
Emergency Response And Mortality In Hospitals In Kisoro District: A Case Study Of Mutolere Hospital.

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Abstract

The study aimed at emergency response and mortality in hospitals in kisoro district with a case study of Mutolere hospital and it was guided by the following objectives; To find out circumstances that call for emergency response at Mutolere hospital in Kisoro district, assess the assets of hospital for emergency preparedness/response at Mutolere hospital in Kisoro district and find whether there was any relationship between emergency response and mortality at Mutolere hospital in Kisoro district. The target population for the research study was a sample of 15 comprising of In Charge, medical workers in the department of emergence, some members of Medical/emergency team, and some patients in the emergency ward at Mutolere Hospital in Kisoro district. The sample population to use when providing information required for the research objectives was in consideration of department i.e. emergency department but regardless of their gender and age. From the findings, 57.1% (8) of respondents revealed that mortality extent at Mutolere hospital was low, 28.6% (4) cited it was medium and 14.3% (2) of them said the extent was high. The highest percentage of 57.1% of respondent who revealed that mortality at the Hospital was low implied that the response to emergency cases was also high hence saving most lives. WHO (2023) and UNICEF recommend that children initiate breast feeding within the first hour of birth and be exclusively breastfed for the first 6 month of life. The first hour breast milk the baby is exposed to is called colostrum is the most vital for the baby's immunity system to protect them in future from serious disease attack since this milk contain all the vital nutrients for immunity built up and this type of immunity is called naturally acquired immunity. So Mutolere Hospital should empower parents to enable breast feeding.

Key words: Emergency Response, Mortality and Hospitals

Background of the study

(Jac & Kazaara, 2023) stated that although the rising death rate in general in government hospitals in the country is attributed to "...poor professionalism on the part of some doctors serving in the government hospital system", the problem is more complicated than that in the sub-region in 2008– 2009, healthcare sector procurement reform and facility efficiency, Ghana's health infrastructure has become vulnerable after decades of neglect, mismanagement of financial assets and human capital (Racheal et al., 2023). There appeared to be open corruption in health care procurement despite procurement law and regulations (Paul et al., 2023). This situation was exacerbated by systemic underfunding. Hospitals often lack fully functional laboratories, X-ray and diagnostic or rehabilitation equipment, a good supply chain for logistics and consumables, as well as adequate postgraduate medical and support staff. The bed capacity is overloaded with patients, some of whom sleep on mattresses in corridors and passages. The bedding is not in the best conditions. Robertson-Steel (2006) said that Triage is the triage of work protocols at the point of impact and the standardization of frontline emergency departments, hospitalizations and

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treatment procedures based on medical emergency, availability of trained personnel, appropriate medical equipment, supplies. and proper distribution of patients in an emergency.

Treatment assumes the availability of trained trauma and emergency personnel, appropriate hospitals with mutual aid agreements, and supplies. Transport assumes qualified emergency medical service, (EMS) equipment and crew, Emergent Group with basic knowledge of preparedness (Nasuru & Bafaki, 2023).

Saint Francis Hospital Mutolere, commonly referred to as Mutolere Hospital, is a private, non-profit, community hospital owned by the Roman Catholic Diocese of Kabale. This site is located in the extreme south-west of Uganda, close to the international borders with the Democratic Republic of the Congo and the Republic of Rwanda. It is accredited by the Uganda Catholic Medical Bureau (Mercy et al., 2023). The hospital serves patients from Kisoro district and the neighboring districts of Rukungiri, Kanungu and Kabale. A percentage of their patients come from abroad, from the Democratic Republic of the Congo and the Republic of Rwanda

Hospital of St. Františka Mutolere, now a hospital with a capacity of 210 beds, was founded in 1957 by the Franciscan Sisters of Breda (Netherlands) as a church voluntary health agency within the Catholic Diocese of Kabale (Richard, 2022). The hospital was run by the founding congregation of sisters until 1994, when ownership was transferred to the Board of Directors of the Diocese of Kabale. At the time of its establishment, Kisoro was a county of the then Kigezi District. It is therefore commendable that Dr. Bruno Rochus, a German, dedicated his life to serving Bufumbira for nine years after serving in World War II. Until then there was no telephone access.

Problem statement

Emergency response is an action/attempt by hospitals or any medical emergency team to provide care to victims during critical events/disasters according to World Health Organization (W.H.O). In the hospital, this is done to reduce the increase in mortality, although some victims meet with a catastrophe at the moment of death, which sabotages the hospitals' whole struggle to save lives/deal with the challenge (Cand et al., 2022). hospitals must therefore initiate essential priority measures to increase the readiness of medical facilities. Therefore, the researcher was interested in whether there is a relationship between emergency response and mortality in hospitals in Kisoro District with reference to Mutolere Hospital (Richard et al., 2022).

Specific objectives.

1. To find out circumstances that call for emergency response at Mutolere hospital in Kisoro district.
2. To assess the assets of hospital for emergency preparedness/response at Mutolere hospital in Kisoro district.
3. To find whether there was any relationship between emergency response and mortality at Mutolere hospital in Kisoro district.

Methodology

The study adopted a descriptive and experimental research design which attempted to answer a research question that asked what relationships one variable had on another variable. It also described situations and events such

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that, an observer observed an event or a situation and tried to describe it as best as he/she could according to how things unfold. The study involved both qualitative and quantitative approaches during data collection. Qualitative approach enabled the researcher to give a complete, detailed description of phenomenon while quantitative approach enabled the researcher to construct statistical models in an attempt to explain the findings.

The study was conducted at Mutolere hospital in Kisoro District. The Hospital was located at the neighborhood called Mutolere suburb of Kisoro Municipality, approximately 6 kilometers (3.7mi), by road, northeast of Kisoro Municipality, where the district headquarters are located. This location, lies in extreme southwestern Uganda, close to the international borders with the Democratic Republic of Congo and with the Republic of Rwanda. The target population for the research study was a sample of 15 comprising of In Charge, medical workers in the department of emergence, some members of Medical/ emergency team, and some patients in the emergency ward at Mutolere Hospital in Kisoro district. The sample population to use when providing information required for the research objectives was in consideration of department i.e. emergency department but regardless of their gender and age. The researcher employed only a purposive non-probability sampling technique. According to Orodho (2013), a purposive sample was the one which was selected by the researcher subjectively i.e. influenced by personal opinions where he/ she attempted to obtain a sample that appears to be representative of the population and was usually tried to ensure that the arrangement from one extreme to the other was included. The researcher only considered the patients, team members, medical workers, and in charge of Mutolere hospital only. These were expected to provide relevant data in regard to the objectives of the study. Simple random sampling was whereby the individuals in the total population had equal and independent chances of being selected as a member of a sample (Orodho, 2004). The respondents in this study were patients as primary respondents. Simple random sampling was used to select respondents in the group of patients within the hospital in the department of emergency. A total of 07 patients from Mutolere hospital in emergency department, participated in the study and their selection involved simple random sampling and specific attention was paid to inclusion of both male and female patients in the study. This is a data collection technique in which written questions are presented and answered by respondents in a written form. The researcher designed questions which was distributed to the individuals so as to obtain statically useful information about the current emergency response and mortality records. This technique was used due to its ability to gather responses in a standardized way, it is cheap and information is easy to analyze. Data processing was done through Editing, coding and tabulation. Data analysis was done using computer analysis with the help of the SPSS (Statistical Package for Social Sciences). This helped the researcher analyze the raw data and transform it into meaningful and usable information. After this process, a report is written based on the findings from the study. The researcher analyzed and interpreted quantitative data by using statistical package for social science (SPSS) program to compute the percentages, frequency and tabulation of responses and both use of quantitative and qualitative types of data (Nelson et al., 2022). Data was edited to identify and eliminate errors made by respondents. Coding was then done to translate question responses into

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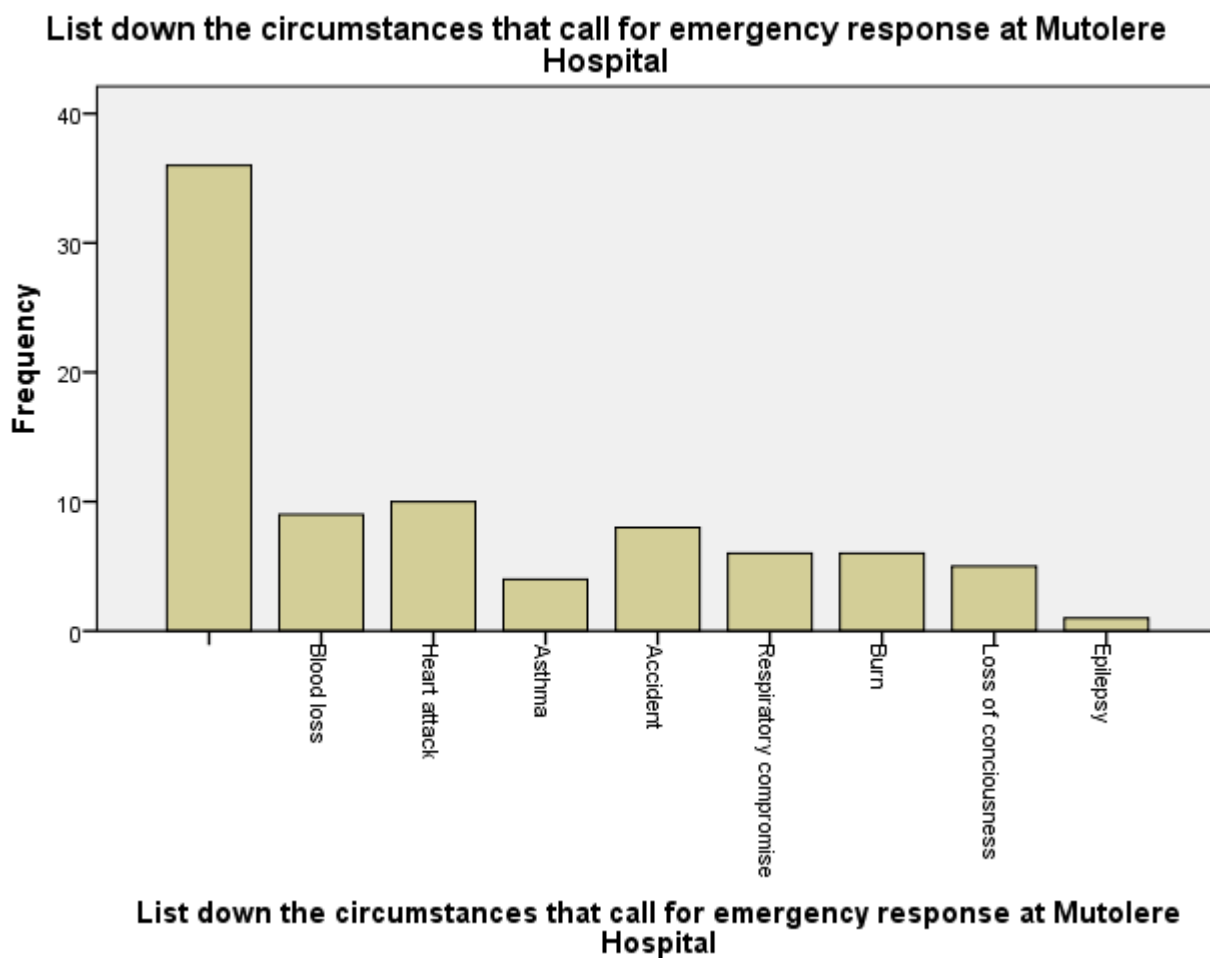
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specific categories. Descriptive statistics such as frequency distribution and percentages were used to analyze the data. Qualitative data was analyzed using content analysis in which all the responses was categorized according to their thematic areas and analyzed according to their contents. Presentation was done on tables, figures and charts. Statistical Package for Social Sciences (SPSS) software was used to aid in the analysis of data (Nelson et al., 2023).

RESULTS

Figure 1: showed list of circumstances that call for emergency response



Source: Primary data, 2023

The results shown on the bar graph were responses of 14 participants about the circumstances that call for emergency response at Mutolere Hospital who happened to give different responses while some where repeated by them so, out of those, Heart attack was cited by 10 respondents out of 14, Blood loss was given by 9 respondents out of 14, Accidents was cited by 8 participants out of 14, Respiratory compromise was cited by 6 respondents out

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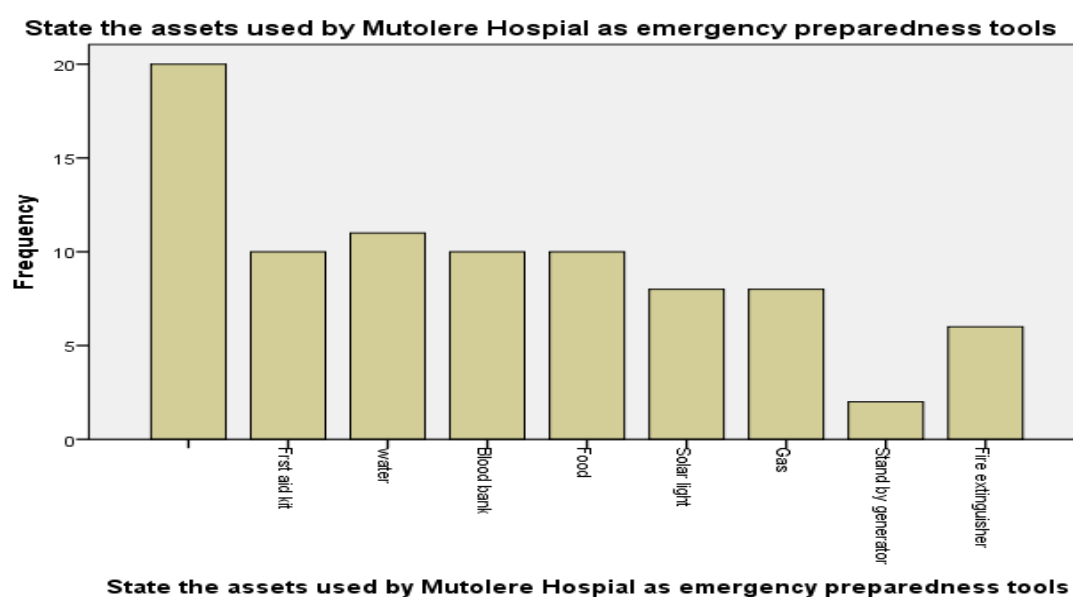
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of 14 as well as Burn was also cited by 6 participants out of 14, Loss of consciousness was given by 5 respondents out of 14, Asthma was also given by 4 respondents out of 14 and lastly Epilepsy was cited by 1 participant out of 14 respondents. Heart attack appeared most time i.e. cited by 10 participants, implied that the frequently addressed emergency case at Mutolere Hospital is Heart attack.

Emergency Preparedness Tools

Figure 2: showed the emergency preparedness tools at Mutolere Hospital.



Source: primary data, 2023

The results shown on the bar graph were responses of 14 participants about the emergency preparedness tools at Mutolere Hospital who happened to give different responses while some were repeated by them so, out of those, water was given by 11 participants out of 14, first aid kit was cited by 10 respondents out of 14, Blood bank was given by 10 respondents out of 14, Food was cited by 10 participants out of 14, solar light was cited by 8 respondents out of 14 as well as Gas was also cited by 8 participants out of 14, Loss of consciousness was given by 5 respondents out of 14, Fire extinguisher was also given by 6 respondents out of 14 and lastly Generator was cited by 2 participants out of 14 respondents. Water appeared most time i.e. cited by 11 participants, implied that the frequently used emergency preparedness tool at Mutolere Hospital is water.

Extent of Mortality

Regarding the extent of Mortality at Mutolere hospital, the respondents gave the responses as summarized in the table below;

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Table 1; Showed the extent of Mortality at Mutolere Hospital

	Frequency	Percent	Valid Percent	Cumulative
Low Medium High	8	57.1	57.1	57.1
Total	4	28.6	28.6	85.7
	2	14.3	14.3	100.0
	14	100.0	100.0	

Source: primary data, 2023

According the results summarized, 57.1% (8) of respondents revealed that mortality extent at Mutolere hospital was low, 28.6% (4) cited it was medium and 14.3% (2) of them said the extent was high. The highest percentage of 57.1% of respondent who revealed that mortality at the Hospital was low implied that the response to emergency cases was also high hence saving most lives

Table 2; Showed the major short comings in emergency department that led to Mortality at Mutolere Hospital.

	Frequency	Percent	Valid Percent	Cumulative
Blood shortage	11	12.9	12.9	12.9
	10	11.8	11.8	24.7

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Unstable network	9	10.6	10.6	35.3
Poor weather condition	13	15.3	15.3	50.6
Inadequate drugs	10	11.8	11.8	62.4
Long Distance from the	7	8.2	8.2	70.6
Valid Hospital	9	10.6	10.6	81.2
Inflexible health workforce	7	8.2	8.2	89.4
Poor roads	9	10.6	10.6	100.0
		100.0	100.0	

Source: primary data, 2023

The results shown on the table were responses of 14 participants about the major short comings in emergency departments that led to Mortality at Mutolere Hospital who happened to give different responses while some were repeated by them so, out of those, inadequate drugs was cited by 13 respondents out of 14, Blood shortage was given by 11 respondents out of 14, unstable network was cited by 10 participants out of 14, long distance from the hospital was cited by 10 respondents

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out of 14, poor roads was also cited by 9 participants out of 14, as well as poor weather condition was given by 9 respondents out of 14, unreliable electricity was also given by 9 respondents out of 14, unreliable transport mean was cited by 7 participant out of 14, and lastly 7 respondents out of 14 of them cited inflexible health workforce. Inadequate drugs appeared most time i.e. cited by 13 participants out of 14 participants, implied that the drugs in the facility was insufficient though the extent of mortality was low due to high response to emergency cases at Mutolere Hospital.

Measures being taken to reduce on the Mortality level at Mutolere Hospital.

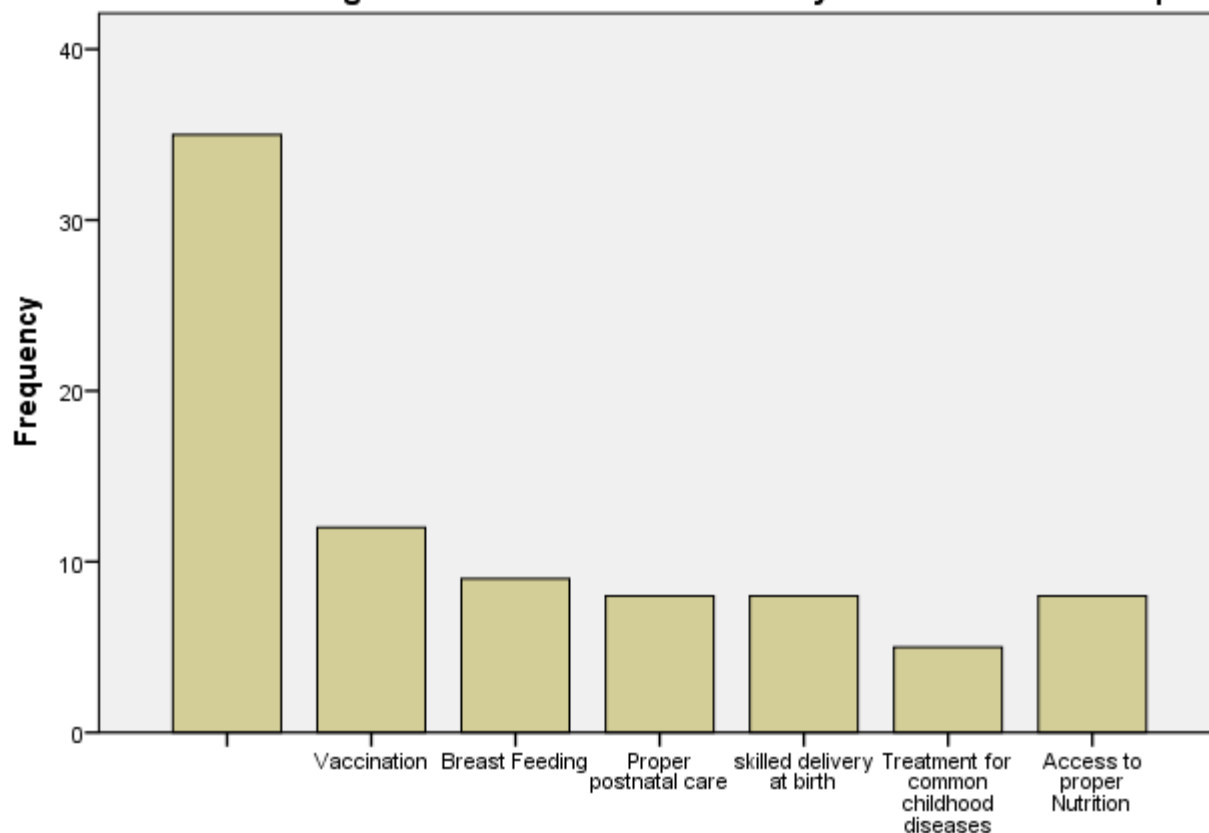
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Figure 3; showed the measures that were being taken to reduce on the level of Mortality at Mutolere Hospital.

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State the measres being taken to redce on the mortality level at Mutolere Hospital

Source: primary data, 2023

The findings shown on the Bar chart were responses of 14 participants about the measures being taken to reduce on the level of at Mutolere Hospital who happened to give different responses .so, out of those, Vaccination was cited by 12 respondents out of 14, Breast feeding was given by 9 respondents out of 14, Postnatal care unstable network was cited by 8 participants out of 14, skilled delivery at birth was cited by 8 respondents also out of 14, Treatment for common childhood disease cited by 5 participants out of 14, and lastly 8 respondents out of 14 of them cited access to proper nutrition. Vaccination appeared most time i.e. cited by 12 participants out of 14 participants, implied that the in the facility, Vaccines are administered massively to both infants, expectant mothers, lactating mothers and other groups of vulnerable people at Mutolere Hospital.

Conclusions:

Basing on the main research objective or question of this research, that is to say examine the relationship between

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emergency response and mortality at Mutolere hospital, it was established that the level of mortality has a direct relationship with emergency response. Largely, Mutolere hospital had registered low mortality level because of moderate response to most emergency cases arising at the hospital be reduced by Vaccination of the entire clients just as it was done for COVID19 that totally erased the emergency cases concerning COVID19 in the entire Uganda and the world as a whole. Therefore, even though Mutolere hospital undertook various procedures and plans to reduce on mortality figures to a certain extent, there is still much to exercise for better service delivery in the emergency departments at the Hospital.

Recommendations

Following the findings, the researcher calls to address the major short comings that contribute to the mortality at Mutolere hospital which include, Blood shortage, unstable network, poor weather condition, inadequate drugs, Long distances from the hospital, poor roads, inflexible health workforce, unreliable electricity and unreliable transport means. Such shorts comings should be addressed using the following measures as analyzed below: -

Vaccination;

People are supposed to be vaccinated which is the introduction of inactive virus in the body to keep the antibodies alert/ prime the immune system about the antigens. It is the simplest, safe and effective way of protecting people against harmful diseases before they come into contact with them. This would also help reduce emergency cases admitted at Mutolere hospital.

Breast feeding;

WHO (2023) and UNICEF recommend that children initiate breast feeding within the first hour of birth and be exclusively breastfed for the first 6 month of life. The first hour breast milk the baby is exposed to is called colostrum is the most vital for the baby's immunity system to protect them in future from serious disease attack since this milk contain all the vital nutrients for immunity built up and this type of immunity is called naturally acquired immunity. So Mutolere Hospital should empower parents to enable breast feeding.

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