

Study protocol

**Promoting health literacy in a surgical setting: a scoping review**

Jaensson Maria <sup>1</sup>, Wångdahl, Josefin <sup>2,3</sup>, Dahlberg Karuna<sup>1</sup>

<sup>1</sup> Faculty of Health and Medicine, School of Health Sciences, Örebro University, Örebro, Sweden

<sup>2</sup> Aging Research Center, Karolinska Institutet and Stockholm University, Sweden.

<sup>3</sup> Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden.

Corresponding author: Maria Jaensson (maria.jaensson@oru.se)

**Key words:**

Health literacy, interventions, surgery

## **Background**

Health literacy is related to literacy and *entails people's knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course* (Sørensen et al., 2012). In the surgical context limited health literacy can contribute to a higher risk for surgical site infections (Theiss et al., 2022), postoperative complications (Qin, Jin, Min, Wang, & Shen, 2022; Theiss et al., 2022) and longer lengths of stay (Qin et al., 2022). Also, limited health literacy was associated with poorer postoperative recovery process in day surgical patients (Halleberg Nyman, Nilsson, Dahlberg, & Jaensson, 2018).

Research about prevalence of health literacy and consequences for the individual and society is quite extensive. But there is a paucity in research that investigates interventions that promotes health literacy and can be effective to use for a surgical setting (Chang et al., 2020).

## **Objectives**

1. To describe interventions that promote health literacy in surgical settings.
2. To identify knowledge gaps for future research.

## **Method**

A scoping review with a systematic search will be performed (Munn et al, 2018).

## **Databases**

A systematic search with the help of an experienced librarian was performed in Medline, Cinahl, Scopus and Web of Science. Manual searches from citation lists and expert knowledge will also be utilized.

## **Search terms**

Search terms related to health literacy and surgery was used with a combination with AND or OR and in full or truncated versions.

## **Limitations**

2012-2022

English language

## **Type of papers to include**

### *Inclusion criteria's:*

Peer-reviewed articles will be included.

Population: adults >17 years planned for or undergoing a surgical procedure

Interventions: interventions with the aim to improve health literacy

Outcome: health literacy

### *Exclusion criterias:*

Reviews, psychometric evaluations, protocol studies, conference abstracts.

## **Selection**

A title and abstract screening will be performed by two researchers (MJ, KD) independently. Conflicts will be solved in discussions within the research group. We will code all the potential studies from our search as 'include', exclude or maybe using the Covidence software. After title and abstract screening, fulltexts will be reviewed and coded as include or exclude. We will extract relevant information. We will use PRISMA flow diagram to present the selection process in sufficient detail. Excluded studies will be presented in a 'Characteristics of excluded studies' table.

Included studies will be reviewed with the Critical Appraisal Skills Programme (CASP) quality appraisal tool <https://casp-uk.net/>

## **Data extraction**

Data that relates to the objectives will be extracted and recorded in a data extraction form designed for this study. The following data items will be collected from all the included papers:

- Bibliographic details (lead author, title, journal, year, country of origin, full citation).
- Type of intervention (i.e education, webbased information etcetera), (if possible) effect of intervention, context/clinical setting, patients (age, gender)
- Type of HL measured (i.e., comprehensive, functional, critical and communicative etcetera)
- What definition for HL is used
- When is health literacy measured?
- How is health literacy measured ?
- Has timing and measurement been motivated by the researcher(s)
- Validity/reliability of instrument (reported or not)
- Barriars and fascilitators for promoting HL
- Knowledge gaps

## **Analysis**

Findings will be presented and summarized in text and tables.

## **Reporting**

The findings will be reported in a scientific publication.

## References

- Chang, M. E., Baker, S. J., Marques, I. C. D. S., Liwo, A. N., Chung, S. K., Richman, J. S., . . . Davis, T. C. (2020). Health literacy in surgery. *HLRP: Health Literacy Research and Practice, 4*(1), e46-e65.
- Halleberg Nyman, M., Nilsson, U., Dahlberg, K., & Jaensson, M. (2018). Association Between Functional Health Literacy and Postoperative Recovery, Health Care Contacts, and Health-Related Quality of Life Among Patients Undergoing Day Surgery: Secondary Analysis of a Randomized Clinical Trial. *JAMA Surg, 153*(8), 738-745. doi:10.1001/jamasurg.2018.0672
- Qin, P.-P., Jin, J.-Y., Min, S., Wang, W.-J., & Shen, Y.-W. (2022). Association Between Health Literacy and Enhanced Recovery After Surgery Protocol Adherence and Postoperative Outcomes Among Patients Undergoing Colorectal Cancer Surgery: A Prospective Cohort Study. *Anesthesia and Analgesia, 134*(2), 330-340.
- Sørensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., & Brand, H. (2012). Health literacy and public health: a systematic review and integration of definitions and models. *BMC Public Health, 12*(1), 1-13.
- Theiss, L. M., Wood, T., McLeod, M. C., Shao, C., Marques, I. D. S., Bajpai, S., . . . Morris, M. S. (2022). The association of health literacy and postoperative complications after colorectal surgery: A cohort study. *The American Journal of Surgery, 223*(6), 1047-1052.