondents indicated their extent of satisfaction or dissatisfaction measured on a 4-point Likert scale of ‘Very True of Me = 4’, ‘True of Me = 3,’ ‘Occasionally True of Me = 2,’ and ‘Never True of Me = 1.’ Section C is the ‘Information Use of Health Care Workers Scale’ (IUHCWS) which was designed to collect data on information use by health care workers. The information use scale was measured using a 5 scale of “Strongly Agree = 5,” “Agree = 4,” “Strongly Disagree = 3,” “Disagree = 2,” and “Undecided = 1,”

The face validity of the questionnaire was attained by giving the instrument to experts in the fields of health information management who made inputs on the adequacy and appropriateness of the items in the instruments (questionnaire) on which some items on the questionnaire were modified. To ensure the content validity of the questionnaire, the questionnaire was trial-tested on thirty (30) selected health care workers at Ido Local Government Primary Health Care Centre which was excluded from the main study. The data collected were subjected to reliability test using the Cronbach Alpha method and the reliability coefficient result for each of the scales is reported as follows: Information Sharing ($\alpha = 0.82$) and Information Use (0.77). The overall reliability of the instrument was 0.79, making the research instrument reliable to elicit the needed data for the study. The administration of the questionnaire was done over a period of one month. The questionnaire for this study was administered with the aid of five (5) research

assistants that were trained on the questionnaire and method of its administration. The research assistants helped in the administration and collection of the questionnaire from the respondents. The descriptive methods of analysis such as frequency, percentage, mean, and standard deviation and inferential statistics such as Pearson Product Moment Correlation were used in analysing the data collected for the study. The research questions were answered using the descriptive statistical methods of frequency, percentage, mean and standard deviation while the hypotheses was tested using Pearson product moment correlation at 0.05 level of significance.

Results

The results are presented according to the research questions and hypothesis.

Research question 1: What is the purpose of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria?

Florence Tope Dahunsi: Information sharing and use by health care workers in primary health care workers in Oyo State, Nigeria

Table 1: Purpose of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria

Items	VTM	TM	OTM	NTM	Mean	Rank
I really make work related information available to my colleagues	163, 33.1%	88, 17.8%	103, 20.8%	139, 28.2%	2.88	0.89
I will always hoard information that is very important to problem solving	159, 32.3%	98, 19.9%	97, 19.7%	139, 28.2%	2.81	0.86
Most often times, I provide forum to discuss ideas	147, 29.8%	117, 23.7%	106, 21.5%	123, 24.9%	2.78	0.84
I will share information with my co-workers in exchange for a reward	159, 32.3%	99, 20.1%	113, 22.9%	122, 24.7%	2.77	0.82
I encourage my subordinates to share information with me	158, 32.0%	108, 21.9%	103, 20.9%	124, 25.2%	2.74	0.77
I do not let personal disagreement interfere in my duty to make vital information available	154, 31.2%	119, 24.1%	104, 21.1%	116, 23.5%	2.70	0.75
I do not place restrictions on information	170, 34.5%	99, 20.1%	105, 21.3%	119, 24.1%	2.68	0.73
Most frequently, I request information from my co-workers	164, 33.3%	112, 22.7%	102, 20.7%	115, 23.3%	2.66	0.70
Sharing information with my co-workers make me lose my power	178, 36.1%	96, 19.5%	100, 20.3%	119, 24.1%	2.62	0.68
I enjoy sharing processed data with people for achieving corporate goals	181, 36.7%	105, 21.3%	93, 18.9%	114, 23.1%	2.61	0.66
Weighted Mean					2.73	
Grand Mean					27.25	

N = 493

Key: VTM = 4 (Very True of Me), TM = 3(True of Me), OTM = 2 (Occasionally True of Me), NTM = 1(Never True of Me)

Result from Table 1 on the purpose of information sharing among the health care

workers in PHCCs in Oyo State, Nigeria revealed that most of the respondents are in agreement with the statements that supported ease of information sharing. For instance, majority of the respondents affirmed their support for statements such as ‘I really make work related information available’ (251, 50.9%), ‘Most often times,

I provide forum to discuss ideas’ (264, 53.5%), ‘I will share information with my co-workers in exchange for a reward’ (258, 52.4%), and ‘I encourage my subordinates to share information with me’ (266, 53.9%). These statements/items also ranked highest on the scale mean ranking with values of 2.88, 2.78, 2.77 and 2.74 respectively. The implication to be drawn from this result is that the health care workers in PHCSs in Oyo State shared information mainly for the

purposes of; work related issues, problem solving, provision of forum for discussion of ideas and exchange for a reward.

Research question 2: What is the level of information sharing among health care

workers in selected primary healthcare centres in Oyo State, Nigeria?

In order to determine the level of information sharing among the health care workers in selected primary healthcare centres in Oyo State, Nigeria, the test norm method was used as presented in Table 2.

Table 2: Test norm of level of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria

Interval	Total mean score	Remark
1 - 13		Low
14 – 27		Moderate / Fair
28 – 40	27.25	High

The test norm for level of information sharing is classified into three levels of 1-14 that is considered as low, 15 – 27 as moderate or fair, and 28 – 40 considered as high. The overall mean score of the level of information sharing among the health care workers in PHCCs in Oyo State, Nigeria of 27.25 falls within the range of 28-40 which is considered high level of information sharing. This clearly shows that the purpose of information sharing among health care workers in PHCCs in Oyo State, Nigeria is high. The reasons being that majority of the respondents claimed that they share information for the purpose of organisational or corporate goals; that work-related information are shared for utilisation; they share information in order to discuss ideas; and that information are share for reward.

To further support this inference is the fact that the weighted mean of 2.73 is greater than the criterion mean of 2.50 set for high level of information sharing among the respondents. Also, the fact that the mean ranking of most of the items on the information sharing scale ranked above the weighted mean can also be used to establish the fact that there is a high level of information sharing among the respondents. It can, therefore, be established that there is high level of information sharing among health care workers in PHCCs in Oyo State, Nigeria.

Research question 3: What is the purpose of information use among health care workers in selected primary healthcare centres in Oyo State, Nigeria?

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Table 3: Purpose of use of health information by health care workers in selected primary healthcare centres in Oyo State, Nigeria

Items	SA N %	A N %	D N %	SD N %	UN	Mean	Std Dev
With information, I perform difficult tasks	85, 17.2%	130, 26.4%	93, 18.9 %	93, 18.9 %	92, 18.7%	3.31	1.87
Information use help me to perform technical or professional tasks	86, 17.4%	130, 26.4%	87, 17.6 %	100, 20.3 %	90, 18.3%	3.29	1.84
The use of information helps me in ensuring that jobs are done	97, 19.7%	139, 28.2%	71, 14.4 %	90, 18.3 %	96, 19.5%	3.27	1.80
Information use helps me to influence others to translate vision into action	96, 19.5%	141, 28.6%	76, 15.4 %	92, 18.7 %	88, 17.8%	3.23	1.78
Information use helps me to consider and respond appropriately to the needs and feelings of different people situations	91, 18.5%	147, 29.8%	78, 15.8 %	89, 18.1 %	88, 17.8%	3.23	1.77
With the help of information, I come up with unique ideas	103, 20.9%	137, 27.8%	72, 14.6 %	80, 16.2 %	101, 20.5%	3.23	1.79
Information use helps me to adapt and work with others	93, 18.9%	154, 31.2%	64, 13.0 %	88, 17.8 %	94, 19.1%	3.22	1.77
Information helps me to exercise good judgments by making sound and well-informed decision	92, 18.7%	153, 31.0%	78, 15.8 %	80, 16.2 %	90, 18.3%	3.18	1.75
Information use help me in creative thinking	124, 25.2%	124, 25.2%	64, 13.0 %	78, 15.8 %	103, 20.9%	3.08	1.73
Information use helps me in ensuring that work output is of quality	102, 20.7%	136, 27.6%	87, 17.6 %	89, 18.1 %	79, 16.0%	3.08	1.72
Weighted Mean						3.21	

Key = Strongly Agree (SA = 5), Agree (A = 4), Disagree (D = 3), Strongly Disagree (SD = 2), Undecided (UN = 1)

Table 3 presents the results of purposes to which health care workers in PHCCs in Oyo State use of health information. Using the benchmark of the weighted mean, the results revealed that; the respondents affirmed using information to; perform difficult tasks ((x = 3.31); perform technical tasks (x = 3.29); ensure that jobs are done (x = 3.27); help influence others to translate vision into action (x = 3.23); assist all to come up with unique ideas (x = 3.23); and helping to adapt

and work with others (x = 3.22) are major purposes for which the respondents use health information. The inference to be drawn from the foregoing information is that health care workers in PHCCs in Oyo State, Nigeria make use of health information mainly for the purposes of performing difficult and technical tasks, as well as helping to influence others to translate vision into action, to come up with unique

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ideas and to adapt, and work with colleagues and other stakeholders in the sector.

Research question 4: What is the frequency of information use among health care workers in selected primary healthcare centres in Oyo State, Nigeria?

Table 4: Frequency of use of health information among health care workers in selected primary healthcare centres in Oyo State, Nigeria.

Items	SA N %	A N %	D N %	SD N %	UN	Mean	Std Dev
With information, I perform difficult tasks	85, 17.2%	130, 26.4%	93, 18.9%	93, 18.9%	92, 18.7%	3.31	1.87
Information use help me to perform technical or professional tasks	86, 17.4%	130, 26.4%	87, 17.6%	100, 20.3%	90, 18.3%	3.29	1.84
The use of information helps me in ensuring that jobs are done	97, 19.7%	139, 28.2%	71, 14.4%	90, 18.3%	96, 19.5%	3.27	1.80
Information use helps me to influence others to translate vision into action	96, 19.5%	141, 28.6%	76, 15.4%	92, 18.7%	88, 17.8%	3.23	1.78
Information use helps me to consider and respond appropriately to the needs and feelings of different people situations	91, 18.5%	147, 29.8%	78, 15.8%	89, 18.1%	88, 17.8%	3.23	1.77
With the help of information, I come up with unique ideas	103, 20.9%	137, 27.8%	72, 14.6%	80, 16.2%	101, 20.5%	3.23	1.79
Information use helps me to adapt and work with others	93, 18.9%	154, 31.2%	64, 13.0%	88, 17.8%	94, 19.1%	3.22	1.77
Information helps me to exercise good judgments by making sound and well informed decision	92, 18.7%	153, 31.0%	78, 15.8%	80, 16.2%	90, 18.3%	3.18	1.75
Information use help me in creative thinking	124, 25.2%	124, 25.2%	64, 13.0%	78, 15.8%	103, 20.9%	3.08	1.73
Information use helps me in ensuring that work output is of quality	102, 20.7%	136, 27.6%	87, 17.6%	89, 18.1%	79, 16.0%	3.08	1.72
Grand Mean						32.12	

N = 493

Key = Strongly Agree (SA = 5), Agree (A = 4), Disagree (D = 3), Strongly Disagree (SD = 2), Undecided (UN = 1)

In determining the frequency of use of information among health care workers in

PHCCs in Oyo State, Nigeria, the test norm method was used as presented in Table 5.

Table 5: Test norm of frequency of use of information among among health care workers in selected primary healthcare centres in Oyo State, Nigeria

Interval	Total mean score	Remark
1-16		Sometimes
17-33	32.12	Occasionally
34-50		Regularly

The test norm for use of information is considered at three levels of 1-16 that is considered as sometimes, 17-33 as occasional use, and 34-50 is considered as regular use. The overall mean score of the frequency of use of information among health care workers in PHCCs in Oyo State, Nigeria of 32.12 falls within the range of 17-33 which indicates occasional use of information. This clearly shows that health care workers in PHCCs in Oyo State, Nigeria makes use of information on occasional basis. This may be due to the fact that majority of the respondents claimed that they use information for the purposes of

performing difficult and technical tasks, as well as helping to influence others to translate vision into action, to come up with unique ideas and to adapt, and work with colleagues and other stakeholders in the sector, which are not common tasks being carried out by health care workers in PHCCs in Oyo State, Nigeria.

Test of hypothesis

Ho: There is no significant relationship between information sharing and use among health care workers in selected primary healthcare centres in Oyo State, Nigeria.

Table 6: Relationship between information sharing and use of among health care workers in selected primary healthcare centres in Oyo State, Nigeria

Variables	Mean	Std. Dev.	N	r	Sig. P
Information sharing of health information management personnel	27.23	8.42	493	.752**	.000
Information use of health information management personnel	32.11	10.97			

*Sig. at .05 level

Table 6 showed that there is a positive significant relationship between information sharing and use of health care workers in selected primary healthcare centres in Oyo State, Nigeria ($r = .752^{**}$, $N = 493$, $p < .05$). The positive relationship implies that an improvement in information sharing among health care workers in selected PHCCs in Oyo State, Nigeria would lead to an increase in their level of information use while the

significance of the result implies that information sharing is a potent factor that determines the level of information use among the health information management personnel.

Discussion

Findings from the study revealed a high level of information sharing among health care workers in PHCCs in Oyo State,

Nigeria. This finding is at variance with the result from Abah and Nwokwu (2016) study which revealed a low level of information sharing among workers in Federal Radio Corporation of Nigeria due to unnecessary administrative bottleneck, as it concerns withholding of vital organisational information from some concerned members of staff as well as unhealthy organisational politics which usually result in hoarding of important information from certain groups of workers simply because they are not networked with power blocks in the organisation. The study reveals that health care workers in PHCCs in Oyo State, Nigeria make use of health information mainly for the purposes of performing difficult and technical tasks, as well as helping to influence others to translate vision into action, come up with unique ideas and to adapt and work with others. This finding partially corroborated the result of Choo, et al. (2008) and Runo (2013) studies which established the purposes of information use in organisations to include: enlightenment, problem understanding, projective, motivational, personal or political and effective decision making,

Moreover, a significant positive relationship established between information sharing and use of health information among health care workers in PHCCs implies that an improvement in information sharing among health care workers in PHCCs in Oyo State, Nigeria would lead to an increase in their level of information use while the significance of the result implies that information sharing is a potent factor that determines the level of information use among the health care workers in PHCCs in Oyo State, Nigeria. This finding is at variance with the result of Li and Lin (2006) study which reported the non-significant relationship between information sharing and use such that the sharing of information

among industrial workers does not translate to actual use of the information, and Barua, et. al. (2007) finding which revealed that restricted information flow in form of sharing and utilisation through application of stringent rules denies, health information management professionals, access to useful information and also make the organisations unable to prepare for sudden changes in the environment and which could impede their adaptation to environmental changes. However, Shi, et.al. (2010) established a positive relationship between information sharing and use thereby corroborating the finding from this study. According to their results, positive information sharing and use behaviours led to increased productivity among the various health care workers in PHCCs in Oyo State, Nigeria which enable them to speed up information flow, efficiency and workers' effectiveness that ultimately led to quick customer response and personnel changing needs.

Conclusion

The study investigated the relationship between information sharing and use of health care workers in selected primary healthcare centres in Oyo State, Nigeria with a view to establishing linkage mechanisms between the two variables of information sharing and use. There is a high level of information sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria which implies that health care workers in selected primary healthcare centres in Oyo State, Nigeria are favourably disposed to sharing information among themselves and as such make provision for platforms and forums for sharing useful and valuable information across the different cadres health care workers in selected primary healthcare centres in Oyo State, Nigeria. Health care workers in selected primary healthcare

centres in Oyo State, Nigeria make use of health information mainly for the purposes of performing difficult and technical tasks, as well as helping to influence others to translate vision into action, come up with unique ideas and to adapt and work with others. This affirms the importance of health information use and sharing among health care workers in selected primary healthcare centres in Oyo State, Nigeria. Health care workers in selected primary healthcare centres in Oyo State, Nigeria use of information on occasional basis. The occasional use of information by the health care workers in selected primary healthcare centres in Oyo State, Nigeria may be due to some human, institutional, and infrastructural constraints. There is a significant positive relationship between information sharing and use of information by the health care workers. Thus, information sharing can be considered a potent factor that determine the level of information use among individuals and health care workers in PHCCs in Oyo State, Nigeria, such that an improvement in the level of information sharing among health care workers in selected primary healthcare centres in Oyo State, would lead to an increase in their level of information use and ult. Considering the findings of the study, it can be concluded that information sharing have positive influence on information and use of health care workers in selected primary healthcare centres in Oyo State, Nigeria. have positive effect on career fulfilment of health information management professionals in federal teaching hospitals in Southern Nigeria. This study, therefore, provided empirical data on relationship between information sharing and use of health care workers in selected primary healthcare centres in Oyo State, Nigeria.

The following recommendations are made based on the results:

1. Sequel to the invaluable nature of the work of health care workers in primary healthcare centres in Oyo State, Nigeria, the management of primary healthcare centres in Oyo State should put in place facilities, such as computers and related technologies, for effective information sharing and use among the primary healthcare workers. This could be done through the acquisition and setting up of an integrated health information system that would eliminate all the bureaucratic bottlenecks that usually arose in the sharing and use of health information in the healthcare centers thereby motivating the healthcare workers to be more effective and motivated in carrying out their duties.
2. Employing the Information Utilisation Theory which discusses the correlation between information sharing and use. Healthcare information management office and primary healthcare centres should provide infrastructure, facilities, and physical environments that facilitate user privacy for accessing health information.
3. The health information management office should be encouraged to develop websites, including links, to Internet resources to meet the information needs of their users. These links should be made within the existing mission, policy and management of health information within the centres. For instance, primary healthcare centres should consider placing terminals, printers and workstations so that user

information sharing and use are made easier and that privacy is enhanced. Where resources are limited, health information management office should consider time, place and manner of restrictions. An unprecedented platform for sharing of information and ideas cannot be realised unless there is ease of information sharing among healthcare workers. In furtherance to this, access to Internet and Intranet should be made available in order to facilitate ease of sharing, access and use of health information among healthcare workers.

4. Furthermore, all federal teaching hospitals should strive to help healthcare workers cultivate a positive attitude to the use of technology by acquiring relevant technology skills by which they could relate with the technological infrastructure put in place to help them through provision of a high quality and efficient information services. To ensure this, management of privacy healthcare centres should organise various workshops, seminars, orientation, and user education programmes to impart, develop and encourage knowledge acquisition about all aspects of electronic information processing, storage, transfer and dissemination among healthcare workers.
5. It is also recommended that primary healthcare centres should drastically reduce the use of traditional method of health information management or medical records, and encourage more use of electronic methods of health information management. This, if done can be of immeasurable benefit

to the entire primary health care centres in Nigeria by reducing to the barest minimum congestion in health information management.

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