

Iman Nabihah Noor Azam<sup>1</sup>, \*Aliza Haslinda Hamirudin<sup>1</sup>, Sakinah Harith<sup>2</sup>, Mohd Aznan Md Aris<sup>3</sup>, Karimah Hanim Abd Aziz<sup>4</sup>, Nurul Syaureen A Rashid<sup>5</sup>

<sup>1</sup>Department of Nutrition Sciences, Kulliyah of Allied Health Sciences, International Islamic University Malaysia (IIUM)

<sup>2</sup>School of Nutrition and Dietetics, Faculty of Health Sciences, Universiti Sultan Zainal Abidin (UniSZA)

<sup>3</sup>Department of Family Medicine, Kulliyah of Medicine, International Islamic University Malaysia (IIUM)

<sup>4</sup>Department of Community Medicine, Kulliyah of Medicine, International Islamic University Malaysia (IIUM)

<sup>5</sup>Primary Health Care Unit, Pahang Health State Department, Ministry of Health (MOH)

\*Corresponding author: aliza@iiu.edu.my

## INTRODUCTION

- Malnutrition risk and nutritional inadequacy is high among elderly population.
- Nutrition resource kit is useful as a part of a care plan due to its ability to provide nutrition education for the malnourished and at risk elderly patients.
- To the best of our knowledge, there is no comprehensive nutrition educational materials particularly developed for malnourished and at-risk elderly for use in Malaysian health clinic setting.
- Hence, development and provision of nutrition resource kit tailored for this group is warranted to improve their nutritional status.

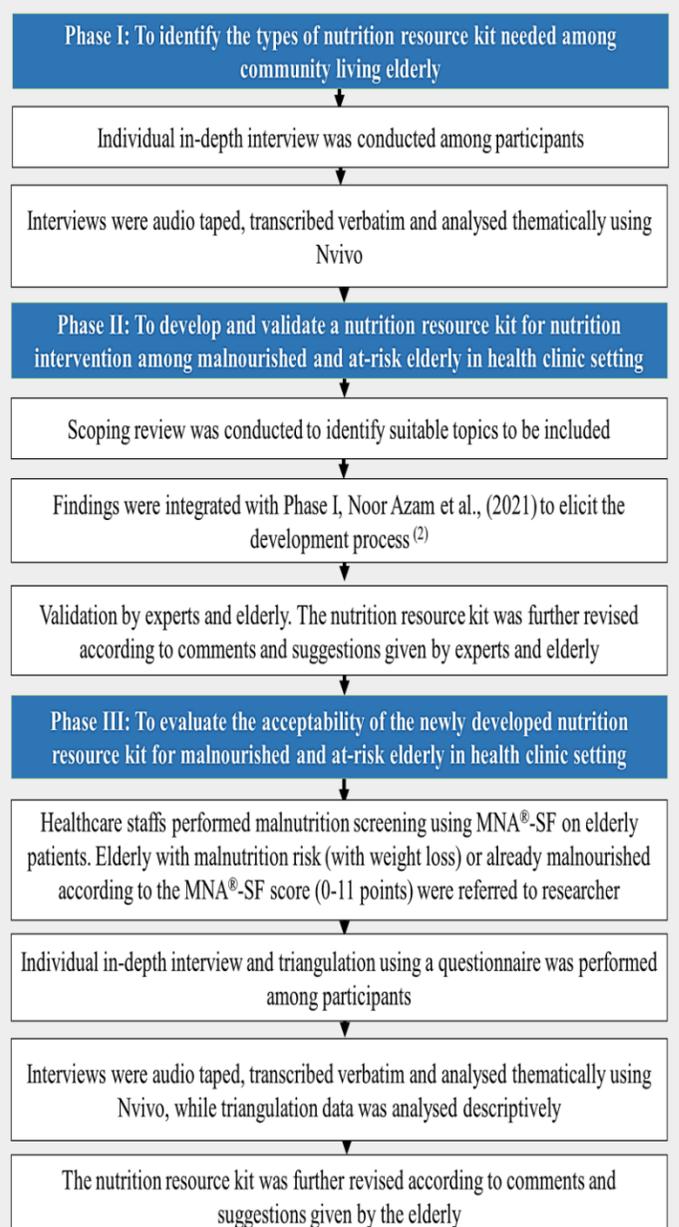
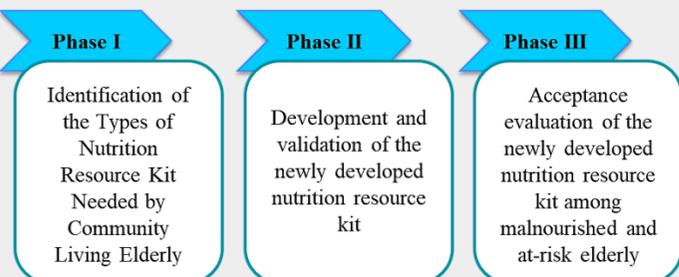
## AIM

This study aimed to develop and evaluate the acceptance of a newly developed nutrition resource kit for malnourished and at-risk elderly which act as a reference or guide for them.

## METHODOLOGY

### Study Design and Approach:

- Action research, qualitative study
- Conducted in 4 government health clinics in urban and rural areas in Kuantan, Pahang (Klinik Kesihatan Indera Mahkota, Klinik Kesihatan Permatang Badak, Klinik Kesihatan Gambang, Klinik Kesihatan Sungai Lembing)
- This study consisted of three phases:



## RESULTS

### Phase I:

- Qualitative assessment among participants revealed five themes (Figure 1) <sup>(2)</sup>.

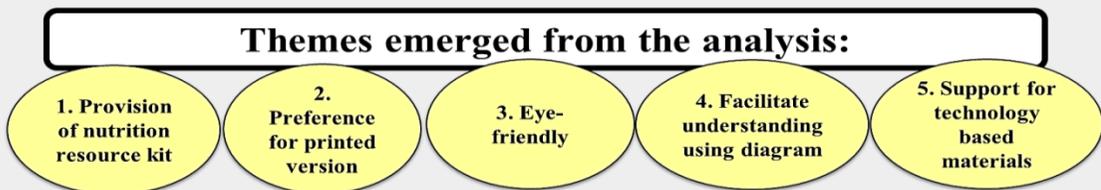


Figure 1: Themes emerged from qualitative assessment

- Findings became the basis to develop the nutrition resource kit.

### Phase II:

- An A5 sized booklet with incorporation of an educational video (displayed in QR code) was developed as in Figure 2.



Figure 2: The newly developed nutrition resource kit and educational video

- Both resources achieved excellent content validity and were positively evaluated for face validity by experts and elderly. The I-CVI for all items achieved the value of more than 0.80 except at one for printed version.
- Comments and suggestions given were reviewed and revision was done accordingly.

### Phase III:

- In this phase, acceptance evaluation revealed four themes (Figure 3):

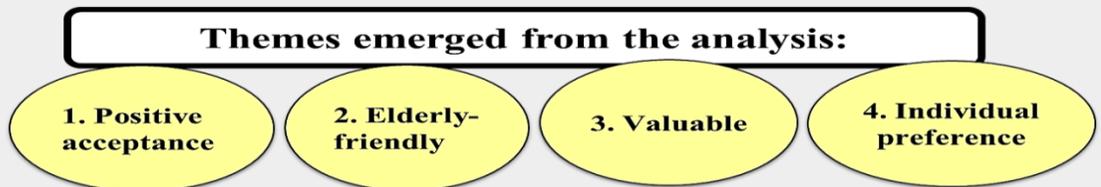


Figure 3: Themes emerged from acceptance evaluation

- The triangulation data also revealed that all elderly positively evaluated both resources. Suggestions given by them were considered for improvement.

## DISCUSSION

- Provision of nutrition resource kit tailored for the malnourished and at-risk elderly would be beneficial to improve their nutritional status <sup>(1,3)</sup>.
- From the findings, both nutrition resource kit and educational video were well-accepted among malnourished and at-risk elderly.
- This kit and video primarily aimed for the malnourished and at-risk elderly who are able to read. However, the illiterate elderly could also obtain the information by watching and listening to the educational video.

## CONCLUSION

- Nutrition intervention for malnourished and at-risk elderly can be facilitated with the provision of nutrition education materials tailored for their use.
- The use of action research and qualitative study enabled insights to be obtained from the elderly itself; in which definitely known to have their own viewpoints.
- Measuring the effectiveness of this developed nutrition resource kit for continuity in the future implementation is warranted for future research.

## ACKNOWLEDGEMENTS

- Ethical approval was obtained from Medical Research Ethics Committee (MREC), Reference number: KKM/NIHSEC/P19-1283(11).
- This research was supported by Fundamental Research Grant Scheme (FRGS), Reference number: FRGS/1/2018/SKK06/UIAM/02/5.

## REFERENCES

- Hamirudin, A. H., Charlton, K., Walton, K., Bonney, A., Potter, J., Milosavljevic, M., ... Dalley, A. (2014). Feasibility of implementing routine nutritional screening for older adults in Australian general practices : a mixed-methods study. *BMC Family Practice*, 15, 186. <https://doi.org/10.1186/s12875-014-0186-5>
- Noor Azam, I. N., Hamirudin, A. H., Harith, S., Md Aris, M. A., Abd Aziz, K. H., & A Rashid, N. S. (2021). Types of Nutrition Resource Kit Needed by Community Living Elderly in Malaysian Health Clinic Setting: A Qualitative Study. *Malaysian Journal of Medicine and Health Sciences*, 17(2), 217–224.
- Volkert, D., Beck, A. M., Cederholm, T., Cruz-Jentoft, A., Goisser, S., Hooper, L., ... Bischoff, S. C. (2019). ESPEN guideline on clinical nutrition and hydration in geriatrics. *Clinical Nutrition*, 38(1), 10–47. <https://doi.org/10.1016/j.clnu.2018.05.024>