EDITORIAL VIEW

Sepsis Guidelines for Pakistan

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ABSTRACT

Pakistan Society of Critical Care Medicine (PSCCM) and the Sepsis Guidelines for Pakistan (SGP) Committee took an important step to improve the care of sepsis patients in Pakistan by adapting the Surviving Sepsis Campaign (SSC) guidelines to the local needs. The document was carefully reviewed and approved by the executive board of Global Sepsis Alliance (GSA). The important task ahead is to disseminate the guidelines by the use of protocols and standard operating procedures championed by dedicated clinicians across the three tiered healthcare system of the country.

Key words: Sepsis; Guidelines; Critical Care; emergency

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For any chance of successful implementation guidelines need to be relevant to the context in which they will be used. This has been amply shown with the Surviving Sepsis Campaign (SSC) guidelines where the inability to implement elements of the bundles such as mechanical ventilation, measurement of lactate to define severe sepsis were not practical in resource poor areas.[1] As a consequence, using approaches for resource rich areas may not be applicable to poor areas and may even lead to harm both in children and adults. For instance, because of shortage of resources, the results of a study of east African pediatric patients with hypoperfusion showed that standard resuscitation methods were harmful [2] and a study in Zambian adults with sepsis was stopped early because of concerns for harm in the resuscitation group ,[1]

Thus the initiative of the Pakistan Society of Critical Care Medicine (PSCCM) and the Sepsis Guidelines for Pakistan (SGP) Committee have taken an important step to improve the care of sepsis patients in Pakistan by adapting the Surviving Sepsis Campaign guidelines to Pakistani needs. The Global Sepsis Alliance (GSA) is dedicated to support Quality Improvement initiatives aiming at raising awareness for prevention and early recognition and treatment of sepsis, and hence the GSA executive board Global Sepsis Alliance after carefully reviewing the document is proud to add our support to the PSCCM and congratulate them for this most laudable effort. Indeed, their effort should serve as a template and should spur other national societies involved in patient care to follow their example. The GSA EB members would also point out that it can be expected that the new consensus definitions for sepsis and septic shock that are to be published in the fall of this year are very likely to ease the diagnosis of sepsis also for resource limited settings as they will be based on simple clinical signs.

The process followed in the development of these guidelines were inclusive of many different medical disciplines and hence is more likely to gain acceptance. The important task ahead is to encourage use of the guidelines by the use of protocols and

standard operating practices championed by dedicated clinicians. A similar initiative to develop sepsis guidelines for newborns and children is sorely missing in Pakistan and we encourage our colleagues to undertake this important task. The urgent need is clear because around 60% of global deaths in neonates and infants are attributable to sepsis, with the majority of cases occurring in Asia and sub-Saharan Africa.

The publication of the SGP guidelines is timely and overdue because severe sepsis is an important cause of mortality globally but especially in Asia. The ravages of sepsis are indiscriminate, however the most vulnerable are women in the postpartum period, new-born babies and children under five years of age in resource poor areas. Applying data from a systematic review of studies on the epidemiology of sepsis mostly from resource rich countries globally, Fleischmann and colleagues estimated a yearly incidence of up to 31 million cases of sepsis, with about 6 million fatalities.[3] However, this is clearly an underestimate because the assumption is that resources to treat and hence outcomes are uniform globally is false and ninety percent of the worldwide deaths from pneumonia, meningitis or other infections occur in less developed countries. Mortality for patients with sepsis in low-income countries is in the range of 50% and higher.[4] whereas a range of estimates for the USA is between 15% and 30%.[5-7] The steady decrease of sepsis mortality that has been reported from high-income countries most likely is to be attributable to the successful implementation and adoption of the Surviving Sepsis Campaign guideline recommendations.[8-10]

That rigorous context based pragmatic research is sorely needed to improve sepsis care in resource-constrained settings is amply outlined in a thoughtful document recently.[11] The burden of sepsis is highest in low-income and middle-income countries, hence major gains can only be realized if these countries are included in sepsis studies not as an afterthought but as essential participants. Furthermore, as genetics, comorbidities, social factors, pathogens, and health systems in resource poor settings of Asia and Africa may differ from those of North America or Europe, research from these settings are necessary to guide clinical practice guidelines development and implementation.[12]

The GSA recognizes that sepsis despite its enormous health-economic and human burden is not included in high-profile data collection systems like the Global Burden of Disease project as a cause of morbidity and mortality in children and adults. Failure to highlight this global killer, is a major impediment in engaging policy makers, global acting foundations, benefactors and the public are to link arms to combat sepsis. Advocacy may lead to engagement and thus we are very pleased that the PSCCM became an early active supporter of World Sepsis Day and a member of the Global Sepsis Alliance.

The mandate of the GSA is as follows:

- Achieve a mandate for World Sepsis Day by the World Health Assembly and WHO
- Achieve adequate representation of sepsis in the Global Burden of Disease report
- Generate reliable estimates on sepsis incidence in low- and middle income countries
- Increase awareness among health care workers, public, media, policy makers
- Encourage national action plans against sepsis
- Foster quality improvement initiatives on the local level

The Sepsis Guidelines for Pakistan are an important contribution to the global task of facing the challenge of sepsis. It should encourage others in similar circumstances to undertake similar initiatives. The GSA will be happy to foster dissemination and input to such guidelines. The Global Sepsis Alliance encourages all stakeholders to be engaged in various projects to raise awareness, prevent and optimize treatment of sepsis. Stop Sepsis, save lives.

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Repeatedly we hear of unaccountable managers protecting themselves and undertaking biased investigations, character assassination, lengthy suspensions, disciplinary hearings which resemble kangaroo courts, and ultimately dismissal of staff who previously had exemplary work records.
Sir Robert Francis QC, February 2015 (*NHS Whistleblowing Report*)