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(REVIEW ARTICLE)



Barriers and enablers to implementation of evidence-based practice in nursing: A systematic review of literature

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Abstract

Background; Evidence-Based Practice (EBP) is an essential aspect of today's healthcare landscape through which high-quality scientific research evidence can be obtained and translated into the best practical decisions to improve health outcomes. Nurses and midwives deliver the highest proportion of direct patient/client care, and therefore need to utilize evidence based practice to ensure quality patient care. Despite the great importance of evidence-based care, majority practices shown to be effective by research remain unused in the nursing field. Nurses and other health care providers often cite barriers that prevent its delivery.

Objective: To describe barriers and enablers to, successful implementation of evidence based Practice in nursing

Methods: A Systematic mixed-studies review of literature, synthesizing quantitative and qualitative research was done. The review involved a search on multiple data base engines which included COCHRANE, google scholar and PubMed. A search of the database using keywords (implementation, adoption, compliance, Evidence based practice (EBP), nurses, barrier, challenges and facilitators was conducted.

Results: A total of 43 articles were reviewed. Two common themes were identified as barriers to EBP. Individual barriers and organizational barriers. Individual barriers identified include inadequate knowledge on EBP, time constraints and nurse's attitude towards EBP. Organizational barriers were lack of administrative support and lack of autonomy in nursing. Enablers of EBP identified were administrative support, engagement of stakeholders and nurses autonomy

Conclusion: The key barriers to EBP implementation in nursing are deficient knowledge on EBP, time constraints and lack of autonomy in nursing. The barriers can however be overcome by supporting an environment that prioritizes EBP.

Recommendations: Addressing barriers to EBP implementation will enhance quality of nursing care leading to better patient' outcomes. To mitigate the barriers, targeted enablers such as trainings and workshops on EBP, supportive leadership and increasing nurses autonomy ought to be put in place.

Keywords: Evidence based practice; Implementation; Barriers; Facilitators; Enablers; Nursing

1 Introduction

Evidence-Based Practice (EBP) is an essential aspect of today's healthcare landscape through which high-quality scientific research evidence can be obtained and translated into the best practical decisions to improve health outcomes

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[1]. Nurses and midwives deliver the highest proportion of direct patient/client care hence have a key role in ensuring delivery of safe, high-quality, effective and efficient health services[2]. In nursing and midwifery EBP involves a systematic approach to provision of holistic, quality nursing care that integrates clinical expertise, patient preferences, expert opinions and the most up-to-date research and knowledge as opposed to traditional methods, advice from colleagues or personal beliefs [3]. Nursing practice therefore needs to be evidence based to enhance improve patient outcomes.

Implementing evidence-based practice in nursing has several advantages. Findings from a scoping review[4] showed that EBP gives nurses the tools they need to become change agents for improved healthcare outcomes. EBP enables nurses to standardize care, decrease medical errors, and reduce healthcare costs by minimizing unnecessary interventions[5]. Research further shows that nurses employing EBP become the nexus between a wealth of medical research and practical experience on the ground since it bridges the theory-to-practice gap and delivers innovative patient care using the most current health care findings[6]. In addition, recent studies also indicate that nurses experience greater autonomy in their practices and a higher level of job satisfaction when they engage in EBP[7]. Of utmost importance is that EBP serves as a standard for quality patient care, ensuring provision of safe and excellent nursing care through enhanced health-care quality and professional practice[4].

Despite its proven benefits, majority of EBP practices shown to be effective by research remain unused in the nursing field [3];[8]. Nurses often cite barriers that prevent them from effectively utilizing current evidence in making clinical decisions. Several studies done over the years [9];[10];[11] indicate that nurses experience a number of barriers to EBP implementation in their clinical practice. Barriers to getting evidence into practice are often the 'opposite' from the enablers. Examples of barriers in EBP are time and resource constraints. In a literature review [12] and a recent focus group study[13], lack of time to read literature was the commonly mentioned deterrent to EBP implementation among nurses. Other documented barriers were lack of access to research, poor understanding of the research process, insufficient knowledge for critical analysis of research and little support from the organizational leadership.

Failure to overcome EBP barriers results in a gap between recommendations from research findings and clinical practice negatively impacting on the quality of patient care [3]. Successful integration of EBP into clinical practice therefore requires identification of key enablers that can facilitate its adoption. Enablers create a conducive environment that facilitates adoption and utilization of research evidence in clinical decision making[14]. Documented examples of enablers are good leadership that fosters a conducive working environment, adequate provision of resources and training of staff on EBP[11].

Identifying both barriers and enablers to EBP implementation in nursing and midwifery practice is essential in fostering of an environment where EBP can thrive. However, most researches done have concentrated on barriers affecting nursing only. This literature review therefore aims at providing a comprehensive understanding of various barriers and potential strategies/enablers that enhance the implementation of EBP in nursing and midwifery practice.

2 Material and methods

2.1 Study design

A Systematic mixed-studies review of literature, synthesizing quantitative, qualitative and mixed methods research was done.

2.2 Search strategy

The review involved a search on biomedical data bases of recent electronic data published in English between 2015-2024. A search using keywords (implementation, adoption, compliance, EBP, nurses, barrier, obstacle, challenges and facilitators to EBP was conducted on PUB-MED, Scopus, Elsevier, CINHAL, Cochrane Library, and Google scholar data bases. Key words used were designed to reflect the subject heading. The search was limited to the English language. Information on knowledge, attitudes, implementation, and the perceived facilitators and barriers of EBP nursing and midwifery practice was extracted and summarized.

2.3 Study selection

Articles were downloaded to the Mendeley desktop reference manager. Prior to the screening process duplicates were removed. Eligibility assessment was conducted by two independent researchers. On completion of the title screening stage, the two datasets produced by each researcher were combined. The same steps were taken for abstract/full-text

screening results. All disagreements were resolved by consensus and disagreements were discussed to determine if the article included the information needed.

2.4 Study group

The study comprised studies related to evidence based implementation in nursing and midwifery published in English between 2015-2024.

2.5 Eligibility and exclusion criteria

Studies that met the inclusion criteria were all qualitative, quantitative and mixed method studies that explored and described barriers and enablers to EBP implementation in studies conducted in nursing and midwifery settings, any study conducted in period between 2015 to 2024 about search title 'barrier and facilitators of evidence based practice implementation in nursing' and all peer-reviewed studies published in English language. Excluded were studies conducted among other healthcare practitioners such as a physician or in non-healthcare settings.

2.6 Quality assessment

Articles were independently assessed by two researchers for quality using the Critical Appraisal skills program. Disagreements were resolved by discussion between the two researchers.

2.7 Data collection process

A standardized data extraction tool was developed to identify study design, themes, study setting, aims and main findings for all included studies. Data collection was carried out by the two researchers.

2.8 Synthesis of findings

The study employed a narrative analysis of results. Key themes across the studies were identified. The study adopted PRISMA method figure 1. Data was organized and presented in tables under two thematic domains.

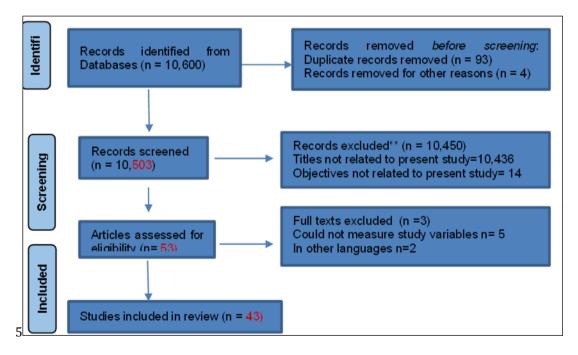


Figure 1 PRISMA flow diagram

3 0 Results

The search generated a total of 10,600 articles of which 93 duplicate articles were removed (fig1). A total of 50 articles were included in the full text review following screening of their titles and abstracts. The identified articles were further assessed using the inclusion criteria. Only 43 articles met the inclusion criteria and were included in the study. The

barriers were extracted and categorized into two domains which were grouped as individual and organizational. Enablers were discussed under a common theme.

3.1 Barriers to implementation of EBP

As shown in table 1, Knowledge deficit on EBP was the commonly mentioned barrier to EBP in most studies.

Table 1 Barriers to implementation of EBP

THEME 1: INDIVIDUAL BARRIERS			
S/NO	BARRIER	No of articles (n)	
1	Lack of knowledge and skills on evidence based practice.	09	
2	Lack of time to implement EBP	06	
3	Nurses attitude towards EBP	07	
THEME 2: ORGANIZATIONAL BARRIERS			
1	Lack of administrative support	07	
2	Lack of autonomy in nursing	07	

3.2 Enablers to EBP implementation

Stakeholder involvement was most recommended enabler in enhancing successful EBP implementation table 2.

Table 2 Enablers to EBP implementation

S/NO	ENABLER	No of articles (n)
1	Training	04
2	Leadership	05
3	Stakeholder involvement	07

4 Discussion

The study aimed at exploring the barriers and enablers to implementation of EBP in nursing and midwifery.

4.1 Barriers to EBP implementation

The study revealed several barriers that hinder the process of EBP implementation. The barriers were organized into two thematic domains which are individual and organizational barriers.

4.1.1 Individual barriers

Individual barriers are internal obstacles that inhibit humans from accepting or adapting to change. From the findings individual barriers were the commonest. Common barriers at the level of the individual professional identified in the review were three. Lack of knowledge on EBP, lack of time to search and read literature and nurses attitude towards EBP.

Lack of knowledge and skills on evidence based practice.

A total of 9 studies in the current review demonstrated a lack of enough knowledge to integrate research findings in nursing practices as one of the key individual barriers to EBP implementation among nurses. While assessing barriers to adoption of evidence based nursing a qualitative study done in Cyprus[13] found inadequate knowledge among nurses to be the most serious obstacle for EBP implementation. According to the participants in this focus group study,

knowledge deficit was due to lack of education, non-connection of theory with practice as well as insufficiently updated protocols. These findings were echoed by those from several other studies globally. A cross-sectional study done in Egypt [15] among nurses to identify the relationship between EBP and quality improvement(QI) revealed a strong positive correlation between EBP and QI with a predictive power of QI on EBP *p*<*0.001*. However, despite the strong relationship between EBP and QI, 94 % of the respondents lacked knowledge on EBP implementation prompting the researchers to recommend educational support to enhance knowledge and skills needed in EBP. Similarly in Indonesia, a study [16], assessing barriers and potential strength of nursing in implementing EBP revealed a lack of preparedness to implement EBP due to lack of EBP knowledge among the respondents.

Further findings from an integrative review [17] done to assess nurses knowledge and attitude regarding evidence based practice concur with those of other studies. According to this review most nurses are not knowledgeable on EBP since they are not informed on the significance of EBP in their profession. In line with this is a systematic review [18] which found lack of knowledge among community nurses to be a major set-back in the implementation of EBP. The findings confirm those of an earlier study [19] which revealed difficulties in understanding the research process and research articles among nurses who worked at the bedside. Additional findings from a mixed method systematic review [11] reported negative impact on midwifery led care which was largely associated with midwives lack of confidence in their knowledge and skills.

A recent study [20] affirmed findings from previous and current studies that knowledge in an impediment to EBP. In this study majority of the nurses lacked skills for searching and application of literature findings a fact they attributed to lack knowledge on where to obtain relevant information. Contrary findings were however reported in a descriptive study done in Nigeria which assessed Knowledge and Utilization of Evidence-Based Nursing Practice among Nurses[21]. According to this study, though utilization of EBP was low, nurses were found to have high knowledge on EBP. Most of the sampled nurses had either a post basic or degree in nursing a prove that with good training nurse's knowledge on EBP can be improved.

Nurses Attitudes towards evidence based practices

Six articles reported on nurse's attitude as a barrier to EBP in the current review. A focus group study[13] done to explore barriers to evidence based practice in nursing revealed that negative attitude in nurses led to non-implementation of new practices. The study further revealed that the negative attitude stemmed from nurse's preference to leave things the way they are, lack of initiative, insecurity, the supervisor's attitude, the existence of the established, their resistance to change and reluctance of nurses to work according to new techniques.

A ddesirable attitude is one of the fundamental prerequisites in implementing EBP. The implementation of EBP will therefore be carried out well if the nurse has a positive attitude towards EBP[22]. However, even though positivity toward EBP serves as a good basis for designing suitable nursing techniques to improve the implementation of this practice[23] some studies revealed that positive attitude does not automatically translate to EBP implementation. In assessing nurses readiness in implementing EBP a study [16] demonstrated positive attitudes towards EBP by the nurses. The nurses were however not sure of their ability to engage in EBP. Similar findings were noted in a study [22] done in Malawi to assess knowledge, attitude and use of EBP among registered nurse midwives. The study showed that even if the midwives viewed EBP positively, the practice was comparatively low. Likewise according to a study done in Omanan[23] there was a mismatch between nurse's attitudes and translation of EBP to clinical practice. Several other studies [24]; [17];[23] reported positive associations between positive attitudes and translation of EBP to practice. The study by [17] however concluded that the positive attitude among the participants could have been influenced by Hawthorne observer effect and exposure to trainings.

Lack of time

Lack of time is a well-recognized barrier in EBP that is cited in nursing literature [25]; [26]. Studies show that time constraints can significantly impact the success of adopting and implementing EBP[13]; [27]. Seven of the reviewed articles in the current study indicated lack of time as the number one barrier to implementing and maintaining EBP across all professions. Nurses are usually faced with demanding workloads leaving very minimal time for research and implementation of EBP. A recent cross-sectional study done in Saudi Arabia examined the barriers perceived by primary healthcare nurses in implementing EBP[28]. The study revealed perceptions of lack of time to read research as a key barrier to EBP implementation among nurses. According to the study, most nurses felt that the process of searching for and critically appraising evidence was time consuming. These perceptions act as a psychological barrier consequently preventing nurses from seeking opportunities to apply EBP.

Earlier studies on EBP in nursing [13] and [15] done in Saudi Arabia and Egypt respectively agree with those of the current finding. In these studies, nurses lacked time both for reading and searching information due to high workloads exacerbated by shortage of staff. Similar findings were noted in Indonesia[16] where over 50% of study participants were unable to apply recommendations from research into clinical practice due to lack of time to read research articles. Further results from [26] showed that nurses lacked time for reading research due to tight work schedules and heavy workload.

A focus group study [12] conducted to assess nurses views on the barriers to implementation of EBP demonstrated that nurses are often forced to juggle with multiple tasks such as care of patients and their families and administrative duties consequently limiting the time available for searching literature and applying evidence based research findings. The nurses therefore prefer not to apply EBP, believing that this way they will be able to perform their duties effectively. The reasons for failure to read research articles in a study conducted in Ethiopia[17] were however contrary to findings from most articles. In this study negligence was the main reason nurses failed to read books, guidelines and research to guide their clinical decision-making practice.

4.1.2 Organizational barriers

The study identified two main organizational barriers to EBP mentioned by nurses. These are lack of administrative support and lack of autonomy in nursing

Lack of administrative support

Administrative support plays a critical role in fostering a culture of EBP [29];[25]. Leaders have a responsibility to engage staff at all levels, support an EBP culture and allocate resources to provide the necessary infrastructure to enable EBP. In the end this can enhance a professional work environment in which professionals feel engaged in clinical decisions and have the skills to base their practice on the best available evidence. Despite this important role in leadership in EBP, studies show that even when evidence supports a particular intervention, EBP initiatives may always not be prioritized [30]. A qualitative descriptive study conducted in Ethiopia to explore the experience of implementing evidence-based practice among nurses and midwives working in public hospitals [3], revealed presence of a non-supportive management towards EBP in nursing, lack of organizational supportive organizational resources to get electronic journals for research consequently leading to unsuccessful EBP implementation.

Another study [28] demonstrated lack of understanding and commitment to EBP by the leadership as the main organizational barrier to EBP implementation. Participants in this study expressed frustrations due to heavy workload and lack of time emanating from a non-supportive leadership. Further lack of administrative support and lack of visionary nursing leaders which led to low recognition was reported in a Saudi Arabian study [13]. Other management barriers identified include lack of supervision and incentives for conducting research and developing nursing skills.

Bureaucratic governance tends to have hierarchical structures where decisions are made by those high up in the organizational structure. These can potentially lead to a disconnect between nurses providing direct patient care and the administrators tasked with making policy decisions. A Case study on a metropolitan health network done in Australia to explore how different nursing and midwifery leadership roles enact responsibility for implementing evidence-based practice[29] reported presence of layers of administrative complexities due to bureaucracy. Study participants felt that the decision making process was slow thus impeding the implementation of new research evidence. Further findings from the Australian study reveal a disgruntled group of nurses who were required to only rely on protocols and guidelines in decision making. According to the respondents, the health system imposed use of protocols and guidelines to meet national guidelines a factor that limited the nurse's ability to experiment ideas that they felt could be workable. Similar findings were recorded in a qualitative study examining facilitators and barriers to EBP implementation in EBP mentors across health care settings in Switzerland [30] where nurses reported excessive use of bureaucracy. According to the respondents in this study, individuals are required to pass through several people to get an approval for non-clinical inquiry which can lead to delays in adopting new evidence based practices. The participants further identified lack of systemic support and structural processes that can support long-term sustainability of implementation efforts thus slowing the EBP implementation process.

Lack of autonomy in nursing

Autonomy the capacity through which one can determine one's actions through independently made choices, among a set of principles and rules to which one adheres is the main element of professional practice in nursing[7]. As members of the health team, nurses and physicians have complimentary roles in health provision. The effectiveness of this team depends on the extent to which they hold similar perspectives on how to provide care. Evidence has shown that when

nurses have the power to act autonomously, they are more likely to engage in critical thinking [13], and thus, they can decide and choose their course of action quickly[33]. Further evidence shows that autonomy of nurses can facilitate their empowerment translating into the promotion of their caring behaviors, resulting to improvement of patient outcomes and quality of care [33]. Despite such evidence, research has shown that nurses and midwives lack authority in decision making over patient management consequently leading to a lack of nurses' autonomy to change practice required for EBP implementation [7].

A robust body of literature exploring the value of autonomy shows that nurses are required to follow strict procedures dictated by physicians leaving them with little or no authority in clinical decision making in many health care settings [19]; [12]. As a consequence nurses are more likely to follow routine practices even when they are not effective as opposed to adopting newer EBP approaches [28]. A systematic review[19] revealed difficulties in performing midwifery led care among midwives due to lack of power to change procedures since there were hierarchical procedures that accorded doctors higher authority thus resulting in nurse's opinions on patient care not being valued by the physicians. Another study assessing barriers to EBP implementation in Iran [10] reported perceptions of inadequate authority to change patient care practices among midwives. The midwives were restricted from performing even ultrasound screening for pregnant women.

In conclusion, nurses operate within hierarchical structures that limit their decision-making power hence discouraging the independent application of research and evidence. The lack of autonomy as a result leads to reduced ability to apply EBP in patient care.

4.2 Enablers/facilitators in EBP implementation

The major purpose of implementation research is to support and promote the successful application of interventions that have been demonstrated to be effective. In addition, implementation research is to make a difference, to improve the effectiveness, quality, efficiency and equity of policies, programmes and services. Findings from the review indicate that multiple strategies can be used to integrate EBP into practice. The implementation process consists of specific implementation strategies, which encompass all methods and means to ensure the adoption and sustainment of interventions.

4.2.1 Training on EBP

Professional development to gain EBP knowledge is recognized as the nurse's best preparation for providing clinical care that optimizes patient outcomes [34]. Once nurses gain EBP knowledge and skills, they realize it's not only feasible within the context of their practice setting, but that it reignites their passion for their roles and assists them in delivering a higher quality of care resulting to improved patient outcomes. Findings from most searched articles show that training nurses on how to use an innovation before it is implemented contributes to its successful adoption. Hence to ensure that future healthcare users can be assured of receiving such care, healthcare professions must effectively incorporate the necessary knowledge, skills and attitudes required for EBP into education programs [35].

Education programs and associated curricula act as a key medium for shaping healthcare professional knowledge, skills and attitudes, and therefore play an essential role in determining the quality of care provided. This was demonstrated by an interventional study[14] done to evaluate the impact of a training program on nurse's literacy skills for EBP. The study proved that practical workshops and regular training courses are effective interventional strategies to equip nurses with skills that they can apply in their future nursing practice. In agreement are findings from a recent observational cross-sectional study [36]) which concluded that training nurses on EBP increases their abilities to integrate evidence into decision making in their clinical practice enabling them to adapt changes into their practice. An expert view by [35] further highlighted the importance of the need for EBP principles to be integrated throughout all elements of healthcare professions. The interviewed experts recommended use of patient examples and clinical scenarios as one of the instructional practices.

The implementation of a successful EBP education is necessary so that learners not only understand the importance of EBP and be competent in the fundamental steps, but it ultimately serves to influence behavior in terms of decision-making, through application of EBP in their professional practice. Further findings from a systematic review [37], concluded that the best way to increase EBP skills among nurses and facilitate EBP implementation in their daily clinical practice is through use of a variety of educational strategies that integrate multiple learning pathways and techniques with regular follow-up and feedback from mentors and/or leaders. According to this review, computer-based education is the most cost-effective and efficient strategy. Such incorporation can be facilitated at various different levels and settings. At a health service level, the provision of computer and internet facilities at the point of care with associated content management/decision support systems allowing access to guidelines, protocols, critically appraised topics and

condensed recommendations was endorsed. At a local workplace level, access to EBP mentors, implementation of consistent and regular journal clubs, grand rounds, audit and regular research meetings are important to embed EBP within the healthcare and education environments. This in turn can nurture a culture which practically supports the observation and actualization of EBP in day-to-day practice and could in theory allow the coherent development of cohorts of EBP leaders.

4.2.2 Supportive leadership

Management support is the key to the successful implementation of EBP. Facilitation of successful implementation of EBP, requires the support of nursing managers who have the authority and nursing service policies to commit to the implementation of EBP[16]. Nurse leaders, managers, directors, and chief nursing officers have considerable influence on the implementation of evidence-based practice (EBP) in their units, departments, and organizations. Results from a qualitative study [29] done to explore the role of nursing and midwifery leadership in EBP implementation showed that managers act as a gatekeeper that nurtures the development and systemic application of EBP into administrative decision-making, as well as allocating resources. Their role in EBP involves combining the best scientific evidence and years of professional experience as managers, together with organizational evidence to make informed decisions [25].

Transformation to an EBP culture requires an exciting team vision and clear expectations from healthcare leaders that EBP is the foundation of all care delivered within the healthcare system. This expectation should be integrated into the vision, mission, and strategic plan of the institution and incorporated into the on boarding of all new clinicians [33]. Chief executive officers and other healthcare administrators also must understand the link between EBP and improved healthcare system outcomes. They must be assisted in understanding and valuing the importance of EBP in reaching their high-priority goals of health-care quality and safety. Nurse executives also must be actively engaged in EBP in their own decision making and role model it for their directors, managers, and point of care staff as prior research has indicated that role modeling and valuing of research by nursing management increases the use of evidence.

Successful nurse managers have supported the emergence of an operational culture favourable to EBP, and have created strategies and participatory structures related to EBP implementation, while also improving the smooth running of related processes. Effective leaders listen to nurses' ideas and remove barriers to the implementation of EBP, as well as authorizing and mentoring the nurses. Managers can engage nurses in EBP implementation through good preparation and by educating and encouraging employees[38].

4.2.3 Stakeholder engagement

The world health organization (WHO) defines a stakeholder as any "individual or group who is responsible for or affected by health- and healthcare-related decisions that can be informed by research evidence[39]. In healthcare, stakeholders comprise of individuals, corporations or any other entity that has vested interest in medical decisions or evidence upon which the clinical decision is based upon [40]. Engaging stakeholders ensures that the process of adoption and integration of EBP into practice are aligned with the needs, preferences and expectations of those who will be affected by the change [41]. Engaging stakeholders therefore helps in identification of potential barriers early in the process and matching of accepting implementation strategies [42].

Most of the reviewed articles in this study agree that successful guideline development and implementation requires the engagement of multiple stakeholders and "shared solutions". A systematic review assessing barriers and facilitators to implementation of midwifery led care in middle and low income countries [19] found that having stakeholders who were positive increased success in implementation of midwifery - led practices. The study showed that midwives worked with village heads who introduced them to the community thus enhancing acceptability of care. The study therefore recommended strengthening of collaboration between funders, professional organizations, practitioners, communities, and the government. In support are findings from a policy analysis conducted in Uganda to explore implementation of skilled birth attendance strategy[43]. The analysis revealed presence of a strong support system for policy implementation from development partners and national stakeholders such as the White Ribbons Alliance and other Civil Society Organizations which resulted to improvement in obstetric emergency care leading to an increase in skilled birth attendance.

In summary stakeholder engagement has the potential to move research evidence off from bookshelves into practice. Involving all stakeholders from the start of a process can therefore help keep this priority at the forefront of project work and ensure that 'ground level' role-players acquire the skills they need to participate fully [40].

5.0 Conclusion

Evidence based practice remains a crucial step towards improvement of nursing care of patients consequently improving outcomes however, the implementation process is challenged by several barriers. The key barriers to EBP implementation in nursing are deficient knowledge on EBP, time constraints and lack of autonomy in nursing.

Recommendations and implications of the study

Addressing barriers to EBP implementation will enhance quality nursing care. To mitigate the barriers, targeted strategies ought to be put in place. One of the strategies to overcome EBP implementation is enhancement of nurses' knowledge on EBP. This can be achieved through incorporating targeted trainings on EBP, conducting workshops on EBP, awareness creation and mentorship activities where experienced nurses will be required to guide others in EBP. Another step in overcoming EBP barriers is increasing time for EBP activities by use of current technology that supports clinical decision support systems and incorporating EBP related activities into routine nursing activities. There is also need for better administrative support that prioritizes EBP as a strategic goal that enhance nurse's autonomy in decision making.

Compliance with ethical standards

Disclosure of conflict of interest

The authors have no conflict of interest to declare.

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