STRATEGY TO PROMOTE PATIENT CENTERED CARE PCC FOR IMPROVING PATIENT SATISFACTION: A LITERATURE REVIEW

Wahyuni Wahyuni 1, Mira Triharini 1*, Eka Mishbahatul Mar’ah Has 1

1 Faculty of Nursing, Airlangga University, Surabaya, Indonesia

*Correspondence:
Mira Triharini
Faculty of Nursing, Airlangga University, Surabaya, East Java Province, Indonesia
Mulyorejo Road, Surabaya, East Java Province, Indonesia - 60115
Email: mira-t@fkp.unair.ac.id

Abstract
Background: Patient satisfaction is playing an increasingly important role in care-quality reforms and healthcare delivery in general. Patient dissatisfaction with nursing services was still a problem in Indonesia and in other developing countries. Patient Centered Care (PCC) as one of the six dimensions of improving the quality of care.

Objectives: The purpose of this study aimed to analyse Strategy to Promote PCC for Improving Patient Satisfaction.

Design: This study using systematic review design refers to The Center for Review and Dissemination and the Joanna Briggs Institute Guideline.

Data Sources: Search for articles was conducted from 14 December 2020 to 28 April 2021 by accessing four electronic databases (Scopus, PubMed, ProQuest, Sage). The article year is limited from 2015-2021. Keywords: “Strategy” OR “Promote” OR “Intervention” AND “Patient Centred Care” OR “Patient Care Management” AND “Patient Satisfaction” OR “Patient Acceptance”.

Review Methods: Assessing the quality of articles using the JBI Critical Appraisal Tool and PRISMA checklist as a guide in article screening.

Results: A total of 15 article were analyzed according to inclusion criteria. The selected article is divided in five broad themes about strategy to promote patient centered care. The five broad themes are enhanced communication (n=4), promoting patient participation (n=4), emotional support (n=2), intervention to enhanced patient centered care (n=3) and organizational culture (n=2).

Conclusion: There are 5 strategies to promote patient centered care for improving patient satisfaction. Five patient centered care strategies to improve patient satisfaction involve enhance communication, promoting patient participation, emotional support, intervention to enhanced patient centered care and organizational culture.

Keywords: Patient Centered Care, Patient Satisfaction, Person-Centered Handover, Patient Centered-Communication.
INTRODUCTION

Patient satisfaction is playing an increasingly important role in care-quality reforms and healthcare delivery in general. Patient satisfaction has been identified as the way forward to improve health, reduce costs and implement reform. Hospitals are therefore refocusing healthcare delivery and organisational policies towards patients to improve the quality of care. (Mirzad, Cramm and Nieboer, 2019). Patient dissatisfaction with nursing services was still a problem in Indonesia and in other developing countries.

Patient satisfaction data in one general hospital in Indonesia shows that 70% of patients were less satisfied with the nursing services provided (Hafid 2014 dalam Widiasari, Handiyani and Novieastari, 2019). In addition, data from a hospital in an ASEAN country in 2016 showed that patient satisfaction was 79%, while the patient satisfaction standard set was > 80% with a complaint rate of 4–5 cases / month (Klaipetch, 2016 dalam Widiasari, Handiyani and Novieastari, 2019).

Patient satisfaction is one indicator of the quality of service or quality of service provided by health workers. The Institute of Medicine (IOM) identified PCC as one of the six dimensions of improving the quality of care (Kohn LT, 1999 dalam Mirzad, Cramm and Nieboer, 2019). Patient centered care is increasingly considered as an integral component of quality of care. Patient centered care defined as healthcare that establishes a partnership among practitioners, patients, and their families (when appropriate) to ensure that decisions respect patients’ wants, needs, and preferences and that patients have the education and support they need to make decisions and participate in their own care ( Shaller, 2007 dalam Mirzad, Cramm and Nieboer, 2019).

Previous research in the Netherlands about the importance of PCC and co-creation care on satisfaction with care, physical condition, and social well-being in multi-morbid patients in primary care settings, shows that PCC and co-creation care were associated with satisfaction with care, physical condition, and well-being in a multi-morbid patient in a primary care setting. If treatment is adjusted to patient needs and pays attention to patient-centered care and co-creation care, it can produce better output (Kuipers, Cramm and Nieboer, 2019). Another study about the impact of patient centeredness on patient satisfaction and treatment outcomes in medical rehabilitation in German showed the relevance of patient centeredness to patient satisfaction and treatment outcomes (Plewnia, Bengel and Körner, 2016).

Based on the background, it can be seen that patient satisfaction is related to PCC, so it can be concluded that one of the ways to increase patient satisfaction is through the optimal implementation of PCC. The optimal implementation of PCC requires several strategies. The purpose of this systematic review is to find strategy to promote patient centered care for improving patient satisfaction.

METHODS

Design

A systematic review was conducted as a comprehensive and synthesis of relevant studies about strategy to promote patient centered care for improving patient satisfaction. The protocol in this systematic review refers to The Center for Review and Dissemination and the Joanna Briggs Institute Guideline as a guide in assessing the quality of the study. Systematic reviews will be evaluated using the PRISMA checklist to determine the selection of studies that have been identified.

Search Methods

Literature search strategy using 4 databases; Scopus, PubMed, ProQuest, Sage. The search was carried out from 14 December 2020 to 28 April 2021 to identify relevant research. The PICOS question (P = population, I = intervention, C = comparators, O = outcomes, S = study type) format was used for formulating the research question. We can see in table 1.
The boundaries of the review question were defined through the development of inclusion and exclusion criteria using the PICOS format. Studies were included for review if they met the following inclusion criteria: All types of cross sectional, cohort study, mixed method study, and qualitative study conducted in strategy to promote PCC; Outcomes related to the patient satisfaction.

Phrase searching used is the boolean logic used is "And", and "Or". In addition, the search process for articles is limited to article journals and in English and the year limitation focuses on articles published in the last 5 years. Keywords in this Systematic review are adjusted to Medical Subject Heading (MeSH) Pubmed. The search strategy was established as: (strategy OR promote OR intervention) AND (“patient centered care” OR “patient care management”) AND (“patient satisfaction” OR “patient acceptance”).

Search Outcome
Nine hundred and five publications were found from the database searches (Figure 1), publications duplicated (n=558) were removed from the results, leaving a total of 347 records. Researchers assessed and screened the title (n = 347), abstract (n = 114) and full text (n = 52) of each publication irrelevant of inclusion criteria (Table 1). We found 52 full-text articles were eligible to conduct a systematic review and 15 articles include in synthesis of systematic review. Researchers defined common reasons for exclusion criteria during the literature screening process, including irrelevant study type, no complete explanation of strategy to promote PCC to improve patient satisfaction, and grey literature.

Quality Appraisal
The JBI Critical Appraisal was used to assess the methodology’s quality in each study (n = 15). The checklist for studies suitable had various assessment criteria. Criterion assessment was given a score of ‘yes’, ‘no’, ‘unclear’ or ‘not applicable’. Every criterion with score ‘yes’ was given one point and, following this, each study score was calculated. Researchers performed critical appraisal to assess the eligible studies. If the score of the study was at least 50% during the critical appraisal, which was the predetermined cut-off point agreed by both researchers, studies were included in the review. Researchers excluded low-quality studies to avoid compromising the validity of the results and recommendations of the review. In the last screening, fifteen studies reached a score higher than 50% and were ready to do data synthesis. Unfortunately, due to the risk of bias assessment, nine studies were excluded.

Table 1. The PICOS Format

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Inclusion</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>Healthcare and patient in Hospital and Community</td>
<td>No Exclusion</td>
</tr>
<tr>
<td>Issue of Interest</td>
<td>Patient centered care strategy to improve patient satisfaction</td>
<td>Article did not focus to strategy PCC to improve patient satisfaction</td>
</tr>
<tr>
<td>Comparators</td>
<td>No comparator</td>
<td></td>
</tr>
<tr>
<td>Outcomes</td>
<td>Patient centered care strategy to improve patient satisfaction</td>
<td>Not described Patient centered care strategy to improve patient satisfaction</td>
</tr>
<tr>
<td>Study Design and publication type</td>
<td>Cohort Study, Cross Sectional, Randomized Control Trial, Qualitative study</td>
<td>Review article</td>
</tr>
<tr>
<td>Publication years</td>
<td>Post-2015</td>
<td>Pre-2015</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
<td>Language other than English</td>
</tr>
</tbody>
</table>
Figure 1. Study Selection Flow Diagram.

Data Abstraction
The relevant data and the review question was extracted, including author, country, year, setting, theoretical framework, research aim, the conceptualization of cultural competence, educational content, study design, sample size, sampling method, description of participants, reliability, and validity, measurement instruments, analysis and statistical techniques, outcomes related to cultural competence, and the analysis of the results.

Data Analysis/Synthesis
A narrative approach with the primary goal to aggregate evidence on the strategy to promote PCC and develop a coherent textual narrative on commonalities and differences between studies was used to synthesize the data in this systematic review.
RESULTS

The results of the article analysis found that 7 studies were Randomized Control Trials, 5 cross-sectional studies and 3 qualitative studies. We can see the flow diagram for study selection in the figure 1.

The studies included in this systematic review article consisted of 6 studies in the USA, 3 studies in the Sweden, 2 studies in the Germany, 1 studies in the Ghana, 1 studies in the Israel, 1 Studies in the Portugal, and 1 studies in the Britania Raya. The time of research was conducted between 2015-2021. Strategy to promote patient centered care is based on the result of study conducted, it was found that there are 5 strategies. Five patient centered care strategies to improve patient satisfaction involve enhance communication, promoting patient participation, emotional support, intervention to enhanced patient centered care and organizational culture.

Based on the result of study conducted there are 4 studies that discuss strategies for enhance communication to promote patient centered care namely communication training, CareShare (collaborative communication system), patient-centered communication, Interprofessional Teamwork Innovation Model to promote communication (Li et al., 2018; Maatouk-Bürmann et al., 2016; Paiva et al., 2019; Gall et al., 2020). In addition, there are 4 studies of promoting patient participation namely patient-centered toolkit (PCTK), person-centred handover, Video-Otoscopy (Dalal et al., 2016; Kullberg et al., 2017; Rimon et al., 2015; Kullberg et al., 2019). There are 2 studies about emotional support to promote patient centered care (Poleshuck et al., 2020; Rathert et al., 2015). There are 3 studies that discuss about interventions to increase patient centered care involve the PreProCare intervention, community-based enhanced care intervention (CECI), a computer-mediated intervention (IALOG) (Jayadevappa et al., 2019; Abboah-Offei et al., 2020; Priebe et al., 2015). There are 2 studies discuss about organizational culture as a strategy to promote patient centered care (Wick et al., 2015; Moore et al., 2017).

Respondent in this study were health care professional and patient. This study has mentioned a strategy to promote patient centered care for improving patient satisfaction, with a total of 642 professional health care and 2848 patient. Participants for research with randomized control trials research ranging 60-743 patient and 42-49 professional health care, cross-sectional 116-496 patient and 500 professional healthcare, qualitative study 8-12 patient and 18-33 professional health care. The result can be seen in table 2.

<table>
<thead>
<tr>
<th>No.</th>
<th>Author, year, country</th>
<th>Study design</th>
<th>Summary of result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>(Li et al., 2018) USA</td>
<td>Design: Randomized Control Trial Sample: 302 respondents Variables: Interprofessional Teamwork Innovation Model (ITIM), communication and patient-centered, coordinated care Instrument/intervention: Interprofessional Teamwork Innovation Model Analysis: SAS V.9.4</td>
<td>The ITIM approach facilitates a collaborative environment in which patients and their family caregivers, physicians, nurses, pharmacists, case managers and others work and share in the process of care.</td>
</tr>
<tr>
<td>2.</td>
<td>(Poleshuck et al., 2020) USA</td>
<td>Design: Randomized Control Trial Sample: 200 respondents</td>
<td>Personalized Support for Progress and Enhanced Screening and</td>
</tr>
<tr>
<td>Variables: Two Patient-Centered Interventions, Women with Unmet Social Needs</td>
<td>Referral are effective Women with Unmet Social Needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrument/intervention: Personalized Support for Progress and Enhanced Screening and Referral</td>
<td>Analysis: Cohen’s, general linear model approach (analysis of covariance)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **(Kullberg et al., 2019)**
   - **Sweden**
   - Design: Cross sectional
   - Sample: 120 adult patients with cancer
   - Variables: Patient satisfaction, person-centered handover
   - Instrument/intervention: The EORTC INPATSAT-32 the Individualized Care Scale (ICS)
   - Analysis: univariate dan multivariate regression model
   - Person-centered handover seems to have sustainable positive effects on important outcomes regarding patient satisfaction. A novel finding is the positive impact on nurses’ information provision, indicating that PCH can facilitate effective information exchange between patients and nurses.

4. **(Maatouk-Bürmann et al., 2016)**
   - **Germany**
   - Design: Randomized Control Trial
   - Sample: 42 physicians 410 patients
   - Variables: Patient-centered communication
   - Instrument/intervention: communication training
   - Analysis: The Roter Interaction Analysis System
   - The results indicated that our structured and time-efficient communication skills training significantly improved the patient centeredness of experienced physicians in routine clinical practice. This supports the idea that patient-centered communication skills can effectively be learned and/or improved on a general level.

5. **(Kullberg et al., 2017)**
   - **Sweden**
   - Design: Cross sectional
   - Sample: 116 patients
   - Variables: Patient satisfaction, person-centered handover
   - Instrument/intervention: The EORTC IN-PATSAT32, implementation of person-centered handover
   - Analysis: Multivariate regression analysis
   - Minor differences in patient satisfaction were found between the intervention ward and the control wards after implementing person-centered handover. The subscale related to the exchange of information between caregivers was improved in the intervention ward at the second point of measurement while no other changes in patient satisfaction were detected.

6. **(Jayadevappa et al., 2019)**
   - **USA**
   - Design: Randomized Control Trial
   - Sample: 743 patients
   - Variables: Patient-centered preference assessment, satisfaction with care
   - Instrument/ intervention: The PreProCare intervention, Patient Satisfaction Questionnaire (PSQ-18)
   - Analysis: x² and t tests
   - Patient-centered PreProCare (Preferences for Prostate Cancer Care) intervention improved satisfaction with care, satisfaction with decision, reduced regrets, and aligned treatment choice with risk category

7. **(Abboah-Offei et al., 2020)**
   - **Ghana**
   - Design: Randomized Control Trial
   - Sample: 60 respondents
   - The feasibility testing demonstrates that the CECI is feasible and acceptable for PLWH
<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Variables</th>
<th>Instrument/intervention</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. (Rimon et al., 2015) Israel</td>
<td>Randomized Control Trial</td>
<td>60 respondents</td>
<td>Video-otoscopy, patient-centered care</td>
<td>Video-Otoscopy to conventional otoscopy</td>
<td>VO was found to encourage patient-centered care and parental satisfaction with otoscopy. There is a significantly higher positive correlation between patient-centeredness and parental satisfaction when VO is used. VO is an affordable, easy to use and well-accepted technology.</td>
</tr>
<tr>
<td>9. (Paiva et al., 2019) Portugal</td>
<td>Qualitative study</td>
<td>Patients (n = 12) and providers (n = 33)</td>
<td>Patient-centered communication</td>
<td>Semi structured set of questions that were aimed at capturing the experiences in the communication between patients living with type 2 diabetes and their providers</td>
<td>Improvements in patient-centered communication depend on fostering the patient-provider relationship, patients’ participation and involvement, and training providers’ communication skills.</td>
</tr>
<tr>
<td>10. (Gall et al., 2020) Germany</td>
<td>Qualitative study</td>
<td>Eight residents, eight significant others, and six caregivers participated in the study</td>
<td>Self-organizing knowledge management, the quality of person-centered dementia care</td>
<td>Qualitative interviews and focus groups afterward</td>
<td>Self-organizing knowledge management systems such as CareShare can assist in facilitating person-centered care. Based on our results, we hypothesis that such knowledge organization improves the quality of person-centered care.</td>
</tr>
<tr>
<td>11. (Dalal et al., 2016) USA</td>
<td>Cross sectional</td>
<td>496 respondents</td>
<td>A web-based, patient-centered toolkit, engage patients and caregivers</td>
<td>we have observed modest use of an acute care patient portal by patients and care partners as a platform for participating in the plan of care and communicating with providers.</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Authors, Year, Country</td>
<td>Design</td>
<td>Sample</td>
<td>Variables</td>
<td>Instrument/intervention</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------</td>
<td>--------</td>
<td>--------</td>
<td>-----------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>12.</td>
<td>(Priebe et al., 2015) Britannia Raya</td>
<td>Randomized controlled trial</td>
<td>49 clinicians and 179 patients</td>
<td>Patient-Centered Assessment, Solution-Focused Approach (DIALOG+) for Patients with Psychosis</td>
<td>A computer-mediated, intervention (DIALOG)</td>
</tr>
<tr>
<td>13.</td>
<td>(Rathert et al., 2015) USA</td>
<td>Cross sectional</td>
<td>142 respondents</td>
<td>Patient perceptions, patient-centered care</td>
<td>Picker Inpatient Survey</td>
</tr>
<tr>
<td>14.</td>
<td>(Wick et al., 2015) USA</td>
<td>Cross sectional</td>
<td>500 participants</td>
<td>Organizational Culture, Patient-Centered Outcomes</td>
<td>Comprehensive Unit Based Safety Program</td>
</tr>
<tr>
<td>15.</td>
<td>(Moore et al., 2017) Sweden</td>
<td>Qualitative study</td>
<td>18 participants</td>
<td>Barriers and facilitators to the implementation of person-centered care</td>
<td>A semi structured interview guide</td>
</tr>
</tbody>
</table>
DISCUSSION

There are 5 strategies to promote patient centered care for improving patient satisfaction, namely enhance communication, promoting patient participation, emotional support, intervention to enhanced patient centered care and organizational culture. The first strategy is enhanced communication. Communication and Teamwork are essential elements of achieving the quadruple aim through safe and effective healthcare systems (Li et al., 2018). The Institute of Medicine suggested that healthcare professionals can best communicate and address patients’ complex and challenging needs by working in interprofessional teams (Li et al., 2018). In addition, patient-centered communication is acknowledged as a core dimension of patient-centered care. Moreover, communication is considered to be a basic clinical competency, and communication skills have been regarded as a crucial component of the health literacy of providers (Paiva et al., 2019).

The second strategy is promoting patient participation through patient-centered toolkit (PCTK), person-centered handover, Video-Otoscopy. Based on research conducted by Kullberg et al. (2017) showed person-centered handover directly affected the patients for around 5 minutes per day. PCH is performed according to a set structure with focus on relevant clinical information, including patient safety issues (ID, fall risk, medications and safety concerns raised by the patient). In addition, based on research conducted by Kullberg et al. (2017) showed during PCH patients play an active role in planning their care and get to participate in nursing staff’s shift change. PCH enhances handover structure, facilitating care continuity for RNs during the evening shift. If patients note this change, it could affect their perception of nurse-to-nurse information exchange (Wolf et al, 2008 dalam Kullberg et al. 2017). Furthermore, the research conducted by Rimon et al. (2015) showed Video-otoscopy was found to encourage patient-centered care and increase parental satisfaction with otoscopy. There is a significantly higher positive correlation between patient centeredness and parental satisfaction when video-otoscopy is used. While patient-centered toolkit (PCTK) that engages patients/caregivers in the hospital plan of care by facilitating education and patient-provider communication (Dalal et al., 2016).

The third strategy is emotional support. Emotional support had the strongest relationship with overall quality ratings. In addition, the theoretical model of patient-centered care fits the data moderately well as a model predictive of patients’ overall quality ratings. Some previous research has suggested that emotional support may play a role in patient outcomes. Emotional support from care providers could have an important impact on overall experiences or other outcomes (Rathert et al., 2015).

The fourth strategy is intervention to enhanced patient centered care. Based on this systematic review, several interventions to increase patient centered care are The PreProCare intervention, community-based enhanced care intervention (CECI), a computer-mediated intervention (Jayadevappa et al., 2019; Abboah-Offei et al., 2020; Priebe et al., 2015). Interventions in care promoting PCC have shown positive effects on, for example, patient satisfaction (Sharp, McAllister and Broadbent, 2015). The fifth strategy is organizational culture. In the organization, trained project managers, patient starting an active role in research and adaptive strategies by researchers all helped PCC delivery. Professional training and education, for the successful implementation of PCC, was commonly cited across projects. Success was dependent upon well-trained professionals with a genuine knowledge of the patient and how to practice communicating in a PCC way. PCC leadership and training can help address generic barriers and facilitate changes to traditional practices, systems and attitude (Moore et al., 2017).
CONCLUSION
There are 5 strategies to promote patient centered care for improving patient satisfaction. Five patient centered care strategies to improve patient satisfaction involve enhance communication, promoting patient participation, emotional support, intervention to enhanced patient centered care and organizational culture. The strategies can be implemented by health workers to promote the implementation of patient centered care for improving patient satisfaction.

ACKNOWLEDGMENT
The author of this study would like to thank to lectures who have guided in this study, all parties involved, and the author also thanks the Health Polytechnic of Kerta Cendekia for providing the opportunity to publishing of this study.

DECLARATION OF CONFLICTING INTEREST
There is no conflict of interest.

FUNDING
None.

AUTHOR CONTRIBUTION
Wahyuni Wahyuni: Main author of the systematic review and source search used for article writing.

Mira Triharini: Looking for the sources used to write and supervised the work of systematic review.

Eka Mishbahatul Mar’ah Has: Looking for the sources used to write and supervised the work of systematic review.

ORCID
Wahyuni Wahyuni
http://orchid.org/0000-0002-2258-2166

Mira Triharini
http://orchid.org/0000-0001-7872-6256

Eka Mishbahatul Mar’ah Has
http://orchid.org/0000-0002-1786-285X

REFERENCES


Kullberg, A. et al. (2017) ‘Patient satisfaction after implementation of person-centred


