



JOURNAL CLUB, A METHOD TO IMPLEMENT EVIDENCE-BASED PRACTICE AT NURSING WORK

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ABSTRACT

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Journal Club, a Method to Implement Evidence-based practice at Nursing Work

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A patient's safety and wellbeing is the main goal of a health care system. The quality of the health care system is always questioned and patient's wellbeing and safety is at risk. Evidence-based practice is a key to provide patient centered care and it helps to achieve the goals of health care system by promoting the latest research findings in nursing work. Journal club method is one well innovated method to educate nurses and help them to realize the evidence-based practice at their work.

Purpose of this study was to provide the nurses in Hatanpää City Hospital, Tampere, with clear, understandable and reader-friendly guidelines for establishing and running a journal club at their work-place. A literature review was done using available databases which provided background knowledge and base to achieve the goals of this thesis study. The research showed that nurses need to improve their knowledge and research skills. There is a clear need for nurses to understand the correlation between evidence-based practice at nursing work and patient's safety and wellbeing. Nurses need more guidance and education in how to realize evidence-based practice at their work. A study and guidelines for establishing and practicing a journal club were requested by the working life representative at Hatanpää City Hospital in Tampere.

The literature review revealed similarities in existing evidence-based practice models and journal club process. These similarities were used to develop and provide structured guidelines for practicing the journal club method. More research and evaluation is needed to assess similarities of evidence-based practice models and journal club process.

Keywords : journal club, evidence-based practice, patient's safety and wellbeing

TIIVISTELMÄ

Tampereen ammattikorkeakoulu
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Sisätauti-kirurginen hoitotyö

SYED NUMAN RAZA:

Tutkimusklubi, Menetelmä kuinka Toteutetaan Näyttön Perustuva Harjoittelu Hoitotyössä

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Potilaan turvallisuus ja hyvinvointi ovat terveydenhuollossa päätavoite. Terveydenhuoltojärjestelmän laatua on aina kyseenalaistettu ja potilaan hyvinvoinnissa ja turvallisuudessa on riskinsä. Näyttöön perustuvassa hoitotyössä harjoittelu on avain parantamaan potilaskeskeistä hoitoa. Se auttaa saavuttamaan tavoitteita terveydenhuollossa edistämällä viimeisintä tutkittua tietoa hoitotyössä. Tutkimusklubi menetelmänä on yksi hyvin innovatiivinen toimintatapa hoitajien kouluttautumisessa.

Tämän tutkimuksen tarkoitus on tehdä Hatanpään kaupungin sairaalan hoitajille selkeä, ymmärrettävä ja lukijaystävällinen ohje, jonka avulla voivat luoda ja pyörittää tutkimusklubia työpaikoillaan.

Kirjallisuusmateriaali on tehty käyttäen saatavilla olevia tietolähteitä, jotka tarjoavat taustatietoa ja pohjaa tämän opinnäytetyön tavoitteiden saavuttamiseksi. Tutkimus osoittaa, että hoitajat tarvitsevat tietoa parantaa heidän tieto- ja tutkimustaitojaan. On olemassa selkeä tarve hoitajille ymmärtää vastaavuussuhde näyttöperäisen toiminnan välillä hoitotyössä sekä potilaan turvallisuudessa ja hyvinvoinnissa. Hoitajat tarvitsevat enemmän opastusta ja koulutusta kuinka näyttöön perustuva toiminta ohjaa heidän työtään. Hatanpään kaupungin sairaala on tämän opinnäytetyön työelämäyhteys.

Kirjallisuusmateriaali osoittaa yhteneväisyyksiä jo olemassa olevan näyttöön perustuvan toiminnan malleissa ja tutkimusklubin prosessissa. Näitä yhteneväisyyksiä on käytetty tutkimusklubin menetelmän kehittämisessä. Lisää tutkimusta ja arviointia tarvitaan yhteneväisen näyttöön perustuvan toiminnan mallien ja tutkimusklubin prosessin vahvistamisessa.

Asiasanat : tutkimusklubi, näyttön perustuva harjoittelu, potilaan turvallisuus ja hyvinvointi

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GLOSSARY

EBP	Evidence Based Practice
JBI	Joanna Briggs Institute
TAMK	Tampere University of Applied Sciences
WHO	World Health Organization

1 INTRODUCTION

Patient centered care, safety and wellbeing are the main goals of a health care system. The nursing work is very significant in achieving these goals as a nurse is in the best position to observe a patient's changing condition and provide the bed side care. Evidence-based practice is a key to achieve these goals in the patient's care. Nurses need to improve their knowledge and research skills. The journal club is a tool and successful method which helps to promote the evidence-based practice by helping nurses to improve their competence and skills at their work. Nurses need more knowledge, better understanding and clear guidelines, how to establish and practice a successful journal club. (Ipsen, Hansen, Mortensen & Brockdorff 2010, 18; Independent study 2012; Baker 2013, 102.)

This functional thesis study aims to help nurses by providing guiding material which explains how they can practice a journal club and realize the evidence-based practice at their work. There is a hope that this study improves nurses' knowledge, quality of work and most importantly patients are benefited in the end with improved care, safety and their wellbeing. A literature review has provided the base knowledge for this thesis study and guiding material produced including a guide booklet, a mind map and a power-point presentation.

This thesis booklet consists of six chapters. In the following second chapter the purpose aim, task and research questions of this thesis study have been stated. The third chapter discusses the background theory and important concepts including the evidence-based practice, the definition of evidence in nursing science, the journal club method and its types. Different barriers and strategies have been also discussed to give the reader a clear idea how the evidence-based practice can be promoted. The existing guidelines and tips for establishing and practicing a journal club and promoting strategies have been discussed. The methodology followed for this thesis study has been discussed in the fourth chapter. In the fifth chapter, thesis study has been concluded and future research recommendations have been given. The final sixth chapter includes discussion, explaining the thesis study process, trustworthiness and ethical considerations.

2 PURPOSE, AIM, TASKS AND OBJECTIVE OF BACHELOR'S THESIS

The purpose of this study and functional bachelor thesis was to produce helping material and present a model of a journal club to be practiced by the nurses in Hatanpää City Hospital, Tampere. The aim was to promote the evidence-based practice through the journal club method with the objectives of improved nursing knowledge and skills. The ultimate goal was the improvement in patient's care and wellbeing.

The helping material includes a guide booklet in appendix 1, a mind-map of the journal club process in appendix 2 and the PowerPoint presentation in the appendix 3. This helping material answers the following questions.

- What is the evidence-based practice?
- What is a journal club?
- How to implement and promote the evidence-based practice in nursing care using a Journal club?
- What is nurses' role in a journal club's implementation?
- What is administration's role in a journal club's implementation?
- What are the guidelines and keys to practice a successful journal club?

3 THEORETICAL STARTING POINTS

This chapter includes the key concepts and provides the theoretical background knowledge needed to understand for establishing a journal club and realizing the evidence-based practice at nursing work. Definition of scientific evidence in nursing science and significance of evidence-based practice in Finland's health care system according to Finnish health care act are described briefly. A short introduction of Finnish center of evidence-based health care and World Health Organization's (WHO) programs is given, which are based on evidence-based practice. The barring factors and resources in the promotion of the evidence-based practice in nursing are also discussed.

The journal club is discussed and its types synchronous and asynchronous are explained. It is also explained what factors can be barriers and resources which can be utilized, while practicing a successful journal club. For the successful implementation of a journal club and realization of the evidence-based practice at nursing work, nurses' and administration's roles are also discussed in this chapter.

In the figure 1, the concept model is shown which explains how the journal club method helps to improve a patient's safety and wellbeing by promoting the evidence-based practice at nursing work.



FIGURE 1. The concept model

3.1 Evidence-based practice

In the recent years nursing practice has evolved due to the evidence-based practice movement and promotion in the medicine (Xiaoshi 2008, 6). The development of evidence-based practice is emboldened in the public health care sector for the positive healthcare results and benefits to achieve the effective use of public funds (Xiaoshi 2008, 7, according to Courtney 2005). The evidence-based practice (EBP) is a process of clinical decision making which is based on the most valid, relevant and latest acces-

sible information (Pearson 2001, 11). There are many different elements which can be considered for defining the evidence-based practice at nursing work. These elements are identification of the research, evaluation of the research, application of the research to practice, the best found evidence, evaluation of the care, problem solving, decision making, use of professional expertise, theory driven, patient involvement and a continuous process based on the feedback of results and assessment. Different definitions used by different sources and authors incorporate different individual combinations of those elements. (Scott & McSherry 2009, 1090-1091.)

For the implementation of EBP, some kind of method is required to acquire needed knowledge of the current evidence. The journal club is a tool of social activity and information sharing. It is one of the methods, which has been fulfilling its purpose by promoting EBP since its first time establishment in 1875. (McQueen, Miller, Nivison & Husband. 2006, 311.)

3.1.1 The definition of a scientific evidence in nursing science

It is worth to recall the definition of an evidence to get an initial idea about its meaning. Oxford dictionary describes the evidence very precisely as follows
“The available body of facts or information indicating, whether a belief or proposition is true or valid” (Oxford Dictionaries 2015).

However in the nursing science, the evidence-based practice incorporates the best available scientific evidence rather than traditional interventions. It not only answers the clinical question through research using critical appraisal but also includes a nurse’s own clinical expertise and a patient’s values and preferences to bring the better outcomes for the patient. (Melnyk Fineout-Overholt 2011, 266.)

3.1.2 Patient’s wellbeing and safety

Patients’ safety and health care quality are always at question. It is necessary for nurses to understand that patient’s safety and wellbeing are goals of the evidence-based practice. A patient’s condition is always changing and it is never static. A change of needs requires continuous observation and the change of care plan accordingly. A nurse

should be aware and able to recognize a patient's changing needs, which requires review of the new evidence which is used in change of the care plan. A nurse is in the best position to observe and recognize a patient's changing needs and taking care of them. A nurse should be capable to foresee a patient's future needs and plan ahead accordingly, at the same time reacting efficiently and effectively if things don't go according to the initial plan. (Independent study 2012, 10.)

In USA many states' boards of nursing define their one of the goals to protect the public during the nursing care. A nurse is expected to keep their knowledge up-to-date. Research and evidence-based nursing practice promotes patients' safety and improves quality of the nursing care. A modern and advanced health care system is safe, effective, efficient, patient centered and based on equality. Evidence-based practice is a cost reducing factor of the health care practice and provides the base for these features of a modern and advanced health care system. The evidence-based practice helps to focus and itemize the research based knowledge within the fabric of patient's current situation and needs. (Independent study 2012, 6, 10.)

3.1.3 The Finnish health care act

The Finnish health care act (8/2010), addresses the issues including quality of care and patient's safety. It also emphasizes the use of the evidence in health care practices as follows.

“The provision of health care shall be based on evidence and recognized treatment and operational practices. The health care provided shall be of high quality, safe, and appropriately organized”. (The Finnish Health Care Act 2010.)

3.1.4 The Finnish center of evidence-based health care

The Finnish center of evidence-based health care is affiliated with the Joanna Briggs Institute (JBI), Australia. JBI's center's main objective is to support and promote the evidence-based practice in Finland's health care field, by producing a concentrated research and evidence. Finland's JBI center produces systematic reviews, as well as translates JBI recommendations. In addition, the JBI center also communicates and distributes evidence-based information about the area. Finland's JBI collaborating center be-

longs to the European region, where co-operation centers are in Denmark, Belgium, Spain, Switzerland, the United Kingdom (Wales, Scotland, London, Edinburgh and Nottingham), Romania and Portugal. (JBI-keskus: Hotus 2015.)

3.1.5 WHO and evidence-based practice

The World Health Organization (WHO) has been running many large scale projects which promote and provide the evidence-based practice guidelines for various health care programs. The WHO's function and development of the global guidelines ensure the appropriate use of evidence. These WHO guidelines and recommendations can impact upon health policies or clinical interventions. Worth mentioning projects and guidelines are child health care, chronic diseases, injuries and disabilities, communicable diseases, environmental health, HIV/AIDS, health systems, malaria, maternal care, reproductive health and women's health, mental health and substance abuse, nutrition, patient safety and tuberculosis. (WHO guidelines: WHO 2015.)

3.1.6 Barriers and strategies in EBP

The research work and its output have increased but nurses still use limited research findings in their practice which means research evidences are not being utilized thoroughly to improve the patient's care (Nagy, Lumby, McKinley & Macfarlane 2001, 314). Nurses rely more on their experience based knowledge rather than a research evidence. After their education nurses spend less time to research and its evaluation when they are at work. Lack of internet and research skills is one another major barrier in the realization of evidence-based practice. The leadership and manager's role is very important. A manager's research incompetence and lazy attitude towards research and implementation of evidence-based practice is also considered as one of the major barriers. (Xiaoshi 2008, 9-10, according to Morris and Maynard 2007.) On duty time is contemplated as for patient time with less opportunity for research work online and in a library (Nagy et al. 2001, 320). Nurses also think that research findings may lack clinical credibility (Xiaoshi 2008, 9, according to Caldwell et al. 2007).

A management and authority's motivation, vision, strategy and direction play an important role in the realization of evidence-based practice (Ciliska 2006, 38). A lack of

confidence in the will and support of an organization, lack of library resources and lack of money are also described by nurses as barriers in research and evidence-based practice. An organization's policy and culture towards the evidence-based practice is a major factor, which can be a barrier or support. A research and evidence based culture, rewards, providing education for building research skills, providing necessary resources and access to internet and research engines can be fruitful strategies. (Maljanian, Carmanica, Taylor, MacRae & Beland 2002, 85.)

Different strategies can be used in the promotion of evidence-based practice. For example using research and the evidence-based practice can be used as an assessment tool and requirement in the nursing job interviews. A continuous support, finding and supporting the early research and evidence-based practice adopters and nurse specialists as adept role models is another good strategy. (Dooks 2001, 100-102.) Approaches like staff based nurse model and research corner in each unit can be adopted to promote the evidence-based practice at nursing work. In each unit a research area or a research corner can be allocated especially for posting the research articles, posters, findings and holding research discussions. Nurse interns can be identified by a nurse manager to participate in the trainings and development forums. (Warren and Heermann 1998, 40-42.)

The evidence-based practice cannot be realized if there is no support from the people in an organization with the control of resources (Nagy et al. 2001, 320). There should be a focus on nurses' continuous skills' development based on a regular need assessment (Hicks and Hennessy 1999, 223). Strategies like subscribing to professional journals, reviewing research reports, practicing journal club, attending and presenting at professional conferences can be adopted (Maljanian et al. 2002, 85, according to Cronenwett 1995 and Titler et al. 1994).

3.2 Journal club

Nursing is an adroit and complex profession which requires recent evidence based research knowledge and practice. Thus nurses are required to use recent research knowledge and equip themselves with EBP skills, while making decisions during their client's care. The journal club is one tool which helps to promote and practice evidence-based practice using recent research findings. (Steenbeek, Edgecombe, Durling, Le-

Blanc, Anderson & Bainbridge 2009, 1.) A journal club is a group of embarked nurses in scientific discussion meetings (Baker 2013, 102, according to Indira 2012).

The goal of a journal club is to evaluate a published article critically and conclude how valid and relevant is presented evidence to the application of clinical practice. In a journal club members critically review a published article to investigate the results and findings independently and unbiased, irrespective of author's own conclusions. (Baker 2013, 102.) According to the majority of nurses who participated in a journal club at Emergency Department of Nykøbing Denmark, the journal club is a successful method in achieving its goals by improving nurses' competence and skills. About 83% participants expressed their views that participation in the journal club has affected their clinical practice. (Ipsen, Hansen, Mortensen & Brockdorff 2010, 18.) A journal club helps nursing students to stay updated with recent research and upgrade their ability to critically gauge research publications (St. Pierre 2005, 390, according to Heiligman and Wolitzer 1987). The journal club participants expressed that they feel more confident after the gain of more knowledge based on evidence for their practices (McQueen et al. 2006, 315).

The journal club has been used for over a century as a teaching tool in medical education. The goal of a journal club is to achieve high quality and perfection in the nursing practice by promoting the evidence-based knowledge and practices. A journal club implementation in a hospital can be enjoyable and interesting for nurses. Beside as an educational and critical appraisal tool, a journal club can be also used as a motivational tool to change nurses' attitude and behavior to elevate the health care quality, patient's safety and wellbeing. (St. Pierre 2005, 390-392; Khan 2013, 46, according to Coomarasamy and Khan 2004.)

3.2.1 Journal club types

Journal club can be divided in following 2 types, based on their location, time and place of event.

1. Synchronous Journal Club
2. Asynchronous Journal Club

A synchronous journal club is where meeting place, date and time might be same for all participants' e.g roundtable meetings. However with new electronic age possibilities, location might be different e.g skype meetings. (Trim 2008, 23; Baker 2013, 103.)

An asynchronous journal club is where meeting or event might occur at different location, date and time (Baker 2013, 103). This type correlates mostly with an online or virtual journal club e.g online blogs etc. The electronic age has provided nurses with new opportunities to practice in a journal club with the freedom from time and location where nurses can participate in a journal club when they are able to. (Trim 2008, 23; Baker 2013, 103.)

In this thesis focus will be on a traditional synchronous journal club as per working life connection's request, where time, date and place will be same for all participants. As shown in the figure 2, all participants are physically present around a table of discussion with a question mark which represents research question in this case. The outer circle shows the time, date and place boundary. This figure explains that all participants are bounded inside the boundary of same time, date and location.

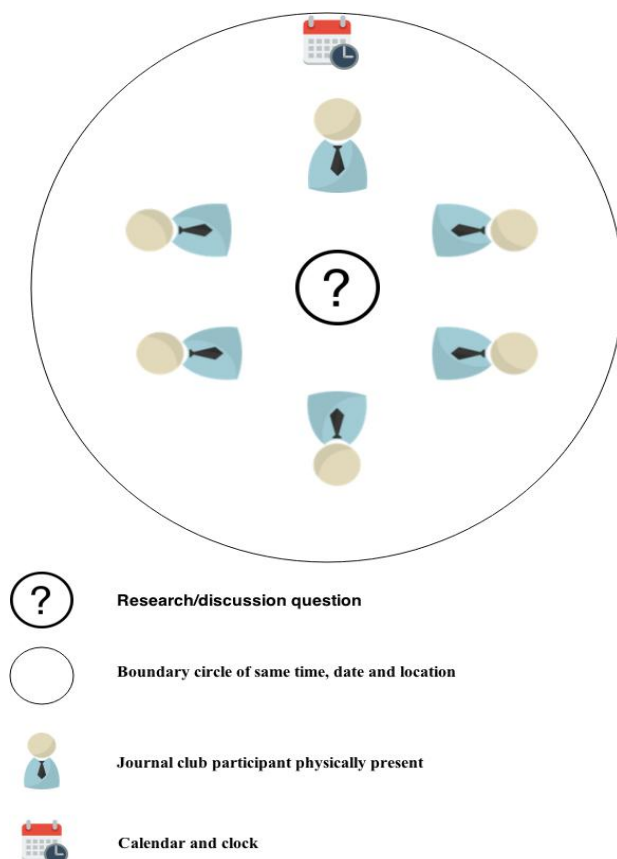


FIGURE 2. Traditional synchronous Journal Club.

3.3 Guidelines for establishing and running an effective journal club

The research material available provides no gold standard guidelines for running a journal club and translation of evidence into practice. Due to which health care professionals find it challenging establishing and running a successful journal club. (Deenadayalan et al. 2008, 898.) After studying available research literature, in this section author rounds off and proposes a more structured journal club practice model and guidelines based on existing literature.

There are several evidence-based practice models available for implementing and translation of evidence into nursing practice including the Stetler model, the IOWA model, the ACE Star Model, the John Hopkins EBP model, the Caledonian development model and EBP model for staff nurses. However there is a need to assess and identify which model best meets an organization's and nurses' aimed goals. Similarities are found between the journal club process and evidence-based practice models. Establishing and running a journal club process can be divided into five phases for better and easy understanding. These proposed five phases of a journal club process are similar to the Stetler's evidence-based practice model, but the difference is journal club's continuous process and implementation method. (Keele 2010, 75-76; Schaffer, Sandau and Diedrick 2013, 1206.)

The EBP models can be useful from planning phase till the evaluation phase. EBP models can help in the cost estimation and consideration of financial aspects during the translation of evidence into practice phase. In this thesis objective is not to discuss evidence-based practice models, so these models are not discussed in detail but only EBP implementation phases of Stetler's model are described for the reader to understand the correlation between the Stetler's model and the journal club process.

The Stetler's EBP model was first developed in 1976 and updated in 1994 and 2001. There are five phases of the Stetler's model for the translation of evidence into practice which can be used by nurses at work. (Keele 2010, 75; Schaffer, Sandau and Diedrick 2013, 1206.)

1. Preparation phase includes the identification and verification of a problem with evidence.
2. Validation phase includes analysis and synthesis of evidence. Quality of evidence is rated using a table of evidences, if there is lack of evidence and only non-credible sources are available then process ends here using elimination.
3. Comparative evaluation and decision making is used for synthesizing findings. What can be used from available evidences and if there is a need to conduct own research? if available findings are not implementable.
4. Translation of evidence into practice is done by making decision about what type of practice change is going to be, individual, group or organization level? A proposal of practice change is prepared with the strategy development and information sharing.
5. Evaluation can be done formally or informally. Consider both formative and summative evaluation of results with cost estimation.

(Keele 2010, 75-76.)

The figure 3, shows the similarities between Stetler's EBP model and a journal club's process and implementation phases.

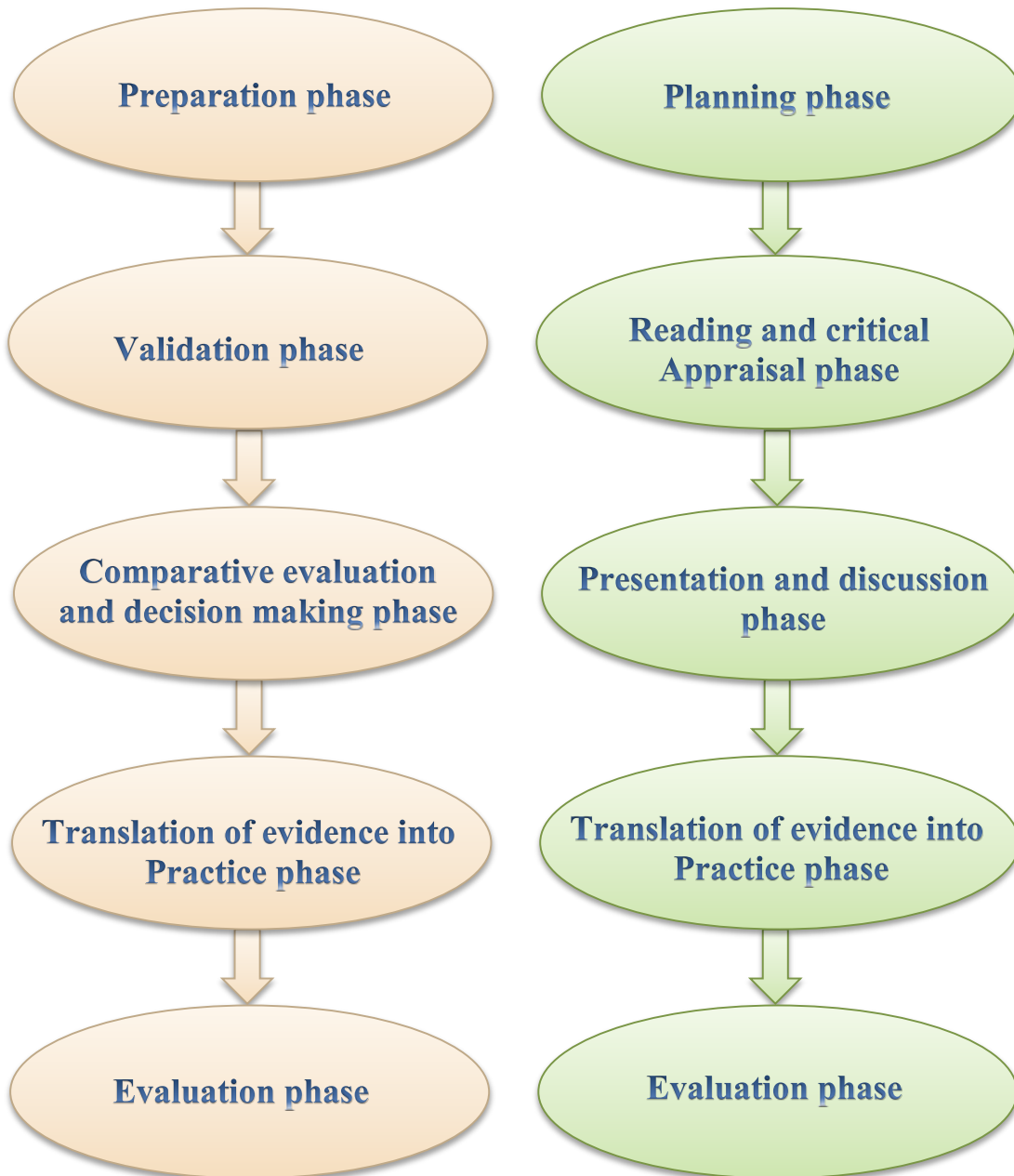


FIGURE 3. Similarities between Stetler's EBP model on left and Journal club's process on right.

The figure 4, shows the journal club phases and whole process as a continuous. There can be many journal club sessions which can be linked with each other. Planning and evaluation phases can be merged together and new research question and topic can be suggested in the evaluation phase and then it continues in the same loop as shown in the figure 4.

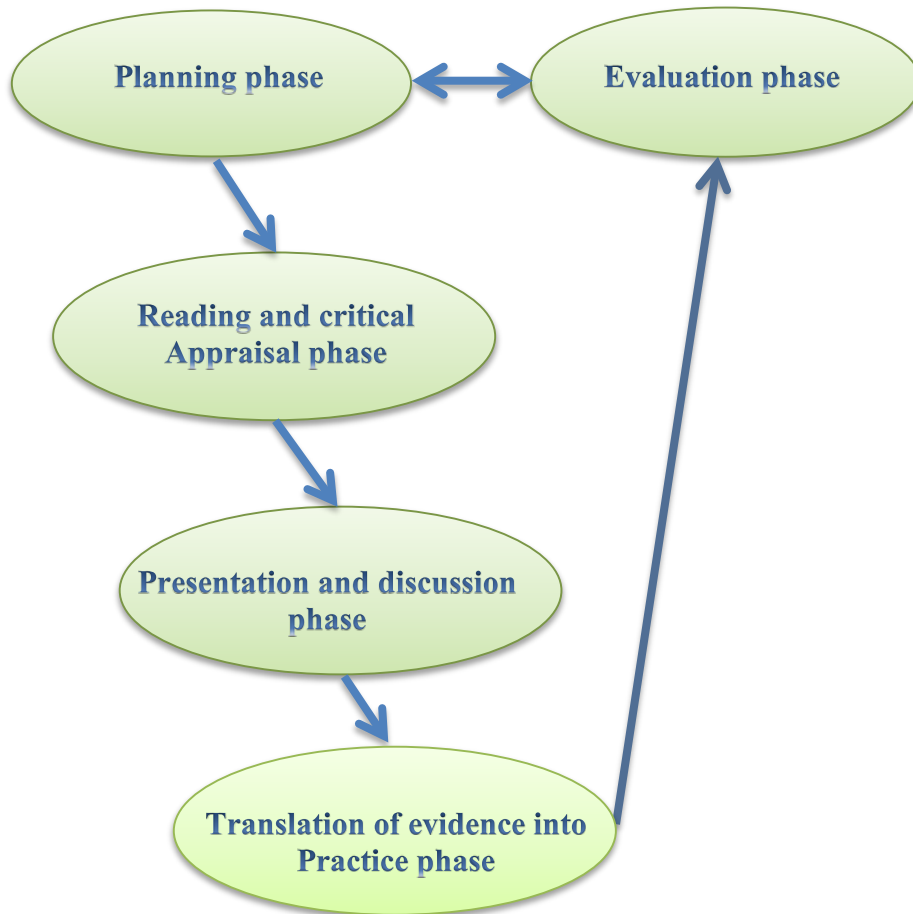


FIGURE 4. Journal club process and phases.

In a journal club, the first phase is the planning phase which includes the preparations for a journal club session including identifying goals and purpose of journal club, identifying a leader, gaining and identifying administration support, inviting interested and motivated participants, providing research and internet access, forming a research question, searching and providing relevant research articles to beginners who are unfamiliar with research process, avoiding duplication and defining meeting agenda and structure. The second phase includes reading, critical thinking and preparing for the journal club meeting for the discussion in third phase. The third phase is presentation and discussion phase where all members discuss and critically evaluate the findings of research articles and decide which evidence is most relevant and strongest for application in nursing practice. The fourth phase includes implementing the chosen evidence in nursing practice and recording its results for patient's care and wellbeing. In the last fifth phase, participants share the information and evaluate the results of the chosen evidence in the concluding session. They make a policy decision whether to change a nursing practice

in ward, based on the results of the practiced evidence or not? The last and fifth phase is very important and critical phase because it is also the right time to evaluate the journal club's progress and success. These phases and their contents are explained further in detail in the light of existing research material. These phases also clarify nurses' and administration roles in the success of a journal club.

3.3.1 Planning phase

There are many steps and actions required to be performed before actual journal club discussion or meeting session. These steps are listed below.

Identify Goals and purpose of your journal club. What do you want to achieve through a journal club? All members of a journal club should know clearly the goals and purpose of the journal club. Usually the purpose is to share the knowledge and critically appraise the relevant search material. The goals are to improve nurses' research skills, knowledge and implement the evidence-based practice in the health care to improve patients' care, safety and wellbeing. It is a good idea to discuss and review the journal club's goals and purpose with the members in each session and correlate with research articles and targeted skills of nurses' to be achieved. (St. Pierre 2005, 390-391; Deenadayalan, Grimmer-Somers, Prior & Kumar 2008,905-906; Practical Tips in Starting a Journal Club 2008,18; Khan 2013, 46.)

Identify a leader, who leads and directs the journal club in the right direction and is willing to put the required time and effort for the success of a journal club. A leader should have dedication and a clear understanding of the journal club. A trained leader, an educator, an expert in the field or a nursing manager with good research skills can be a good choice. The leadership position can be rotated among the journal club participants, who are interested and willing to share the responsibility. A leader is mainly the key person who schedules and organizes a journal club's sessions. He is also responsible for well-directed discussions and raising developing questions. A leader may also help to choose and distribute research articles among participants, avoiding duplication so that participants do not read same articles. (Denehy 2004, 187; Deenadayalan et al. 2008, 905-906; Practical Tips in Starting a Journal Club 2008, 18; Khan 2013, 46.)

Gain and identify administration's support may include providing refreshment, food and snacks, facilitating and encouraging nurses' with incentives and rewards for attending a journal club sessions while leaving their work shift for education purposes. It helps to increase voluntary attendance and create amusing environment during journal club session. Provide journal club participants internet and research access. (Deenadayalan et al. 2008, 905-906; Tips in Starting a Journal Club 2008, 18; Khan 2013, 46.)

Invite participants and choose articles for the journal club. With your set goals and purpose, what kind of participants or members of a journal club you are planning to invite? e.g a ward specific where only one ward's nurses participate, hospital specific where all nurses from hospital can participate, multidisciplinary where nurses from different fields can participate, formal or informal means whether you are following an assessment list or not. Identification of research question/topic and recent research articles to be critically appraised, (whether by leader or participants themselves) is another important step. Participants should know and have access to their research articles in good time beforehand at least ten to fourteen days prior to the journal club presentation and discussion meeting. Initially it is beneficial to choose single and easy article per person. The regular attendance of participants is very important for the success of a journal club. Sending meeting agenda and asking broad questions from participants before discussion can also direct them and help in the implementation of an effective journal club. (Denehy 2004, 187-188; Deenadayalan et al. 2008, 906; Practical Tips in Starting a Journal Club 2008, 18; Khan 2013, 46.)

Define meeting agenda of the journal club. Consistent and regular frequency, date, time and duration (30-60 minutes) are set according to the nature and demand of research topic, number of participants and taking into consider their work shifts' time table for achieving regular and high attendance is also very important. A location should be chosen which suites participants and is more appropriate. Designating a research area is a bright idea for this purpose where the research articles, posters and relevant research material can be posted as well. (Maljanian et al. 2002, 85; Deenadayalan et al. 2008, 905; Practical Tips in Starting a Journal Club 2008, 18; Khan 2013, 46.)

Define meeting structure in advanced and explain in the beginning of meeting. What are the contents and agenda of meeting? Explain purpose and goals of meeting. Explain

research topic and its importance and significance for this journal club, a short presentation for raising interest can be very beneficial. Define roles and responsibilities of the leader and participants in the meeting. Inform the timeline and time slot each participant is going to utilize during the meeting. (Dobrzanska & Cromack 2005, 376-377; Deenadayalan et al. 2008, 906; Practical Tips in Starting a Journal Club 2008, 18-19; Khan 2013, 46.)

3.3.2 Reading and critical appraisal phase

Reading and critical appraisal of available and relevant research articles is second phase and very important step for the participants of a journal club. Nurses may find it difficult to critically appraise their first article due to unfamiliar research terms. Understanding the research text sequence and assessing the value of a research article may become easy if a nurse uses a structured approach to perform analysis in a systematic and logical order. (Ingham-Broomfield 2008, 102.) The table 1 gives below guidelines for performing a critical appraisal using a systematic and structured approach, while reading a research article.

TABLE 1. Considerable questions during reading phase, according to Ingham-Broomfield (Ingham-Broomfield, R. 2008, 108; Practical Tips in Starting a Journal Club 2008, 19).

Step	Investigation scrutiny
Title	Clear, accurate and describing the research?
Author	Qualification and current position?
Date	When research was undertaken? Publishing date? Is it recent and relevant to current practice?
Journal	Nursing research? Academics and practice of the editorial board members? Target audience? Broad or specific?
Abstract	Does the abstract clearly describe problem, the research question, aims and objectives, methodology, results, conclusions and recommendations?

	Do you get clear idea about investigation?
Identification of problem/need	Are the problem and/or purpose of the study well explained? Is there a reason for the study?
Research question	Are the aims and objectives clear? How many research questions? How much is being attempted? Is the research question logical and correlate the original problem?
Theoretical background/starting point	Is discussion of related research unbiased? Does the study give insight into the subject? An appropriate timescale for the references cited? Has there a theoretical framework been used? How much quotations or does the study critically appraise previous studies?
Methodology	Study described adequately? What type of study is used, e.g descriptive, experimental, quasi-experimental? If any tools are used, was there a need for those? e.g questionnaire, observation, interview, patient records, diaries? Is the advantage/limitation of the tool discussed? Is the sample mentioned under study? Characteristics of the sample? e.g size, culture, gender? Method of sample selection is appropriate? Ethical consideration? Informed consent been given? Confidentiality and anonymity assured? Right not to participate explained? Dignity upheld? Subjects free from harm? Ethics committee approval? Reliability and validity? Research methodology biased?
Preliminary study	Completed pilot study? Modifications? Why?
main study	Raw figures and percentages or?

	<p>Visually presentation e.g graphs, bar charts, scatter-grams, extracts of dialogue?</p> <p>Reason for inclusion and exclusion of statistical tests?</p> <p>Probability?</p> <p>Discussion of the results understandable?</p> <p>Findings and recommendations comprehensible after reading the rest of the paper?</p> <p>Recommendations implementable?</p> <p>Trustworthiness and acknowledged of limitations?</p> <p>Future research recommendations?</p> <p>Logical conclusions and correlating to results?</p> <p>Any distortions attempted to meet preconceived ideas?</p> <p>Aims and research questions mentioned earlier addressed?</p> <p>Any failings and have those been referred?</p>
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3.3.3 Presentation and discussion phase

In the third phase, participants present their study, discuss it and critically appraise in a meeting. Use of an existing systematic critical appraisal approach in a journal club discussion session can result in an effective discussion (Deenadayalan et al. 2008, 906). Considerable points for an effective presentation are listed below.

A leader should introduce the journal club topic, research question and participants. A leader is also a facilitator during a discussion who keeps time management, discussion and group on task. Asking questions for testing participants' basic knowledge in the beginning may help in receiving attention and gain interest of participants. Questions can be used also to keep discussion well directed and on track. (St. Pierre 2005, 391; Denehy 2004, 187-188.)

A presenter can start his presentation of research article by explaining the title, purpose, methodology, sample, inclusion and exclusion criteria. Explain major study findings and results. Supporting and contradicting research to this study should be mentioned. Explain your critical appraisal and findings. What is the significance and con-

nection of this study on nursing practice e.g teamwork and patient's education, safety, care, wellbeing, family, education and guardian etc. Is this evidence strong and relevant enough to be tested for change in nursing practice? If yes then what set of actions and resources are needed to implement it? A group debate and critical appraisal is performed. Use own time efficiently. (St. Pierre 2005, 391; Practical Tips in Starting a Journal Club 2008, 19; Khan 2013, 44-45.)

Journal club participants should use three questions to assess the evidence.

1. Whether available evidence is applicable to the target patient?
2. Is the suggested treatment suitable and fit to the targeted patient's condition, values and desires?
3. How to implement the suggested evidence, decision making and what resources are available?

(Sackett, Rosenberg, Gray, Haynes & Richardsonl. 1996, 72.)

In case if there is a lack of robust evidence for a clinical practice then conclusion should be based on experience, analysis, comparison, estimation and evaluation (Naylor 1995, 840-841). Different interventions e.g inviting observers, different role players and rotation of roles, video tapes and case studies, can be used to make journal club session more charismatic and effective (St. Pierre 2005, 391).

3.3.4 Translation of evidence into practice phase

In this fourth phase translation of evidence into nursing practice is performed. Research material available consists of various guidelines on running a journal club but there is a lack of information regarding translation of evidence into practice (McQueen, Miller, Nivison & Husband. 2006, 311; Deenadayalan et al. 2008, 898). However Stetler's model provides better guidelines for the translation of evidence into practice. It should be decided at what level this change of practice is going to be, individual, group or organization? After examining and recording the outputs and results of new test evidence into practice, a proposal for change in practice can be prepared, for the fifth phase of evaluation along with a presentation describing the test practice and results. (Keele 2010, 75-76.)

3.3.5 Evaluation phase

The last and fifth phase is the information sharing and evaluation of results after the implementation of new evidence in practice. In this phase the journal club session can be also evaluated and the future planning for next session can be done. Future plan of action can be prepared, journal club meetings, research question and articles can be chosen and decided. Rotation of roles, innovating journal club and offering its members new opportunity can be also considered. Make sure journal club is concluded with a summary. (Denehy 2004, 188; St. Pierre 2005, 391; Deenadayalan et al. 2008, 906.)

Following guidelines can be used for the evaluation of a journal club.

1. Assess the relevance of the journal club's topic, research question, research articles and content.
2. Assess whether the journal club's and individual participants' goals were met or not?
3. Assess the critical appraisal of research articles and translation of evidence into practice?
4. Assess time management of the journal club session and whether if it was well organized and effective or not?
5. What suggestions are received from all participants for the development of journal club and future journal club research topics?

(Sherratt 2005, 304.)

According to senior nurses, lack of orientation and knowledge of the journal club is problematic in practicing a journal club and mentoring new trainees (Taylor and Warner 2000, 273). Limitations to journal club include lack or lose of interest which may be due to discontinuity, lack of time, poorly defined goals and objectives. Success of a journal club depends on the participants' attendance, motivation of reading research articles and active involvement in development discussions. (Denehy 2004, 188; St. Pierre 2005, 391; Deenadayalan et al. 2008, 906.)

4 METHODOLOGICAL STARTING POINTS

This study is a functional thesis work based on a literature review. A literature review provides the background knowledge and basis for this functional thesis (Polit & Beck 2012, 94). For a functional thesis available research material, relevant and gathered data are used to translate the essence of knowledge into the guiding material with the implementable guidelines to meet the requirements of a working life connection. A working life connection is one of the recommended features of a functional thesis. A product and guidelines of a functional thesis are supposed to be easy to grasp and able to be used by not only the author but other professionals as well to practice in a working environment. (Vilkka & Airaksinen 2003, 9-10, 16.) Research questions have provided a framework and a beam of guidance throughout the process of this study to achieve the final output in the form of the guiding material products. Products include a guide booklet, a mind-map and a power-point presentation giving guidelines, how to establish and run an effective journal club in hospital ward settings. These products will serve as a guiding material for the nurses of working life connection in Hatanpää City hospital, Tampere and will help them to implement evidence-based practice at their nursing work using journal club method.

Both primary and secondary source articles and references have been used during this functional thesis study. A primary source and reference is the one where research was conducted by same author during same study and for this thesis study, data and knowledge has been acquired directly from the original source. While a secondary source and reference is the one where research was conducted during another study and the results have been used and cited as reference in another article, the original source article where the study was conducted is secondary source for this literature review. (Polit & Beck 2012. 95.) A secondary source or reference is used during this thesis study, only in the case where an original source of knowledge was not available.

There is a lot of research material available on evidence-based practice and journal club on internet. Different research articles and studies provide tips and focus on different phases of a journal club method. This study and thesis work has combined existing material's knowledge in more structured form, step by step in five different phases to provide clearer guidelines to practice a journal club. Different databases including EB-

SCOhost, CINAHL, PubMed, British Journal of Psychiatry and Wolters Kluwer's Ovid were used for this research study. However for some articles Google search engine and TAMK librarian provided source articles. Keywords used for this research study in CINAHL database were 'evidence-based practice' and 'Journal club'. Different available search techniques in CINAHL database were used to acquire the research material for this study (Lawrence 2007, 779). Inclusion and exclusion criteria were set to filter research articles which are mentioned below in the table 2.

TABLE 2. Inclusion and exclusion criterion

INCLUSION	EXCLUSION
Primary sources dated between 1995 and 2014	Primary sources older than 1995
Study material in English and full text	Non English material
Evidence-based studies	Non-evidence based studies
WHO and Finnish health care act	Non Finnish health care acts

The material acquired for this research study is logically and critically assessed using a systematic approach. For this purpose screening and filtering was done for choosing most relevant research articles. Relevance criteria used was directly proportional to this study's research questions. Critical thinking and decision making techniques were used, under the guidelines provided by Ingham-Broomfield (2008), for reading and the assessment of research material.

Figure 1, 3, 4 and the mind-map in appendix 2 were drawn using Microsoft WORD clip art and drawing tools. Online available tools and interface at <https://drive.draw.io/> were used for drawing diagram in figure 2.

Producing the guiding material products has been a very interesting and good learning process as it was author's first experience to conduct a functional thesis study. The structure and language of the guide booklet, mind-map and power-point demo have been kept purposefully simple and reader-friendly, as many nurses for whom this guiding material products intends to serve in Hatanpää City Hospital, Tampere, English language may not be their first language.

5 DISCUSSION

This thesis study is based on a literature review. In this thesis study there is no new information produced by the author himself. All the information is based on the existing research material. The author has rearranged the already available journal club practice guidelines and tips from different sources and have presented in different implementation phases which are similar to Stetler's EBP model. This makes the process of the journal club method better-structured, reader-friendly and understandable for the nurses, which were also the purpose and a goal of this study.

The process of this study and research began right away after the topic of this study was suggested by the supervising teacher. A request was made by the author for more interesting research topic. Though the evidence-based practice was a familiar topic for the author but the journal club method was new and unfamiliar. This topic was really interesting and itself so motivating, that it always pushed the author to sit on computer and read research articles from different databases for hours. There was a clear plan set since the beginning of this study. The purpose, objectives, goals and aims were set in the beginning clearly and carefully to fulfill the requirements of the working life connection at Hatanpää City Hospital, Tampere. The research questions were formed after enquiring the requirements of the working life connection in a meeting at TAMK with a representative from Hatanpää Hospital, Tampere and supervising teacher from TAMK.

Different routine phases were planned for this study process including searching the relevant research material, reading, critical assessment, thinking and writing. A strategy was adopted that the author never ruled out any research article or study on the evidence-based practice subject in the beginning of this study process. One fruitful result of this strategy was that author also studied EBP models and found their correlation with the journal club process. The study of well-designed and structured EBP models brought the idea to restructure and establish the journal club guidelines in different phases similar to EBP models which makes the journal club process guidelines clearer, reader-friendly and understandable. The time management was another challenge during this study process besides having school, trainings and summer-job. The time management and avoiding the waste of time was one of the main backend goals during this study process. This thesis book was written following Virikko's (2012) report guide-

lines translated by Lamminsivu for TAMK (Kirjallisen raportoinnin ohje 2012). Though the report guidelines were very helpful but author found some limitations e.g citing reference guidelines in the text and in the list of references were very basic and were lacking the depth of variety. In such cases the English language teachers provided the guidance. During the literature review there were some research articles out of the author's limited student access of databases. In such cases the supervising teacher and TAMK librarian provided some research articles on request.

Trustworthiness and credibility of a literature review based study work depends on the source material used, unbiased and honest writing, where author avoids plagiarism, personal opinions, emotions and preferences to keep the study work as transparent as possible. For this purpose author has used multiple references, tried to avoid distortion of information and have reported these references honestly so that original information can be tracked easily and available for critical review. (Polit & Beck 2012, 169.)

The guiding material of this study has been developed in the English language. Though during the first meeting in TAMK, with the supervising teacher and the working life connection representative from Hatanpää City Hospital, Tampere it was suggested to develop the guiding material in the Finnish language but the author objected and expressed the concerns of not being able to develop the guiding material in the Finnish language. The concerns were realistic as the Finnish is not author's strong language beside the study and thesis product is in the English language. It also surely would have raised the trustworthiness and ethical questions on such guiding material products if it was developed by an author with not so proficient Finnish language skills. Handing over an erroneous and poorly translated guiding material products, to nurses in Hatanpää City Hospital, Tampere would have been ethically and morally wrong. The author suggested hiring the services of a professional translator for the translation of this study's guiding material.

For keeping this thesis study work as ethical as possible the research material which was used was assessed for ethical considerations, where no reports were found if any party was hurt physically or psychology. Nurses who participated in research and evaluation process were not forced to participate and they enjoyed their rights of freedom of opinion and privacy. (Polit & Beck 2012, 152-156.)

6 CONCLUSION

There are similarities between evidence-based practice models and a journal club process. EBP models can be used to develop and enhance the structure and process of a journal club. Journal club is a method to realize the evidence-based practice where nurses themselves are in active role during research, critical thinking and self-education process. Nurses need motivation, resources, more education and support from administration to realize the evidence-based practice in the nursing field. Roles of nurses and administration are equally important for the promotion of evidence-based practice and implementation of a journal club.

In future, more research studies can be conducted to evaluate and assess the similarities between evidence-based practice models and the journal club's process. It can be also studied and evaluated that how much fruitful are the presented guidelines of this study for practicing journal club method and implementing evidence-based practice at nursing work. Nurses' feedback after practicing the journal club method using this thesis study's guidelines can be useful for the improvement of the journal club implementation method and guidelines.

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APPENDICES

Appendix 1. The guide booklet

Introduction

The main goal in health care and nursing is to provide patient centered care by ensuring patient's safety and wellbeing. Evidence-based practice is the key to achieve this goal and highly emphasized to be practiced by nurses and all other health care professionals worldwide. Journal club is a tool and method which helps to realize the evidence-based practice in nursing.

This guide booklet is prepared on the request of representative from Hatanpää City Hospital, Tampere Finland. It provides information about how to practice the evidence-based practice using a journal club method. The significance of patient's safety and wellbeing has been discussed. After a brief introduction of the evidence-based practice and the journal club method, this guide booklet provides a framework and guidelines for nurses how to practice a successful journal club in a hospital ward settings. It also describes the roles of administration and nurses in the promotion of a journal club.

Patient's safety and wellbeing

Patient's safety and health care quality are always at question. It is necessary for nurses to understand that patient's safety and wellbeing are goals of the evidence-based practice. A patient's condition is always changing and it is never static. A change of needs requires continuous observation and change of care plan. A nurse should be aware and able to recognize a patient's changing needs which require review of new evidence which is used in the change of care plan. A nurse is in the best position to observe and recognize a patient's changing needs and taking care of them. A nurse should be capable to foresee a patient's future needs and plan ahead accordingly, at the same time reacting efficiently and effectively if things don't go according to the plan.

In USA many states' boards of nursing define their goal to protect the public during the nursing care. A nurse is expected to keep their knowledge up-to-date. Research and evi-

evidence based nursing practice promotes patient's safety and improves quality of nursing care. A modern and advanced health care system is safe, effective, efficient, patient centered and based on equality. The evidence-based practice is also a cost reducing factor of health care practice and provides the base for these features of modern and advanced health care system. The evidence-based practice helps to focus and itemize research based knowledge within the fabric of a patient's current situation and needs.



Evidence-based practice

In nursing, evidence-based practice means that a nurse incorporates latest research findings into her practice along with her own clinical expertise by using critical thinking and critical appraisal techniques and considering patient's values and preferences as well to make a clinical decision which ensures and leads to the patient's safety and wellbeing.



Strategies promoting evidence-based practice

An organization's policy and culture towards evidence-based practice is a major factor, which can be a barrier or support. A research and evidence based culture, rewards, providing education for building research skills, providing necessary resources and access to internet and research can be fruitful. Different strategies can be used in the promotion of evidence-based practice e.g using research and evidence-based practice can be used as a value and requirement in the nursing job interviews. Continuous support, identification and encouraging early research and evidence-based practice adopters and clinical nurse specialists as skilled role models are also useful strategies.

A staff based nurse model and unit based approach can be utilized as a strategy to promote evidence-based practice at nursing work. In each clinical unit a research area or research corner can be allocated especially for posting research articles, posters, findings and holding research discussions. Nurse interns can be identified by a nurse manager to participate in the trainings and development forums.

Evidence-based practice cannot be a success if it does not have a support of those people in an organization who have control of the organization's resources. The focus should be on need assessment based education. Strategies like subscribing to profes-

sional journals, reviewing research reports, practicing journal club, attending and presenting at professional conferences can be also focused on and initiated.



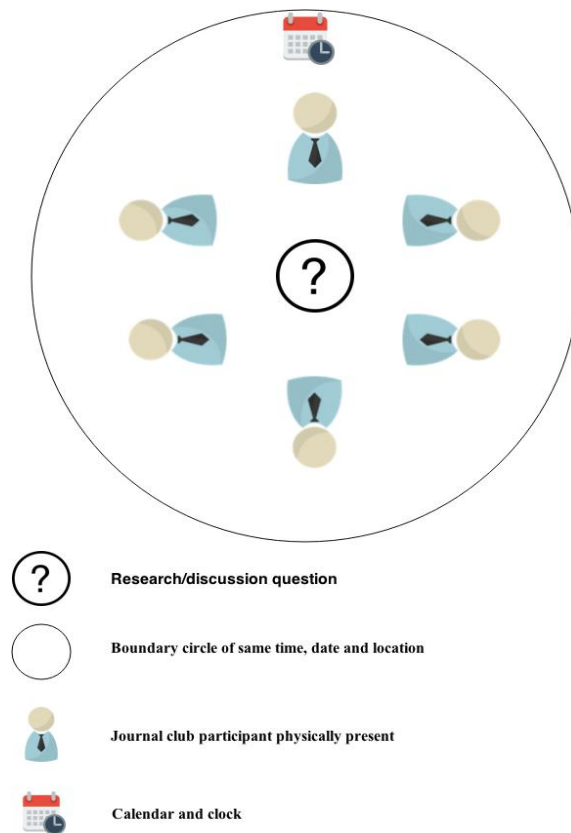
Journal club

Journal club is a tool and method which helps to practice and promote the evidence-based practice. In a journal club session a group of nurses evaluates published research articles critically and concludes how valid and relevant is presented evidence to the application of a clinical practice. A journal club members critically review a published article to investigate results and findings independently and unbiased, irrespective of an author's own conclusions. Beside an educational and critical appraisal tool a journal club can be also used as a motivational tool to change nurses' attitude and behavior towards research and enhance health care output.

Journal club has been used for over a century as a teaching tool in medical education. The goal of a journal club is to achieve high quality and perfection in nursing practices by promoting the evidence-based knowledge and practices. A journal club implementation in a hospital can be enjoyable and interesting for nurses. A journal club can be used to motivate nurses to bring change in nursing practice to improve the quality of patient's care, safety and wellbeing.

In this guide booklet focus will be on traditional synchronous journal club as per working life connection's requirement, where time, date and place will be same for all participants in a journal club. As shown in the figure below, all participants are physically present around a table of discussion with a question mark which represents research question in this case. A circle shows the time, date and place boundary. This figure ex-

plains that all participants are bounded inside the boundary of same time, date and location.



Establishing and running an effective journal club

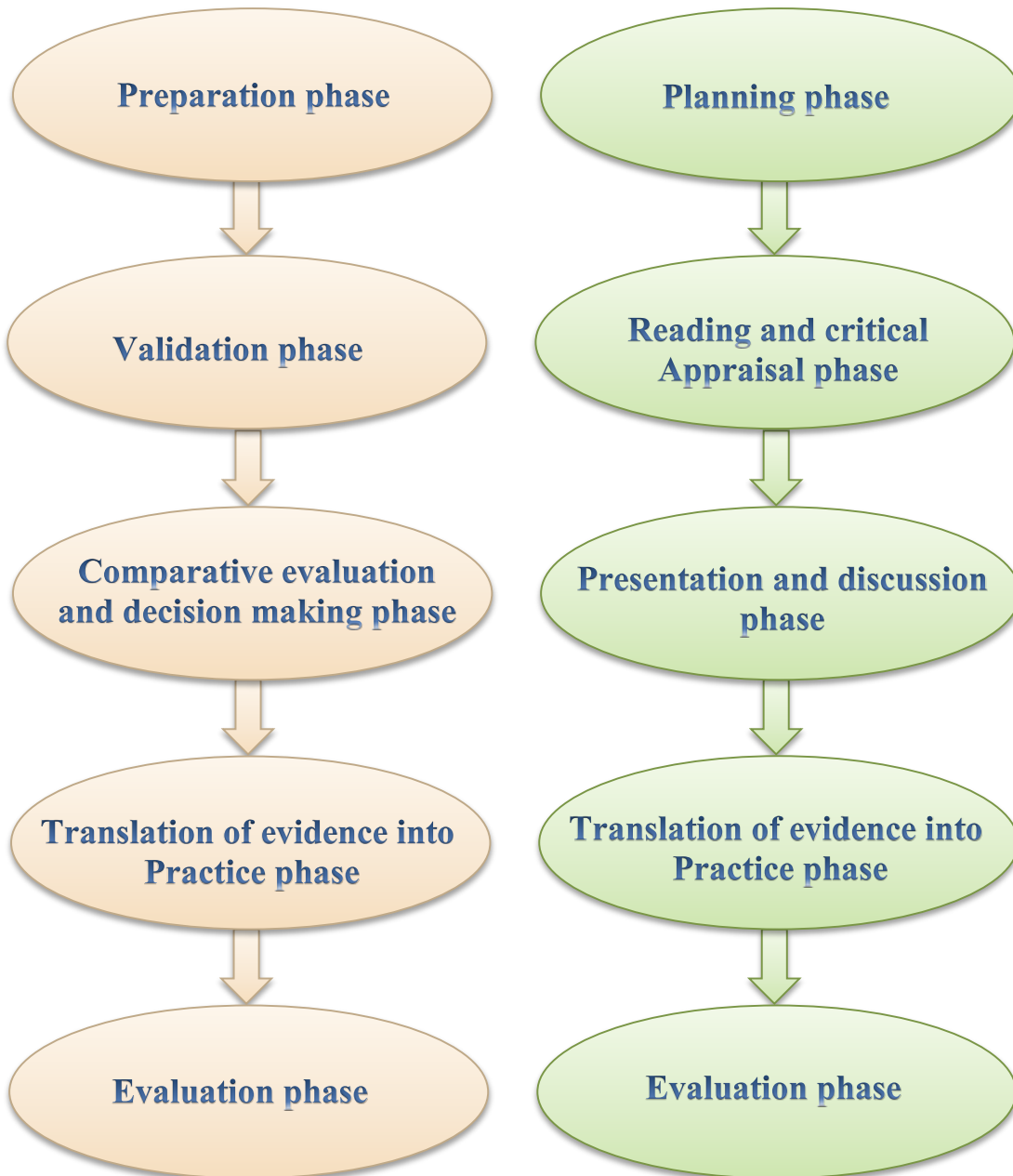
There are several evidence-based practice models available for implementing and translation of evidence into nursing practice including the Stetler's model, the IOWA model, the ACE Star Model, John Hopkins EBP model, Caledonian development model and EBP model for staff nurses. However there is a need to assess and identify which model best meets an organization's and nurses' aimed goals. Similarities are found between journal club process and evidence-based practice models. Establishing and running a journal club process can be divided into five phases for better and easy understanding. These proposed five phases of a journal club process are similar to the Stetler's evidence-based practice model, but the difference is a journal club's implementation method and continuous process.

EBP models are useful from the planning phase till the evaluation phase. EBP models can help in cost estimation and consideration of financial aspects during the translation

of evidence into practice phase. Here objective is not to discuss evidence-based practice models, so these models are not discussed in detail but only EBP implementation phases of the Stetler's model are described for the reader to understand the correlation between the Stetler's model and the journal club process. Reason for choosing Stetler's EBP model is that author's proposed journal club's implementation phases are similar to the Stetler's EBP model. The Stetler's EBP model was first developed in 1976 and was updated in 1994 and 2001. There are five phases of the Stetler's model for the translation of evidence-based practice which can be used by nurses at work.

1. Preparation phase includes the identification and verification of a problem with evidence.
2. Validation phase includes analysis and synthesis of evidence. Quality of evidence is rated using a table of evidences, if there is lack of evidence and only non-credible sources are available then process ends here using elimination.
3. Comparative evaluation and decision making is used for synthesizing findings. What can be used from available evidences and if there is a need to conduct own research? if available findings are not implementable.
4. Translation of evidence into practice is done by making decision about what type of practice change is going to be, individual, group or organization level? A proposal of practice change is prepared with the strategy development and information sharing.
5. Evaluation can be done formally or informally. Consider both formative and summative evaluation of results with cost estimation.

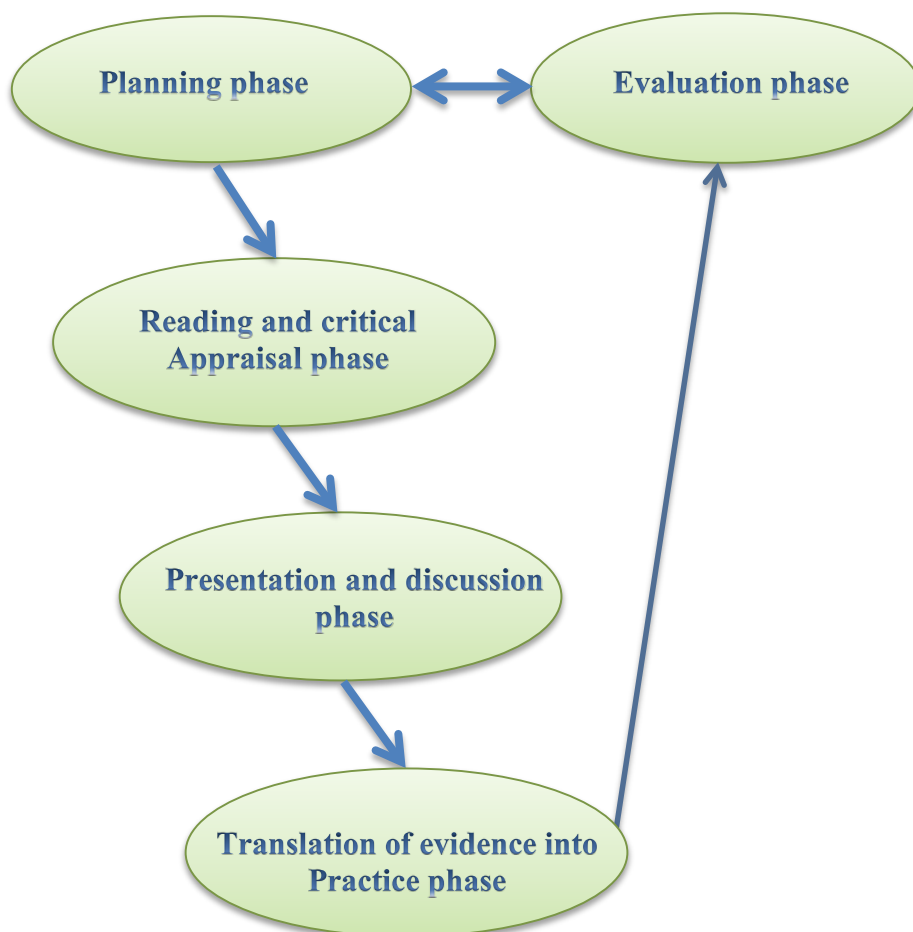
Figure below shows the correlation between the Stetler's EBP model and a journal club's implementation phases.



Journal club process and phases

In a journal club, the first phase is the planning phase which includes the preparations for a journal club session including identifying goals and purpose of journal club, identifying a leader, gaining and identifying administration support, inviting interested and motivated participants, providing research and internet access, forming a research question, searching and providing relevant research articles to beginners who are unfamiliar with research process, avoiding duplication and defining meeting agenda and structure. The second phase includes reading, critical thinking and preparing for the journal club

meeting for the discussion in third phase. The third phase is presentation and discussion phase where all members discuss and critically evaluate the findings of research articles and decide which evidence is most relevant and strongest for application in nursing practice. The fourth phase includes implementing the chosen evidence in nursing practice and recording its results for patient's care and wellbeing. In the last fifth phase, participants share the information and evaluate the results of the chosen evidence in the concluding session. They make a policy decision whether to change a nursing practice in ward, based on the results of the practiced evidence or not? The last and fifth phase is very important and critical phase because it is also the right time to evaluate the journal club's progress and success. These phases and their contents are explained further in detail in the light of existing research material. These phases also clarify nurses' and administration roles in the success of a journal club.



Planning phase

There are many steps and actions required to be performed before actual journal club discussion or meeting session. These steps are listed below.

Identify Goals and purpose of your journal club. What do you want to achieve through a journal club? All members of a journal club should know clearly the goals and purpose of the journal club. Usually the purpose is to share the knowledge and critically appraise the relevant search material. The goals are to improve nurses' research skills, knowledge and implement the evidence-based practice in the health care to improve patients' care, safety and wellbeing. It is a good idea to discuss and review the journal club's goals and purpose with the members in each session and correlate with research articles and targeted skills of nurses' to be achieved.

Identify a leader, who leads and directs the journal club in the right direction and is willing to put the required time and effort for the success of a journal club. A leader should have dedication and a clear understanding of the journal club. A trained leader, an educator, an expert in the field or a nursing manager with good research skills can be a good choice. The leadership position can be rotated among the journal club participants, who are interested and willing to share the responsibility. A leader is mainly the key person who schedules and organizes a journal club sessions. He is also responsible for well-directed discussions and raising developing questions. A leader may also help to choose and distribute research articles among participants, avoiding duplication so that participants do not read same articles.

Gain and identify administration's support may include providing refreshment, food and snacks, facilitating and encouraging nurses' with incentives and rewards for attending a journal club sessions while leaving their work shift for education purposes. It helps to increase voluntary attendance and create amusing environment during journal club session. Provide journal club participants internet and research access.

Invite participants and choose articles for the journal club. With your set goals and purpose, what kind of participants or members of a journal club you are planning to invite? e.g a ward specific where only one ward's nurses participate, hospital specific

where all nurses from hospital can participate, multidisciplinary where nurses from different fields can participate, formal or informal means whether you are following an assessment list or not. Identification of research question/topic and recent research articles to be critically appraised, (whether by leader or participants themselves) is another important step. Participants should know and have access to their research articles in good time beforehand at least ten to fourteen days prior to the journal club presentation and discussion meeting. Initially it is beneficial to choose single and easy article per person. The regular attendance of participants is very important for the success of a journal club. Sending meeting agenda and asking broad questions from participants before discussion can also direct them and help in the implementation of an effective journal club.

Define meeting agenda of the journal club. Consistent and regular frequency, date, time and duration (30-60 minutes) are set according to the nature and demand of research topic, number of participants and taking into consider their work shifts' time table for achieving regular and high attendance is also very important. A location should be chosen which suites participants and is more appropriate. Designating a research area is a bright idea for this purpose where the research articles, posters and relevant research material can be posted as well.

Define meeting structure in advanced and explain in the beginning of meeting. What are the contents and agenda of meeting? Explain purpose and goals of meeting. Explain research topic and its importance and significance for this journal club, a short presentation for raising interest can be very beneficial. Define roles and responsibilities of the leader and participants in the meeting. Inform the timeline and time slot each participant is going to utilize during the meeting.



Reading and critical appraisal phase

Reading and critical appraisal of available and relevant research articles is second phase and very important step for the participants of journal club. Nurses may find it difficult to critically appraise their first article due to unfamiliar research terms. Understanding the research text sequence and assessing the value of research article may become easy if nurses use a structured approach to perform analysis in a systematic and logical order. Table given below provides guidelines for performing critical appraisal using a systematic and structured approach, while reading a research article.

Considerable questions during reading phase.

Step	Investigation scrutiny
Title	Clear, accurate and describing the research?
Author	Qualification and current position?
Date	When research was undertaken? Publishing date? Is it recent and relevant to current practice?
Journal	Nursing research? Academics and practice of the editorial board members? Target audience? Broad or specific?
Abstract	Does the abstract clearly describe problem, the research question, aims and objectives, methodology, results, conclusions and recommendations? Do you get clear idea about investigation?
Identification of problem/need	Are the problem and/or purpose of the study well explained? Is there a reason for the study?
Research question	Are the aims and objectives clear? How many research questions? How much is being attempted? Is the research question logical and correlate the original problem?
Theoretical background/starting point	Is discussion of related research unbiased? Does the study give insight into the subject? An appropriate timescale for the references cited?

	<p>Has there a theoretical framework been used?</p> <p>How much quotations or does the study critically appraise previous studies?</p>
Methodology	<p>Study described adequately?</p> <p>What type of study is used, e.g descriptive, experimental, quasi-experimental?</p> <p>If any tools are used, was there a need for those? e.g questionnaire, observation, interview, patient records, diaries?</p> <p>Is the advantage/limitation of the tool discussed?</p> <p>Is the sample mentioned under study?</p> <p>Characteristics of the sample? e.g size, culture, gender?</p> <p>Method of sample selection is appropriate?</p> <p>Ethical consideration?</p> <p>Informed consent been given?</p> <p>Confidentiality and anonymity assured?</p> <p>Right not to participate explained?</p> <p>Dignity upheld?</p> <p>Subjects free from harm?</p> <p>Ethics committee approval?</p> <p>Reliability and validity?</p> <p>Research methodology biased?</p>
Preliminary study	<p>Completed pilot study?</p> <p>Modifications? Why?</p>
main study	<p>Raw figures and percentages or?</p> <p>Visually presentation e.g graphs, bar charts, scatter-grams, extracts of dialogue?</p> <p>Reason for inclusion and exclusion of statistical tests?</p> <p>Probability?</p> <p>Discussion of the results understandable?</p> <p>Findings and recommendations comprehensible after reading the rest of the paper?</p> <p>Recommendations implementable?</p> <p>Trustworthiness and acknowledged of limitations?</p> <p>Future research recommendations?</p>

<p>Logical conclusions and correlating to results?</p> <p>Any distortions attempted to meet preconceived ideas?</p> <p>Aims and research questions mentioned earlier addressed?</p> <p>Any failings and have those been referred?</p>



Presentation and discussion phase

In the third phase, participants present their study, discuss it and critically appraise in a meeting. Use of an existing systematic critical appraisal approach in a journal club discussion session can result in an effective discussion. Considerable points for an effective presentation are listed below.

A leader should introduce the journal club topic, research question and participants. A leader is also a facilitator during a discussion who keeps time management, discussion and group on task. Asking questions for testing participants' basic knowledge in the beginning may help in receiving attention and gain interest of participants. Questions can be used also to keep discussion well directed and on track.

A presenter can start his presentation of research article by explaining the title, purpose, methodology, sample, inclusion and exclusion criteria. Explain major study findings and results. Supporting and contradicting research to this study should be mentioned. Explain your critical appraisal and findings. What is the significance and connection of this study on nursing practice e.g teamwork and patient's education, safety, care, wellbeing, family, education, guardian and etc. Is this evidence strong and relevant enough to be tested for change in nursing practice? If yes then what set of actions and resources are needed to implement it? A group debate and critical appraisal is performed. Use own time efficiently. Journal club participants should use three questions to assess the evidence.

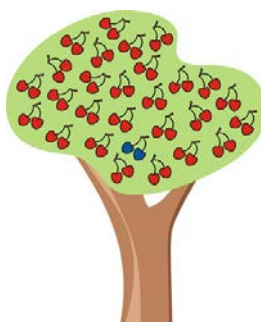
1. Whether available evidence is applicable to the target patient?
2. Is the suggested treatment suitable and fit to the targeted patient's condition, values and desires?
3. How to implement the suggested evidence, decision making and what resources are available?

In case if there is a lack of robust evidence for a clinical practice then conclusion should be based on experience, analysis, comparison, estimation and evaluation. Different interventions e.g inviting observers, different role players and rotation of roles, video tapes and case studies, can be used to make journal club session more charismatic and effective.



Translation of evidence into practice phase

In this fourth phase translation of evidence into nursing practice is performed. Research material available consists of various guidelines on running a journal club but there is a lack of information regarding translation of evidence into practice. However Stetler's model provides better guidelines for the translation of evidence into practice. It should be decided at what level this change of practice is going to be, individual, group or organization? After examining and recording the outputs and results of new test evidence into practice, a proposal for change in practice can be prepared, for the fifth phase of evaluation along with a presentation describing the test practice and results.



Evaluation phase

The last and fifth phase is the information sharing and evaluation of results after the implementation of new evidence in practice. In this phase the journal club session can be also evaluated and the future planning for next session can be done. Future plan of action can be prepared, journal club meetings, research question and articles can be chosen and decided. Rotation of roles, innovating journal club and offering its members new opportunity can be also considered. Make sure journal club is concluded with a summary. Following guidelines can be used for the evaluation of a journal club.

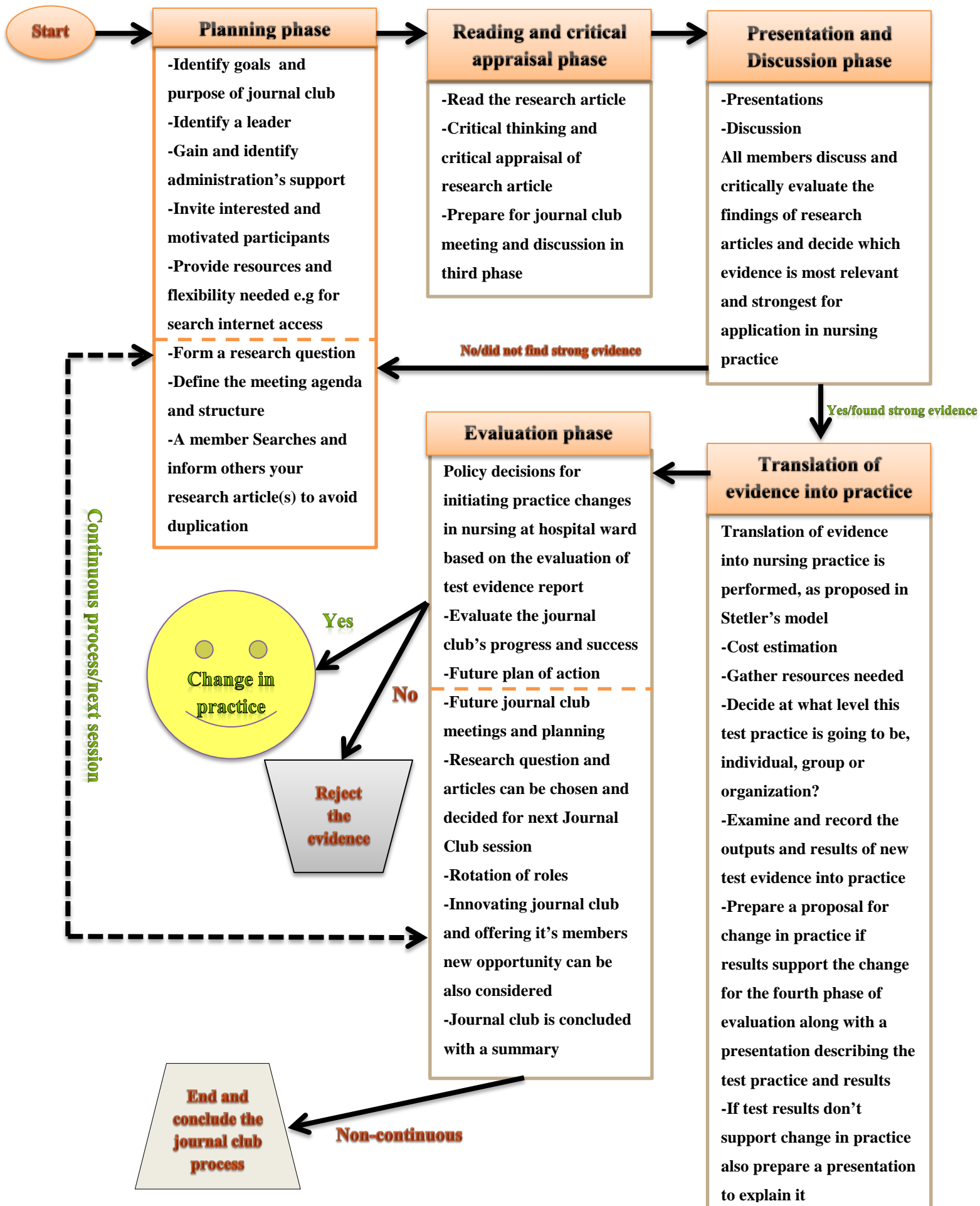
1. Assess the relevance of the journal club's topic, research question, research articles and content.
2. Assess whether the journal club's and individual participants' goals were met or not?
3. Assess the critical appraisal of research articles and translation of evidence into practice?
4. Assess time management of the journal club session and whether if it was well organized and effective or not?
5. What suggestions are received from all participants for the development of journal club and future journal club research topics?




Research shows that lack of orientation and knowledge of a journal club can be problematic. Limitations to a journal club include lack or lose of interest which may be due to discontinuity, lack of time, poorly defined goals and objectives. Success of a journal club depends on the participants' attendance, motivation of reading research articles and active involvement in the development discussions.



Appendix 2. The mind-map of the journal club process



Appendix 3. The power point presentation of the journal club process



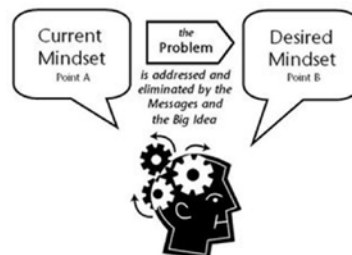
JOURNAL CLUB, A METHOD TO IMPLEMENT EVIDENCE BASED PRACTICE AT NURSING WORK

By Syed Numan Raza
12NURSE

Teacher : Heleena Laitinen
TAMK, Hatanpää Sairaala

BACKGROUND AND NEED

- Goal of health care system
 1. Patient centered care
 2. patient's safety and wellbeing
- Key solution : Implementation of evidence based practice in nursing
- Journal club is one innovative and advanced method and tool to reach this key solution



SOLUTION MODEL



PATIENT'S SAFETY AND WELLBEING



- How patient's safety and wellbeing are related as a goal of evidence based practice?

EBP promotes patient's safety and wellbeing by improving quality of nursing care.

But still how?

1. Continuously changing patient's condition → new and changed needs → new evidence → change of care plan.
2. A nurse's duty → continuous observation and look for evidence → recognition of patient's changing condition → forecasting current and near future needs → efficient and effective current and near future patient's care plan.
3. A nurse's tools and needs : updated knowledge, professional expertise, critical thinking, patient's values and preferences.

EVIDENCE BASED PRACTICE

- In nursing, evidence based practice means that a nurse incorporates latest research findings into her practice along with her own clinical expertise by using critical thinking and critical appraisal techniques and considering patient's values and preferences as well to make a clinical decision which ensures and leads to patient's safety and wellbeing.



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STRATEGIES PROMOTING EVIDENCE BASED PRACTICE



- Research and evidence based culture, rewards, providing education for building research skills, providing necessary resources and access to internet and research engines can be fruitful.
- Using research and evidence based practice can be used as a value in nursing job interviews and requirements.
- Continuous support, identification and encouraging early research and evidence based practice adopters and clinical nurse specialists as skilled role models are also useful strategies.
- A staff based nurse model and unit based approach can be utilized as a strategy to promote evidence based practice at nursing work. In each clinical unit a research area or research corner can be allocated especially for posting research articles, posters, findings and holding research discussions. Nurse interns can be identified by nurse manager to participate in trainings and development as well.
- Support from administration and access organizational resources, focus should be on need assessment based education. Strategies like subscribing to professional journals, reviewing research reports, practicing journal club, attending and presenting at professional conferences can be focused on and initiated.

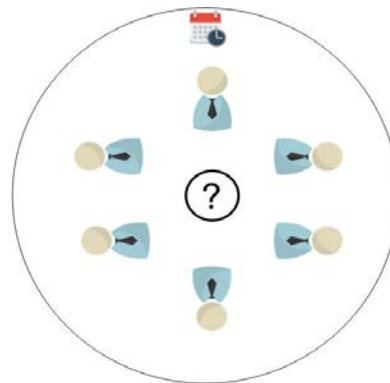


JOURNAL CLUB



- Journal club is a tool and method which helps to practice and promote evidence based practice. In a journal club session a group of nurses evaluates published research articles critically and concludes how valid and relevant is presented evidence to the application of clinical practice.
- Journal club members critically review a published article to investigate results and findings independently and unbiased, irrespective of author's own conclusions. Beside an educational and critical appraisal tool journal club can be also used as a motivational tool to change nurses' attitude and behavior to enhance health care output.

SYNCHRONOUS JOURNAL CLUB



- Research/discussion question
- Boundary circle of same time, date and location
- Journal club participant physically present
- Calendar and clock

ESTABLISHING AND RUNNING AN EFFECTIVE JOURNAL CLUB

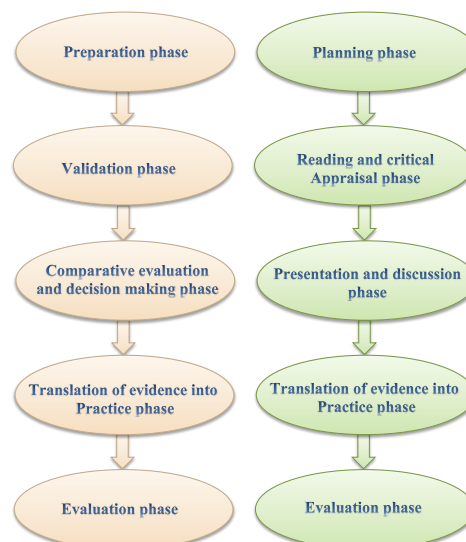
- Need good knowledge of
 1. Organizational aimed goals, structure and function
 2. Nurses' aimed goals, needs, expectaions
- Assess different EBP models which one suites the most to your organizational needs.

Why?

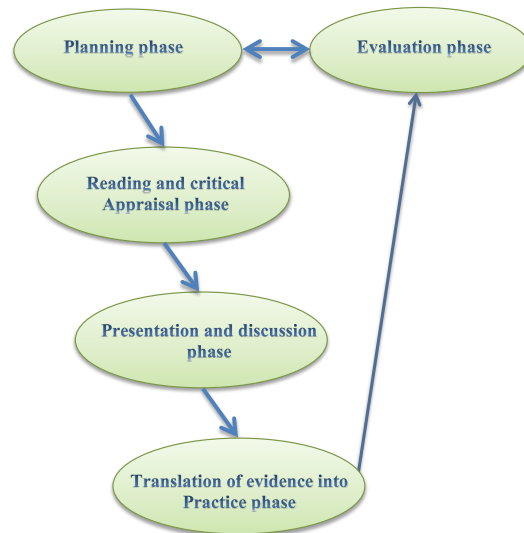
- There is a strong correlation found between Journal Club and EBP models and their need.
 1. EBP models not only help from planning phase till evaluation phase but also help in translating evidence into practice and considering financial aspects through cost estimation and resources management.



CORRELATION BETWEEN STETLER'S EBP MODEL AND JOURNAL CLUB



JOURNAL CLUB MODEL AND PHASES



PLANNING PHASE

Preparations for journal club session includes

- Identifying goals and purpose of journal club
- Identifying a leader
- Gaining and identifying administration support
- Inviting interested and motivated participants
- Searching, providing internet access
- Forming a research question
- Providing resources and flexibility e.g for research internet access
- Defining meeting agenda and structure



READING AND CRITICAL APPRAISAL PHASE

- Reading the research article
- Critical thinking and critical appraisal
- Preparing for journal club meeting and discussion in third phase.



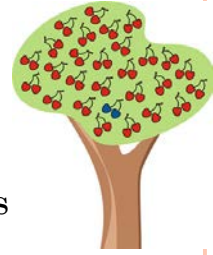
PRESENTATION AND DISCUSSION PHASE

- Presentations
- Discussion

All members discuss and critically evaluate the findings of research articles and decide which evidence is most relevant and strongest for application in nursing practice.



TRANSLATION OF EVIDENCE INTO PRACTICE PHASE



- Translating evidence into nursing practice is performed, as proposed in Stetler's model
- 1. It should be decided at what level this test practice is going to be, individual, group or organization?
- 2. After examining and recording the outputs and results of new test evidence into practice.
- 3. A proposal for change in practice can be prepared for the fourth phase of evaluation along with a presentation describing the test practice and results.



EVALUATION PHASE



Fifth phase and second meeting is very important session which not only helps to make

- Policy decisions for initiating practice changes in nursing at hospital ward based on the evaluation of test evidence report.
- It is also the right time to evaluate the journal club's progress and success.
- If the process is not continuous end and conclude the journal club.
- If the process is continuous then following actions can be performed which are also part of planning phase
- 1. Future plan of action
- 2. Future journal club meetings
- 3. Research question and articles can be chosen and decided for next Journal Club session
- 4. Rotation of roles
- 5. Innovating journal club and offering it's members new opportunity can be also considered
- 6. Journal club is concluded with a summary



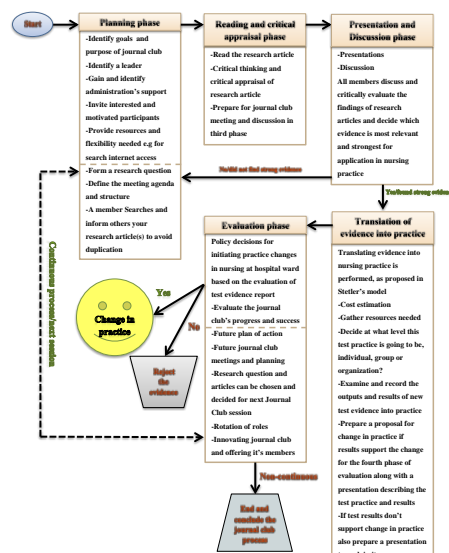
LIMITATIONS TO JOURNAL CLUB



- Lack or lose of interest which may be due to
 1. Discontinuity
 2. Lack of time
 3. Poorly defined goals and objectives
- Research shows that lack of orientation and knowledge of journal club is problematic.
- Success of a journal club depends on the participants' attendance, motivation of reading research articles and active involvement in developing discussion.

MIND MAP OF THE JOURNAL CLUB

Appendix 2. The mind map of the journal club process



ANY QUESTIONS

