Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

PUERPERAL SEPSIS AND ITS ASSOCIATED FACTORS AMONG POSTNATAL MOTHERS AT MUKONO GENERAL HOSPITAL, MUKONO DISTRICT. A CROSS-SECTIONAL STUDY.

Molly Kasasa , Mariam Suubi, Francisco Ssemuwemba, Janefrank Nalubega*
Mildmay Institute of Health Sciences, P.O.BOX 24985.

ABSTRACT.

Introduction:
This study was on factors associated with puerperal sepsis among postnatal mothers at Mukono General Hospital, Mukono District. It was guided by two specific objectives: assess the prevalence, individual-related factors, and health facility-related factors associated with puerperal sepsis among postnatal mothers at Mukono General Hospital, Mukono District.

Methodology:
This study used a descriptive cross-sectional study design and employed quantitative and qualitative data collection approaches. The study was carried out at Mukono General Hospital, Mukono District. The study population for this study comprised postpartum mothers with puerperal sepsis at Mukono General Hospital, Mukono District. The sample size of 30 postpartum mothers with puerperal sepsis who participated in this study was sampled using a simple random sampling procedure. The questionnaire was used for data collection and analyzed using Microsoft Excel 2019.

Results:
The study established that the socio-demographic characteristics that were associated with puerperal sepsis were age between 18 – 25 years (57%), rural residence (63%), low levels of education (50%); Furthermore individual related factors included utilization of herbal medicine (63%), tears during delivery (53%), resumption of sexual intercourse before 7 days of peuperium (53%); Finally health facility related factors included lack of follow up services during peuperium (60%), negative attitude of health workers (63%).

Conclusion:
The study established that the socio-demographic characteristics that were associated with puerperal sepsis were age between 18 – 25 years, rural residence, and low levels of education; furthermore, individual-related factors included utilization of herbal medicine, tears during delivery, resumption of sexual intercourse before 7 days of puerperium; Finally, health facility related factors included lack of follow up services during puerperium, negative attitude of health workers.

Recommendation:
Health workers should provide follow-up services to postnatal mothers after delivery.
Health facilities should conduct training to improve the attitude of health workers to postnatal mothers.

Keywords: *Puerperal sepsis, Postnatal mothers, Mukono General Hospital*
Submitted: 2024-02-14 Accepted: 2024-02-15

Corresponding author: *Mariam Suubi**
Email: mariamsuubi@gmail.com
Mildmay Institute of Health Sciences, P.O.BOX 24985.

BACKGROUND OF THE STUDY.

According to the World Health Organisation (WHO), Puerperal sepsis is defined as an infection of the genital tract occurring at any time between rupture of membranes, labor, and the 42-day postpartum Nchimbi, D. B., et al.,2022. The report also showed that two or more of the following clinical criteria must be present: pelvic pain, fever, abnormal vaginal discharge, or delay in uterine involution Nchimbi, D. B., et al.,2022. According to Chernet, A. G., et al,2019, The risk of a woman in a developing country dying from a maternal-related cause during her lifetime is about 33 times higher compared to a woman living in a developed country Sepsis causes 10.7% of maternal deaths worldwide.

According to Hassan, R, Mohammed et al.., 2021, Puerperal sepsis is the fourth common cause of maternal mortality after postpartum bleeding, unsafe abortion, and hypertensive disorder of pregnancy. Globally, it is

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

estimated that almost 21 million incident cases of puerperal sepsis and 17 thousand deaths from maternal sepsis and other maternal infections (MSMI) worldwide. Mothers living in developed countries die from sepsis less than those in developing countries. It causes more deaths in Asian countries, Caucasus, Latin America, the Caribbean, Oceania, North Africa and sub-Saharan Africa.

In Africa, seventy-seven thousand mothers die of puerperal sepsis from a total of 6 million cases of puerperal sepsis. Another study showed that 75000 maternal deaths occur every year due to puerperal sepsis and most of these deaths occur in low-income countries. In Sub–Saharan Africa, it is estimated that over 1 million postpartum mothers suffer from puerperal sepsis.

In East Africa, it is estimated that 39% of post-partum mothers acquire puerperal sepsis every year. The study further revealed that puerperal sepsis prevalence in Kenya stands at 29%, Tanzania at 32%, and Rwanda at 31%. In Uganda, it is estimated that the most frequent cause of maternal mortality was puerperal sepsis accounting for 30.9 %.

Nchimbi Dorice. B et al.,2022 state that studies have reported that risk factors contributing to puerperal sepsis include prolonged labor, early rupture of membrane for more than 24 h, repeated vaginal examination more than five times during labor, retained products of conception, and maternal anemia. Women with informal, primary level education and low monthly income of the mother or the family are also at increased risk.

According to Atlaw. D et al.,2017, Puerperal sepsis is one of the major causes of maternal death and accounts for 15 percent of all maternal deaths in developing countries. If it does not cause death, puerperal sepsis can cause long-term health problems such as chronic pelvic inflammatory disease (PID) and infertility.

It is upon this background that the researcher is set to determine the Factors associated with puerperal sepsis among postnatal mothers at Mukono General Hospital, Mukono District.

Purpose of the study.

The study will aim to determine the factors associated with puerperal sepsis among postnatal mothers at Mukono General Hospital, Mukono District.

Specific objectives.

- To assess the prevalence of puerperal sepsis among postnatal mothers at Mukono General Hospital, Mukono District.
- To establish the individual-related factors associated with puerperal sepsis among postnatal mothers at Mukono General Hospital, Mukono District.
- To identify the health facility-related factors associated with puerperal sepsis among postnatal mothers at Mukono General Hospital, Mukono District.

METHODOLOGY.

Study design and rationale.

The study was centered on a descriptive and cross-sectional analytical survey and interviews were elicited in depth which involved both quantitative and qualitative research approaches. Data was collected from various respondents, and its ineffective collection used a triangular approach hence the design was the most appropriate. Moreover, the design enabled the collection of all the data necessitated at one point in time, to be completed within a limited amount of time available for doing it.

Study setting and rationale.

The study was conducted at Mukono Referral Hospital which is a government-owned Health facility under the management of the Ministry of Health (MoH). The Health facility is located in Mukono City, Mukono district, Uganda. It offers both curative and preventive services like Outpatient, inpatient, Maternal, and Child health care including immunization, and ANC- Health education including a daily run clinic of ART. The study setting was selected because it had recorded postpartum mothers who had puerperal sepsis. This research will be carried out between May 2023 and December 2023. This time duration covers proposal development, data collection and analysis, and compiling of the report.

Study Population and Rationale.

The study included postnatal mothers with puerperal sepsis attending Mukono General Hospital in Mukono District and receiving treatment from there. The target population was considered because the subject content under investigation directly applied to them.

Sample Size Determination.

The sample size of post-partum mothers with puerperal sepsis attending Mukono General Hospital who participated in this study was determined by the statistical formula by Keish and Leslie (1965)

$n = Z^2p\ (l\text{-}P)/d^2$

Where n was the sample size

Z was the standard normal deviation at a 95% confidence level (i.e. 1.96)

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

P was the proportion of the target population (which is 50% or 0.5)
d was the acceptable degree of error (in this case 5% or 0.05)
$n= (1.96)^2 \times 0.5 \times 0.5/0.05^2 = 384.16$
$= 384$
Since the total population of respondents involved is less than 10,000 (33), the following formulae were applied. n/1+n/N
Sample size estimation (*nf*) was calculated as follows;
nf = the desired sample size (when the population was less than 10,000)
n = the desired sample size (when the population was more than 10,000)
N = the estimate of the population size
nf = n
N = 33 (Estimated total number of post-partum mothers with puerperal sepsis in Mukono General Hospital)

$$nf = \frac{n}{1 + \frac{n}{N}} = \frac{384}{1 + \frac{384}{33}} = \frac{384}{1 + 12} = \frac{384}{13}$$

$= 29.5 \approx 30$

Therefore, the sample size was 30 respondents.

Sampling Procedure.

A simple random type of sampling procedure was used to select the respondents for the study. Selected post-partum according to the patients' lists were selected at random from which at least one participant was given a chance to participate in the study. This was achieved by getting pieces of papers on which the words "inclusion" meaning included in the study and "exclusion" meaning excluded from the study were written for the respondents to pick. Whoever picked the "inclusion" paper was given a questionnaire to fill whereas those who picked the "exclusion" paper were exempted from the study.

Inclusion Criteria.

The study included postnatal mothers with puerperal sepsis attending Mukono General Hospital in Mukono District and who had voluntarily consented to participate in the study.

Definition of variables.

The dependent variable was referred to as the one that yielded results such as puerperal sepsis.

Independent variables were individual-related factors, health-related factors, and prevalence.

Research Instruments.

Data was collected using a semi-structured questionnaire which consisted of open and closed-ended questions. The questionnaires had questions with options where the respondents chose what best suited them. The instrument was pretested from Kisenyi Health Center IV among 10 postpartum mothers with puerperal sepsis. The questionnaire was used because it enabled the respondents to respond efficiently to the questions that were asked.

Data collection Procedure.

Before administering the questionnaires, the researcher first explained the questions to the respondents. Those unable to read and write questions were translated to them and their responses were recorded in data. The procedure took 3 days and the researcher collected data from 10 respondents per day to obtain the required number of 30 respondents.

Data management.

The filled questionnaires were collected, checked for completeness, and counted after every data collection day to ensure that they were all returned, coded, and kept in a safe place as a backup. A flash disk was also used to store data.

Data analysis and presentation.

Data was manually analyzed and entered into the computer using Microsoft Excel 2019. Then was presented using tables, texts, and figures.

Ethical Consideration.

An introductory letter was obtained from the principal of the Mildmay Institute of Health Sciences introducing the researcher to the research committee of Mukono General Hospital in Mukono District to be allowed to conduct the study. Once permission was granted, the In-charge introduced the researcher to the respondents. Respondents were assured of maximum confidentiality for all the information that was given. The study only commenced after study objectives had been clearly explained. Participants were asked to voluntarily consent to the study and were told about free entry and free exit when the need arose. Questionnaires were then administered to participants and were filled and then later returned to the researcher who kept them in the file.

RESULTS.

Socio-Demographic Characteristic

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

Table 1: Shows the demographic characteristics of Respondents.

Characteristics	Attributes	Frequency (n = 30)	Percentage
Age of the respondents	18 – 25 years	17	57%
	26 – 33 years	4	13%
	34 years and above	9	30%
Residence	Urban	11	37%
	Rural	19	63%
Level of Education	Tertiary	4	13%
	Secondary	6	20%
	Primary	15	50%
	Informal	5	17%
Social economical class	Low Social class	21	70%
	Middle Social class	9	30%
	High Social class	0	0%
Marital status	*Married*	7	23%
	Single	17	57%
	Divorced	6	20%
Husband's educational status	Tertiary	1	
	Secondary	18	60%
	Primary	7	23%
	Informal	4	13%

Table 1 shows that the majority of the respondents 17 (57%) were between 18-25years whereas the minority of the respondents 4 (13%) were between 26-33years; furthermore shows that the majority of the respondents 19 (63%) resided in rural areas whereas a minority of the respondents 11 (37%) resided in urban areas; in-addition shows that majority of the respondents 15 (50%) had attained primary level whereas a minority of 4 (13%) had attained tertiary level; it further shows that majority of respondents 21 (70%) lived in a low socio class whereas a minority of respondents 9 (30%) lived in a middle class; in the additional majority of the respondents 17 (57%) were single whereas a minority of 6 (20%) were divorced: finally the majority of respondents 18(60%) their husbands had attained a secondary level of education whereas a minority of respondents 4(13%) their husbands were informal.

Individual-related factors contributing to puerperal sepsis among postnatal mothers.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

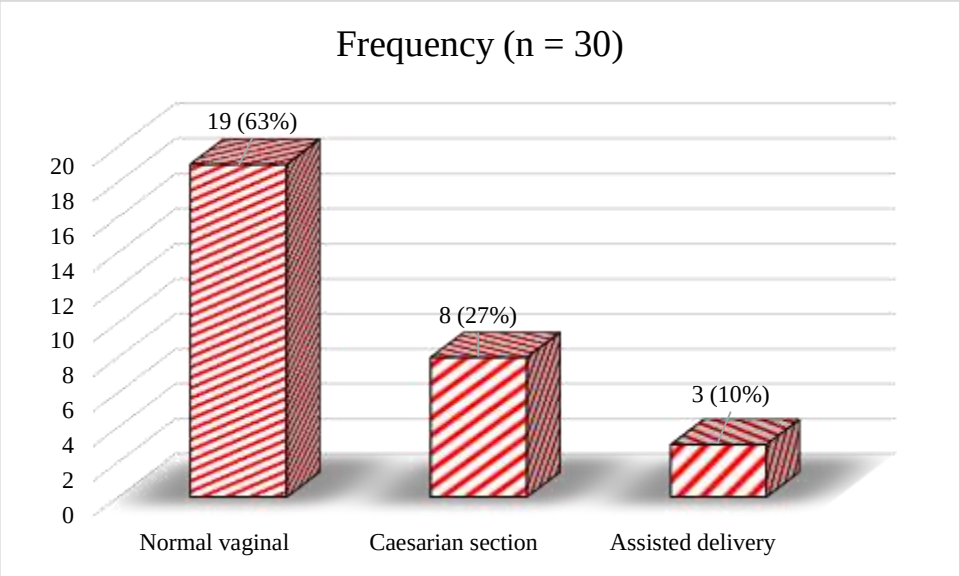


Figure 1: Illustrates the type of delivery respondents used.

Figure 1 illustrates that the majority of 19 (63%) used normal vaginal delivery whereas a minority of 3 (10%) used assisted delivery.

Figure 2: indicates whether respondents thought it was necessary to deliver in the health facility.

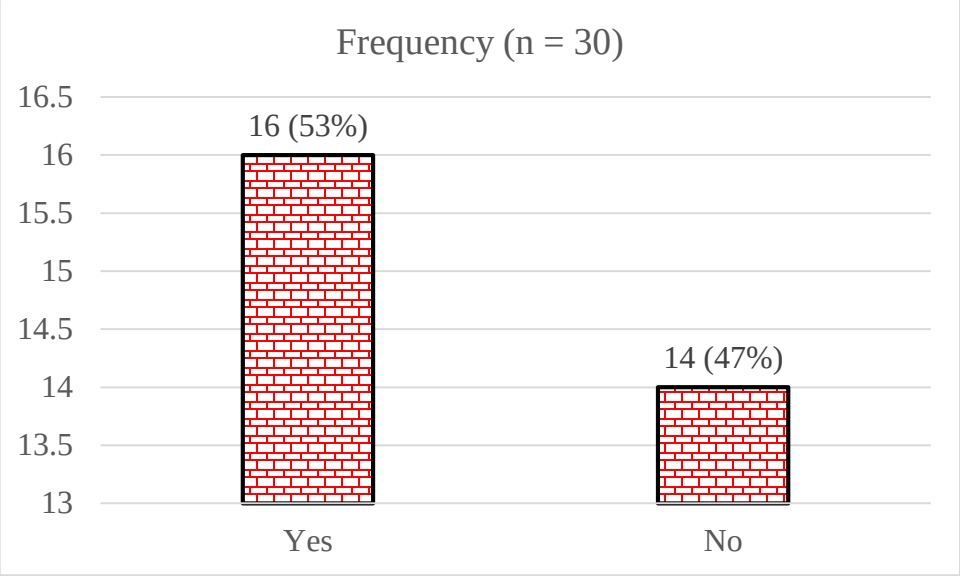


Figure 2 indicates that the highest number of the respondents 16 (53%) thought it was necessary to deliver in the health facility whereas a minority of 14 (47%) thought it was not necessary to deliver in the health facility.

Table 2: Shows the number of kgs the respondents weighed.

Response	Frequency (n = 30)	Percentage
30 – 50 kg	20	67%
51 – 70 kg	7	23%
71Kgs and above	3	10%

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

Table 2 shows that the majority of the respondents 20 (67%) weighed between 30-50kgs whereas the minority of the respondents 3 (10%) weighed 71kgs and above.

Figure 3: Shows how long respondents took in labor before delivering a child.

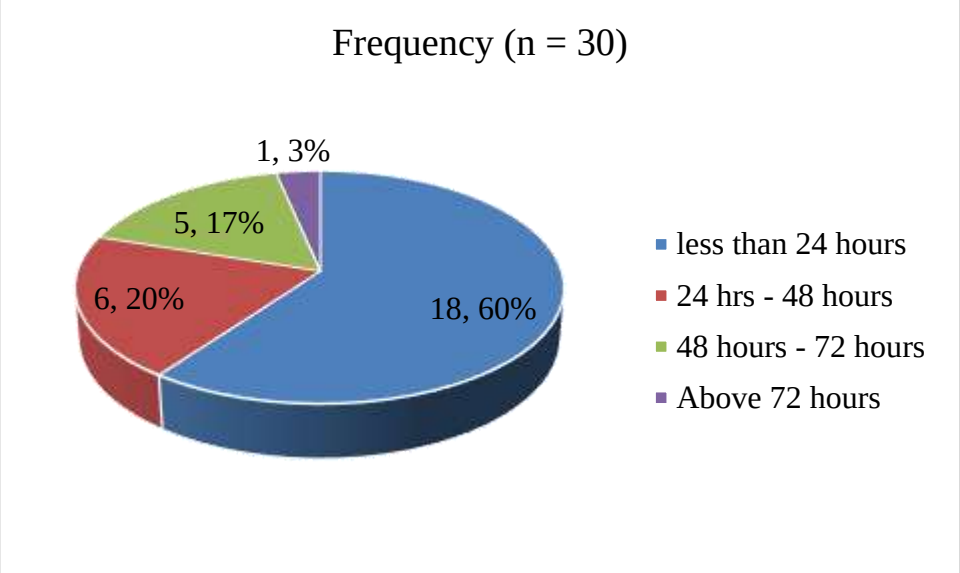


Figure 3 shows that the majority of respondents 18 (60%) reported that it took them less than 24 hours before delivering a child whereas a minority of 1 (3%) reported that it took them above 72 hours before delivering the child.

Table 3: Shows whether respondents had any other chronic illnesses i.e. HTN, DM.

Response	Frequency (n =30)	Percentage
Yes	9	30%
No	21	70%

Table 3 shows that the majority of the respondents 21 (70%) had no other chronic illnesses i.e. HTN, or DM whereas a minority of respondents 9 (30%) had other chronic illnesses.

Table 4: Indicates whether respondents were taking herbal medicine during pregnancy.

Response	Frequency (n = 30)	Percentage
Yes	19	63%
No	11	37%

Table 4 indicates that the majority of the respondents 19 (63%) agreed that they were taking herbal medicine during pregnancy whereas a minority of 11 (37%) never used an herbal medicine during pregnancy.

Table 5: Reveals whether respondents' babies were born at term.

Response	Frequency (n=30)	Percentage
Yes	20	66%
No	10	34%

Table 5 reveals that the majority of respondents 20 (66%) said that their babies were born at term whereas the minority of respondents 10 (34%) said that their babies were not born at term.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

Figure 4: Shows whether respondents received tears.

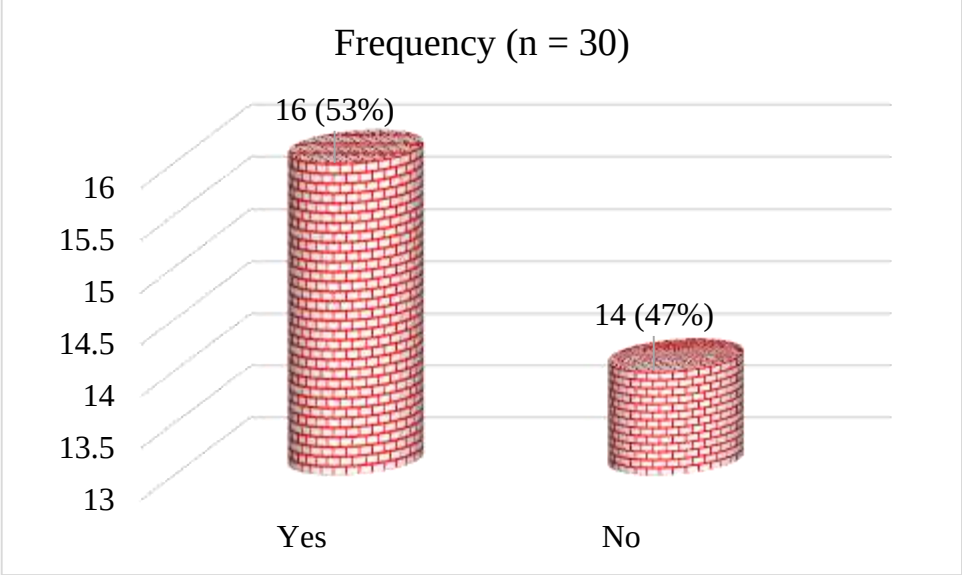


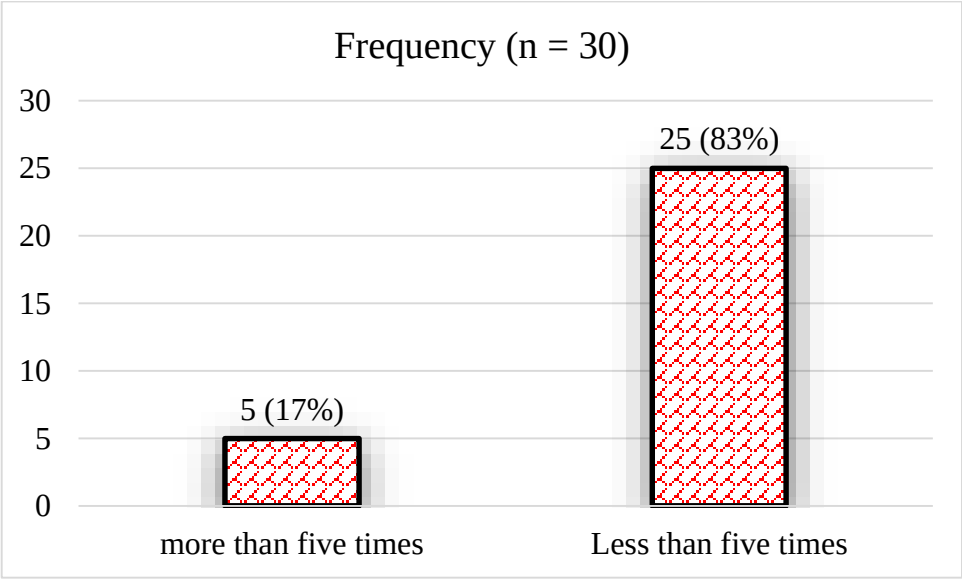
Figure 4 shows that the majority of respondents 16 (53%) reported that they received tears whereas a minority of 14 (47%) reported that they didn't receive tears.

Table 6: Reveals whether respondents had stress.

Response	Frequency (n =)	Percentage
Yes	0	0%
No	30	100%

Table 6 reveals that all respondents 30 (100%) had no stress.

Figure 5: Shows the number of vaginal examinations that were done on respondents during labor.



Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

Figure 5 shows that the majority of the respondents 25 (83%) reported that they were done vaginal examinations less than five times during labor whereas a minority of the respondents 5 (17%) reported that they were done vaginal examinations more than five times during labor.

Table 7: Reveals the respondent's awareness of the proper care after birth.

Response	Frequency (n = 30)	Percentage
Yes	17	57%
No	13	43%

Table 7 reveals that the majority of the respondents 17 (57%) agreed that they are aware of the proper care after birth whereas a minority of 13 (43%) were not aware of the proper care after birth.

Figure 6: Shows when respondents resumed sexual intercourse after birth.

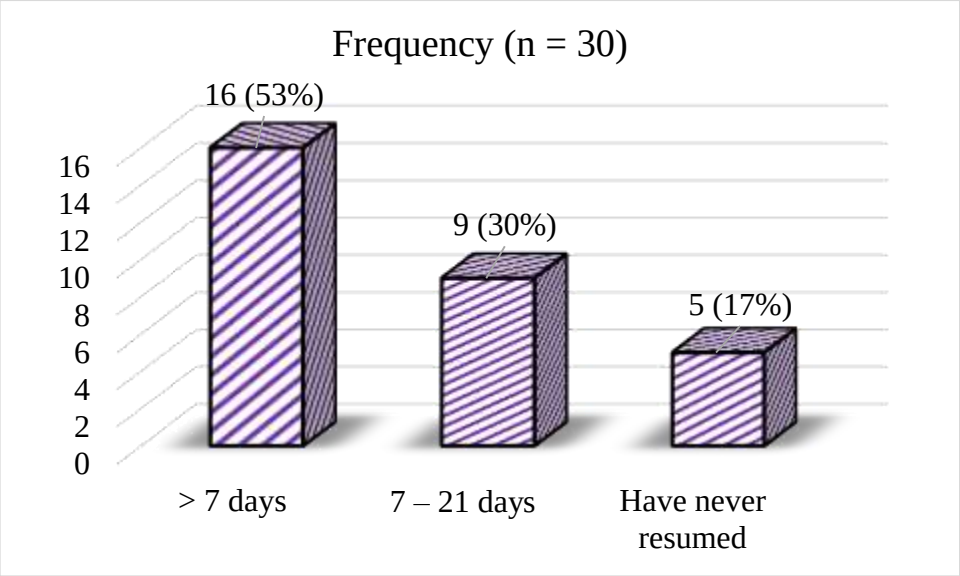


Figure 6 shows that the majority of respondents 16 (53%) resumed sexual intercourse above 7 days after birth whereas a minority of 5 (17%) had never resumed sexual intercourse.

Table 8: Shows respondent's responses on whether medical advice of the puerperium care was not effective.

Response	Frequency (n =)	Percentage
Yes	12	40%
No	18	60%

Table 8 reveals that the majority of the respondents 18 (60%) reported that medical advice of the puerperium was effective workers whereas the minority of respondents 12 (40%) reported that medical advice of the puerperium care was not effective.

Table 9: Reveals whether respondents knew their HIV status.

Response	Frequency (n = 30)	Percentage
Yes	30	100%
No	0	0%

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

Table 9 reveals that all the respondents 30 (100%) knew their HIV status.

Health Facility-Related factors contributing to puerperal sepsis among postnatal mothers.

Figure 7: Shows whether respondents were followed up by the health workers after the delivery.

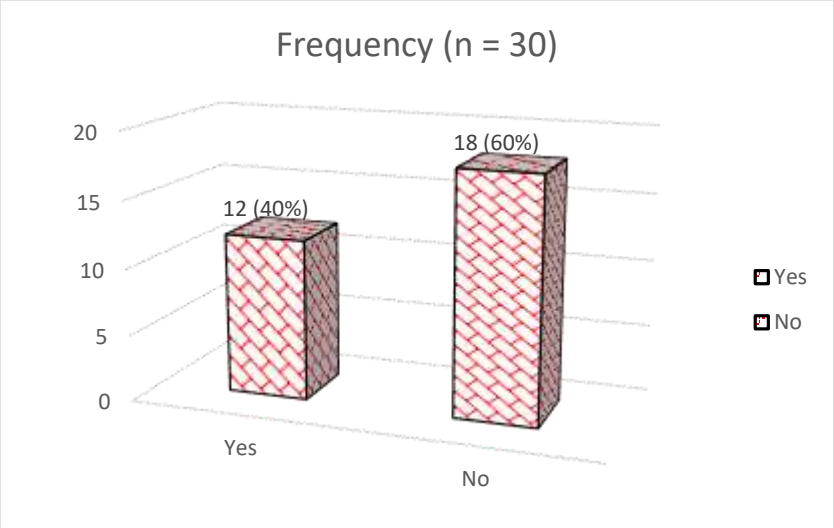


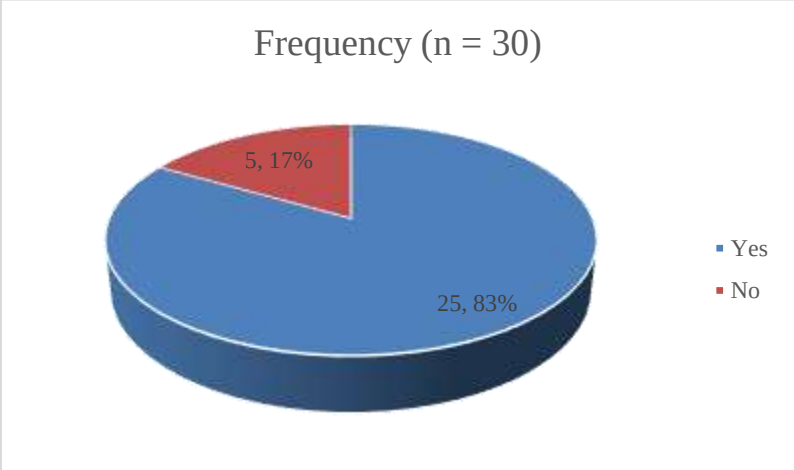
Figure 7 shows that the majority of respondents 18 (60%) reported that health workers never followed them up during pregnancy whereas a minority of 12 (40%) reported that health workers followed them up during pregnancy.

Table 10: Reveals whether respondents had ever received health education talk about puerperal sepsis.

Response	Frequency (n =)	Percentage
Yes	0	0%
No	30	100%

Table 10 reveals that all the respondents 30 (100%) had ever received health education talk about puerperal sepsis.

Figure 8: Shows whether there are adequate numbers of health workers at the health center.



Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

Figure 8 shows that the majority of the respondents 25 (83%) reported that they had adequate health workers at the health center whereas a minority of the respondents 5 (17%) reported that they had no adequate number of health workers at the health center.

Table 11: Reveals whether respondents received proper care during delivery.

Response	Frequency (n = 30)	Percentage
Yes	17	57%
No	13	43%

Table 11 reveals that the majority of the respondents 17 (57%) agreed that they received proper care during delivery whereas a minority of 13 (43%) didn't receive proper care during delivery.

Table 12: Shows the respondents' awareness of proper care after birth.

Response	Frequency (n = 30)	Percentage
Yes	17	57%
No	13	43%

Table 12 shows that the majority of the respondents 17 (57%) agreed that they were aware of the proper care after birth whereas a minority of 13 (43%) were not aware of the proper care after birth.

Figure 9: Shows whether respondents freely talked to the health workers.

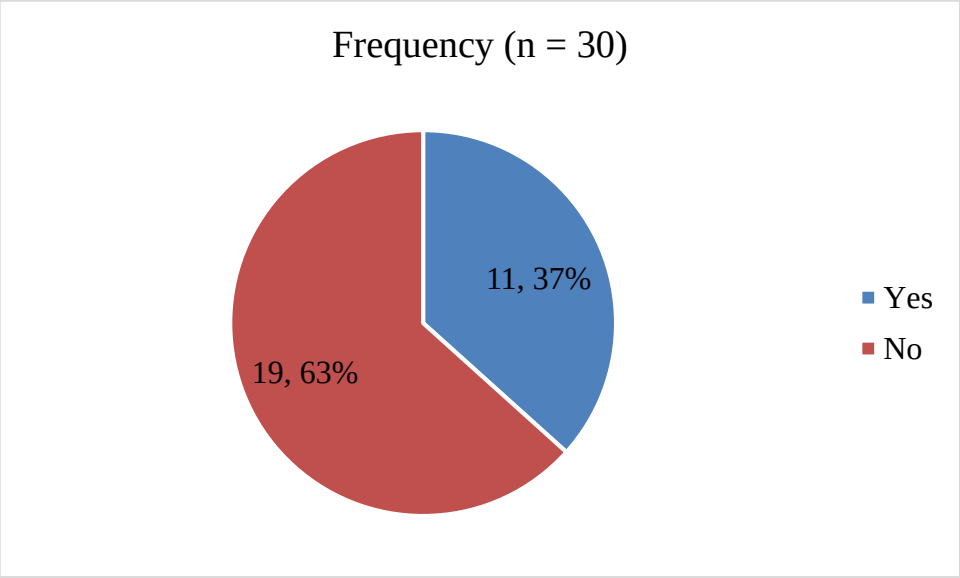


Figure 9 shows that the majority of respondents 19 (63%) reported that they didn't talk freely to the health workers whereas a minority of 11 (37%) reported that they talked freely to the health workers.

Table 13: Reveals how often wards are cleaned.

Response	Frequency (n =30)	Percentage
Daily	30	100%
Weekly	0	0%

Table 13 reveals that all respondents 30 (100%) reported that wards were cleaned daily.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

Figure 10: Shows respondents' responses on the major challenges faced in the treatment of mothers with sepsis.

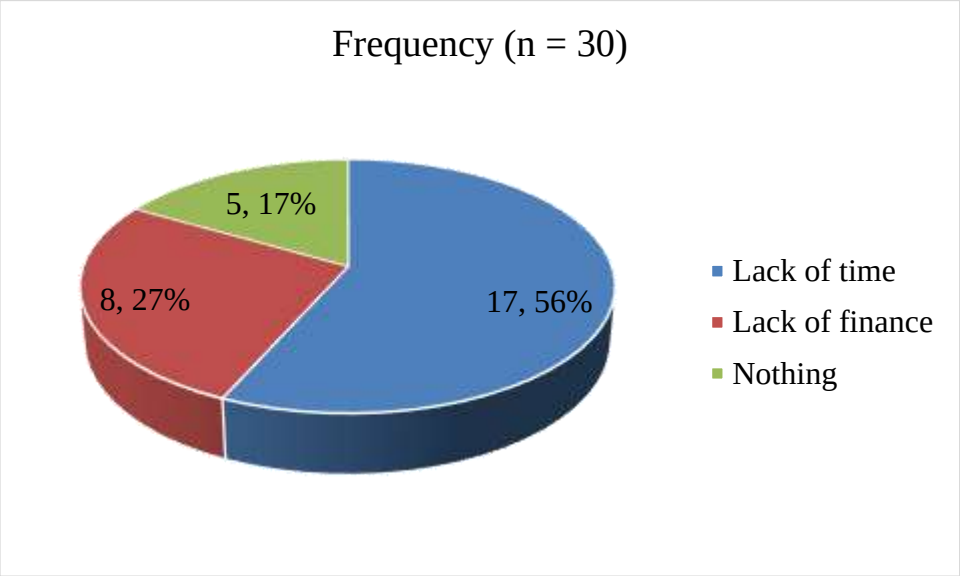


Figure 10 shows that the majority of the respondents 17 (56%) reported that the major challenge faced in the treatment of mothers with sepsis was lack of time whereas a minority of the respondents 5 (17%) reported that there was nothing.

Table 14: Shows respondents' thoughts on whether the health facility is well equipped to handle sepsis cases.

Response	Frequency (n = 30)	Percentage
Yes	30	100%
No	0	0%

Table 14 shows that all respondents 30 (100%) believed that the health facility was well equipped to handle sepsis cases.

DISCUSSION OF RESULTS.

Socio-Demographic Characteristics.

According to the results of this study, 57% of the respondents were between 18-25years. These results indicate that the majority of the postnatal mothers who had puerperal sepsis were aged between 18 – 25 years. This was probably related to a lack of knowledge about post-partum care which is common in mothers at that age due to lack of experience in delivery issues.

According to the results of the study, 63% resided in rural areas. These results indicate that the majority of the postnatal mothers who had puerperal sepsis were residing in rural areas. This was probably related to a lack of knowledge about post-partum care and the wide availability of herbal medicine in rural areas that contributed to the development of puerperal sepsis among post-partum mothers. This was in line with Ngonzi J et al., (2016), who revealed that puerperal sepsis was prevalent among post-partum mothers residing in rural areas.

According to the results of the study, 50% had attained the primary level. These results indicate that the majority of the postnatal mothers who had puerperal sepsis had attained low levels of education. This was probably related to a lack of exposure to health-related information about post-partum care which could have contributed to the development of puerperal sepsis among post-partum mothers.

Individual-related factors contributing to puerperal sepsis among postnatal mothers.

According to the results of the study, 63% of the respondents agreed that they were taking herbal medicine during pregnancy. The results of this study indicate that the majority of the postnatal mothers who had puerperal sepsis were using herbal medicine during puerperium. This was probably due to the exchange of medical care with herbal medicine use.

Student's Journal of Health Research Africa
e-ISSN: 2709-9997, p-ISSN: 3006-1059
Vol. 5 No. 3 (2024): March2024 Issue
https://doi.org/10.51168/sjhrafrica.v4i3.1036
Original Article

According to the results of this study, 53% of the respondents reported that they received tears. The results of this study indicate that the majority of the postnatal mothers who had puerperal sepsis received tears during delivery. Experience of tears during delivery exposes mothers to puerperal infections hence the development of puerperal sepsis. The study further revealed that 54% of the respondents who had puerperal sepsis experienced tears during delivery. This was related to the fact that tears during delivery expose mothers to postnatal infections which in turn leads to the development of puerperal sepsis.

According to the results of the study, 53% of the respondents resumed sexual intercourse below 7 days after birth. These results indicate that the majority of the postnatal mothers who had puerperal sepsis resumed sexual intercourse in less than 7 days. this was probably because sexual intercourse before 6 weeks of puerperium exposes mothers to puerperal infections that could have led to puerperal sepsis. This was in line with Alum, A.C et al.,2015), who revealed that early resumption of sexual intercourse during puerperium contributed to the development of puerperal sepsis.

Health facility-related factors contributing to puerperal sepsis among postnatal mothers.

According to the results of the study, 60% of the respondents reported that health workers never followed them up during puerperium. The results of the study indicated that the majority of the postnatal mothers who had puerperal sepsis were not followed up by health workers which could have discouraged them from reporting back to a health facility for the treatment of puerperal sepsis which later turned into puerperal sepsis.

According to the results of the study, 63% of the respondents reported that they didn't talk freely to the health workers. The results of the study indicated that the majority of the postnatal mothers who had puerperal sepsis were attended to by health workers who had negative attitudes towards postnatal mothers.

CONCLUSION.

This study specifically sought to determine Puerperal sepsis and its associated factors among postnatal mothers at Mukono General Hospital, Mukono District. The study established that the socio-demographic characteristics that were associated with puerperal sepsis were age between 18 – 25 years, rural residence, and low levels of education; furthermore, individual-related factors included utilization of herbal medicine, tears during delivery, resumption of sexual intercourse before 7 days of puerperium; Finally, health facility-related factors included lack of follow-up services during the puerperium, the negative attitude of health workers.

RECOMMENDATIONS.

Recommendations to the health facility and MOH.

- Strengthen the knowledge of postpartum mothers about the proper care in the puerperium
- Conduct campaigns targeting the communities to discourage the use of herbal medicine in the puerperium.
- Health workers should provide follow-up services to postnatal mothers after delivery
- Health facilities should conduct training to improve the attitude of health workers to postnatal mothers.
- Lobby from the Ministry of Health for more funding to facilitate awareness campaigns about proper puerperium.

Recommendations for further research.

- The following topics can be considered by any interested research to broaden the body of knowledge in this area.
- Factors influencing proper postnatal care among postnatal mothers.

ACKNOWLEDGEMENT.

I thank God for the life, knowledge, good health, and grace bestowed on me through which I have been able to develop this dissertation.
I thank my parents, and my mother for financial support during my course.
My sincere gratitude to my supervisor for his enduring guidance, encouragement, and support throughout the creation of this research.
My gratitude to my classmates and staff of the Institute for all the support rendered during my studies at Mildmay Institute of Health Sciences - School of Clinical Officers.

LIST OF ABBREVIATIONS/ACRONYMS.

ANC: Antenatal Care
HMIS: Health Management Information System
MSMI: Maternal sepsis and other maternal infections (MSMI)
UAHEB: Uganda Allied Health Examination Board.
WHO: World Health Organization

REFERENCES.

1. Aboyeji, Ijaiya, F., Sinha, P., Mrcpi, F., Diped, D., Mrcogb, M. O., Khaskheli, M. N., … Bleker, O. P. (2017). *Risk factors and complications of puerperal sepsis at a tertiary healthcare center.*

Maternal And Infant Death-SG, 29(4), 2–17. https://doi.org/10.1017/CBO9781107784758.011

2. Ahmed, M. I., Alsammani, M. A., and Ali, R. (2019). P*uerperal Sepsis in a Rural Hospital in Sud*an. Mat Soc Med., 25(1), 19–22. https://doi.org/10.5455/msm.2013.25.19-22
3. Alum, A.C., Kizza, I.B., Osingada, C.P. *et al.* Factors associated with early resumption of sexual intercourse among postnatal women in Uganda. *Reprod Health* **12**, 107 (2015). https://doi.org/10.1186/s12978-015-0089-5
4. Atlaw D, seyoum K, Woldeyohannes D, et al. Puerperal sepsis and its associated factors among mothers in University of Gondar referral hospital, Ethiopia, 2017. Int J Pregn & Chi Birth. 2019;5(5):190-195. DOI: 10.15406/ipcb.2019.05.00175
5. Bartlett, L. A., LeFevre, A. E., Mir, F., Soofi, S., Arif, S., Mitra, D. K., … Ahmed, S. A. (2016). The development and evaluation of a community-based clinical diagnosis tool and treatment regimen for postpartum sepsis in Bangladesh and Pakistan. Reproductive Health, 13(1), 16. https://doi.org/10.1186/s12978-016-0124-1
6. Bonet, M., Oladapo, O. T., Khan, D. N., Mathai, M., and Gülmezoglu, A. M. (2015). *New WHO guidance on prevention and treatment of maternal peripartum infections*. The Lancet Global Health, 3(11), e667–e668. https://doi.org/10.1016/S2214-109X(15)00213-2
7. Chun-Hai Fung, I., Cheung, C.-N., Fu, K.-W., Ip, P., and Tsz Ho Tse, Z. (2016). *Incidence and risk factors for surgical site infections in N'Gaoundéré Regional Hospital, Cameroon*. AJIC: American Journal of Infection Control, 44(10), 1195–1196. https://doi.org/10.1016/j.ajic.2016.04.248
8. Cunningham, G. (2014). Williams Obstetrics. (B. C. Steven Bloom, Catherine Spong, Ed.) (24th ed.). New York: McGraw Hill Medical.
9. Chernet, A. G., Dumga, K. T., & Cherie, K. T. (2019). Home Delivery Practices and Associated Factors in Ethiopia. *Journal of reproduction & infertility*, *20*(2), 102–108.
10. Dillen, Jeroen & Zwart, Jj & Schutte, Joke & Roosmalen, Jos. (2010). Maternal Sepsis: Epidemiology, Etiology And Outcome. Current opinion in infectious diseases. 23. 249-54. 10.1097/QCO.0b013e328339257c.
11. Hensley MK, Bauer ME, Admon LK, Prescott HC. (2019) Incidence of maternal sepsis and sepsis-related maternal deaths in the United States. JAMA;322(9):890–2.
12. Hussein JWL. (2019) Puerperal sepsis in low- and middle-income settings: past, present and future, vol. 4. London: RCOG Press.
13. Jacksons, A. N. (2015). Puerperal infection after cesarean section at Chris Hani Baragwanath Academic Hospital, Johannesburg. South African Journal of Obstetrics and Gynaecology, 18(3), 9–12. https://doi.org/10.7196/SAJOG.559
14. Johnson, A. N., and Buchmann, E. J. (2020). *Puerperal infection after cesarean section at Chris Hani Baragwanath Academic Hospital, Johannesburg. South African* Journal of Obstetrics and Gynaecology. https://doi.org/10.7196/sajog.559
15. Khaskheli, M. N., Baloch, S., and Sheeba, A. (2018). *Risk factors and complications of puerperal sepsis at a tertiary healthcare center*. Pakistan Journal of Medical Sciences, 29(4).
16. Low, S., Cddep, Khaskheli, M. N., Baloch, S., Sheeba, A., Shagufta, Q., … Ali, R. (2013). *Puerperal sepsis--still a major threat for parturients. Journal of Liaquat University of Medical and Health Sciences*, 22(4), 1–8. https://doi.org/10.4997/JRCPE.2011.411
17. Mohammed Hassan, R., Mohamed, H., & Solimen, H. (2021). Knowledge and Practices of Postnatal Mothers Regarding Prevention of Puerperal Sepsis. *Minia Scientific Nursing Journal*, *009*(1), 33-39. doi: 10.21608/msnj.2021.188066
18. Nchimbi, D. B., & Joho, A. A. (2022). Puerperal sepsis-related knowledge and reported self-care practices among postpartum women in Dar es Salaam, Tanzania. *Women's health (London, England)*, *18*, 17455057221082954. https://doi.org/10.1177/17455057221082954
19. Ngonzi, J., Tornes, Y.F., Mukasa, P.K. *et al.* Puerperal sepsis is the leading cause of maternal deaths at a Tertiary University Teaching Hospital in Uganda. *BMC Pregnancy Childbirth* **16**, 207 (2016). https://doi.org/10.1186/s12884-016-0986-9
20. Ngonzi J, Tornes YF, Mukasa PK, Salongo W, Kabakyenga J, Sezalio M, Wouters K, Jacqueym Y, Van Geertruyden J-P. (2016) *Puerperal sepsis, is the leading cause of maternal deaths at a Tertiary University Teaching Hospital in Uganda*. BMC Pregnancy Childbirth;16(1):207.
21. Ngonzi, J., Bebell, L. M., Fajardo, Y., Boatin, A. A., Siedner, M. J., Bassett, I. V., … Riley, L. E. (2018). *Incidence of postpartum infection, outcomes and associated risk factors at Mbarara regional referral hospital in Uganda*. BMC Pregnancy and Childbirth, 18(1), 1–11. https://doi.org/10.1186/s12884-018-1891-1
22. Ngonzi, J., Tornes, Y. F., Mukasa, P. K., Salongo, W., Kabakyenga, J., Sezalio, M., …

Van Geertruyden, J.-P. (2016). *Puerperal sepsis is the leading cause of maternal deaths at a Tertiary University Teaching Hospital in Uganda*. BMC Pregnancy and Childbirth, 16(1), 207. https://doi.org/10.1186/s12884-016-0986-9

23. Say L, Chou D, Gemmill A, Tuncalp O, Moller AB, Daniels J, Gulmezoglu AM, Temmerman M, Alkema L. (2016) *Global causes of maternal death*: a WHO systematic analysis. Lancet Glob Health;
24. Say, L., Chou, D., Gemmill, A., Moller, A. B., Daniels, J., G??lmezoglu, A. M., … Alkema, L. (2014). *Global causes of maternal death: A WHO systematic analysis. The Lancet Global Health*, 2(6), 323–333. https://doi.org/10.1016/S2214-109X(14)70227-X
25. Sayinzoga, F., Bijlmakers, L., van Dillen, J., Mivumbi, V., Ngabo, F., and van der Velden, K. (2016). *Maternal death audit in Rwanda 2009–2013: a nationwide facility-based retrospective cohort study*. BMJ Open, 6(1), e009734. https://doi.org/10.1136/bmjopen-2015-009734
26. Sustainable Development Solutions Network. (2014). *Indicators for Sustainable Development Goals. United Nations*. https://doi.org/10.3390/su5072840
27. The Global Health Network. (2014). *Maternal Sepsis*. The Geneva Foundation for Medical Education and Research.
28. The United Nations. (2015). *Sustainable Development Goals*.
29. van Dillen J, Zwart J, Schutte J, van Roosmalen J. (2015) *Maternal sepsis*: epidemiology, etiology and outcome. Curr Opin Infect Dis;23(3):249–54.
30. van Dillen, J., Zwart, J., Schutte, J., and van Roosmalen, J. (2010). *Maternal sepsis: epidemiology, etiology and outcome. Current Opinion in Infectious Diseases*, 23(3), 249–254. https://doi.org/10.1097/QCO.0b013e328339257c
31. Vos T, Lim SS, Abbafati C, Abbas KM, Abbasi M, Abbasifard M, Abbasi-Kangevari M, Abbastabar H, Abd-Allah F, Abdelalim A, et al. (2020) *Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019*: a systematic analysis for the Global Burden 2019. Lancet;396(10258):1204–22.
32. WHO, (2020) *Maternal mortality*. World Health Organisation. https://www.who.int/news-room/fact-sheets/detail/maternal-mortality#:~:text=94%25 of all maternal deaths, lives of women and newborns.

Publisher details.

SJC PUBLISHERS COMPANY LIMITED

SJC Publishers Company Limited

Category: Non-Government & Non-profit Organisation
Contact: +256775434261(WhatsApp)
Email: admin@sjpublisher.org, info@sjpublisher.org or studentsjournal2020@gmail.com
Website: https://sjpublisher.org
Location: Wisdom Centre Annex, P.O. BOX. 113407 Wakiso, Uganda, East Africa.