Increasing awareness that untreated sore throat can lead to rheumatic heart disease is a huge part of the battle

September 27 2013

Without a huge improvement in living conditions, a cure, or a vaccine, rheumatic heart disease (RHD) will continue to blight low-income and middle-income countries. Raising community awareness of the condition, emphasising that untreated sore throat caused by group A streptococcal (GAS) infection can lead to acute rheumatic fever (ARF)/RHD, is a huge part of the battle. The issues around advocacy and awareness are discussed in a paper in the RHD special issue of *Global Heart*, the journal of the World Heart Federation, written by Dr Liesl Zühlke, University of Cape Town and Red Cross War Memorial Children's Hospital, Cape Town, South Africa, and Dr Mark E Engel, University of Cape Town, South Africa.

In South Africa, most patients and their guardians had not yet heard of RHD until they were diagnosed with the condition, demonstrating a low level of awareness in the general community. Elsewhere, the vast majority of clinicians (87%) in a study from Tanzania felt that their patients and families were unaware of the consequences of untreated GAS.

The authors say: "The importance of creating awareness of the disease and its sequelae cannot be underestimated, especially in resource-limited conditions. The importance of these efforts needs to be recognised and barriers to awareness and education understood and overcome while health promotion research for acute rheumatic fever and RHD is

prioritised...Maximised case detection within a community dictates that all members of that community are aware of the presentation and diagnosis of the disease, with the highest awareness needed amongst health care workers at primary health care level."

With increased awareness of the potential effects of sore throat, the authors believe that more families will be encouraged to seek medical help and prevent further cases of ARF/RHD. The authors say: "School and educational institutions should be targeted as the most vulnerable population for GAS infections are school-aged children. These have tremendous potential to improve the reach of primary and secondary prevention and case-detection."

The authors also advocate for a change in attitudes from healthcare workers who see ARF/RHD as secondary to their plans to treat malaria, HIV, and TB, saying that ARF/RHD treatment can take place alongside treatment for these other life-threatening conditions. They also question priorities in medical teaching, saying: "Teaching in the countries most affected by RF//RHD tends to mimic that in developed countries and is unlikely to take into account differences in public and private and primary health care strategies. It is critical that medical education in developing countries be defined by the needs and service required by the majority of the people. Medical students in sub-Saharan Africa, for example, need to know about RHD more than they need to know about MRI scans, since many of the poorest nations have almost zero access to such equipment."

Helping patients understand the treatment with information that is appropriate to their level of comprehension is also vital, using printed material, video, discussion and any other relevant techniques. The authors praise the remarkable model that has implemented by health authorities in Martinique, Guadeloupe and Cuba, where comprehensive 10-year programmes were initiated with education, awareness strategies

at all levels and primary and secondary prevention delivered through a registry as the mainstay of the programme. A rapid decline in ARF incidence was achieved at modest cost with overall reductions of between 74% and 86% observed.

The authors conclude: "We strongly support awareness-raising and health promotion strategies as an integral part of a RHD prevention and control programme."

Provided by World Heart Federation