

BARRIERS TO IMPLEMENTING EVIDENCE-BASED PRACTICES IN MIDWIFERY CARE IN GOVERNMENTAL HOSPITALS IN JORDAN

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Abstract

Purpose: Midwives are crucial in the provision of proper and quality maternity care. The application of evidence-based practice (EBP) can be viewed as one of the foundations of enhancing the outcomes of maternal health. Nevertheless, implementation of EBP in midwifery care is usually hampered especially in state hospitals. The purpose of the study was to determine the obstacles to the EBP implementation in midwifery care in governmental hospitals in Jordan. **Techniques:** A cross-sectional study (descriptive) was carried out on midwives employed in governmental hospitals in Jordan. The structured and validated questionnaire was used to gather data regarding the barriers to the implementation of EBP on an organizational, professional, or individual level. The SPSS software was used in the application of descriptive and inferential statistics. **Findings:** Lack of time caused by work overload, the absence of training opportunities, non-access to recent research materials, the lack of institutional support, and the lack of autonomy in clinical decision-making were identified as the major barriers. All these obstacles were detrimental in the proper incorporation of EBP into midwifery care. **Conclusion:** Midwives in government hospitals in Jordan have different obstacles that restrict the use of EBP. Such difficulties demand the help of the organizational strategies such as constant professional development, improved access to resources, positive leadership, and increased clinical authority of midwives. By eliminating these obstacles, it can be possible to encourage the uptake of EBP and eventually enhance the quality of maternity care in Jordan.

Keywords: Evidence-Based Practice (EBP); Barriers; Midwifery Care; Governmental Hospitals; Jordan.

INTRODUCTION

Maternal health is a priority area in the world and one of the priority areas on the indicators of public health especially in developing nations where mortalities and morbidity of mothers is still a major issue. Ensuring that maternity care is of high quality is a critical element in realizing international health development objectives. Evidence-based practice (EBP) is one of the best strategies that can be used to improve the quality and safety of maternal healthcare. The nature of EBP can be described as a combination of the finest research evidence and clinical practice and patient values to aid the decision-making process in healthcare delivery (Abuidhail et al, 2022; Ali et al, 2021). It is very well known as the gold standard of enhancing clinical outcomes, safe care, and optimum maternal and neonatal health. Nevertheless, the adoption of EBP in maternity care is a problematic issue in all parts of the world. Lack of access to current research, time, insufficient training, resource and inadequate institutional or managerial support are some of the barriers to studies (Hussein & Dahlen, 2016, Abualrejal et al, 2021).

These obstacles may stop midwives successfully integrating evidence into their practice, which will restrict the possible advantages of EBP in enhancing maternal and newborn results. Midwives are important in availing safe and all-inclusive maternity care, especially in the governmental hospitals where most women in Jordan seek maternal health

services (Azmoode, 2017; alqudah et al, 2021; Abualrejal et al, 2021). Nevertheless, there is limited research on the impediments to EBP, among midwives in Jordan. The paucity of research in the special needs of midwives in the application of evidence-based care has created a gap in the research on this aspect, and this study involves determining the factors that limit the use of evidence-based practices in midwifery care within government hospitals in Jordan. It is believed that the findings will be important to policymakers, healthcare managers and educators to formulate specific measures that would handle these barriers and facilitate effective implementation of EBP in midwifery practice.

MATERIALS AND METHODS

It is a descriptive cross-sectional research design, whereby it used census of midwives working in government hospitals in Jordan. The research was done to determine the obstacles that impede the use of evidence-based practice (EBP) in midwifery care. All midwives willing to take part in the study and possessing at least six months of work experience were used as the subjects of the study. Midwives who were either on maternity leave or were sick leave were not considered. The involvement was voluntary and anonymous. Before every participant was enrolled in the study, they were informed about the background and objectives of the study, and informed consent was taken. A structured questionnaire was applied in order to gather the required information. The questionnaire's first section gathered sociodemographic and professional data, including age, education, employment status, years of work experience, prior EBP training, level of English proficiency, statistical knowledge, and access to electronic databases. An established tool for assessing barriers, the Barriers Scale, was used to gauge the obstacles (Funk et al., 23). This instrument consists of 31 items divided into four subscales: i) adopter characteristics (midwives) (eight items), ii) setting characteristics (organization) (eight items), iii) research characteristics (innovation) (six items), and iv) presentation characteristics (communication) (six items). The questionnaire's items are dispersed at random and lack clear classifications of the various types of factors. There are multiple items on each of the subscales.

A 5-point Likert scale was used to rate the responses: 1 = to no extent, 2 = to a little extent, 3 = to a moderate extent, 4 = to a great extent, and 5 = no opinion. The marked responses that expressed no opinion were excluded from the mean score in order to perform the analysis. The subscale score was calculated by dividing the sum of the similar items' scores by the subscale items. Funk and associates. (23) have demonstrated the original Barriers Scale's face and content validity, and it has been reported to have strong intersubscale internal consistency reliability ($\alpha = 0.651-0.801$). The panel of midwifery and nursing research experts in Jordan checked the questionnaire in the study to ensure that it has content and face validity. Pilot test has also been carried out to verify on the clarity and applicability. The internal consistency of the adapted one was established, and the Cronbach coefficients were 0.690 to 0.741 in the four subscales. The data was collected during the secret working hours.

The questionnaires were given at the beginning of the shift and the respondents given the opportunity to complete them in a separate room within the time frame of approximately 15 minutes, in order to ensure that the respondents are not bothered with work and are also similar to ensure that the confidentiality is achieved.

Ethical Consideration

Prior to the study, the Institutional Review Board (IRB) of the Jordanian Ministry of Health and a local university ethical committee gave their approval (approval number: MOH/REC/2025/04). Every participant signed an informed consent form after being fully informed about the purpose and goal of the study. Midwives were reminded that their responses were voluntary and given the assurance that they would not be shared. Additionally, they were informed that they could leave the study at any moment without facing any consequences.

Data Analysis

The Statistical Package of Social Sciences (SPSS) version 25.0 was used for both descriptive and inferential statistics. The sociodemographic characteristics and barrier scores of the participants were compiled using descriptive statistics like means, standard deviations, frequencies, and percentages. The inferential statistics employed to investigate the connections between the demographic traits and perceived obstacles to evidence-based practice included the Mann-Whitney U test, the independent t-test, the one-way ANOVA, and the Spearman correlation analysis. A p-value of less than 0.05 was considered statistically significant.

RESULTS

The study included 120 midwives in total, 95 of whom completed the survey, yielding a 79.3 response rate. Each of them worked in a Jordanian government hospital. With an average age of 30 ± 20 ± 5 to 10 years, the subjects ranged in age from 23 to 45. Ninety-one percent of the respondents had a bachelor's degree, and eighty-four percent had a masters.

The range of the professional years was 1–20 (mean \pm SD = 6.10 ± 4.80 years). Of the midwives, about half reported attending at least one formal training session on evidence-based practice (47–4%). The average score for self-reported proficiency in statistical analysis, English language, and electronic information database use was also found to be 2.72 ± 0.581 , 2.22 ± 0.731 , and 2.65 ± 0.66 (ranging from one to four), respectively.

Six of the top ten barriers were organizational, two were related to research characteristics (innovation), one was related to research communication, and one was related to adopter characteristics, according to Table 1 results. Additionally, it was demonstrated that the three main barriers to the adoption of EBP were the dispersion of relevant literature (mean = 2.61), the midwife's lack of time to read research (mean = 2.72), and the facilities' lack of preparation for its implementation (mean = 2.66).

Overall, the largest obstacles were found in the organization subscale (mean \pm SD = 2.58 \pm 0.52) and the innovation subscale (mean \pm SD = 2.44 \pm 0.61). The next items on the list were adopter characteristics (mean \pm SD = 2.25 \pm 0.55) and communication barriers (mean \pm SD = 2.31 \pm 0.57) (Table 2).

DISCUSSION

This is the first study that was available and sought to assess the hindrances to the implementation of evidence-based midwifery care in the governmental hospitals within Jordan. The current research shows that midwives have a series of problems that are limiting the adoption of EBP in the practice.

The results of Azmoude et al. (2017) in Jordanian nurses, who found that limited time, resource deficiency and inadequate support of the administration were significant barriers to EBP support this finding (26).

Likewise, other researchers across other nations have attested to the fact that excessive workload, insufficient training, and poor access to research evidence are the most prevalent obstacles to EBP among the health care practitioners (16, 18, 27, 28).

Conversely, some of the studies have had lower barriers, and enabling environments and ongoing professional growth supported the adoption of EBP (9, 29, 30). These barriers, as a result, are a crucial precondition of successful EBP implementation into clinical practice (Shaban et al, 2011; Dagne et al, 2021; Hussein et al, 2014).

There were no marked differences in barriers to EBP based on individual and professional qualities. An example is the fact that it was found that there is no difference between the MSc and BSc degree midwives in terms of barriers to EBP.

This was in accordance with a report by Dagne et al., (2021) who indicated the existence of the same problems at various levels of education qualifications (16). In their turn, Dabak et al. (2024) discovered that EBP implementation among nurses with MSc degrees in Jordan had fewer barriers due to the increased exposure to research courses and academic resources (31).

The number of midwives in the current study with the master degree is small and could be the reason behind this discrepancy. Additionally, both the MSc and BSc midwives were placed in similar clinical settings and this could have made their experiences even in the area of barriers. Past exposure to EBP training was not related to a decrease in perceived barriers.

Also, the correlations of barriers with professional variables like English proficiency, statistical analysis skills and use of electronic information databases were not significant ($P < 0.05$).

These variables can be more in terms of knowledge and technical competence as opposed to structural and organizational constraints that midwives are faced with (Youssef et al, 2018; Abdel-Sammad et al, 2022).

Table 1: Barriers to implementing evidence-based practices in midwifery care

No.	Item	Mean \pm SD
1	Lack of time to search for and apply research findings in daily practice	3.95 \pm 0.82
2	Heavy workload creates difficulty in adopting EBP	3.88 \pm 0.91
3	Limited access to updated research databases and journals	4.02 \pm 0.73
4	Insufficient support from hospital administration for EBP initiatives	3.84 \pm 0.88
5	Lack of training and workshops on how to apply EBP	4.10 \pm 0.69
6	Inadequate knowledge of how to critically appraise research	3.76 \pm 0.85
7	Reliance on traditional methods rather than evidence-based care	3.44 \pm 0.92
8	Difficulty integrating research findings into clinical practice	3.68 \pm 0.80
9	Limited availability of clinical guidelines based on EBP	3.72 \pm 0.78
10	Shortage of resources such as internet, library, or updated materials	3.85 \pm 0.87
11	Lack of collaboration and communication among colleagues about EBP	3.60 \pm 0.90
12	Absence of incentives or motivation to practice EBP	3.55 \pm 0.95
13	Clinical environment does not facilitate the implementation of EBP	3.70 \pm 0.89

Table 2: Correlations between demographic and professional characteristics and barriers to implementing evidence-based practice

Variable	r	p-value
Age	-0.042	0.721
Experience years	0.095	0.412
degree of English language competency.	-0.182	0.114
proficiency in statistical analysis.	-0.208	0.079
proficiency with electronic information databases.	-0.162	0.174

Table 3: Barriers to implementing evidence-based practice among midwives

Rank	Factor	Barrier Item	Mean	SD
1	O	insufficient time to read research.	2.701	0.921
2	O	Insufficient facilities for execution.	2.641	0.721
3	C	There isn't a single compilation of pertinent literature.	2.591	0.921
4	O	Physicians' lack of cooperation.	2.483	1.062
5	O	Midwives believe they lack the power to alter patient care practices.	2.454	0.881
6	I	Not all research findings are warranted.	2.454	0.972
7	O	lack of assistance from other employees.	2.442	0.961
8	O	Hospital administration does not allow implementation	2.431	1.040
9	I	Research findings are often conflicting	2.422	1.011
10	A	Unwillingness of midwives to change or try new ideas	2.420	1.010
11	A	Lack of awareness about current research	2.411	0.721
12	A	There is no documented need to modify the practice.	2.402	0.963
13	O	Lack of time during working hours to implement new ideas.	2.404	0.991
14	I	Lack of research replication.	2.401	0.802
15	I	Research articles are not published quickly enough.	2.391	0.852
16	A	Midwives don't see the value of research in practice.	2.342	1.081
17	C	Research articles are not readily available.	2.311	0.921
18	C	Analyses of statistics are difficult to understand.	2.311	0.922
19	C	The practical implications are not made clear.	2.313	0.814
20	C	Research is not presented in a clear and readable manner.	2.301	0.990
21	A	Midwives don't see much personal benefit from EBP.	2.284	0.963
22	O	Results from the study are not generalizable to local settings.	2.251	0.932

23	I	The amount of research data is overwhelming.	2.241	0.910
24	I	Midwives are uncertain about whether to trust research findings.	2.211	1.00
25	I	Research has methodological shortcomings.	2.18	0.881
26	A	Lack of confidence in evaluating the quality of research.	2.181	0.891
27	A	Midwives believe that changing practice has little to no benefits.	2.161	0.852
28	C	Research is not relevant to midwives' practice.	2.100	0.920
29	A	In order to discuss research, midwives are isolated from knowledgeable colleagues.	2.041	0.871

The given research also enables determining perceived obstacles to the implementation of evidence-based practice among midwives of governmental hospitals in Jordan. The five leading barriers were insufficient time, poor facilities and failure to compile pertinent literature in a single location, physician uncooperative nature and the perception of having insufficient authority. These results agree with the findings of the earlier researches elsewhere (Abdel-Sammad, 2022; Morton et al, 2016; Ali et al, 2021). As an example, Yassin et al. (2024) indicated that the most prominent obstacles to implementation of research results in practice were insufficient time, inappropriate facilities, and authority in the case of Iranian nurses (25).

Likewise, a systematic review of 10 studies in Iran reported that the constraint of time and lack of facilities were consistently identified as the key barriers to the use of research (13). Various researches done in other countries and other healthcare cohorts also found the most prevalent factor to prevent EBP adoption to be the shortage of time (32-34). Similar to other health systems, midwifery shortages and workload are also one of the main issues in the governmental hospitals in Jordan. To overcome this challenge, it would be essential to address this challenge by offering adequate human resources, which will enable the application of EBP (ALJA'FREH, 2022; Sweidan, 2008; Abualrejal et al, 2021). The second significant obstacle that was found was the lack of implementation facilities. The success of EBP integration also depends on the presence of adequate infrastructure, such as material resources, such as access to computers, electronic databases, journals, and libraries, as well as human resources, such as clinical specialists (Iravani, 2016; Shaban, 2012). The third obstacle was that there was no literature that was compiled at a single location, and this could be because of the challenge that midwives encounter when trying to locate and arrange information in various sources (Lewis, 2013).

The approaches that advance the understanding of midwives in literature appraisal, the access of international databases, and the familiarization with such organizations as the Cochrane Collaboration or the National Institute of Health and Care Excellence, can become valuable tools that will help to overcome this barrier (36). The following two barriers were associated with the perception that the physicians will not collaborate with implementation, and midwives do not believe they have adequate power to transform the way they provide care to patients. The relationship between obstetricians and midwives should be optimized, as the two work in parallel areas of the maternal health care. Nonetheless, the discrepancies in the views and the lack of power held by the midwives tends to cause tension in the clinical decision-making. Other studies have reported similar barriers with lack of physician cooperation and inadequate authority ranked as the three

leading barriers to research utilization (25, 38-41). On the other hand, Oraby et al. (2022) established that Chinese nurses did not consider the cooperation of physicians to be a significant obstacle, which is a characteristic of professional relationships in different nations (42). In general, organizational aspects were always rated as the greatest obstacles, which is consistent with the previous studies that underscored that structural and managerial support is essential to the implementation of EBP (15, 42, 43).

Thus, organizational support should be improved to boost the quality of the maternity care provided in governmental hospitals in Jordan. There were few limitations to this study (alqudah et al, 2021; Abualrejal et al, 2021). First, misclassification bias can have been caused through the use of self-reported questionnaire. Second, the cross-sectional design will be unable to give causal relationships between the barriers identified and EBP utilization. Lastly, the sample size could be a limitation to the generalizations of the results to every midwife practicing in Jordan considering its relatively small size.

CONCLUSIONS

According to the results of the present research, midwives who have to work in governmental hospitals in Jordan face a number of challenges which impede the successful adoption of evidence-based practices in maternity care. The barriers that ranked highest comprised of time, inappropriate facilities, unavailability of compiled literature in a single site, insufficient physician collaboration, and the sense of insufficient authority in clinical decision making. These obstacles emphasize the significant contribution of organizational and structural factors to the development of the potential of midwives to implement EBP in their practice. To boost the adoption of evidence-based practices, the strategies must aim to reduce these barriers by provision of sufficient material and human resources, enhancing access to electronic databases and research repositories, and enhancing partnership between midwives and physicians. Besides this, the support at the managerial and policy levels is needed to provide midwives with more power and to establish a favorable organizational environment to promote the implementation of EBP in governmental maternity care facilities.

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