Title

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Comment on "**COVID-19 preparedness within the surgical, obstetric and anesthetic ecosystem in Sub Saharan Africa**"

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To the editor:

In our article providing guidance on preparing the surgical ecosystem in Sub Saharan Africa for the COVID-19 pandemic[1], we noted in the section regarding conserving PPE and consumables that N95 masks could potentially be decontaminated using dry heat at 70°C (160°F) for 30 minutes. The research community is moving quickly to build quality data around COVID-19 inactivation methods and knowledge in this regard is rapidly changing. The technique we put forward has proven to be inadequate for destroying SARS-CoV-19, the virus causing COVID-19.

Recent work by the N95decon group and others has demonstrated a number of promising methods for decontaminating filtering facepiece (FFP) respirators. Heating masks to 70°C (160°F) in a dry autoclave for 60 minutes (rather than 30 minutes as we had originally written) has been shown to destroy the virus under laboratory conditions.[2,3] Other recent work reported virus inactivation using a steam autoclave cycle at 121°C for 15-30 minutes, although some N95 models were found to subsequently fail fit testing after more than a single cycle.[4] Several other methods are also being tested, including vaporised hydrogen peroxide and UV-C sterilization[3], but these are not widely available currently in many low-resource settings.

The N95decon group has been providing rigorous and thoughtful strategies to decontaminate and reuse N95 masks as well as exploring other locally developed methods, particularly in resource-poor settings around the world. We urge providers and facility leads who are working to cope with limited supplies to seek updated information from this and other reputable groups.

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…on behalf of the authorship.

[1] Ademuyiwa AO, Bekele A, Berhea AB, Borgstein E, Capo-Chichi N, et al. COVID-19 preparedness within the surgical, obstetric and anesthetic ecosystem in Sub Saharan Africa. *Ann Surg* 2020. [epublished ahead of print] 6 April 2020.

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