
Status of Knowledge Sharing Practices among Health Professionals the Mechanisms and Tools that Foster Knowledge Sharing: The Case of Assosa Hospital, Ethiopia

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Abstract:

Knowledge is considered as a prime asset of organizations because it is among the vital resources, especially knowledge intensive organizations like, health sector. However, the practices and implementation of knowledge sharing is still in its infancy healthcare institutions. The main aim of this study was to investigate the status of knowledge sharing practices among health professionals in Assosa Hospital, Ethiopia and the mechanisms and tools that nurture knowledge sharing in this public hospital. To carry out this research, a cross-sectional research design, qualitative and quantitative methods was used. A questionnaire and semi-structured interviews were used as data collecting tools. To analyze the data, descriptive and inferential statistics was used with SPSS version 20. The vast majority of the respondents (89%) said that there is no knowledge sharing strategy in Assosa Hospital. As to knowledge sharing, 73% of the respondents disagreed and 18% agreed on healthcare workers share their knowledge, work experience and ideas through group discussions,

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review meetings frequently. Furthermore, when asked about the presence of motivational scheme in the hospital, 59% of the study participants said there is no motivational scheme in hospital for sharing knowledge. Based on the finding of this study, there is a need to develop knowledge sharing strategy and also develop knowledge sharing framework in Assosa Hospital for better quality healthcare service delivery.

Key words: knowledge, healthcare, knowledge sharing practices, health professionals, hospital

1. INTRODUCTION

The twenty first century is known as knowledge era, and in this era, knowledge is one of the main tools and it is considered as the economic resource as intangible assets for any organizations to perform their tasks next to labor, land and capital (Paulin and Suneson, 2012).

Knowledge Management (KM) has largely focused on: (1), the nature of knowledge; (2), the processes of KM such as generation, sharing, distribution of knowledge; (3), the infrastructure of KM such as technological, organizational or managerial issues and thus knowledge management process is the heart of KM. Tiwana (2002) classifies KM in three different processes: knowledge acquisition, knowledge sharing (KS) and knowledge utilization.

Jacobson (2006) define KS as “an exchange of knowledge between individuals,” and Lindsey (2006) defines KS as “facilitating learning, through sharing, into usable ideas, products and processes. In addition KS can be defined as “the exchange of knowledge between and among individuals and within and among teams, organizational units, and organizations” (King, 2009).

KS involves a main part of creating competitive study based on KM. Knowledge sharing can be studied in organizational, collective and individual levels. Organizational and collective KS roots in the practice of people and conducts their activities here; it means motivation for KS (King, 2009). Since, knowledge is a central resource of government services, effective KS among employees is a significant management challenge for providing excellent services to the public at all levels (Kim and Lee, 2006).

Managing knowledge efficiently and effectively is considered a core competence for organizations to survive in the long run. The capability of organizations to leverage their knowledge resources seems to be one of the most important parameters from the strategic perspective. Nevertheless, the evolution and implementation of KS is still in its infancy in public organizations (Yao, Kam, and Chan, 2007), which is specifically the case in healthcare sector.

Knowledge sharing within organizations may cause wonderful interactions, especially for knowledge intensive organizations like healthcare sectors. Health professionals need updated health information from credible sources to improve their knowledge and as a result make evidence based decision for better patient treatment outcome. Therefore, this study was launched with the main objective to investigate the status of knowledge sharing practices among health professionals and stakeholders in Assosa Hospital and also the mechanisms and tools to foster knowledge sharing.

Statement of the Problem

Many practitioners and academics assume that since KS is crucial for achieving the collective outcome, people will share knowledge as part of their work requirements. However, most organizations tend to over-emphasize on systems and tools, rather than on the core component that is “knowledge sharing”

among knowledge workers in a given organization. Therefore, KS practices are vital in knowledge-based organizations such as healthcare sectors.

Health professionals need up-to-date health information from credible sources to improve their knowledge and provide evidence based healthcare services to their clients (Ghebre, 2005). As shown by various studies, developing KS habits within the organizations is essential for the success of health institutions and their customers by increasing intellectual capital, reducing costs, and making individuals and organizations competitive in their environment (Zhang, et al, 2006). However, as indicated by different studies in Ethiopia, knowledge sharing practices of health professionals is poor due to several reasons (Andualem, et al., 2013). These reasons are willingness, trust , motivation, supportive leadership, job satisfaction, awareness, willingness , lack of strategy and resource allocation are some of the determinants of knowledge sharing practices.

Healthcare workers in most of the health institutions are working simply by referring to their handouts and remembering their school trainings (Andualem, et al, 2013).

Many scholars have been interested in the effect of KS on better performance and effectiveness in the private sector (Kim and Lee, 2006). However, it is hard to find scholarly research on KS in the public sectors i.e. there is limited research conducted so far in public sectors (Willem and Buelens, 2007). Thus, relatively few scholars have paid attention to KS that explores a concept and practice within public sector (Yao, Kam, and Chan, 2007). This is also quite true in Ethiopia and particularly there is no study done on KS practices yet in Benishangu-Gumuze Regional State where Assosa Hospital is found.

As Taylor and Wright (2004) stated ,KS in public sector has been slow to realize its importance, and knowledge sharing

process is not taken as strategic part of work process due to the fact that KS in public services sector is at infancy stage.

Research Questions

The study attempted to answer the following questions:

1. What is status of knowledge sharing practices among health professionals in Assosa Hospital?
2. What are mechanisms and the tools that can be used to nurture social networks and knowledge sharing practices among health professionals in Assosa Hospital?

Objective of the Study

The main objective of the study was to investigate the status of knowledge sharing practices among health professionals and stakeholders in Assosa Hospital and also the mechanisms and tools to foster knowledge sharing.

2. METHODOLOGY

Study Area

The geographical area for this study was Benishangu-Gumize Regional state, Ethiopia. The region is located in the western part of the country between 09.17⁰ - 12.06⁰ North latitude and 34.10⁰ - 37.04⁰ East longitude. The region has international boundary with Sudan in the west and is bordered by the Amhara region in the north and northeast, Oromia in the southeast and Gambella region in the south. Asossa Hospital, where this study was done is located at a distance of 687 km west of the capital city of Ethiopia Addis Ababa. The hospital is a public hospital established to serve the people in the remote part of the country.

Research Design

It is very important to choose the appropriate research design in order to achieve the study objective. Cross-sectional research survey method was applied in the study because of a survey is normally conducted to determine the present status of a given phenomenon.

Study population

Targeted population for this study was health professionals in Assosa Hospital. The total population of the hospital during the study period was 152.

Sampling techniques and sample size determinations

Sampling techniques

There are two approaches of sampling techniques. These are probability sampling techniques and non-probability sampling techniques. From probability techniques simple random sampling technique method was used to determine sample size from health professionals, whereas seven middle managers were taken purposively. Therefore, in order to select the representative respondents from the targeted population the researchers used simple random sampling as well as purposive sampling techniques. Even though, there may many methods of simple random sampling, the researchers were used lottery method.

Sample size determinations

From the sample frame Assosa hospital, the sampling unit is health professionals. The total number of employees in Assosa Hospital was 152. From 152 total employees, 145 were health care providers and 7 were middle managers professionals. To select the actual sample size from 145 employees sample size determination formula was used. That is, (Kothari, 2004):

$$n = \frac{z^2 p q N}{E^2 N + z^2 p q}$$

Description: N= is the population size

n = required sample size

z = confidence level at 95% (standard value of 1.96)

d=margin of error at 5% (standard value of 0.05)

p =population proportion at which the sample size is maximum (at p=0.5 and q=0.5, p*q=0.25)

Where q=1-p

$$n = \frac{(1.96)^2 * 0.5 * 0.5 * 145}{(0.05)^2 * (145 - 1) + (1.96)^2 * 0.5 * 0.5} = 106$$

Therefore, the total sample size for this study, including the middle managers were 113.

Data collection instruments

In order to collect the required data for the study, two types of data collection tools were used, namely, questionnaire and interview.

The total 106 questionnaire was distributed for health professionals. The types of questions were open ended and close questions. The questions were divided into parts whereby the general/ personal questions were 6; the part on the status of knowledge sharing practices were 18, which were rated on 5 point likert's scale; the part on barriers of knowledge sharing practices comprised of 13 questions also on 5 points likert's scale; the part on the mechanisms that encourages knowledge sharing practices among employees were three questions with multiple options to choose from; and the last part was on the extra-social networks that encourages knowledge sharing practices comprised of 4 questions, which is also with multiples options to choose from. Some of the questions in our questionnaire were adapted from Teklit G et al, 2014 and

Tirualem Yalew (2011) and modified to meet the aim of this research.

In addition, interview question was prepared for interviewing middle managers. Of the total distributed 106 questionnaires, 91 (86%) were completed and returned for analyses.

Data collection procedure

In this study, the data was collected by using a self-administered questionnaire and in-depth interview. Before data collection activity, the researchers obtained an official letter from Jimma University with detail description of the research objectives and submitted to Assosa Hospital to get permission. The questionnaires were distributed to respondents in Assosa Hospital and return the questionnaires to their department/section heads. Moreover, by arranging appointments, an interview was conducted with a reasonable length of time then acknowledges all respondents who devote their valuable time to complete the questionnaires and interviews

Method of Data Analysis

The collected data was analyzed using both qualitative and quantitative methods of data analysis. First the data was edited, categorized, coded and tabulated. Then, it was described by using statistical techniques of both descriptive and inferential statistics. All quantitative data were analyzed using Statistical Package for Social Science (SPSS-version 20). On the other hand qualitative data was thematized and presented in a form of narration.

Validity and reliability of data

Constructing validity includes using tools, which are corresponded to a study. This validity allows researchers to

identify if these tools really measure a research phenomenon and to help to answer on research questions. To check content validity and internal constancy, the questionnaires was pre-tested to make necessary modifications so as to correct and avoid confusing and ambiguous questions as data quality control. For testing the data collection questionnaires, ten (10) randomly selected health professionals, were selected purposively in the hospital to fill the questionnaire. The necessary corrections were then done to produce the final version of the questionnaire.

Ethical considerations

The purpose of the study was made clear and understandable for all respondents. Any communication with the concerned bodies was accomplished at their voluntarily consent without harming and threatening the personal and institutional wellbeing. In addition, all information obtained from individual respondents was kept confidential.

3. RESULTS

Socio-demographic information of the respondents

The general information about the respondents' sex, age, educational qualification, years of experiences and work position are presented for better understanding of their background. The data was collected on the characteristics of the respondents are presented in the table 1 below. One hundred six self-administered questionnaires were distributed among the study participants. Of the total distributed 106 questionnaires, 91 (86%) were completed and returned for analyses.

Table: Socio-Demographic information of the respondents

Required information	Responses in		
No	Variables	Frequency	Percentage (%)
1	Age (in year)		
	21-30	38	41.8
	31-40	29	31.9
	41-50	19	20.9
	above 50	5	5.5
	Total	91	100.0
2	Gender (Sex)		
	Male	63	69.2
	Female	28	30.8
	Total	91	100.0
3	Educational level		
	Medical Specialist	1	1.1
	Medical Doctor	2	2.2
	Master degree	22	24.2
	First degree	42	46.2
	Diploma	24	26.4
	Total	91	100.0
4	Working Experience		
	0-5	36	39.6
	6-10	32	35.2
	11-15	10	11.0
	16-20	5	5.5
	above 20	8	8.8
	Total	91	100.0

As presented in table 1, male respondents were found to be 69 percent of the total sample whereas the remaining 31 percent were female. The largest group of the respondents was between the age of 20 and 30 (42 %) followed by the age group 31-40 (32%); 41-50 years of age (21%) and age group of more than 50 years (5%). Regarding educational qualification of the respondents, 42 (46.2%) and 24(26.4 %) of the respondents are first degree and diploma holder respectively. While, 22(24.4 %), 2(2.2 %) and 1(1.1%) of professionals have Master degree, Medical Doctor and specialists respectively.

Status of knowledge sharing practices

This section deals with the items related to the status of knowledge sharing practice among health professionals in Assosa Hospital. Each item is analyzed based on the data obtained through questionnaires responded by health professionals. Most of the constructs of knowledge sharing variables were measured by using a five-point Likert-scale.

Presence of knowledge sharing strategy

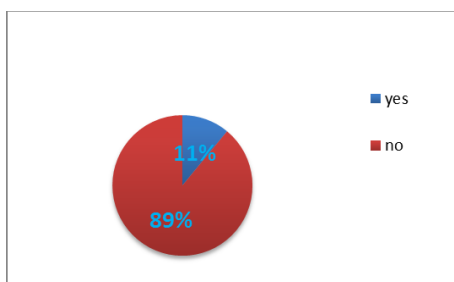


Figure 1: Presence of knowledge sharing strategy

Regarding with presence of knowledge sharing strategy as one part of daily work process, the vast majority (89%) of the respondents said there is no knowledge sharing strategy in the hospital (Figure 1).

Presence of Knowledge Sharing Practices

Regarding the availability of knowledge sharing practices, 33 percent of health professionals acknowledged the presence of knowledge sharing practices in Hospital to improve organizational performance. However, 67 percent of the respondents said that there is no knowledge sharing practices (Figure 2).

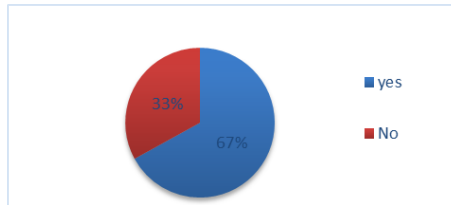


Figure 2: Presence of KSPs

Status of Knowledge Sharing Practices using different variables

To determine the status of knowledge sharing practices in Assosa Hospital, number of items were presented to the study participants so that they rate on a five point Likert’s Scale. The result for each item is presented in table 2.

Table 2: Status of Knowledge Sharing Practices using different variables

S. No	Items to be rated on 5 point Likert's Scale	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Mean value	Sd.dev
1	Health professionals commonly share their knowledge and experience with their coworkers while working.	5.5%	26.4%	1.1%	37.4%	29.7%	2.41	1.30
2	Your co-workers have willingness to share their knowledge, information, and experience with other coworkers in organization.	14.3%	42.9%	2.2%	25.3%	15.4%	3.15	1.37
3	You share your knowledge, work experience and ideas through group discussions, review meetings frequently with your coworkers.	1.1%	16.5%	8.8%	54.9%	18.7%	2.26	0.98
4	The knowledge, information, findings, reports, or files are easily accessible that others have in your unit/department/organization.	2.2%	26.4%	13.2%	39.6%	18.7%	2.54	1.13
5	Certain tasks accomplish through teamwork discussion and collaboration between colleagues.	14.3%	47.3%	1.1%	22.0%	15.4%	3.23	1.35
6	There is a motivational scheme in organization to encourage staffs to share their knowledge within and outside the organization.	5.5%	22%	13.2%	37.4%	22%	2.52	1.21
7	Presence of periodic meetings, trainings, workshops, and orientation help to organize and share knowledge and information for staffs	9.9%	26.4%	2.2%	35.2%	26.4%	2.58	1.38
8	There is a good working environment	4.4%	17.6%	16.5%	40.7%	20.9%	2.42	1.10
9	Employees are rewarded for sharing their knowledge and experience with their colleagues.	3.3%	12.1%	2.2%	50.5%	31.9%	2.04	1.06

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12	The knowledge sharing rewards are available to motivate staffs to exchange/share their knowledge effectively.	16.5%	58.2%	1.1%	12.1%	12.1%	3.55	1.25
13	Supportive leadership is helpful to improve KSPs.	5.5%	14.3%	9.9%	41.8%	28.6%	2.26	1.18
14	Presence of specific budget allocation is vital to motivate knowledge and information sharing in organization	3.3%	36.3%	3.3%	34.1%	23.1%	2.63	1.27
15	A considerable level of trust among co-workers is vital for knowledge and information sharing in organization	14.3%	35.2%	11.0%	31.9%	7.7%	3.16	1.24
16	Face-to-face interaction and communication is helps to facilitate knowledge sharing among colleagues	6.6%	26.4%	8.8%	39.6%	18.6%	2.63	1.24
17	Fair and open communication and decision among staffs is available to improve KSPs	4.4%	25.3%	2.2%	38.5%	29.7%	2.36	1.26
18	Sharing knowledge, through paper or electronic documents, team discussions, review meetings, is helpful for overall organizational performance.	7.7%	28.6%	4.4%	30.8%	28.6%	2.56	1.36

Keys: - scale ranges of mean value:0-1.49=*very low level*; 1.50- 2.49 =*low level*; 2.50 - 3.49 = *moderate level*; 3.50-4.49 =*high level*; 3.50 - 5.00 = *very high level*.

The result of this study showed that, 32% of the health professionals agreed (strongly agreed + agreed) with health professionals sharing their knowledge and experience to other healthcare professionals, whereas, the majority (67 %) disagreed. The mean value of the responses is 2.41 and is within the range of low level of practices to share knowledge, (Table 2: item number 1). On the other hand; the majority (56%) of health professionals shows their willingness to share their knowledge with other co-workers while working.

The frequency or how often health workers share their knowledge, through group discussions, review meetings and documented forms was also known. Accordingly, the majority (73%) of the respondents disagreed and 18 percent agreed on healthcare workers being sharing their knowledge, work experience and ideas through group discussions, review meetings frequently. The mean score for this item, 2.26 is in the range of disagreement. Thus, healthcare worker in the hospital do not often share their knowledge, information and experiences with co-workers.

As to the accessibility of knowledge, information, data, and reports through paper or electronic formats the employees have in the organization, 29% and 58% of the respondents agreed and disagreed respectively, whereas 13% were neutral. The mean score of the respondents is 2.54, which is in the range of moderate level. This reveals that the extent to which accessibility of knowledge in the hospital is moderate.

Concerning the teamwork and collaboration to enhance knowledge sharing between colleagues, item number 5 in table 2, the majority 62% of respondents agreed that some tasks are accomplished through teamwork and collaboration. However, 37% of the respondents disagreed and 1% did not make decision. The mean value of this item is 3.23 and is in the range of moderate level of practices of teamwork and collaboration. Thus, it can be concluded that the teamwork and collaboration between healthcare workers to enhance knowledge sharing in the hospital is at moderate level and there is a need of improvement in this regard.

Furthermore, on the presence of motivational scheme in the hospital (item 6 in table 2), 59% of the healthcare workers agreed as there is no motivational scheme in the hospital for sharing knowledge. The mean value of 2.52 for this item, with standard deviation 1.38, is in the range of disagreement which indicates at low level motivational system in hospital.

Concerning good working environment in the hospital (Table 2,item 8), the majority (61%) of respondents agreed as there is no good working environment for sharing knowledge, information, experiences whereas 21% agreed and the remaining were neutral. The mean value of 2.42 with standard deviation 1.10 is in the range of disagreement which indicates the working environment is not that good for the employees to share knowledge. Regarding the presence of rewards and recognition system the result showed that only 15% agreed and

the majority 82% disagreed on employees are rewarded for sharing their knowledge and experience with their colleagues.

The health professionals were asked about the importance of trust in the organization with regard to knowledge sharing. The result of the study showed that 40% of respondents agreed as considerable level of trust among co-workers is vital for knowledge and information sharing in organization. However, 49% disagreed and 11% were neutral. The mean value of responses is 3.16 that indicate in the scope of moderating level on the importance of trust, (table 2, item number 15).

When posed with a question on presence of open and fair communication among employees, the majority (68%) of the respondents agreed as there was no fair and open communication and decision to share knowledge and 30% of the respondents have an opposite opinion on the presence of open and fair decision making within their hospital and 2 percent of respondents were neutral. The mean score of 2.36 is agreement of responses on lack of fair and open communication and decision, (table 2, item number 17).

The result of this study revealed that 36 % of the respondents believed that knowledge and information sharing through paper or electronic documents, discussions, review meetings, was helpful for overall organizational performance and 60% of routine task was accomplished through teamwork discussion and collaboration between healthcare workers (table 2, item number 18).

Mechanisms and tools that fosters knowledge sharing and practices in Assosa Hospital

Knowledge sharing practices can be facilitated through a range of communication channels. This research found that whenever possible, the study participants preferred to share knowledge through face-to-face interaction, whether that be through a

formal opportunity, such as a structured meeting, or through an informal activity such as opportunistic conversation.

Table 3: Mechanisms of knowledge sharing and practices in Assosa Hospital

Do you participate in any training programs, workshops and seminars for your work?			If your answer is yes; how frequently have you attended training, workshop, seminars... related to your work?	
	Number	Percentage	Frequency*	Percentage
Yes	54	59.3%	very frequently	3.7
			frequently	5.6
No	37	40.7%	somewhat frequently	25.9
			Not very frequently	64.8
Total	91	100.0%		

* Very frequently = weekly, frequently = biweekly, somewhat frequently = monthly, not frequently = every 3 to 6 months.

As the result indicated (table 3), 59.3% of the health professionals had participated training programs, workshops whereas 40.7% did not get the opportunity and from this it is possible to say that high number of the health professionals are not updating their knowledge through training, workshops, and seminars and this needs attention.

Regarding to frequency that healthcare workers had participated, scheduled work training, workshops, and meeting, the majority (65%) of the respondents indicated their agreements that “Not very frequently”, and some (26%) “Somewhat frequently”, whereas 5.6% and 3.5% of participants had showed “frequently” and “very frequently” respectively on how often healthcare workers had work related training programs, workshops and seminars (table 3).

On the presence of various types of mechanisms to share knowledge and experiences health professionals showed their preferred way to share knowledge they need during work. Respondents indicated the mechanisms to share knowledge in the hospital are/ through face to face interaction encompass (review meeting 16.5%, training 12.1%, team work 17.6%, workshop 11%, community of practices 6.6%), written

documentation review 23.1%, telephone 13%, and web based application nil (0%) (Figure 3).

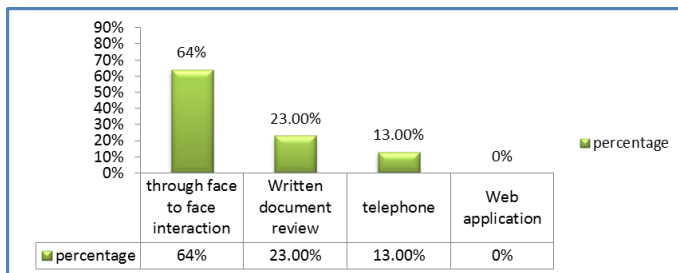


Figure 3. Mechanisms and tools of Knowledge sharing practices mechanisms

Qualitative results

The researchers interviewed seven middle managers to obtain detail information on the topic at hand. Regarding to how participants understand the concept of knowledge sharing practices and if it is it part of the work design, majority of the interviewees have limited idea about it. One of them stated that: “We surely understand the importance of sharing knowledge and experience, but it is a pity we are not efficiently using the potential. You know, we are usually occupied in other routine activities and meetings making it hard to actively participate in such initiatives. I don’t mean we never communicate or share knowledge with staffs but it is far below enough. I don’t think we should communicate and learn from each other only when the opportunity comes in your way or reciprocal issues. It must be a planned activity from the beginning”. This was also said in other words by other interviewed participants’ commented as KSPs that “It is important that we have a plan for sharing knowledge just like we plan for other our activities. We just recently become a little bit aware of the concept of KM while working with foreign projects engaged on capacity building and technical assistance. Lack of clearly defined strategy and plan of knowledge sharing

will have implication to performance in organization. To summarize the answers on the above statements, mostly participants have limited idea about knowledge sharing practices, lack of time, and lack knowledge sharing strategy and these are major factors to knowledge sharing practices.

Regarding mechanisms and tools to facilitate knowledge sharing practices among employees and stakeholders, in the hospital, knowledge sharing practices is undertaken through variety of formal and informal mechanisms including face-to-face communication, medical document, training module review and telephone. Participants were interviewed to identify the knowledge sharing channels they most commonly use to communicate with each of the other participants with whom they had indicated a knowledge sharing relationship. The result of the interview showed that face-to-face done through team discussion with colleagues is one of their preferred and adapted methods to share knowledge from work units or colleagues without panic. One of the interviewee revealed that “face-to-face communications like training, workshops, meeting and teamwork discussion in the form of formal ways are the most influential knowledge sharing and communication tools.”

DISCUSSION

Health sector is knowledge demanding organization, where sharing knowledge is a paramount to achieve the intended goals and to deliver quality service. The study was intended to investigate the status of knowledge sharing practices in Asossa Hospital, Ethiopia. According to the findings obtained, the practices of knowledge sharing are at an early stage. Sixty seven percent of the respondents agreed that there is no knowledge sharing among the health professionals in the hospital. Moreover, the qualitative data collected by interview indicated, most of the interviewees have limited idea about

knowledge sharing practices. The majority (64 %) of the health professionals confirmed that they share their knowledge and information was face to face (review meetings, workshops...). The finding of the study by Asemahagn (2014), supports this result because they also found that a face to face knowledge sharing mechanism was 67(44.0%) , 53(35.0%), 20(13.0%) and 12(8.0%) of the respondents used frequently, sometimes, rarely and never to share their knowledge and experiences respectively.

Another study reported similar mechanism and justifies whereby teamwork provides the opportunity for face-to-face communication and an environment that better supports trust-building and decision-making (Loureiro & Curran, 2007). In Asossa Hospital, there is no web based application and other knowledge sharing tools usage because of poor ICT infrastructure and resource, poor attention from management and staffs, lack of familiarity with ICT and lack of skilled personnel in the field of information and knowledge management. The study conducted by Asemahagn (2015) also strength the fact that more than half of the respondents were computer illiterates and poorly initiated to use ICTs due to socio demographic (Age, educational status), skill related problems (computer literacy, training), infrastructural (poor computer access, absence/poor internet connection, setups, resource constraint) and management style were important factors in limited ICTs utilization. Therefore, it is possible to conclude that ICT infrastructure is vital for both ICTs utilization as well as knowledge sharing.

Andrew et al (2015) argued that infrastructure is very important for knowledge sharing by saying that a knowledge infrastructure consisting of technology, structure, and culture along with knowledge process architecture of acquisition, conversion, application, and protection are essential organizational capabilities or "preconditions" for effective

knowledge sharing. Another study opined that there is a need of huge support of infrastructure, which requires huge funds (Apulu and Latham, 2009). Therefore, financial resources are one of the key variables that support the infrastructure and manpower requirements for knowledge sharing practices implementation.

Moreover, the vast majority (89%) of the study participants said that there is no knowledge sharing strategy in the hospital. However, as Riege (2005) stated knowledge sharing strategy is the corner-stone of many organizations' knowledge-management strategy and thus, for Asossa Hospital, there should be a knowledge sharing strategy in order to implementations of knowledge sharing practices and thereby improve healthcare delivery.

The finding of the study can send an important message that both individuals and organizations can actually have benefits in knowledge sharing practices. Knowledge sharing among healthcare workers may cause wonderful interactions, especially for knowledge intensive organization like healthcare sectors. The finding of this study can be used as an evidence for health administrators, policy makers, health professionals, none governmental organizations (NGOs) and researchers to plan and make interventions to improve knowledge sharing practices in the study area. The study also will offer the mechanism of knowledge sharing activities among health professionals and stockholders that can be used to minimize potential influencing factors of knowledge sharing and finally it might improve overall organizational performance. Moreover, this study may help as a source of reference to those who aspire to make further investigation in the area of related dimensions and thus used as baseline information for further study and provide directions for any interference events.

CONCLUSIONS AND RECOMMENDATIONS

Governmental organizations have to deal with diverse problems, since knowledge is central resources for different organizations especially knowledge intensive organizations like, education institution, health sector; sharing knowledge and experience is required to address organizational goals and to deliver quality service. Various types of medical errors have occurred in resource-limited countries because of poor knowledge and experience sharing practices among health professionals. Thus, knowledge sharing practices play important roles in knowledge management and allow employees exchanging their perspectives, thinking, and ideas, and thus create a strong relationship between each other. In this case, employees could interact with each other and exchange necessary knowledge for their work. The study was conducted in Assosa Hospital under Benishangul Gumuze health bureau, Ethiopia. Assosa Hospital is governmental service sector, and in this sector knowledge sharing practices have been little studied. Speaking in general, yet the effective knowledge sharing practices is in its infancy in public organizations. According to the qualitative research result the most of the interviewees have limited idea about knowledge sharing practices. In addition, 89 percent of health professionals said there is no knowledge sharing strategy. Moreover, 67 percent of the respondents agree that there is no knowledge sharing among the healthcare professionals in the hospital. Furthermore, majority (64 %) of the health professionals shares their knowledge and information by face to face; 23% medical written documentation review, 13% telephone. However, there is no web based application usage in the hospital. From this result one can understand, the most predominant and convenient tools were face to face communication like review meetings, workshops rather than

computer and web based application. The possible reasons could be poor ICT infrastructure and resource, poor attention from management and staffs, lack of familiarity with ICT and lack of skilled personnel in the field of information and knowledge management. Based on the finding, it is possible to identify the future work of this study. Accordingly, there is a need to develop knowledge sharing strategy. In addition, there is need to develop knowledge sharing framework.

REFERENCES

1. Andrew H. Gold, Arvind Malhotra, Albert H. Segars, 2015, Knowledge Management: An Organizational Capabilities Perspective, Volume 18, Issue 1, 2001
2. Andualem M, Kebede G, Kumie A: Information needs and seeking behaviour among health professionals working at public hospital and health centres in Bahir Dar, Ethiopia. *BMC Health Serv Res* 2013, 13:534. <http://www.biomedcentral.com/1472-6963>.
3. Apulu, I., and A. Latham. "Information and communication technology adoption: Challenges for Nigerian SMEs." *TMC Academic Journal* 4.2 (2009): 64-80.
4. Asemahagn BMC Health Services Research 2014, 14:431, <http://www.biomedcentral.com/1472-6963/14/431>
5. Asemahagn M. A. Challenges of ICTs Utilization among Health Professionals: The Case of Public Hospitals in Addis Ababa, Ethiopia. *SM J Public Health Epidemiol.* 2015;1(3):1012.
6. Ghebre HA: Assessment of Health Management Information System in Addis Ababa Health Bureau (MSc Thesis). Addis Ababa: Addis Ababa University; 2005.

7. Jacobson, C. (Ed.). (2006). Knowledge sharing between individuals: *IDEA Group Reference*.
8. Kim, S. and Lee, H. (2006), the impact of organizational context and information technology on employee knowledge-sharing capabilities, *Social Science Journal*, 66 (3), 370-385
9. King, W.R., 2009. Knowledge management and organizational learning: In King W. R. (ed), *Knowledge Management and Organizational Learning, Annals of Information Systems*. Springer, 4
10. Kothari, C.R. 2004. Research methodology methods and techniques, published by new age international (p) ltd., publishers ISBN (13): 978-81-224-2488-1.
11. Lindsey, K. (Ed.). (2006). Knowledge sharing barriers: *IDEA Group Reference*.
12. Paulin, D and Suneson, K. "Knowledge Transfer, Knowledge Sharing and Knowledge Barriers – Three Blurry Terms in KM". 2012. The Electronic Journal of Knowledge Management Volume 10 Issue 1 (pp81-91
13. Riege, Andreas. "Three-dozen knowledge-sharing barriers managers must consider." *Journal of knowledge management* 9.3 (2005): 18-35.
14. Syed Ikhsan, S.O.S and Rowland, F. "Benchmarking knowledge management in a public organisation in Malaysia," *Benchmarking: An International Journal*, (11), 2004, pp. 238-266.
15. Taylor, W., and Wright, G. (2004), Organizational readiness for successful knowledge sharing: challenges for public sector managers. *Information Resources Management Journal*, 17(2), 22-37.
16. Teklit Gebretsadik, Gebremeskel Mirutse, Kidane Tad esse, Wondwossen Terefe. Knowledge Sharing Practice and its Associated Factors of Healthcare Professionals of Public Hospitals, Mekelle, Northern Ethiopia. American

- Journal of Health Research. Vol. 2, No. 5, 2014, pp. 241-24.
17. Tirualem Y. (2011) Assessment of Knowledge Sharing Practices of Health Care Professionals in Hospitals under Addis Ababa Health Bureau. MSc Thesis
 18. Tiwana, A. (2000). *The knowledge management toolkit: orchestrating IT, strategy and knowledge management platforms*. Upper Saddle River, NJ: Prentice Hall.
 19. Willem, A. and Buelens, M. (2007), "Knowledge sharing in public sector organizations: the effect of organizational characteristics on interdepartmental knowledge sharing", *Journal of Public Administration Research and Theory*, Vol. 17 No. 4, pp. 581-606.
 20. Yao, L., Kam, T., and Chan, S. (2007), Knowledge sharing in Asian public administration sector: the case of Hong Kong. *Journal of Enterprise Information Management*, 20(1), 51-69.
 21. Zhang, L., Li, J., & Shi, Y. (2005), Study on improving efficiency of knowledge sharing in knowledge intensive organizations: *Proceedings of the First International Workshop on Internet and Network Economy*, 816-625.