

Special Article

A Scoping Review Protocol of Evidence on Patient Participation in Surgical Care

Petros Kolovos, RN, MSc, PhD

Assistant Professor, Laboratory of Integrated Health Care, Department of Nursing, University of Peloponnese, Tripolis, Greece

Vasiliki Saligara, RN

Postgraduate Student, Department of Nursing, University of Peloponnese, Tripolis, Greece

Georgia Aggeliki Athanasopoulou, RN, MSc, PhD (c)

General Hospital of Messinia, Kalamata and Department of Nursing, University of Peloponnese, Tripolis, Greece

Maria Gouzou, RN, MSc, PhD

General Hospital of Messinia, Kalamata and Department of Nursing, University of Peloponnese, Tripolis, Greece

Correspondence: Petros Kolovos, Assistant Professor in Surgical Nursing, Laboratory of Integrated Health Care, Department of Nursing, University of Peloponnese, Tripolis, Greece E-mail: pkolovos@uop.gr

Abstract

Background. Patient participation is considered being essential and a key element of patient-centered and high quality of care. As surgical care has a pivotal role to health and welfare improvement, it is of great importance to examine how the concept of patient participation is evident across the entire continuum of perioperative care provided for patients undergoing surgical procedures, including the post-discharge period. Mapping evidence based clinical directions should be established in order patient participation to be considered a reality rather than rhetoric in surgical care.

Aim. The aim of this scoping review is to explore and synthesize the current evidence on patient participation in surgical care.

Methodology. The scoping review will be performed by Arksey and O'Malley methodology framework. The search strategy will be performed to the databases PubMed, Scopus and the Google Scholar based on predefined eligibility criteria. A screening process will guide study selection. Two independent reviewers will perform the process and a third one in case of disagreements. Eligible full texts will be analyzed using descriptive and thematic analysis.

Results. The proposed scoping review will synthesize the nature of the existing evidence on patient participation in surgical care and describe the facilitators and barriers of that participation. Moreover, it will contribute to a better understanding of the clinical applications of participation for surgical patients. The results from this review will add information and knowledge to support the development of clinical directions that the optimal level of participation can be addressed and greater patient participation in surgical settings can be facilitated from both care providers and organizations. Finally, further research opportunities will be hopefully stimulated.

Conclusions. Results from this review will provide a knowledge synthesis and a unique insight into the aspects of participation for patients undergoing surgery, mapping an effective framework for implementation in surgical settings.

Keywords: Patient participation, Patient engagement, Surgical care, Perioperative care, Post-discharge, Scoping review protocol

Introduction

The concept of patient participation has gained much popularity the recent decades worldwide. It

constitutes a patient centered philosophical approach to care and a valued goal in the formulation of modern healthcare policy

agendas, originating from sociopolitical changes and movements (Kolovos & Sourtzi 2007). Participation is stressed as a key component to the provision of person-centered care based on individual needs, values and preferences (Mead & Bower 2000), which finally empower patients to actively and effectively participate in their own care (Morgan & Yoder 2012). Patient participation seems to have an impact on the quality of the care provided, on patient's health outcomes and safety, as well as on the establishment of an effective communicative interchange between patients and care providers (Weingart et al. 2011; WHO 2013; Vaismoradi, Jordan & Kangasniemi 2015; Castro et al. 2016).

Patient participation remains a multifaceted concept in its nature causing difficulties in achieving it in practice, while challenging at the same time (Sahlsten et al. 2008; Castro et al. 2016, Nilsson, From & Lindwall 2018; Hartford Kvæl et al. 2018); studies investigating its applicability in several care settings – such as hospital care (Kolovos et al. 2015), critical care (Falk, Schandl & Frank 2018), mental health (Malfait et al. 2017), rehabilitation (Kankkunen, Kreuter & Pietila 2018), nursing home (Johnson, Popejoy & Radina 2010) and health policy (Souliotis et al. 2018) - are all cited in the literature providing a growth body of the evidence based relevant knowledge. All these evidence support that the care setting has an impact on how the concept of participation interpreted and thus implemented in practice (Street et al. 2017). This drives the conclusion that more light should be spilled in each one setting in order the clinical efficacy of the concept of patient participation to be ensured and for further research.

In an era that a wide range of health related conditions across the life-course are treated surgically, surgical care remains an indispensable part of the delivery of health care services and has a pivotal role to health and welfare improvement (WHO 2014; Meara et al. 2015). Moreover, as the population is aging worldwide, an increasing demand for surgical services is expected for elderly (Liu et al. 2004). The surgical context is characterized by special challenges and requirements of the provision of an integrated perioperative care. Due to the technological investments, the advances in surgical practice and pharmaceutical care, new treatment options for surgical patients have emerged so that the process of information

exchange and a shared decision making have become a prerequisite in order for a tailored treatment option and safety to be achieved. Matsen et al. (2020) in their study assessed the association between performance on patient centeredness and performance on patients' role in decision making process among surgeons, highlighting the importance of patient's participation and providers' responsibility to engage patients in surgical decisions. In addition, as the policy trends reduce the hospital stay, surgical patients should appropriately be prepared and participate in their care process. Yun et al. (2020) provided a model based on four context specific drivers and a rescue one (self-efficacy, resilience, enabling agency, family/social support) with the aim to improve surgical patient engagement to their care postoperatively. In another recent study, an intervention to support patient participation in the recovery period after total knee replacement surgery was tested for efficacy and the results were promising; patient participation after surgery was enhanced, pain intensity and length of hospitalization were also reduced and patients stated more satisfied (McDonall et al. 2019). Similar studies, investigating patient participation in surgical settings and strategies that encourage greater autonomy for the patients undergoing surgery and enhance self care activities during hospitalization and after discharged (rehabilitation setting, home care), should be further examined and analyzed.

The purpose of the current review is to explore how the concept of patient participation is documented in the care provision for patients with a surgical experience. Specifically, this study based on a scoping review methodology (Arksey & O'Malley 2014), aims to examine the available quantitative and qualitative evidence and synthesize the findings on patient participation across the entire continuum of perioperative care provided for patients undergoing surgical procedures, including care after discharge from hospital. Mapping evidence based clinical directions in the surgical settings should be established in order patient participation to be considered a reality rather than rhetoric in surgical care.

Methodology

A scoping review methodology proposed by Arksey and O'Malley (2005) was used to guide the development of that study protocol. Levac,

Colquhoun and Brien (2010) recommendations and the Joanna Briggs Institute (2015) approach of evidence synthesis were also combined. Based on this framework, the following stages should be addressed in conducting the scoping review: (1) identifying the research question; (2) identifying relevant studies; (3) selecting studies; (4) charting the data; (5) collating, summarizing and reporting the results and (6) consultation (optional stage, not included in the current review protocol).

Stage 1: Defining the research question

The research question developed to guide this scoping review is defined as:

- *What quantitative and qualitative evidence is available in the current literature that document patient participation in surgical care?*

The research question addresses the Population, Concept and Context (PCC) elements of the adopted strategy (Joanna Briggs Institute 2015) and highlights the focus of the proposed review. The *population* of the current review is adult patients undergoing a surgical procedure, inpatients and/or outpatients. Patient participation constitutes the *concept* and the main query is how the concept of participation has been implemented during the entire continuum of perioperative care for surgical patients, including care provision after discharge from hospital, which, finally, constitutes the *context* of this study. As the length of hospital stay is shortened and part of the care postoperatively is shifted to patients and their families, post hospitalization period is also included in the current research strategy.

Stage 2: Identifying relevant studies

The eligibility criteria, electronic databases, keywords and search strategy were identified in this stage in consultation with the research team.

Identification of the studies to be included in the synthesis will be achieved by the following criteria:

- adult patients undergoing surgical procedures
- elective surgeries only, due to the acute ones have different care requirements
- evidence about the participation of patients in the care process across the entire continuum of the care provided for

surgical patients (perioperative care and post discharge period)

- setting: hospital, outpatient department or clinic, rehabilitation center, community care
- study designs with a quantitative and a qualitative orientation, mixed methods studies
- published articles in peer-review journals, full text in English language the period from January 2014 to December 2019.

Electronic databases

The electronic databases PubMed/Medline and Scopus will be systematically searched for the published studies relevant to the research question of this review. Moreover, Google Scholar will also be targeted searched to include all the relevant to the current review evidence. Finally, hand search of the reference lists included in the study will also be scanned for relevant publications.

Keywords and search strategy

The research team will determine the keywords which are relevant to the research question. The search of the above databases will be undertaken using a combination of the following terms:

- patient participation, patient involvement, patient engagement, patient-centered care
- surgical care, perioperative care, preoperative care, intraoperative care, postoperative care, post-hospitalization, post discharged, rehabilitation
- surgical patients, patients undergoing surgical procedures, surgery
- decision making

Terms will be searched as keywords in the title and abstract of the studies selected, as well as subject headings for the searching articles. The search strategy will be guided by the Boolean operators 'AND' and 'OR', as needed for each one database. Search results will be then downloaded and documented into an electronic folder. Relevant studies, which are in the list of the references of the publications selected, will be included in the synthesis as well.

Stage 3: Selecting studies

The collection of the studies will be guided from the eligibility criteria the research team has developed and are described above. Initially, the

researchers will conduct a pilot test on a convenience sample of five citations retrieved in the initial search in each one database. Agreement between the reviewers will also be tested. The criteria will be reviewed and further clarified in this stage if the researchers consider it necessary to increase the reliability of the screening process and thus improve the selection of all the relevant articles in the study. Two independent investigators will perform the literature search in two levels of the screening process. A measurement of the inter-rater agreement between reviewers will be calculated at both the screening levels.

Level 1: titles and abstracts of the citations retrieved during the search strategy on all databases included will be screened by two reviewers to identify their inclusion in the study according to the identified criteria. These articles will be then included for further text screening in the second level.

Level 2: undergoing a full-text review according to the stated criteria the selected articles will be screened for the final inclusion in the study. In case of disagreements between the reviewers, further discussion with a third reviewer is aimed to achieve consensus during this level. The reviewer has to be knowledgeable in the scientific field of the research question. Studies that excluded at the end of the screening process will be recorded in an excel spreadsheet explaining for not included in the study.

Stage 4: Charting the data

During this stage, a form developed by the research team will be used for data extraction from the included studies. The data extraction form is designed to cover all the relevant to the research question information of the retrieved studies and includes the following key items:

- author (s), year of publication, country of origin
- aim of the study/ additional research questions
- research design, methodology/methods
- study population and sample size,
- care setting
- data collection and data analysis,
- main findings,
- and main conclusions.

Prior to mapping the data, the extraction form will be piloted with the first five articles. Modifications will be performed where

necessary. Charting will be including all these characteristic but the extraction process is not limited only to these (Levac, Colquhoun & Brien 2010). Consultation with reviewers may lead to further categories of interest until the completion of the search, since they become more familiar with the source results (Joanna Briggs Institute 2015). Data abstraction for all included studies will be performed by two independent reviewers. In case of discrepancies, further discussion between the reviewers or with a third one will ensure accuracy of the information capturing. The data will be finally entered into Microsoft Excel software. Validation and coding will be performed by the research team. Data will be graphically charted where possible.

Stage 5: Collating, summarizing and reporting the results

At this stage, a detailed description of the review decision process according to PRISMA flowchart will be used for data presentation (Liberati et al. 2009). The eligible full texts of the current scoping review will be analyzed using descriptive analysis and thematic analysis. Conceptual categories and key information of the included studies will be described and map the way the concept of participation for surgical patients has been implemented and experienced in perioperative care and the post hospitalization period. Tables and charts will be used for data presentation. The synthesis of the results will provide an overview of the extent and nature of patient participation in the surgical context, describe barriers and enablers of participation and, finally, identify potential areas of future research and gaps in the literature related to the research question.

Results and Discussion

Since patient participation is acknowledged desirable and beneficial in the consumercentric formulation of modern health care system, it is essential to promote and facilitate a person-centred model of the care provided for patients with a surgical experience. Thus, there is a need for a greater insight into how the concept of participation is documented in perioperative care and the post-discharge period for patients undergoing surgical procedures.

Scoping review methodology is well established in the literature and is used to guide the current review (Colquhoun et al. 2014; Khalil et al. 2016; Peterson et al. 2017). Therefore, the

proposed scoping review will synthesize the nature of the existing evidence of patient participation in surgical care from the current literature and explore facilitators and barriers of that participation; moreover, it will contribute to a better understanding of the conceptualization and clinical applicability of participation in the care process for the patients with a surgical experience.

As a result of this study, information and knowledge would be added to support the development of a framework that the optimal level of patient participation can be achieved and greater patient participation in surgical settings can be facilitated from both health care personnel and care organizations. Finally, research opportunities to be applied in the future will be hopefully stimulated.

In the published literature there is currently no scoping or systematic review on how the concept of patient participation is evident in surgical care provision. It is hoped that the proposed scoping review aims to address this gap and will be beneficial, by mapping the available evidence and evaluating whatever a systematic review would be valuable for future research.

Limitations

One limitation of the current review protocol is the lack of consistency in the concept of patient participation terminology, while at the same time there are related concepts that are used interchangeably in the literature. Studies answering the research question may not to be included for this reason. In addition, due to the results will be retrieved only from three databases, the search strategy may omit relevant studies. Nonetheless, a balance is feasibility to be ensured with the breadth and the comprehensiveness with the current review protocol.

Ethics and Dissemination

The current protocol study is based on the scoping review methodology and an ethical approval is not required. The dissemination strategy includes submission of a manuscript for publication in a peer-review journal and abstract submission for presentation at national and/or international scientific conferences. The results from the proposed scoping review will inform healthcare providers and policy makers with the aim to enhance participation for surgical patients in the entire continuum of the surgical care.

Moreover, to encourage organizational changes that optimize participation in order to achieve individualized and qualitative care provision.

Conclusions

As policy agendas have moved towards a patient-centered model of the care provided and great attention is given on patient's role in the care process, the proposed scoping review will provide a knowledge synthesis and an unique insight into the aspects of participation for patients undergoing surgery, mapping an effective framework for implementation in surgical settings, since participation seems to have an impact on both patients' health postoperative outcomes and the quality of the care provided. Apart from the implications for clinical practice, implications for further research also aim to be addressed with the proposed scoping review.

References

- Arksey H. & O'Malley L. (2005) Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* 8 (1): 19-32.
- Castro EM., Van Regenmortel T., Vanhaecht K., Sermeus W. & Van Hecke A. (2016) Patient empowerment, patient participation and patient-centeredness in hospital care: a concept analysis based on a literature review. *Patient education and counseling* 99 (12): 1923-1939.
- Colquhoun HL., Levac D., O'Brien KK., Straus S., Tricco AC., Perrier L., Kastner M., Moher D. (2014) Scoping reviews: time for clarity in definition, methods, and reporting. *Journal of Clinical Epidemiology* 67 (12): 1291-1294.
- Falk AC., Schandl A. & Frank C. (2019) Barriers in achieving patient participation in the critical care unit. *Intensive and Critical Care Nursing* 51: 15-19.
- Joanna Briggs Institute. (2015) Methodology for JBI Scoping Reviews Joanna Briggs Institute Reviewers' Manual. Available at: http://joannabriggs.org/assets/docs/sumari/Reviewers-Manual_Methodology-for-JBIScoping-Reviews_2015_v2.pdf [Accessed December 10, 2019]
- Johnson R., Popejoy LL. & Radina EM. (2010) Older Adults' Participation in Nursing Home Placement Decisions. *Clinical Nursing Research* 19 (4): 358-375.
- Hartford Kvæl LA., Debesay J., Langaas A., Byeb A. & Bergland A. (2018) A Concept Analysis of Patient Participation in Intermediate Care. *Patient Education and Counseling* 101:1337-1350.
- Kankkunen P., Kreuter M. & Pietila AM. (2018) Participation in primary healthcare—using a

- Finnish version of the patient participation in rehabilitation questionnaire. *International Journal of Caring Sciences* 11(3): 1423-1437.
- Khalil H., Peters M., Godfrey CM., Mcinerney P., Soares CB. & Parker D. (2016) An evidence-based approach to scoping reviews. *Worldviews on Evidence-Based Nursing* 13 (2): 118–123.
- Kolovos P., Kaitelidou D., Lemonidou C., Sachlas A. & Sourtzi P. (2015) Patient Participation in Decision Making During Nursing Care in Greece—A Comparative Study. *Nursing forum* 50 (3): 147-157.
- Kolovos P. & Sourtzi P. (2007) Participation in health care. *Nosileftiki* 46 (1): 38–47.
- Levac D., Colquhoun H. & O'Brien KK. (2010) Scoping studies: advancing the methodology. *Implementation Science* 5: 69.
- Liberati A., Altman D. G., Tetzlaff J., MC., Gøtzsche PC., Ioannidis, JP., Clarke M., Devereaux PJ., Kleijnen J. & Moher D. (2009) The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *Annals of internal medicine* 151(4): W-65–W-94.
- Liu JH., Etzioni DA., O'Connell JB., Maggard MA. & Ko CIY. (2004) The Increasing Workload of General Surgery. *Archives of Surgery* 139 (4): 423-428.
- McDonall J., De Steiger R., Reynolds J., Redley B., Livingston PM., Hutchinson AF. & Botti M. (2019) Patient activation intervention to facilitate participation in recovery after total knee replacement (MIME): a cluster randomised cross-over trial. *BMJ Quality & Safety* 28:782-792.
- Malfait S., Vandewalle J., Eeckloo K., Colman R. & Van Hecke A. (2017) The Development and validation of the patient participation culture tool for inpatient psychiatric wards (PaCT-PSY). *Archives of psychiatric nursing* 31(5): 463-469.
- Matsen CB., Ray D., Kaphingst KA., Zhang C., Presson AP. & Finlayson SR. (2020) Patient Satisfaction With Decision Making Does Not Correlate With Patient Centeredness of Surgeons. *Journal of Surgical Research* 246:411-418.
- Mead N. & Bower P. (2000) Patient-centredness: a conceptual framework and review of the empirical literature. *Social Science & Medicine* 51 (7): 1087–1110.
- Meara JG., Leather AJ., Hagander L., Alkire BC., Alonso N., Ameh EA., ... & Mérisier ED. (2015) Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development. *The Lancet* 386(9993): 569-624.
- Morgan S. & Yoder LH. (2012) A concept analysis of person-centered care. *Journal of Holistic Nursing* 30 (1): 6–15.
- Nilsson M., From I. & Lindwall L. (2018) The significance of patient participation in nursing care – a concept analysis. *Scandinavian Journal of Caring Sciences* 33 (1): 244-251.
- Peterson J., Pearce PF., Ferguson LA. & Langford CA. (2017) Understanding scoping reviews: Definition, purpose, and process. *Journal of the American Association of Nurse Practitioners* 29 (1): 12-16.
- Sahlsten MJ., Larsson IE., Sjostrom B. & Plos KA. (2008) An analysis of the concept of patient participation. *Nursing Forum* 43 (1): 2-11.
- Souliotis K., Peppou LE., Agapidaki E. & Tzavara C. (2018) Health Democracy Index: Development and Validation of a Self-Reported Instrument for Measuring Patient Participation in Health Policy. *Frontiers in public health* 6: 1-8.
- Street Jr RL., Volk RJ., Lowenstein L. & Michael Fordis JrC. (2017) Engaging patients in the uptake, understanding, and use of evidence: Addressing barriers and facilitators of successful engagement. *Patient Education and Counseling* 100:4.
- Vaismoradi M., Jordan S. & Kangasniemi M. (2015) Patient participation in patient safety and nursing input – a systematic review. *Journal of Clinical Nursing* 24 (5-6): 627-639
- Yun PS., MacDonald CL., Orne J., Gutierrez-Meza D., Buentello G., Street R., Aanand DN. & Suliburk JW. (2020) A Novel Surgical Patient Engagement Model: A Qualitative Study of Postoperative Patients. *Journal of Surgical Research* 248:82-89.
- Weingart SN., Zhu J., Chiappetta L., Stuver SO., Schneider EC., Epstein AM., David-Kasdan JA., Annas CL., Fowler FJ., JrWeissman JS. (2011) Hospitalized patients' participation and its impact on quality of care and patient safety. *International Journal for Quality in Health Care* 23 (3): 269-277 DOI:10.1093/intqhc/mzr002
- World Health Organization. (2013) Exploring patient participation in reducing health-care-related safety risks. Available at: <http://www.euro.who.int/en/publications/abstracts/exploring-patient-participation-in-reducing-health-care-related-safety-risks> [Accessed December 10, 2019]
- World Health Organization. (2014). Strengthening emergency and essential surgical care and anaesthesia as a component of universal health coverage. Available at: http://apps.who.int/gb/ebwha/pdf_files/EB136/B136_27-en.pdf [Accessed December 10, 2019]