



Clinical Characterisation of Sepsis Among Patients Presenting at a Private Hospital in Lagos, Nigeria.



Abiola Fasina-Ayoola^{1,2,3}, Adebisi Adeyeye¹, SimileOluwa Onabanjo¹, Francis Olajide ¹, Joao Vissoci³, **Oludoyinmola Ojifinni**⁴, Catherine Staton³

GEMINI

¹.Emergency Healthcare Consultants, Yaba, Lagos, Nigeria. ².R Jolad Hospital, Lagos, Nigeria. ³.GEMINI Research Center, Duke University, North Carolina USA ⁴. University of the Witwatersrand, Johannesburg, South Africa.

This is an analysis of presentation modes and management strategies for sepsis using an ongoing sepsis registry. Co-infection with malaria was more common than with HIV or tuberculosis (TB). The highest proportion of patients had lactate levels between 1 & 2. Treatment measures included administration of fluids, antibiotics, and antimalarial. The mortality rate was 3.6% while most patients were successfully discharged home.

>3

2 - 3

1 - 2

<1

0%

results were recorded.

BACKGROUND

Sepsis remains a leading cause of morbidity and mortality worldwide¹. Current guidelines on sepsis identification and management originate from high-income countries with variable outcomes when implemented in low and middleincome countries. The paucity of knowledge on the manifestations of sepsis in Nigerian patients, their outcomes, and the interplay between sepsis and highly endemic diseases like HIV, tuberculosis, and malaria results in poorly defined clinical practice guidelines. This study aims to characterize sepsis presentations in Nigeria capturing infection rates with malaria, HIV, and tuberculosis.

METHODS

RESULTS

Fig 2. Culture tests requested



Lactate test results

20%

16.9%

32.5%

36.3%

Fig 4. Lactate test results

Fig 3. Culture results received





A sepsis registry, established in September 2023, collects data on the clinical presentations of septic patients at R-Jolad Hospital. Sepsis was defined using SIRS criteria of >2. Data on symptoms, exam findings, laboratory investigations, treatment and outcomes are being collected. Enrollment is ongoing; 600 patients have been enrolled.

RESULTS

Table 1 Demographics

	Variable	Frequency	Percent (%)
Gender	Male	267	44.50
	Female	333	55.50
Age	Paediatrics	182	30.33
	Adults	418	69.67
Total		600	100

Fig 1. Co-infection Test Results

Fig 6. Fluid Administration

14.3%

Fig 7. Clinical Outcomes



CONCLUSIONS

Although all the patients in the registry met the SIRS criteria for sepsis, other infectious diseases were found in the clinical picture, especially malaria. There is a need for full clinical and microbiological characterization of sepsis presentations which considers the endemicity of other infectious diseases that are likely to influence recognition and treatment in our context. This will favour the development of locally relevant guidelines that improve patient outcomes.



REFERENCES

¹Rudd, K. E., Johnson, S. C., Agesa, K. M., Shackelford, K. A., Tsoi, D., Kievlan, D. R., Colombara, D. V., Ikuta, K. S., Kissoon, N., Finfer, S., Fleischmann-Struzek, C., Machado, F. R., Reinhart, K. K., Rowan, K., Seymour, C. W., Watson, R. S., West, T. E., Marinho, F., Hay, S. I., Naghavi, M. (2020). Global, regional, and national sepsis incidence and mortality, 1990–2017: analysis for the Global Burden of Disease Study.

