

GLOBAL HEALTH

The 70th World Health Assembly (WHA) adopted the [resolution](#) – ‘*Improving the prevention, diagnosis and management of sepsis*’, during its meeting on Friday, 26th May, 2017 in Geneva, Switzerland, making sepsis a global health priority. This marks a quantum leap in the global fight against sepsis.



We're delighted to have the opportunity speak with Dr Tex Kisson Vice Chair, Global Sepsis Alliance and Past President of WFPICCS. Dr Kisson has worked tirelessly in both functions to draw greater attention to the global burden of sepsis and the need for concerted action by a global body like WHO.

First of all, congratulations for all your efforts in getting the sepsis resolution onto the agenda of the World Health Assembly and adopted, you must be delighted and relieved? What does this mean to you personally? Delighted and relieved is correct, however, we must recognize while this is a major hurdle, this is the first hurdle that we have been trying to accomplish for some time. It now means that we must deliver on this resolution. To do this we need to engage clinicians worldwide, policymakers and the public in order to ensure that everyone is contributing to decrease the burden of sepsis in their areas of expertise. For me personally this has been very gratifying since we have been trying to make the case that sepsis in children is a major problem worldwide and while much has been recognized in high income areas of the world, in resource limited areas of the world this has been largely neglected. With this resolution we now have the UN which has legitimized our concerns regarding children and have endorsed a plan going forward so that the 195 countries can be participants in decreasing this burden.

The sepsis numbers are staggering, 31 million cases every year, six million of which result in death and of those deaths, 3.5 million are children, why do you think it has taken so long for sepsis to be made a global health priority? Yes, you are correct that the number of deaths is staggering. Indeed it is about 3.5 million off of almost 7 million deaths in children that can be attributed to sepsis. It has taken this long for sepsis to be made a global priority because the individual diseases that contribute to sepsis have been addressed in individual silos such as malaria, pneumonia, diarrheal diseases HIV etc. However, sepsis is a syndrome that is caused by an infection which leads to organ dysfunction and ultimately disability and death. Because these individual

diseases were recognized and lend themselves to individual efforts, sepsis was not considered a high-priority. However, for these infections, the final common pathway to death and disability is sepsis which lends itself to simple measures for therapy such as antimicrobial agents, oxygen, fluid and checking glucose etc. in children.

In the USA alone, annual hospitals costs are over 24 billion USD per year, do we have this type of data from other countries? I agree that the cost worldwide is staggering. We do not have very good data for cost in many parts of the world. In the UK, the cost for sepsis has been estimated at about 18 billion pounds and in low income and low resource areas of the world we do not have the economic burden clearly outlined. However, when we look at the number of patients who were admitted to hospitals across the world with sepsis both in adult and pediatric population, one can see it usually is at about one third of the acute-care dollars spent on sepsis related issues. The other issue we have not addressed in this staggering burden is the disability adjusted life years lost. Indeed, it has been said that severe infections and sepsis are disproportionately stealing human resources worldwide. Most of these lost resources are heavily weighted towards children.

Addressing sepsis requires a holistic approach like the title of the adopted WHO resolution suggests 'Improving the prevention, diagnosis and clinical management of sepsis' plus advocacy. How important is advocacy in all of this? Advocacy is one of the most important tools that we have to address sepsis. Indeed without advocacy the United Nations WHA resolution would not have been passed. In addition, it has been said that that any disease is like a political campaign, we need mascots, political figures, iconic figures and celebrities to fight the disease and the corridors of authority and power to get the resources to fight it at the bedside. Unfortunately, many of our colleagues in medicine are skilled in prevention, diagnosis and clinical management but have not really been very active in advocacy.

The adopted WHO resolution sets out 9 key action items for member states to address & implement together with its stakeholders? How important is the role of medical & scientific non-profit associations in this effort? For the resolution to be successful we need to have the involvement of all stakeholders. We need the medical and scientific associations but we more importantly also need policymakers and Ministries of Health across the world to recognize sepsis as a priority and take rational steps to provide the resources. In addition, these bodies also need to ensure that there is a data to inform deliverables and outcome measures such that their efforts can be evaluated.

The WHO has allocated \$4.6 million USD to help implement their sepsis resolution, how will these funds be allocated? The 4.6 million that has been allocated to WHO and will be used to put the infrastructure in place to enable the WHO to engage member states in providing the appropriate context-based guidelines

recommend and outcome measures and to ensure that the WHO Secretary-General has the data and resources to enact some of their key action items that is outlined in the resolution. I suspect that this funding is modest when one considers the enormity of the burden and the impact that sepsis has worldwide.

There is so much to do and it requires a concerted effort to ensure that resources are allocated where they are most needed and collaborations are established to avoid duplication. What role do you see organisations such as WFPICCS play? What are the next steps in this effort? WFPICCS have a very important part to play. Indeed, WFPICCS was the one of the founding bodies of the Global Sepsis Alliance which led the effort to get the United Nations to recognize the Resolution. As the voice for critically ill children worldwide, WFPICCS should be involved in ensuring that the resolution constitution becomes a living document and children being one of the most vulnerable population is not forgotten. WFPICCS intends to form a sepsis working group such that we can identify aspects of the WHA resolution which are relevant to us and get involved globally in addressing these. This would also include us with many partners including WASH agencies as well as epidemiologists, infectious disease consultants, vaccine organizations, antimicrobial stewardship organization, critical care colleagues, civil society among others. Thus there is a lot that WFPICCS can accomplish.

Perspectives

For the low and middle income resource perspective, the sepsis burden is highest in these areas with approximately 95% of children who died from infection and sepsis residing in these locales. In these resource poor areas, malnutrition is very rampant and complicates treatment. In addition, the organisms are different and with limited resources we need to modify protocols and guidelines to make them context specific.

In partnership with colleagues in Africa we are in the process of starting an African Sepsis Alliance which we hope to bring together communities of practice and leaders of these countries to address sepsis. Efforts in sub-Saharan Africa and Asia are sorely needed for children with sepsis in these areas.