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ASSESSMENT OF THE EFFECT OF THE MEDICAL STORAGE AND RETRIEVAL SYSTEMS ON SERVICE DELIVERY: A CASE OF KISWA HEALTH CENTRE IV. A CROSS-SECTIONAL STUDY.

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ABSTRACT.

Background:
This study aimed at assessing the effect of the Medical Storage and Retrieval Systems on Service Delivery.

Methodology:
This study adopted an analytical and cross-sectional research design that aimed at data collection for two or more variables examined at a single point in time to detect variable patterns of association. The study targeted a sample of 156 respondents and the sample respondents were drawn from the top management and middle-level staff as well as the outgoing patients from Kiswa Health Centre IV. 150 questionnaires were effectively filled in for analysis translating to a 96.2% response rate. Data analysis was conducted using SPSS on the information gathered to generate descriptive statistics. The presentation of results was done in tables and figures.

Results:
In terms of the impact of medical retrieval systems used for patient records on Service Delivery, the results indicated that medical retrieval systems positively impact Service Delivery at Kiswa Health Centre IV, this is indicated by a correlation coefficient, r =.878 whose p-value is less than 0.01. In line with the effect of the medical storage systems used on the Service Delivery, the results of the study established that there was a positive and significant relationship between the Medical Storage System and Service Delivery of Kiswa Health Centre (r =.743, p-value<0.01).

Conclusion:
The major challenges faced with the storage and retrieval of patient records at Kiswa Health Centre IV were the inefficient retrieval process, the breakdown with the integration of electronic health records, data loss or corruption challenges, training and adoption of the system challenges, data migration challenges, inadequate staff to operate the systems and finally the disorganization in record management.

Recommendation:
There is a need to recruit more medical personnel to improve the service delivery at Kiswa Health Centre IV given the challenge of inadequate resources.

Keywords: *Medical storage, Retrieval systems, Kiswa Health Centre IV, Service delivery.*
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BACKGROUND OF THE STUDY.

Service delivery has over the years become an increasingly important concern of public healthcare services and generally healthcare service delivery is usually measured by reliability, responsiveness, courtesy, customer orientation, confidentiality, and caring. Therefore, to promote efficient healthcare service delivery, healthcare facilities need to create people-driven services that are characterized by quality, equity, timeliness, and a strong code of ethics (Chakraborty, Edirippulige, and Ilavarasan, 2023).

Thus, in today's healthcare service delivery, health information is fundamental to continually monitor and appraise health status, to ensure and continually boost the quality of medical care programs and services. According to Ondieki F, 2017, the underlining point therefore is that proper health records management facilitates planning, informed decision-making supports continuity, consistency, and effectiveness of public service delivery at facilities. (Mordecai and Gambo, 2022).

Globally, healthcare services have moved from the curative to preventive care system, from precise intervention to a broad-based and inclusive approach, and from an integrated to decentralized healthcare system (Nwankwo and Sambo, 2018). This has compelled the

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need for the reformation of uneven health information systems into an all-inclusive but single health information management system Michael. I.E, et al.,2020. This has led to the emphasis on the importance of proper storage/record keeping as this is critical for the survival and efficient operation of day-to-day business activities.

It should further be noted that records management in the form of medical storage and retrieval systems is vital to service delivery by any institution or organization since misfiled and lost records are likely to delay the service delivery and hence dent the image of any service provide (Mathebeni- Bokwe Pyrene, 2015; Pradhan, Najmi and Fatmi, 2022).

Furthermore, over the previous years, the use of healthcare information systems (HIS) in hospitals has increased worldwide and these are specifically used to capture, process, store, retrieve, share, and present data for better decision-making in the hospital. Healthcare providers are increasingly sharing clinical data with other providers all over the world caring for the same patient by using the systems (Rudin, Goldzweig, and Shekelle, 2014;

The ability to electronically record, integrate, and analyze data and information in the private hospital enables administrators, and practitioners to quickly move to the synthesis of knowledge and the development of wisdom, which they can apply to patient care. Records management was not effectively enabled given that the technology used also lacked a file tracking system, audit trail, and records back up compromised records safety and security.

Owino and Namande (2022) assert that in Uganda notable challenges in document retrieval and follow-up have created difficulty in information about pensioners which has led to delays in service provision (Shobaki, Naser, and Kassab, 2017).

However, researchers still believe that despite ICT adoption, with poor record management, there is a likelihood of failure in the successful implementation of public sector reforms (Owino and Namande 2022). Studies have reported how to record management standards are not being followed due to inadequate personnel in records management resulting in slow information delivery to the users thus leading to delays in service provision.

Additionally, despite the overwhelming need for proper records management in health facilities in Uganda, there is scanty literature on this issue. This is a sign that the importance attached to medical storage and retrieval systems is still less (Muhammad, Barigayomwe, Zulaika, and Daphne, 2022).

It is against this background that this study sought to assess the effect of the Medical Storage and Retrieval Systems on Service Delivery: a case of Kiswa Health Centre IV.

General objective.

To assess the effect of the Medical Storage and Retrieval Systems on Service Delivery: a case of Kiswa Health Centre IV.

Specific Objectives.

- To examine the impact of medical retrieval systems used for patient records on the Service Delivery at Kiswa Health Centre IV.
- To assess the effect of the medical storage systems used on the Service Delivery at Kiswa Health Centre IV.
- To establish the challenges faced in the storage and retrieval of patient records at Kiswa Health Centre IV.

METHODOLOGY.

Research Design.

This study adopted a cross-sectional research design which aims at data collection for two or more variables to be examined at a single point in time to detect variables' patterns of association. The design is preferred because of the consistent nature of objectives aiming to reveal relationships among variables and allowing inferences to be made on the effects of explanatory variables on an outcome variable (Burns and Burns, 2012).

Additionally, the study also applied a quantitative approach. A Quantitative design enhanced the statistical inferences by linking the independent and dependent variables (Creswell, 2014).

Study setting:

The study was conducted at the Kiswa Health Centre IV, located at Bugolobi, Nakawa Division, Kampala district. within two years to date to capture some previous and latest statistics and trends specifically in terms of storage and retrieval systems to ensure reliability and validity for the presented findings.

Study Population.

The study targeted Kiswa Health Centre IV staff and this population was grouped into Top Management Staff and Middle-level staff as these directly interface with the medical records and storage systems. The study also targeted individuals who have ever obtained services from the center.

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Table 1: Study Population.

Category	Accessible Population
Top Management	5
Middle Level	70
Outgoing-patients	120
Total	**195**

Source: Human Capital Management Statistical Abstract (2023)

The Top Management Staff includes the Senior Medical Superintendent, Senior Medical Officer, Human Resource Officer, Senior Clinical Officer, and Senior dispenser.

The Middle-level staff includes Assistant Inventory Management Officers, Clinical Officers, Anaesthetic Officers, Health Educators, midwives, pharmacists, Health Information Assistants, nurses, records officers, ICT Officers, Biomedical technicians, Stenographer secretaries, and Laboratory Officers.

Sampling Size and Selection.

The sample selection is based on the table for determining sample size as generated by Krejcie and Morgan (1970).

Table 2: Sample Selection.

Category	Population Size (N)	Sample Size (n)	Sampling Method
Top Management	5	5	Purposive Sampling
Middle Level	70	59	Simple Random Sampling
Outgoing-patients	120	92	
Total	**195**	**156**	

A sample of 156 respondents was interviewed.

Sampling techniques and procedure.

The study adopted both probabilistic and non-probabilistic sampling techniques.

Probabilistic Sampling Techniques.

From the existing probabilistic sampling techniques, the study used a simple random sampling technique in situations where the different categories of staff have a large population size and this as such warrantes simple random sampling to minimize sampling bias.

Non-probabilistic Sampling Techniques.

From the existing non-probabilistic sampling techniques, purposive sampling was used to select the Top Management Staff at Kiswa Health Centre IV who were targeted due to their perceived knowledge arising out of known experience that they have. This technique was employed following the postulate that if sampling has to be done from smaller groups of key informants, there is a need to collect very informative data, and thus the researcher needed to select the sample purposively at one's discretion (Ashaba S,2015)

Data Collection Methods.

The researcher conducted key informant interviews with section heads while questionnaires were distributed to the officers within the various departments to obtain primary data. Secondary data was derived by conducting a document analysis. The researcher used the following data collection methods;

Questionnaire Survey Method.

For this data collection method, structured questionnaires (close-ended) were distributed to respondents to complete in writing. The structured questionnaire helped in eliciting specific responses from the officers for easy analysis. It offered an accurate picture of the situation and also established the relationship between the independent, dependent, and moderating variables.

Interview Method.

The Interviewing Method was used to collect in-depth information from the key informants such as the Section heads. This enabled the researcher to collect additional facts that serve as a confirmation to some of the responses provided in the questions with a chance to ask so many questions and the information obtained supplemented and validated the data obtained from the survey questionnaire.

Data Collection Instruments.

The researcher used a self-administered questionnaire, interview guide, and external documents as instruments of

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data collection according to the particular type of information needed for collection.

Self-Administered Questionnaire.

The questionnaire is a carefully designed instrument for the collection of data by the research objectives and questions. The justification for the instrument is that it is less expensive and does not require the researcher to be present for the respondent to complete it. Attitude scale (ordinal Likert scale) will be used to enable the respondents to select a statement that best describes his or her reaction to the statement in the question. The Self-Administered Questionnaires had sections A, B, and C. Most of the questions in Sections B, C, and D were weighed using a Likert scale of five points where 1= strongly disagrees, 2= disagree, 3= neutral, 4= agree and 5= strongly agree.

Interview Guide.

An interview guide was used to collect data from key informants. This data assisted in clarifying data collected by the structured questionnaires since it involved a face-to-face interaction and also offered a whole range of views.

Documentary Reviews

Reviewing secondary information about the subject under study allowed the researcher to examine the existing documents to obtain recorded information related to the issue under investigation. This helped the researcher to obtain data at a convenient time.

Reliability.

Internal consistency was tested using the Cronbach Alpha reliability test of alpha= 0.70 or above (Taber, 2017). A reliability coefficient below 0.7 was considered poor and unacceptable.

Validity.

In this study, the content validity of the data collection instrument will be determined by seeking expert opinion on the research instrument from the research supervisor. The valuable comments, corrections, and suggestions given by the research supervisor assisted in the validation of the research instrument. The researcher also developed questions relative to the study to ensure consistency while the validity of the responses obtained from key respondents has been tested against the study objectives as well as the findings of other studies carried out in the study.

Data Analysis Methods.

The data acquired was analyzed based on an overview of the identified purpose of the study in the design of the research. The data analysis process will include editing, cleaning, and coding to quantify data representing the attributes of the variables. Descriptive and inferential statistics with the aid of Social Sciences Statistical Package (SPSS) version 25 was used to analyze the collected qualitative and quantitative data.

Descriptive Analysis.

Descriptive Analysis provides summaries of the sample characteristics. Independent and dependent variables such as medical retrieval systems and medical storage systems will be measured to obtain their mean, minimum, and maximum values, and standard deviation among others. Diagrammatic illustrations such as bar charts and pie charts will also be used. However, such analysis only gives the preliminary outcomes that further require analysis. Therefore, inferential analysis was required.

Correlation Analysis

The study applied the Pearson correlation analysis to examine the strength of the association between the predicted and explanatory variables. This assisted in informing the strengths of association in the model.

Ethical Clearance.

An essential requirement for conducting research is moral integrity. During this study, the respondents were assured of confidentiality because no names are asked and secondly, explanations are going to be given to respondents about the research.

An introductory letter was obtained from the dean's office permitting and authorizing the researcher to conduct the study after approval of the research proposal by the supervisor.

The researcher will also obtain permission from the Head of Kiswa Health Centre IV.

RESULTS.

Rate of Response.

Table 3: Gender of Respondents. (n=150)

Category	Target Sample	Achieved	Response Rate
Top Management	5	4	80.0%
Middle Level	59	55	93.2%
Outgoing-patients	92	91	98.9%
Total	**156**	**150**	**96.2%**

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The study targeted a sample of 156 respondents where the sample respondents were drawn from the top management and middle-level staff as well as the outgoing patients from Kiswa Health Centre IV. 150 questionnaires were effectively filled in for analysis translating to a 96.2% response rate indicated in Table 3.

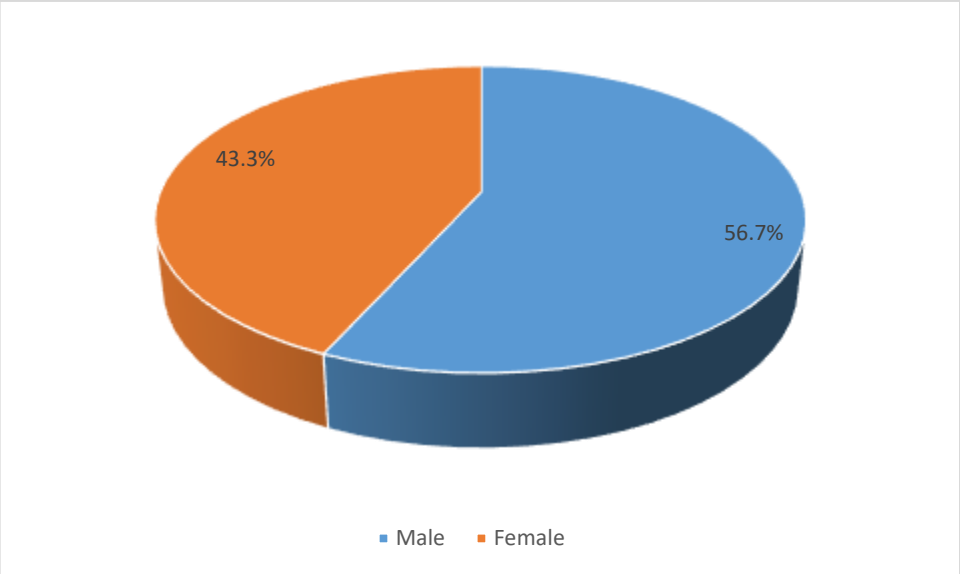
Demographic Profile of Respondents.

The study considered the importance of analyzing the characteristics of a study population as it helps in data interpretation. The respondents were asked about their gender, age, marital status, and level of education. These variables were deemed important in the interpretation of the data.

Gender of Respondents.

The findings in Figure 2 revealed that there were more male respondents 85(56.7%) compared to female respondents 65(43.3%).

Figure 2: Gender of Respondents. (n=150)



Age of Respondents.

The majority of the respondents were less than 30 years and these on average constituted 59(39.3%) of the sample, these were closely followed by respondents between 31-35 years who accounted for 28(18.7%) of the total sample. Furthermore 23(15.3%) of the respondents were between 41-45 years, 16(10.7%) of the total respondents were between 36-40 years, 15(10.0%) were between 46-50 years and 9(6.0%) of the total respondents were above 51 years.

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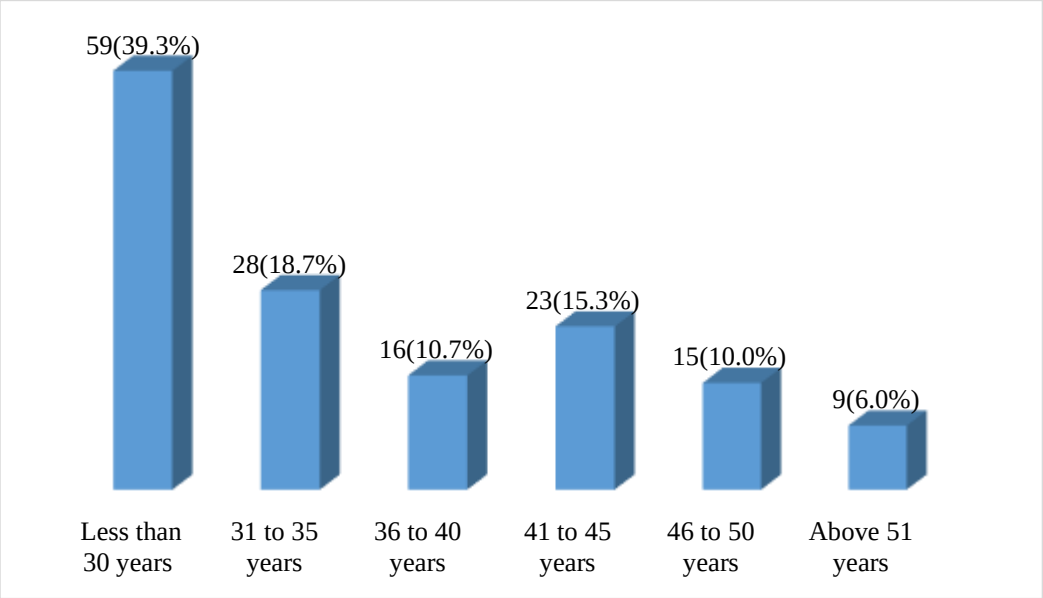
Figure 3: Age of Respondents. (n=150)



Level of Education.

In terms of the level of education attained, the results indicated that the majority of the respondents had attained a Bachelor's degree as represented by 91(60.7%) of the respondents. This was followed by respondents with a Master's degree represented by 36(24.0%) of the respondents. Respondents having attained a Diploma constituted 23(15.3%) of the respondents. This generally implied that the interviewed staff were educated enough and qualified to handle Credit risk and Loan portfolio-related matters with the ability to effectively comprehend and answer the research tool.

Table 4: Education Level of Respondents. (n=150)

Response	Frequency	Percentage (%)
Diploma	23	15.3%
Bachelor's degree	91	60.7%
Master's degree	36	24.0%
Total	**150**	100.0%

Descriptive Analysis of the Variables.

Various statements were presented on a Likert scale where respondents were asked to state their level of agreement or disagreement on a scale of 1 to 5 where '1' strongly disagreed, '2' disagree, '3' neutral, '4' agree, and '5' strongly agree. The terms 'strongly disagree' and 'disagree' were assigned a mean of 1.0 to 2.49, to represent not agreed. The term 'neutral' was assigned a mean of 2.5 to 2.99, and it was identified as neutrality. While the assertions 'agree and strongly agree' were given the mean of 3.0 to 5.0 to represent agreed upon.

Descriptive Analysis of the dependent variable.

Service Delivery.

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Table 5: Descriptive Analysis of Service Delivery. (n=150)

Statement	SD	D	N	A	SA	Mean	Standard Deviation
Services at the Health Centre are reliable	10(6.7%)	57(38.0%)	12(8.0%)	52(34.7%)	19(12.7%)	3.09	1.23
Staff at the health center are responsive when needed	5(3.3%)	9(6.0%)	33(22.0%)	86(57.3%)	17(11.3%)	3.67	0.88
Patients are carefully oriented on the medication to take	0(0.0%)	4(2.7%)	12(8.0%)	74(49.3%)	60(40.0%)	4.27	0.72
All patient information is kept confidential	5(3.3%)	8(5.3%)	56(37.3%)	56(37.3%)	25(16.7%)	3.59	0.943
All patients are treated equally	5(3.3%)	8(5.3%)	56(37.3%)	56(37.3%)	25(16.7%)	3.59	0.943

SD=Strongly disagree, D=Disagree, N= Neutral, A=Agree, SA=Strongly agree

In line with Service Delivery at Kiswa Health Centre IV, most of the respondents agreed with the statements that services at the Health Centre are reliable (mean =3.09, standard deviation =1.23), Staff at the health center are responsive when needed (mean =3.67, standard deviation =0.88), Patients are carefully oriented on the medication to take (mean =4.27, standard deviation =0.72), all patient information is kept with confidentiality (mean =3.59, standard deviation =0.943) and lastly, all patients are treated equally (mean =3.59, standard deviation =0.943).

Retrieval System.

Table 6: Descriptive Analysis of Retrieval System. (n=150)

Statement	SD	D	N	A	SA	Mean	Standard Deviation
There is a system in place for checking records of patients	0(0.0%)	22(14.7%)	64(42.7%)	52(34.7%)	12(8.0%)	3.36	0.83
Feedback is often offered to the patients by the health personnel	5(3.3%)	9(6.0%)	33(22.0%)	86(57.3%)	17(11.3%)	3.67	0.88
There is quick access to patient information	0(0.0%)	4(2.7%)	12(8.0%)	74(49.3%)	60(40.0%)	4.27	0.720
Reports and analysis of information is easily done	6(4.0%)	53(35.3%)	64(42.7%)	20(13.3%)	7(4.7%)	2.79	0.892
There is enhanced patient safety as a result of the retrieval system	0(0.0%)	4(2.7%)	12(8.0%)	74(49.3%)	60(40.0%)	4.27	0.720

SD=Strongly disagree, D=Disagree, N= Neutral, A=Agree, SA=Strongly agree

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Regarding the Retrieval system, most of the respondents agreed that there is a system in place for checking the records of patients (mean =3.36, standard deviation =0.83), Feedback is often offered to the patients by the health personnel (mean =3.67, standard deviation =0.88), there is quick access to patient information (mean =4.27, standard deviation =0.720) and there is enhanced patient safety as a result of the retrieval system (mean =4.27, standard deviation =0.720). However, most of the respondents were neutral about the statement that reports and analysis of information are easily done (mean =2.79, standard deviation = 0.892)

Storage System.

Table 7: Descriptive Analysis of Storage System (n=150)

Statement	SD	D	N	A	SA	Mean	Standard Deviation
There is data security and privacy at the Health Centre	6(4.0%)	16(10.7%)	66(44.0%)	24(16.0%)	38(25.3%)	3.48	1.11
Patients' records are securely stored	1(0.7%)	18(12.0%)	69(46.0%)	42(28.0%)	20(13.3%)	3.41	0.89
There is an archival of historical records of patients	0(0.0%)	15(10.0%)	2(1.3%)	102(68.0%)	31(20.7%)	3.99	0.790
There is easy accessibility to medical records	7(4.7%)	11(7.3%)	57(38.0%)	57(38.0%)	18(12.0%)	3.45	0.959
Inventory of the health center is easily managed	0(0.0%)	0(0.0%)	55(36.7%)	95(63.3%)	0(0.0%)	3.63	0.484

SD=Strongly disagree, D=Disagree, N= Neutral, A=Agree, SA=Strongly agree

In with Medical Storage System at Kiswa Health Centre IV, most of the respondents agreed with the statements that there is data security and privacy at the Health Centre (mean =3.48, standard deviation =1.11), patients' records are securely stored (mean =3.41, standard deviation =0.89), there is archival of historical records of patients (mean =3.99, standard deviation =0.790), there is the easy accessibility of medical records (mean =3.45, standard deviation =0.959) and finally all inventory of the health center is easily managed (mean =3.63, standard deviation =0.484).

Correlations Analysis.

Based on the study objectives, the study further sought to establish the correlation between the independent and dependent variables. Pearson's product-moment correlation analysis was used to assess the strength of the relationship between the variables.

Table 8: Correlation between Service Delivery and Retrieval System.

		Service Delivery	Retrieval System
Service Delivery	Pearson Correlation	1	.878**
	Sig. (2-tailed)		.000
	N	150	150
Retrieval System	Pearson Correlation	.878**	1
	Sig. (2-tailed)	.000	
	N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

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Results from Table 8 show that there was a positive and significant relationship between the Service Delivery and Retrieval System of Kiswa Health Centre (r =.878, p-value<0.01). This implies that generally, the Retrieval System at Kiswa positively has a positive effect on Service Delivery.

Relationship between Service Delivery and Retrieval System.

Table 9: Correlation between Service Delivery and Storage System.

		Service Delivery	Storage System
Service Delivery	Pearson Correlation	1	.743**
	Sig. (2-tailed)		.000
	N	150	150
Storage System	Pearson Correlation	.743**	1
	Sig. (2-tailed)	.000	
	N	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

Relationship between Service Delivery and Retrieval System.

It can be observed from the above table, that there was a positive and significant relationship between the Service Delivery and the Medical Storage System of Kiswa Health Centre (r =.743, p-value<0.01). This signifies that generally, the Medical Storage System plays a positive role in Service Delivery at Kiswa Health Centre IV.

Challenges faced with the Storage and Retrieval of patient records at Kiswa Health Centre IV.

The study also sought to establish the challenges faced with the storage and retrieval of patient records at Kiswa Health Centre IV. The identified challenges are listed in the table 10.

Table 10: Challenges faced with the Storage and Retrieval of patient records at Kiswa Health Centre IV.

Challenges	**Frequency**	**Percentages (%)**
Inefficient Retrieval Process	36	28.6%
Breakdown with the integration of Electronic Health Records	28	22.2%
Data Loss or Corruption challenges	24	19.0%
Training and Adoption of the system challenges	14	11.1%
Data Migration challenges	11	8.7%
Inadequate staff to operate the systems	9	7.1%
Disorganization in Record Management	4	3.2%
Total	**126**	**100.0%**

From Table 10, out of 126 responses about the challenges said to be faced with the storage and retrieval of patient records at Kiswa Health Centre IV were inefficient retrieval process contributed 36(28.6%), the breakdown with the integration of electronic health records was at 28(22.2%), data loss or corruption challenges was at 24(19.0%), training and adoption of the system challenges was at 14(11.1%), data migration challenges was at 11(8.7%), inadequate staff to operate the systems was at

9(7.1%) and lastly the disorganization in record management at 4(3.2%).

DISCUSSION OF STUDY.

Impact of medical retrieval systems used for patient records on the Service Delivery.

In terms of the impact of medical retrieval systems used for patient records on Service Delivery, the results indicated that medical retrieval systems positively impact Service Delivery at Kiswa Health Centre IV, this is indicated by a correlation coefficient, r =.878 whose p-value is less than 0.01.

Effect of the medical storage systems used on the Service Delivery.

In line with the effect of the medical storage systems used on the Service Delivery, the results of the study established that there was a positive and significant relationship between the Medical Storage System and Service Delivery of Kiswa Health Centre (r =.743, p-value<0.01).

The findings were in support of the earlier findings done by Owino and Namande (2022) who indicated that generally medical storage systems positively contributed to Service Delivery.

Challenges faced in the storage and retrieval of patient records.

The major challenges faced with the storage and retrieval of patient records at Kiswa Health Centre IV were the inefficient retrieval process, the breakdown with the integration of electronic health records, data loss or corruption challenges, training and adoption of the system challenges, data migration challenges, inadequate staff to operate the systems and finally the disorganization in record management. The above stated challenges were in conformity with some of the challenges highlighted in the studies of Adriko and Wandara (2021) and Luthuli and Kalusopa (2017).

CONCLUSION.

The study aimed to assess the effect of the Medical Storage and Retrieval Systems on Service Delivery: a case of Kiswa Health Centre IV. Specifically, the study sought to examine the impact of medical retrieval systems used for patient records on the Service Delivery at Kiswa Health Centre IV, to assess the effect of the medical storage systems used on the Service Delivery at Kiswa Health Centre IV, and finally to establish the challenges faced on the storage and retrieval of patient records at Kiswa Health Centre IV

This study adopted an analytical and cross-sectional research design that aimed at data collection for two or more variables examined at a single point in time to detect variables' patterns of association. The design was preferred because of the consistent nature of objectives aiming to reveal relationships among variables and allowing inferences to be made on the effects of explanatory variables on an outcome variable.

The study targeted a sample of 156 respondents and the sample respondents were drawn from the top management and middle-level staff as well as the outgoing patients from Kiswa Health Centre IV. 150 questionnaires were effectively filled in for analysis translating to a 96.2% response rate as indicated in Table 3 above. Data analysis was conducted using SPSS on the information gathered to generate descriptive statistics. Presentation of results was done in tables and figures and recommendations and conclusions given

In terms of the impact of medical retrieval systems used for patient records on Service Delivery, the results indicated that medical retrieval systems positively impact Service Delivery at Kiswa Health Centre IV, this is indicated by a correlation coefficient, r =.878 whose p-value is less than 0.01. In line with the effect of the medical storage systems used on the Service Delivery, the results of the study established that there was a positive and significant relationship between the Medical Storage System and Service Delivery of Kiswa Health Centre (r =.743, p-value<0.01). Finally, the major challenges faced with the storage and retrieval of patient records at Kiswa Health Centre IV were the inefficient retrieval process, the breakdown with the integration of electronic health records, data loss or corruption challenges, training and adoption of the system challenges, data migration challenges, inadequate staff to operate the systems and finally the disorganization in record management.

RECOMMENDATIONS.

- Staff at Kiswa Health Centre IV should be trained on the use of the different medical retrieval and storage systems to improve their efficiency while using them.
- There is a need to recruit more medical personnel to improve the service delivery at Kiswa Health Centre IV given the challenge of inadequate resources.
- Proper record management should be enhanced through more emphasis by the management of Kiswa Health Centre on the benefits of such systems.

SOURCE OF FUNDING.

The study had no funding.

CONFLICT OF INTEREST.

The author declares no competing interests.

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