Topic reviews need to be robust

To the Editor: I note with interest the review entitled 'Heart failure in sub-Saharan Africa: A clinical approach'.[1]

It is very concerning that the only heart failure guideline published in Africa was not referenced in this review.[2] The Heart Failure Society of South Africa (HeFSSA) is the only official heart failure society in Africa. The HeFSSA guideline was published as a modification of the European Society of Cardiology guideline that is quoted in the review,[3] specifically to impart a 'sub-Saharan' perspective.

If the HeFSSA guideline was included in this review then I'm sure the significant omission of the hydralazine-nitrate oral combination as a crucial arm of chronic heart failure therapy would not have occurred. Considering the demographics of sub-Saharan Africa, omitting a therapy that has proven to significantly improve survival, reduce hospitalisations and improve quality of life in black Africans,[4] is most unfortunate.

The review also includes perindopril 2 - 4 mg in their list of suggested angiotensin-converting enzyme (ACE) inhibitors. The HeFSSA guideline excluded this particular drug as no large randomised data exist for the efficacy of this drug in heart failure, not to mention the recommended dose. Perindopril 4 mg as a single drug had no benefit on reducing stroke,[5] and perindopril 8 mg was needed to reduce events in high-risk cardiovascular patients.[6] The effective dose in heart failure is unknown. Telmisartan is also included in this review. No heart failure end point and effective dose data exist for this drug either and it is not listed in the HeFSSA guideline.

The comments in the review on a heart rate target of <75 beats/minute with beta-blocker therapy are confusing and ill advised for the heart failure practitioner. No large, randomised beta-blocker trial that showed improved survival and reduced hospitalisations in chronic heart failure therapy has used heart rate as a target in therapy. Target beta-blocker doses were aimed for in the trials and should be aimed for in clinical therapy. The statement in this review confuses the systolic heart failure treatment (SHIFT)[7] trial and extrapolates inappropriately the heart rate data to beta-blocker therapy with no randomised evidence to support this advice. This advice in the review will also result in underdosing of beta-blocker therapy. If this review[1] is to be used as a reference for doctors to guide their heart failure therapy, then I strongly suggest corrections should be published in a revised review.

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Ntusi *et al.* respond: We are grateful for the opportunity to respond to the comments made by Dr Klug in reference to our article titled 'Heart Failure in sub-Saharan Africa: A clinical approach',[1] which formed part of the recent cardiovascular disease (CVD) continuing medical education (CME) in the Journal. Indeed, the heart failure (HF) guideline[2] published under the auspices of the Heart Failure Society of South Africa (HeFSSA) was not cited in this review. We admit this was an important omission. However, our review liberally cited the European Society of Cardiology (ESC) guideline on the management of HF,[3] upon which the HeFSSA guideline is also heavily premised.

While we acknowledge the importance of the HeFSSA guideline and its place in the management of HF in South Africa (SA), the HF review, which was not meant to replace the current treatment recommendations of HeFSSA, like all the articles that formed the CVD CME, focused on simple, pragmatic clinical approaches to common cardiovascular challenges encountered at the primary level of healthcare, with the aim of not being overly complex. As such, in this successful collaboration, the CME articles were jointly produced by SA cardiologists and family physicians with the dual objectives of empowering doctors who manage these conditions in primary care settings in SA and improving the care of CVD patients in such settings. In the first issue, HF,[1] dyspnoea,[4] hypertension in the young[5] and valvular heart disease[6] were reviewed. In the second issue, infective endocarditis[7] and pericardial disease[8] were discussed. The final edition provided an evidence-based and pragmatic approach to chest pain and acute coronary syndromes[9] and suspected tachyarrhythmias in the emergency room.[10]

Upon this background, the main goals of the HF review were to: (*i*) emphasise how to make the diagnosis of HF; (*ii*) highlight clues for recognition of the underlying aetiology of HF; (*iii*) review the pathophysiology of HF; and (*iv*) provide a simplified approach to management of HF.

The lack of recommendations relating to use of hydralazine-nitrate oral combination in our HF review, in particular for black African patients, are indeed a notable omission. In the SA public sector, particularly at the primary healthcare level, the availability of hydralazine is haphazard. Further, while this combination therapy is associated with improved survival, reduced hospitalisation and improved quality of life in black African patients, compared with placebo, it is comparable with the mortality benefit of angiotensin converting enzyme (ACE) inhibitors, which are much more freely available and accessible in primary health centres around SA. Moreover, this combination therapy should be used with caution in certain patients.[11] In addition, the recently performed Bi treatment with hydralazine/nitrates v. placebo in black Africans admitted with acute HF (BA-HEF) study had to be terminated prematurely due to poor recruitment and was neutral.[12] One of the main reasons for poor recruitment was hypotension.

Even though perindopril does not have randomised trial data supporting its specific use in HF, in certain provinces within SA such as the Eastern Cape, it has been the only ACE inhibitor available within the state sector, and it is still included (at the doses stated in our HF review) in the ESC guidelines.[3] We have opted to adopt a pragmatic approach that is relevant to primary healthcare practitioners in SA.

The comments relating to target heart rate with beta-blockers are noted and we share the same views as Dr Klug. Indeed, there is no evidence of improved outcomes with beta-blockers titrated to a specific target heart rate. However, there is strong evidence that heart rate reduction in HF is associated with improved survival,[13,14] although the optimal heart rate target has not been established.

It is our hope that our review will provide a simple and pragmatic clinical approach to the management of HF at the primary healthcare level in SA in order to improve the lives of SA HF patients.

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