Annals of Clinical Case Studies

ISSN: 2688-1241

Mini Review

Adapting the World Health Assembly 70th Resolution on Sepsis, and Implementing Surviving Sepsis Campaign (SSC) Guidelines in Africa, a Pathway to Achieving Universal Health Coverage (UHC)

*Halima Salisu Kabara**

Intensive Care Unit, Aminu Kano Teaching Hospital, Nigeria

Introduction

Implementing Sepsis Care Bundles (SCB) is one of the fundamental pathways to sepsis quality improvement programme. Guidelines and protocols have been put in place in order to give guidance and support to the clinicians at patient bedside, however, the notion "from bench to bedside" is far-fetched in our environment (Africa). Sepsis morbidity/mortality could be significantly decreased by the use of sepsis care bundles and guidelines. There is paucity of data from Africa on the use of SCB. The reason for poor implementation may be due to lack of awareness, competency, policies and resources, manpower and excessive workload. The lack of data in measurement of the compliance rate in Africa needs to be addressed.

The use of Sepsis Care Bundle (SCB) is a proven Evidence-Based Intervention (EBI) for prevention of sepsis related morbidity/mortality [1]. Sepsis care bundles are sets of interventions that include hand-hygiene, intravenous-line bundles, use of chlorhexidine-based cleaning of equipment/surfaces and judicious use of antibiotics implemented as a protocol. Sepsis care bundle is poorly implemented in many Low-and Middle-Income Countries (LMIC), where neonatal sepsis/mortality rates are high. New technology for rapid sepsis diagnosis combined with innovative sepsis prevention methods Sepsis Care Bundle, would improve sepsis management and prevent its mortality.

The key concepts and current guidelines that are derived from evidence-based literature rely on protocols and sophisticated invasive technologies, which are generally applicable to high-resource settings. However, Low-or Middle-Income Countries (LMICs) comprise approximately 80% of the world's population, and there is a lack of data and recommendations about the effective approaches to sepsis care in LMIC [2].

The Surviving Sepsis Campaign (SSC) guidelines were developed to use best practices for the management of sepsis in high-income countries, whereas, Africa, where the heavy burden of sepsis morbidity and mortality is recorded, is disproportionately addressed by the guidelines. It may not be feasible to use international guidelines without local modifications to fit the peg where it fits best. Compounding the lack of implementation of sepsis protocols and guidelines is the lack of real-time, point-of-care rapid diagnostics that would identify the causative pathogens and the most effective antibiotic. This result in injudicious use of antimicrobials with consequent escalation of antimicrobial resistance. Sepsis is a life-threatening condition which if not detected and managed early can lead to septic shock, multiple organ failure and death. Early diagnosis, timely and appropriate clinical management of sepsis with the most effective antimicrobial use among others are crucial in increasing survival. Sepsis education is essential to enable the healthcare providers maximize compliance with the Sepsis Care Bundles, and the Surviving Sepsis Campaign (SSC) Guidelines.

Following a proposal drafted by the Global Sepsis Alliance (GSA) which was supported by a number of WHO member states, and in May 2017, the World Health Assembly (WHA) adopted the Resolution on Sepsis which recognized Sepsis as a global threat, and called on all the United Nation's member states to develop and implement national action plans to improve the prevention, diagnosis and treatment of sepsis. By 2030, it is expected that each country would have developed a national action plan in order to deliver the six targets set out by the GSA. The leadership of global agencies including the WHO and United Nations will also be required, to effect transformational change, to allocate more resources, and incorporate into available global health strategies. Creating awareness and sensitizing the public, educating the healthcare providers, establishing screening and surveillance networks, integrating capacity building of laboratory and human resource on sepsis care, and implementing guidelines are all in accordance to the recommendations of the WHA resolution.

Background

Sepsis, a topic close to my heart, and which is not yet in the Political or Power space, it ought to be! I wonder why?

I was privileged to have been at the decision tables for the development of some of the policy documents on Sepsis care improvement, and during those occasions, you can't imagine how

Citation: Halima Salisu K. Adapting the World Health Assembly 70th Resolution on Sepsis, and Implementing Surviving Sepsis Campaign (SSC) Guidelines in Africa, a Pathway to Achieving Universal Health Coverage (UHC). Ann Clin Case Stud. 2022; 4(3): 1056.

Publisher Name: Medtext Publications LLC

Manuscript compiled: Aug 12th, 2022

***Corresponding author:** Halima Salisu Kabara, Intensive Care Unit, Aminu kano Teaching Hospital, Kano, Nigeria, E-mail: sdysalisu@gmail.com

much work went into creating documents that would be well-received and well-taken by the healthcare providers and the general public. During these interactions and bench-marking, we were constantly reminded of the existing paucity of scientific evidence on the epidemiology, diagnosis, treatment, and outcome of sepsis in low-resource countries.

Quality is multidimensional and a core component of the University Health Coverage (UHC), without quality, UHC remains an overzealous concept. To achieve Universal Health Coverage (UHC), it is critical to ensure effective, safe, timely, equitable, integrated and efficient quality of health services, improved infrastructure, and better resource management, provision of essential drugs and commodities and leadership, in Africa. The Government's key role in oversight and trusteeship is effective stewardship, forming clear vision, defining the strategic action plan, and articulating how the leadership wants the health system to be. For us to achieve our goal of improving care delivery and better patients' outcomes, we need to enhance the overall performance and quality in the healthcare environments, thereby providing cost-effective, reliable and sustained healthcare processes for frontline healthcare providers. The service providers get adapted to the environment where quality improvement comes first rather than the process outcomes. Let's get started with quality improvement in healthcare system in Africa.

Explore the feasibility and resources required to promote surveillance networks. At facility level, surveillance systems alert clinicians to the early signs of sepsis, enabling initiation of timely treatment. Target population-based studies in epidemiology research, to be linked to existing surveillance efforts, and be supported by a strengthened laboratory capacity. Identifying sepsis risk as quickly as possible is critical for immediate treatment. Monitoring for complications and patient progress are critical for optimizing outcomes, for response to treatment. Preventing and improving outcome of sepsis is priority in achieving UHC and quality of care which is key to global security, which starts with local health security, and in turn depends on high-quality frontline services.

I keep wandering why implementing or compliance with guidelines/protocols and adapting care bundles are so difficult or should I say elusive in Low- and Middle-Income Countries (LMICs)?

Main Issues that need to be Addressed Urgently

Africa inherited intractable colonial health legacies from their past colonial masters, and the devastating impact on the health care systems which made it inefficient, overly expensive and inaccessible to the majority who are the poor and vulnerable, often neglected population.

Poverty can be eradicated just as the disease itself; however, social and political inequalities or disparities that exist make this almost impossible. The risk to the health of the poor and vulnerable is high, though this may be due to the individual behavior which may lead him or her still to poverty, however, it is a vicious cycle, and many people are trapped in it, right from birth. Poor literacy or ignorance compounds their situations and he or she may be ignorant on the health risks and the need and when to seek care, to know how diseases are transmitted and prevented.

Water, an essential commodity is scarce in adequacy, cleanliness and safety. Sanitation and hygiene are not well understood, where people still do open defecation due to no toilet facilities or illiteracy level. Overcrowding is another crucial matter, which is causing the spread of infection and infectious diseases.

Accessibility, availability, affordability and functional health facilities are other compounding issues that make the vulnerable, far-to-reach poor communities at high risk to infection, infectious diseases, sepsis, which consequently lead to high morbidity and mortality in Africa.

Health is a human right not a privilege, therefore, access to quality safe health should not be the right of the rich and the influential, but of everyone-poor, sick, vulnerable, and disabled. Our world is interdependent, interconnected, and interrelated, has become even smaller by globalization.

Sepsis: a formidable foe

Sepsis is a complex, one of the most prevalent, yet unknown and unrecognized preventable killer! Every few seconds (2.8s), someone dies of sepsis!

Sepsis is the final common pathway to death from most infectious diseases worldwide. It is poorly recognized and poorly treated. Sepsis often presents as the clinical deterioration or complication of common and preventable infections such as influenza (the flu), pneumonia, respiratory, meningitis, intra-abdominal or urinary tract infections, malaria, or those of wounds and skin. People with chronic and non-communicable diseases and even trauma cases develop sepsis, and it affects all ages, in particular those at extreme of ages. Sepsis is common and deadly, and under prioritized by the public, healthcare providers, policy and decision- makers, not all sepsis is the same, one size does not fit all. Finding therapeutic prognostication for sepsis patients is necessary. Mapping heterogeneity to clinical trials is difficult. The threat of Antimicrobial Resistance (AMR) and the public health threat from sepsis are dual crises where public, political, and media attention is necessary to curb both. The two threats are inextricably linked. AMR highlights the importance of infection prevention, and control.

Addressing sepsis- the unrecognized number one cause of preventable death from Infection requires 'One Vision - All Year Effort'! All hands should be on deck! To link up with global and regional partnerships- African Union; Heads of Governments; Ministers of Health; African Partnership for Patient Safety; Global Patient Safety Collaborative; AMR; WASH; G20, G7; G4 Nursing Alliance; Global Surgery Foundation; Global Funding Foundation; Global Alliance for infections in Surgery; Patient & Survivor Organizations; and other International Organizations who are all stakeholders.

Challenges with Research in rresource-Restricted Settings

There is a wide range of unexplored frontiers in sepsis management in resource-limited settings, in which important opportunities for research, training, and other innovations for improvement exist. In order to enhance the quality of sepsis management in low-resource settings, there is need to consider disease-specific and environment-specific factors, monitor, and evaluate the pathway to implement innovations using technology to improve the quality and safety of care given. The vital importance of early adoption and bridging the gap between implementation and guidelines publications. Building global collaboration in acute care research, mentoring emerging groups, Acute Care for African Research & Training (ACART), developing local expertise, research as mentorship would be the priority. How feasible is it to implement sepsis guidelines that are modifiable and

scalable to resource availability in Africa? We need to find what fits our local environment and situation that could save more lives from sepsis and other infectious diseases in Africa.

Conclusion

How I wish that the global response to sepsis would be similar to that of HIV, or more recently, COVID-19, which brought out so much commitment, tremendous collaboration and togetherness, great partnership, generous and overzealous funding and resources. Why aren't we seeing same with the war/fight against Sepsis which affects 49 million people worldwide yearly, 85% of these in LMICs, affects 13 million people with 3.5 million deaths in Africa, and is killing about 11 million people annually?

This is to solicit that the Heads of Governments and Ministers of Health, support regional sepsis initiatives, and for them to recognize sepsis as a major public health threat, that requires a Global Action. LMIC health systems should be allocated more funding in order to strengthen the emergency response and public health systems, to curb the high burden of sepsis, and comply with the recommendations from the Global Sepsis Alliance, African Sepsis Alliance and the World Health Organization.

The Global Sepsis Alliance (GSA) therefore called on all relevant stakeholders to ensure multi-agency global response using the six key targets, to implement crucial priority actions *via* a coordinated and resourceful approach. The WHO in partnership with governments should promote national standards and guidelines related to recognition, treatment, laboratory support, and follow-up and support learning, including in Low-and Middle- Income Countries (LMICs) [3].

In collaboration and coordination with WHO regional offices, member States and other stakeholders, several WHO headquarters programs are currently working on the public health impact of sepsis and providing guidance and country support on sepsis prevention, early and appropriate diagnosis, and timely and appropriate clinical management. Unless the world takes collective action across human, animal, plant and environmental health sectors, common infections will become untreatable as resistance to antimicrobials grows [4].

Adapting the World Health Assembly 70th Resolution on sepsis, and implementing Surviving Sepsis Campaign (SSC) Guidelines in Africa is the roadmap to effective, efficient, timely, integrated, quality and safe Universal Health Coverage (UHC).

References

1. Nguyen HB, Corbett SW, Steele R, Banta J, Clark RT, Hayes SR, et al. Implementation of a bundle of quality indicators for the early management of severe sepsis and septic shock is associated with decreased mortality. Crit Care Med. 2007;35(4):1105-12.
2. Kemal AM, Haluk O. Sepsis Management in Resource-Limited Settings. Anesth Analg. 2020;130(2):e37.
3. WHA Recommended Actions for Reducing the Global Burden of Sepsis. N Engl J Med. 2022.
4. WHO. Sepsis. 2020.