Reviewer’s report

Title: Dysphagia risk, low muscle strength and poor cognition predict malnutrition risk in older adults at hospital admission. Idah Chatindiara, I. Chatindiara@massey.ac.nz (corresponding author) Jacqueline Allen, jeallen@voiceandswallow.co.nz Amy Popman, amypopman@hotmail.com Darshan Patel, d.patel0245@gmail.com Marilize Richter, m.richter@massey.ac.nz Marlena Kruger, m.c.kruger@massey.ac.nz Carol Wham, c.a.wham@massey.ac.nz

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Reviewer: Birong Dong

Reviewer’s report:

In this cross-sectional study, Chatindiara and colleagues analysed the magnitude and potential predictors of malnutrition risk in older adults, at hospital admission in older people.

The study quality is good. However, some issues must be pointed out:

1. As authors mentioned, BMI is one of components of MNA-SF. Sometimes, researchers used the BMI to assess the nutrition status in old patients. It is unwise to include BMI as a predictor in the Poisson regression model.

2. When we assess the nutritional status using the MNA-SF, we also will ask the patients whether they have dysphagia in daily life or not. Thus, the same thing as the BMI. I recommended the authors deleted the two variables (dysphagia and BMI) in the Poisson model.

3. Even though medications and comorbidities were not significantly associated with malnutrition risk, these factors are very important for malnutrition in clinical. Therefore, it would be great if authors can put these two variables (medication and comorbidities) in the regression model.

4. The included participants have a lower cognitive function (MoCA score 18.5±5.8 as described in table 1), which may influence the outcome on MNA-SF. For MNA-SF rely a lot on the answers from the patients. The authors should state it in the limitations.

5. There are obvious heterology between races. I suggest authors conduct subgroup analysis according to different races in the study.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes
Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
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