



ABSTRACT

## Effectiveness of digital interventions with application program to improve nutritional knowledge, mother's behaviour, and nutritional status of children under-five: a narrative review

Madinatul Munawwaroh<sup>1</sup>, Sapja Antantanyu<sup>2</sup>, Sumardiyono<sup>3</sup>

Received 23 March 2022

Accepted 31 May 2022

Published: 31 May 2022

1. Department of Nutrition, Sebelas Maret University, Indonesia.
2. Department of Agriculture, Sebelas Maret University, Indonesia.
3. Department of Public Health, Sebelas Maret University, Indonesia.

Link to DOI:

[10.25220/WNJ.V05.S3.0032](https://doi.org/10.25220/WNJ.V05.S3.0032)

**Citation:** Munawwaroh M, Antantanyu S, Sumardiyono. Effectiveness of digital interventions with application program to improve nutritional knowledge, mother's behaviour, and nutritional status of children under-five: A narrative review. World Nutrition Journal. 2022 May 31, 5(S3): 45.



**Copyright:** © 2022 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Website :

<http://www.worldnutrijournal.org/>

### Abstract : Nutrition Virtual Symposium 2021 – Oral Presentation

**Introduction :** The problem of under-five nutrition is still a significant concern in developing countries, including Indonesia. Under-five nutritional problems are caused by multifactorial causes, therefore, nutrition education can be the key to intervention in children's nutrition problems. With the current development of technology, it will be easier to intervene in nutritional problems through digital platforms, for example, using applications. This review aimed to analyze the effectiveness of digital interventions through applications on nutritional knowledge, mother's behaviour, and nutritional status of children under-five.

**Methods :** A narrative review was conducted based on research in two databases, Pubmed and Google Scholar, which contained research based on cross-sectional studies, case-control, cohorts, and randomized controlled trials in English and Indonesian published since 2010. The keywords used are 'Nutrition Application', 'Nutrition Promotion', 'Digital Intervention', and 'Children Nutrition'. The analytical method used was descriptive.

**Results :** 118 journals were obtained from the search. Ten journals based on systematic review, randomized controlled trials, quasi experiment, and pre experiment that met the research criteria were obtained after the screening was conducted. Research that evaluated the use of applications to improve knowledge and behaviour positively impacts mothers and nutritional status of children under-five. Applications can increase the involvement and intensity of mothers in monitoring the nutritional status of their children.

### Conclusion

Digital intervention through applications has been proven to be effective in improving nutritional knowledge, mother's behaviour, and nutritional status of children under-five.

**Keywords:** applications, children under-five nutrition, e-health, m-health

#### Corresponding author:

Madinatul Munawwaroh  
Department of Nutrition, Sebelas Maret University,  
Surakarta, Indonesia  
Email: [madinatul\\_munawwaroh@student.uns.ac.id](mailto:madinatul_munawwaroh@student.uns.ac.id)