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Prevalence of Staphylococcus aureus among patients with septic wounds attending surgical wards at Masaka Regional Referral Hospital. A cross-sectional study.

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Abstract

Background:
Staphylococcus aureus is a common pathogen in septic wounds, particularly among patients admitted to surgical wards. This study aims to determine the prevalence of Staphylococcus aureus among patients with septic wounds who were admitted to the surgical ward at Masaka Regional Referral Hospital.

Methodology:
The study adopted a cross-sectional design and involved 80 purposively selected patients with septic wounds. Wound swabs were collected using sterile swabs, appropriately labeled, and processed using standard microbiological techniques, including Gram staining, culture on selective media, and confirmatory biochemical tests such as catalase and coagulase.

Results:
The majority of respondents, at 53.75% (n=43), were males, while females accounted for 46.25% (n=37). The most affected age group represented was those above 60 years (47.5%, n=38), followed by participants aged 18–30 years (22.5%, n=18). The prevalence of S. aureus was higher among males (64.3%, n=18) compared to females (35.7%, n=10). This suggests that male patients may be more prone to S. aureus wound infections, possibly due to increased exposure to injury, occupational risks, and delayed health-seeking behavior. The highest prevalence of S. aureus was observed among respondents aged above 60 years (53.57%, n=15), followed by those aged 18–30 years (21.42%, n=6). The lowest prevalence occurred in patients below 18 years (7.14%, n=2). This trend suggests that elderly individuals may be at greater risk, likely due to weakened immunity and delayed wound healing.

Conclusion:
This study found that the prevalence of Staphylococcus aureus among patients with septic wounds at Masaka Regional Referral Hospital was a common cause of wound infection.

Recommendation:
Routine screening of septic wounds and strict infection prevention practices should be strengthened to improve early detection and management of S. aureus.

Keywords: *Staphylococcus aureus, septic wounds, surgical ward, infection control.*
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Background of the study

Globally, Staphylococcus aureus (S. aureus) is a leading cause of both community-acquired and healthcare-associated infections, including septic wounds, bloodstream infections, pneumonia, and surgical site infections (SSIs). The prevalence of S. aureus infections has been exacerbated by the emergence of methicillin-resistant Staphylococcus aureus (MRSA), which complicates treatment and leads to increased morbidity and mortality (WHO, 2020). According to global surveillance data, S. aureus is responsible for

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approximately 20% of all hospital-acquired infections, with MRSA accounting for nearly 50% of these cases in some regions (Turner et al., 2019). In Europe, a research study by Schwarz et al. (2022) in Germany found that S. aureus was present in 30% of surgical wound infections. In Asia, a research study conducted in India by Rao et al. (2020) found that S. aureus was isolated in 42% of septic wounds in surgical wards. Additionally, in Asia, the prevalence of Staphylococcus aureus infections was generally higher compared to other regions. A systematic review and meta-analysis found that the pooled prevalence of MRSA among Staphylococcus aureus isolates in Asia was 67.1% (Shibabaw et al., 2019).

In Africa, the burden of S. aureus infections remains high, with MRSA prevalence ranging from 16% to 82% in various healthcare settings (Falagas et al., 2013). Contributing factors include overcrowded hospitals, inadequate infection control measures, widespread antibiotic misuse, and limited healthcare infrastructure (Garoy et al., 2019).

In East Africa, studies indicate an increasing trend of S. aureus infections, particularly in Kenya, Tanzania, and Uganda, where antimicrobial resistance rates have risen sharply over the last decade (Maina et al., 2017).

In Uganda, S. aureus remains a significant public health threat, with studies reporting a prevalence of 2040% in hospital settings. At Mulago National Referral Hospital, S. aureus was responsible for 20.4% of SSIs, with a growing presence of MRSA strains (Seni et al., 2013). Similarly, reports from MRRH indicate an increase in S. aureus infections, yet data on prevalence, affected age groups, and risk factors remain scarce (HMIS Report, 2023). The identification of these epidemiological trends was crucial for developing targeted infection prevention and antimicrobial stewardship strategies. The study aimed to bridge this knowledge gap by determining the prevalence of S. aureus infections among patients with septic wounds at MRRH and analyzing the most affected age groups and associated risk factors.

Methodology

Study Area

The study was conducted at Masaka Regional Referral Hospital (MRRH), located in the central business district of Masaka town, approximately 132 kilometers southwest of Mulago National Referral Hospital.

The hospital provided a range of services, including maternity, laboratory, surgical, pharmacy, HIV counseling, and other medical services. It received an average of 100 patients per day.

It was selected as the study site because it receives a high number of patients with wound infections, particularly due to frequent accidents in the urban area.

Study Design

A cross-sectional experimental study using quantitative techniques was employed. The primary advantage of a cross-sectional design was that it allowed data collection within a relatively short period, which made it a cost-effective and efficient approach.

Study Population

The study population included both male and female patients admitted to the surgical ward with septic wounds during the study period.

Inclusion Criteria

Patients are admitted to the surgical ward. Patients presenting with septic wounds. Patients who provided informed consent.

Exclusion Criteria

Patients without wound infections. Patients already on antibiotic treatment.

Sample Size Determination

To calculate the minimum sample size, the formula below, by Kish and Leslie, was used;

$$n = \frac{Z^2pq}{d^2}$$

Were

N was the desired sample size

Z was the normal deviation (1.96) at a 95% confidence level, and d was the desired error

p was the estimated prevalence of Staphylococcus aureus since the prevalence of Staphylococcus aureus at MRRH was not known an estimated value of 30% was used. p =30% (0.3),

Z =1.962 = 3.8416,

q=1-p, 0.7

d=10% (0.1)

Therefore N = 3.8416 x 0.3x0.7

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(0.1)2

N = 80 respondents.
Therefore, 80 respondents were included in the study.

Sampling Technique

A purposive sampling technique was used. The judgment and expertise were used to select a sample that provided the most valuable information to address the research question.

Sampling Procedure

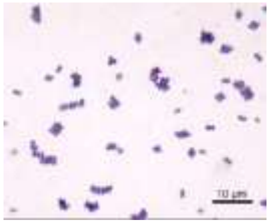
The researcher selected patients who met the study criteria and were available for participation. Since the target population was specific and identifiable (patients with septic wounds), only eligible individuals were recruited.

Sample Collection

A sterile technique, a sterile swab was used to collect samples from patients presenting with septic wounds. Wound swabs were collected from both male and female participants.
A sterile swab was inserted into the site of collection and gently rotated for 5–10 seconds to ensure adequate sample collection. The swab was placed back into its container, labeled appropriately, and transported to the laboratory with a request form as soon as possible.

Laboratory Examination

Gram Staining Technique



Purpose: To differentiate Gram-positive from Gram-negative organisms.

Reagents:

Gentian violet/Crystal violet (Primary stain) Lugol's iodine (Mordant)
50% Acetone alcohol (Decolorizer) 0.5% Neutral red (Counterstain)

Procedure:

1. A smear was prepared from the wound sample on a clean, labeled slide.
2. The smear was air-dried at room temperature.
3. Heat fixation was performed by passing the slide over a flame 3 times.
4. The slide was placed on a staining rack, and the smear will be covered with 0.5% gentian violet for 30 seconds, then rinsed with clean water.
5. Lugol's iodine was applied for 30 seconds and rinsed.
6. The smear was decolorized with 50% acetone alcohol dropwise until no more blue color was released, then rinsed immediately.
7. 0.5% Neutral red was applied for 1 minute, and rinsed.
8. The slide was air-dried vertically and examined under a microscope (×40, ×100) for bacteria among pus cells.

Interpretation:

Gram-positive cocci in clusters, chains, or pairs indicated Staphylococcus aureus (appearing dark purple).

a) Wound Swab Culture

Purpose: To isolate *S. aureus* on selective and nonselective media**. Media:** Blood agar, nutrient agar, chocolate agar, mannitol salt agar.

Optimal Conditions:

Temperature: 35–37°C, pH: 7.5
Incubation: 24–48 hours (aerobic, moist environment).

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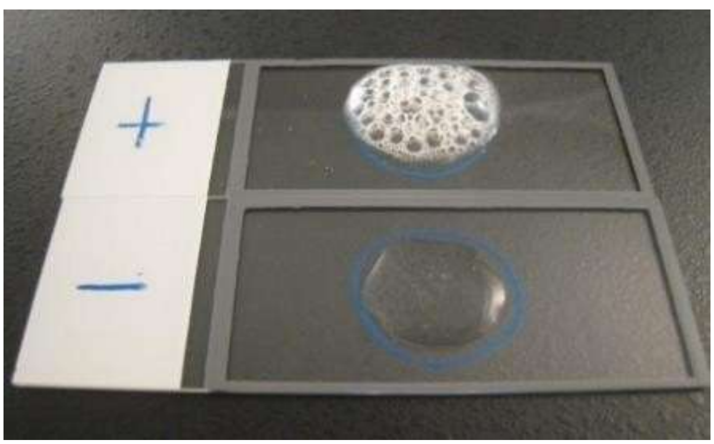
Procedure:

1. The swab was emulsified in normal saline for 2 hours.
2. A sterile loop was used to inoculate the media.
3. Plates were labeled (date, patient ID, media type) and incubated**. Colony**

b) CATALASE TEST

Purpose: To differentiate catalase-positive Staphylococcus from catalase-negative Streptococcus.



Principle:

The catalase enzyme serves to neutralize the bactericidal effects of hydrogen peroxide. Catalase expedites the breakdown of hydrogen peroxide (H_2O_2) into water and oxygen ($2H_2O_2$ +Catalase $\rightarrow$ $2H_2O+O$). This reaction was evident by the rapid formation of bubbles.

Morphology (Nutrient Agar):

Size: 1–3 mm (occasional dwarf colonies).
Appearance: Smooth, convex, opaque, golden yellow pigmentation.

Materials

3% hydrogen peroxide
18-24-hour bacterial colonies Microscope slide, applicator sticks

Procedure (Slide Method):

1. A small colony sample was transferred to a slide (avoiding agar).
2. A drop of 3% H_2O_2 was added.
3. Immediate bubble formation indicated a positive result (S. aureus).
4. No bubbles were indicating a negative result (e.g., Streptococcus pyogenes

Slide catalase test results (**Top**), the positive reaction

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was produced by Staphylococcus aureus; (**Bottom)** the negative reaction was produced by Streptococcus pyogenes

c) Coagulase Test

Purpose: To identify S. aureus (coagulase positive) from other Staphylococcus species.

Principle:

Coagulase enzyme was bound to fibrinogen in plasma, causing bacterial clumping.

Materials:

- Reconstituted coagulase plasma
- Normal saline
- Control strains: S. aureus (positive), S. epidermidis (negative)

Procedure (Slide Test):

1. Two circles were drawn on a slide (labeled "saline" and "plasma").
2. Bacterial colonies were emulsified in saline and plasma separately.
3. Clumping in plasma within 10 seconds confirmed coagulase positive (S. aureus).
4. No clumping after 3 minutes indicated coagulase-negative

Results Clumping /agglutination within 10seconds indicated a positive result.

No formation of clumps /agglutination within 3 minutes indicated a negative result.

Data Collection Methods

Data was collected using participant laboratory request forms, questionnaires, and structured interviews.

The data collected included participants' sex, age, and test results. Questionnaires were administered after obtaining informed consent. For participants who couldn't read or write, the researcher assisted them by interpreting and recording their responses.

Data Collection Tool

A standardized questionnaire and laboratory request forms were used to collect data. The collected data were recorded in a study record book, where each entry was assigned a patient number, age, sex, and test results. Raw data was represented using tables, bar graphs, and pie charts with the help of Microsoft Excel software.

Data Collection Procedure

An introduction letter was obtained from MIHS and presented to the Medical Director of MRRH to facilitate access to respondents for data collection. The researcher informed participants about the study's purpose, ensured confidentiality, and emphasized their right to withdraw at any time.

Piloting Study

Before the main study, the questionnaire was pre-tested at a similar healthcare facility to identify any unclear questions. Feedback from this pilot study was used to refine the tool, ensuring clarity and relevance.

Quality Control

Standard Operating Procedures (SOPs) were followed during sample collection and testing. All sample swabs were clearly labeled to ensure proper patient identification. To maintain data accuracy, parallel checks were conducted by different laboratory technicians.

Data Analysis and Presentation

Collected data was organized, edited, and coded for analysis using Microsoft Excel. The results were presented in tables, graphs, and pie charts based on age, gender, and predisposing factors to facilitate interpretation.

Ethical Considerations

Before commencing the study, a letter of introduction from MIHS and a copy of the research proposal were presented to the MRRH administration for approval. Participants were informed about the study's objectives, and their informed consent was obtained before participation. Confidentiality and anonymity were strictly maintained.

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Results

Social Demographic Characteristics

Table 1: A table showing social demographic characteristics of respondents (n=80)

Demographic	Frequency	Percentage (%)
Gender		
Males	43	53.75%
Females	37	46.25%
Total	80	100%
Age groups		
<18 years	8	10%
18–30 years	18	22.50%
31–60 years	16	20%
>60 years	38	47.5%
Total	80	100%
Employment status		
Unemployed	20	25%
Self-employed	35	43.75%
Formally employed	25	31.25%
Total	80	100%

From table 1, males formed the majority of respondents at 53.75% (n=43), while females accounted for 46.25% (n=37). The most affected age group represented was those above 60 years (47.5%, n=38), followed by participants aged 18–30 years (22.5%, n=18). Employment analysis showed that nearly half (43.75%, n=35) were self-employed, suggesting that small-scale and informal work is common among surgical patients in the study area. This was followed by formal employment (31.25%, n=25), and the smallest group was unemployed individuals (25%, n=20).

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General Prevalence of Staphylococcus aureus

Table 2: A table showing the general prevalence of S. aureus among patients with septic wounds.

Prevalence status	Frequency	Percentage (%)
Positive	28	35%
Negative	52	65%
Total	80	100%

The general prevalence of Staphylococcus aureus among participants that where studied; those who tested positive were 35% (n=28) for S. aureus.

Prevalence of *Staphylococcus aureus* by Gender

Table 3: A table showing the distribution of S. aureus prevalence by gender

Gender	Positive	Negative	Total	Percentage positive (%)
Male	18	25	43	64.3
Female	10	27	37	35.7
Total	28	52	80	100

The prevalence of S. aureus was higher among males (64.3%, n=18) compared to females (35.7%, n=10). This suggests that male patients may be more prone to S. aureus wound infections, possibly due to increased exposure to injury, occupational risks, and delayed health-seeking behavior.

Prevalence of *Staphylococcus aureus* by Age Group

Table 4: A table showing the distribution of S. aureus prevalence by age group

Age group	Positive	Negative	Total	Percentage positive (%)
<18 years	2	6	8	7.14
18–30 years	6	12	18	21.42
31–60 years	5	11	16	17.86
>60 years	15	23	38	53.57
Total	28	52	80	100

The highest prevalence of S. aureus was observed among respondents aged above 60 years (53.57%, n=15), followed by those aged 18–30 years (21.42%, n=6). The lowest prevalence occurred in patients below 18 years (7.14%, n=2). This trend suggests that elderly individuals may be at greater risk, likely due to weakened immunity and delayed wound healing.

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Predisposing Factors of *Staphylococcus aureus*

Table 5: A table showing the predisposing factors associated with S. aureus infection

Predisposing factor	Frequency	Percentage (%)
Poor hygiene practices	10	35.7
Underlying chronic illness (e.g., diabetes)	8	28.6
Trauma/injury	6	21.4
Post-surgical wounds	4	14.3
Total (among positives)	28	100

Among the 28 patients positive for S. aureus, poor hygiene was the most frequently reported predisposing factor (35.7%, n=10), followed by underlying chronic illnesses such as diabetes mellitus (28.6%, n=8). Trauma accounted for 21.4% (n=6), while post-surgical wound infections were observed in 14.3% (n=4). These findings highlight the role of both host-related and environmental factors in the acquisition of S. aureus infections.

Discussion

General Prevalence of Staphylococcus aureus

The study found that the prevalence of Staphylococcus aureus among patients with septic wounds at MRRH was 35%. In other words, about one in every three patients admitted with wound infections had S. aureus as the underlying pathogen. This finding is fairly consistent with results from Ethiopia, where Kahsay et al. (2016) reported a prevalence of 31.3%, and from Uganda's Mulago National Referral Hospital, which documented 20.4% (Seni et al., 2013). On the other hand, the rate observed in this study is lower than reports from other parts of Africa and beyond, such as Eritrea (62.1%) (Eyob et al., 2019), Egypt (58.5%) (Ahmed et al., 2018), and Ghana (52.2%) (Asamoah et al., 2017). Differences in prevalence across studies could be explained by variations in infection control practices, hospital infrastructure, and patient populations. WHO (2020) has also highlighted that differences in diagnostic capacity and antimicrobial resistance profiles contribute to variations across regions. Although the prevalence at MRRH was not the highest compared to other countries, it still reflects a considerable burden of S. aureus in septic wounds. This is in line with global reports describing S. aureus as one of the most common causes of surgical site infections (Turner et al., 2019). The persistence of such high prevalence in Uganda may be linked to challenges such as overcrowded hospital wards, limited resources for infection prevention, and inappropriate antibiotic use, as previously observed across sub-Saharan Africa (Garoy et al., 2019).

Prevalence According to Gender

The study showed that male patients accounted for the majority of infections, with 64.3% test-ing positive compared to 35.7% among females. This suggests that men are more affected by
S. aureus wound infections than women. Similar findings have been reported in Portugal, where 60.4% of cases were among males (Peresa et al., 2016), and in Canada, where 59.9% were male compared to 40.1% female (Nichol et al., 2017). In Uganda, studies at Mulago National Hospital also found a higher prevalence in male patients (Seni et al., 2019).

The higher burden among men may reflect their greater involvement in manual work and activities that increase the likelihood of injuries. In addition, men may delay seeking medical attention, which can worsen infections and increase colonization (Garoy et al., 2019). However, gender differences are not always consistent. Some studies have found a higher prevalence in women. For example, a study in Eritrea reported that 64.8% of female patients were affected compared to 61.8% of males (Eyob & Garoy,

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2018). Similarly, in Tanzania, a higher prevalence was reported in female patients (Nkuwiet et al., 2018). These variations suggest that while gender can be a factor, it is also influenced by cultural practices, healthcare access, and occupational exposure within a particular setting.

Prevalence According to Age Group

The study revealed that older patients, particularly those above 60 years, were the most affected group, accounting for 53.6% of positive cases. This was followed by patients aged 18–30 years (21.4%), while the lowest prevalence was observed among those below 18 years (7.1%). These findings are consistent with previous research showing that elderly individuals are more vulnerable to S. aureus infections due to factors such as weakened immunity, slower wound healing, and the presence of chronic illnesses (Korol et al., 2013; Asamoah et al., 2017).

Similar results have been reported in Ethiopia, where 58.8% of older patients (≥65 years) had S. aureus infections compared to 41.2% of younger patients (Mulugeta, 2019). In Ghana, 52.2% of infections occurred in patients above 60 years (Asamoah et al., 2017), while in Canada, elderly patients also recorded higher prevalence (Nichol et al., 2017). Interestingly, some studies in Uganda have shown different trends. For example, Kiwanuka et al. (2019) at Mbarara Regional Referral Hospital found no significant age differences. This implies that while age is an important factor, it interacts with other variables such as type of wound, duration of hospital stays, and co-existing illnesses.

Predisposing Factors of Staphylococcus aureus

Among the patients who tested positive for S. aureus in this study, poor hygiene practices were the most common risk factor (35.7%). This was followed by chronic illnesses such as diabetes (28.6%), trauma (21.4%), and post-surgical wounds (14.3%). These results agree with earlier reports that identified poor hygiene and chronic conditions as major risk factors for S. aureus infections (Klein et al., 2016). The role of surgical procedures in predisposing patients to infections has also been highlighted in Uganda and elsewhere. At Mulago National Hospital, for instance, S. aureus was a common cause of surgical site infections (Seni et al., 2019). Lifestyle factors also play a role. Smoking has been shown to increase colonization rates (Miller et al., 2015), while alcohol consumption impairs immune responses, raising the risk of infection (Johnson et al., 2018). These findings show that S. aureus infections are influenced by both patient-related and environmental factors, and effective prevention requires addressing both aspects.

Conclusion

This study found that the prevalence of Staphylococcus aureus among patients with septic wounds admitted to the surgical ward at Masaka Regional Referral Hospital was 35%, indicating that S. aureus is a significant pathogen associated with septic wound infections in the study setting. The findings showed that males were more affected than females, and the highest burden of infection occurred among patients aged 60 years and above. Poor hygiene practices, chronic illnesses such as diabetes mellitus, trauma, and post-surgical wounds were identified as the main predisposing factors for infection. These findings highlight the clinical importance of routine microbiological investigation of septic wounds and the need for strengthened infection prevention and control measures within surgical wards. Early detection and appropriate management of S. aureus infections can reduce complications, promote faster wound healing, and improve patient outcomes.

Recommendations

Routine screening of septic wounds

Health workers should ensure regular microbiological screening of septic wound specimens for Staphylococcus aureus to support early diagnosis and appropriate treatment.

Strengthen infection prevention and control practices.

The hospital should reinforce infection prevention measures such as hand hygiene, aseptic wound dressing techniques, sterilization of equipment, and proper wound care practices within the surgical ward.

Health education for patients and caregivers

Patients and caregivers should be educated on proper personal hygiene and wound care practices to reduce the risk of wound contamination and infection.

Acknowledgement

I take this opportunity to thank my family for their unending support rendered to me during my studies. My sincere appreciation also goes to my academic supervisor, Mr. Ssegujja Frank, for his guidance, encouragement, and support toward this study. I am greatly indebted to the entire management of MRRH because of their contribution in the form of advice and support towards this work. Last but not least, to my fellow classmates, you were great, and I will always cherish the moments we shared in our struggle and the contributions of the people not specifically mentioned here but are equally appreciated.

List of Abbreviations

BMI:	Body Mass Index
ECDC:	European Centre for Disease Prevention and Control
HMIS	Hospital Management Information System
MIHS:	Mild May Institute of Health Sciences
MOH:	Ministry of Health
MRSA:	Methicillin-Resistant Staphylococcus Aureus
S. AUREUS:	Staphylococcus aureus
SSI:	Surgical Site Infections
SSTs:	Soft Tissue Infections
UHPAB:	Uganda Health Professions Assessment Board
WHO:	World Health Organization

Data availability

The data is available upon request.

Informed consent

Written informed consent was obtained from all participants before their inclusion in the study. Participants were informed about the purpose of the study, procedures involved, potential risks and benefits, and their right to withdraw at any time without penalty.

Source of funding

The study did not receive any external funding.

Conflict of interest

The author did not declare any conflict of interest.

Author contributions

Henry Mukooza was the principal investigator.
Frank Sseguja, Hasifah Nansereko, Franscisco Ssemuwemba, Anthony Ssekitoleko, and Jane Frank Nalubega supervised the research project.

Author Biography

Henry Mukooza holds a diploma in Medical Laboratory Technology from Mildmay Institute of Health Sciences. Francisco Ssemuwemba is the dean of the School of Allied Health at Mildmay Institute of Health Sciences.
Hasifah Nansereko is the chairperson of the Institutional Review Council (IRC) at Mildmay Institute of Health Sciences.
Frank Sseguja, Anthony Ssekitoleko, and Jane Frank Nalubega are tutors at Mildmay Institute of Health Sciences.

References

1. Ahmed, S. S., et al. (2018). Prevalence of Staphylococcus aureus in surgical wound infections in Egypt. Egyptian Journal of Medical Microbiology, 27(3), 45–52.
2. Asamoah, J. K., et al. (2017). Surgical site infections and Staphylococcus aureus prevalence in Ghana. Ghana Medical Journal, 51(2), 90–98. https://doi.org/10.4314/gmj.v51i3.1
3. Eyob, G., & Garoy, Y. C. (2018). Gender distribution of MRSA infections in Eritrea. African Health Sciences, 18(4), 1120–1128.

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4. Eyob, G., et al. (2019). Methicillin-resistant Staphylococcus aureus in Eritrea: Prevalence and trends. BMC Infectious Diseases, 19, 1–10.
5. Falagas, M. E., Karageorgopoulos, D. E., Leptidis, J., & Korbila, I. P. (2013). MRSA prevalence in Africa: A systematic review. Clinical Microbiology and Infection, 19(9), 827–835.
6. Garoy, Y. C., Gebreab, Y. B., Achila, O. O., Tekeste, D. G., Kesete, R., Ghirmay, R., & Tesfaldet, M. (2019). Methicillin-resistant Staphylococcus aureus (MRSA): Prevalence and antimicrobial sensitivity pattern in Africa. BMC Infectious Diseases, 19, 1–12. https://doi.org/10.1155/2019/8321834
7. Johnson, L. R., et al. (2018). Alcohol consumption and susceptibility to bacterial infections. Journal of Clinical Immunology, 38(5), 520–528.
8. Kahsay, A. G., et al. (2016). Prevalence of Staphylococcus aureus in septic wounds in Ethiopia. Ethiopian Journal of Health Sciences, 26(3), 221–228.
9. Kiwanuka, J., et al. (2019). Age-related patterns of surgical site infections in Uganda. BMC Surgery, 19, 1–7.
10. Klein, E. Y., et al. (2016). Risk factors for Staphylococcus aureus infection: A global review. Clinical Infectious Diseases, 63(4), 507–513.
11. Korol, E., et al. (2013). Epidemiology of Staphylococcus aureus infections in elderly patients. Journal of Hospital Infection, 85(3), 191–198.
12. Maina, E. K., et al. (2017). Trends of antimicrobial resistance in East Africa: A review. African Journal of Laboratory Medicine, 6(2), 1–8.
13. Miller, L. G., et al. (2015). Smoking and Staphylococcus aureus colonization. Clinical Microbiology Reviews, 28(3), 463–484.
14. Mulugeta, M. (2019). Prevalence of surgical site infections among elderly patients in Ethiopia. Ethiopian Medical Journal, 57(2), 101–109.
15. Nichol, K., et al. (2017). Gender and age distribution of Staphylococcus aureus infections in Canada. Canadian Journal of Infectious Diseases, 28(6), 345–352.
16. Nkuwiet, T., et al. (2018). Gender differences in bacterial wound infections in Tanzania. Tanzania Medical Journal, 33(2), 55–62.
17. Peresa, A., et al. (2016). Gender distribution of Staphylococcus aureus infections in Portugal. European Journal of Clinical Microbiology & Infectious Diseases, 35(7), 1121–1127.
18. Rao, S. P., et al. (2020). Prevalence of Staphylococcus aureus in surgical septic wounds in India. Journal of Clinical Microbiology, 58(4), e01234-20.
19. Schwarz, S., et al. (2022). Surgical site infections caused by Staphylococcus aureus in Germany. European Journal of Clinical Microbiology & Infectious Diseases, 41(6), 789–798.
20. Seni, J., et al. (2013). Methicillin-resistant Staphylococcus aureus in surgical site infections at Mulago Hospital, Uganda. BMC Research Notes, 6, 1–6.
21. Seni, J., et al. (2019). Surgical site infections and Staphylococcus aureus in Uganda. BMC Infectious Diseases, 19, 1–9.
22. Shibabaw, A., Abebe, T., & Mihret, A. (2019). Global prevalence of MRSA among Staphylococcus aureus isolates: A systematic review and meta-analysis. International Journal of Infectious Diseases, 85, 1–10.
23. Turner, N. A., Sharma-Kuinkel, B. K., Maskarinec, S. A., Eichenberger, E. M., Shah, P. P., Carugati, M., Holland, T. L., & Fowler, V. G. (2019). Methicillin-resistant Staphylococcus aureus: An overview of basic and clinical research. Nature Reviews Microbiology, 17(4), 203–218. https://doi.org/10.1038/s41579-018-0147-4
24. World Health Organization (WHO). (2020). Global antimicrobial resistance and use surveillance system (GLASS) report. WHO.

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