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Comments on One-way Versus Two-way Text Messaging on Improving Medication Adherence

To the Editor:

Wald et al[1] compared 1-way vs 2-way text messaging for medication adherence, and conclude that 2-way text messaging improves medication adherence, whereas one-way text messaging has little or no effect. Two issues caught our attention. The first is that the trial by Mbuagbaw et al[2] is grouped as a 1-way trial even though it is a 2-way trial; participants were offered the opportunity to respond to the text messages by text or by calling. The second issue is that the numbers don't add up. We used the numbers reported in the Wald paper[1] and found slightly different results. The risk ratio in the Pop-Eleches trial is reported as 1.17; 95% confidence interval, 0.92-1.48; whereas it should be 1.34; 95% confidence interval, 1.06-1.69. After classifying the Mbuagbaw trial as a 2-way trial, patients were only 9% more likely to adhere to medication with 2-way messaging (**Figure**). The superiority of 2-way text messaging has been demonstrated in an individual patient data meta-analysis of 3 human immunodeficiency virus trials,[3] and another systematic review.[4] The efficacy of 2-way text messaging lies in the process of opening a communication channel and offering more care, probably not in the reminder component, hence, the superiority of weekly messaging in the human immunodeficiency virus literature.[3-5] More so, the cutoff that defined adherence in the Mbuagbaw trial[2] was reported as 100%, even though 95% and 90% were reported in the manuscript. Some of these issues could have been avoided if the authors had corresponded with the authors of the included manuscripts.

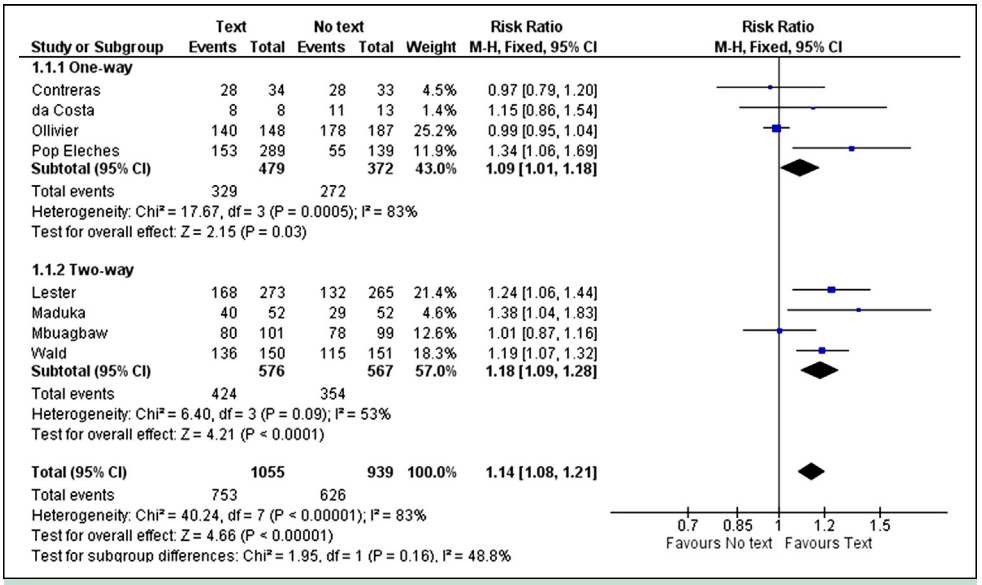

Figure Forest plot of text messaging vs no text messaging to improve adherence to medication. CI = confidence interval.

Two-way text messages engage patients in care, enhance communication, and lead to better adherence. Trials comparing 2-way vs 1-way strategies or individual patient data meta-analyses may offer more reliable estimates. Updates to this systematic review should represent the included trials more faithfully.

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