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Awareness of Evidence-Based Practice and Cochrane Library among Allied Health Care Professionals

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Abstract

Objective:

This study aimed to assess the awareness and use of evidence-based practice (EBP) and the Cochrane Library among allied health care professionals working in major public sector hospitals in Karachi.

Method:

A cross-sectional study was conducted among 100 allied health care professionals recruited through convenience sampling from Civil Hospital, Jinnah Postgraduate Medical Centre (JPMC), and Dow University of Health Sciences (DUHS). A structured self-administered questionnaire was used to measure awareness of EBP principles, knowledge of systematic reviews, and use of the Cochrane Library. Descriptive statistics summarized demographic data, while chi-square tests compared awareness levels across demographic groups.

Result:

Overall, 62% of participants reported having heard of EBP, while only 41% demonstrated an understanding of its principles. Awareness of systematic reviews was observed in 48% of respondents. Regarding the Cochrane Library, 35% had heard of it, and only 18% had ever accessed it. The main barriers to use were lack of training (67%) and limited institutional access (58%). Awareness was higher among younger professionals and those with fewer than five years of experience.

Conclusion:

The findings suggest that while allied health professionals in Karachi are moderately aware of EBP, their knowledge and use of the Cochrane Library remain limited. Capacity-building initiatives, institutional support, and integration of EBP training into professional curricula are

needed to improve evidence-informed practice in Pakistan.

Keywords: *Evidence-based practice; Cochrane Library; allied health professionals; Karachi; awareness*.

Introduction

Evidence-based practice (EBP) is recognized globally as a key strategy for improving the quality of health care delivery, emphasizing the integration of the best available research evidence with clinical expertise and patient values.[1] The Cochrane Library serves as one of the most authoritative sources of systematic reviews, providing clinicians and allied health professionals with reliable, synthesized research evidence to guide decision-making.[2] In high-income countries, EBP has been successfully integrated into health care curricula and clinical practice, resulting in improved patient outcomes and professional confidence.[3–4] However, in low- and middle-income countries (LMICs), barriers such as inadequate infrastructure, limited internet access, and insufficient training hinder its widespread implementation.[5–6] Allied health professionals—including physiotherapists, occupational therapists, medical technologists, radiographers, and speech therapists—form an integral part of multidisciplinary health care teams.[7] Their ability to apply evidence-based interventions is vital for ensuring high-quality and cost-effective patient care. Despite this, awareness of EBP among allied health professionals remains variable, and use of specialized databases such as the Cochrane Library is often limited.[8–9] Previous research in Saudi Arabia and India revealed that although awareness of EBP was moderate, practical application was hindered by lack of institutional support and training opportunities.[10–11] In sub-Saharan Africa, studies highlighted infrastructural and technological challenges as major barriers.[12] In Pakistan, most available research has examined physicians' and nurses' knowledge of EBP, with limited focus on allied health professionals.[13–14] This study was therefore conducted to assess the awareness of EBP and the Cochrane Library among allied health care professionals in Karachi, using Civil Hospital, Jinnah Postgraduate Medical Centre (JPMC), and Dow University of Health Sciences (DUHS) as study sites. The findings will provide insights into current knowledge gaps and help inform institutional strategies for promoting evidence-based clinical practice.

Methods

This cross-sectional study was conducted at Civil Hospital, Jinnah Postgraduate Medical Centre (JPMC), and Dow University of Health Sciences (DUHS) in Karachi. A total of 100 allied health professionals participated, recruited through convenience sampling. Inclusion criteria included

working as a qualified allied health professional with at least one year of clinical experience. Professionals still in training or unwilling to consent were excluded. A structured, self-administered questionnaire was used to collect data. The tool included demographic variables (age, gender, years of experience), awareness of EBP, knowledge of systematic reviews, and familiarity with the Cochrane Library. Data were analyzed using SPSS v.26. Descriptive statistics were calculated for demographics and awareness items. Chi-square tests were applied to assess associations between demographics and awareness variables. A p-value of <0.05 was considered statistically significant.

Results

Table 1 shows that slightly more than half of the participants were female (52%). The majority were between 20 and 30 years of age (57%), and nearly half (46%) had less than five years of professional experience.

Table:1 *Demographic Characteristics of Participants*

Variable	Frequency (n)	Percentage (%)
Gender: Male	48	48.0
Gender: Female	52	52.0
Age 20–30	57	57.0
Age 31–40	31	31.0
Age >40	12	12.0
Experience <5 years	46	46.0
Experience 5–10 years	38	38.0
Experience >10 years	16	16.0

Table 2 demonstrates that while 62% of participants had heard of EBP, only 41% reported understanding its principles. Awareness of systematic reviews was reported by less than half of the respondents (48%). A majority (72%) believed that EBP improves patient care.

Table 2: *Awareness of Evidence-Based Practice (EBP) among Participants*

EBP Awareness Item	Yes (%)	No (%)
Heard of EBP	62	38
Understands EBP principles	41	59
Knows about systematic reviews	48	52
Believes EBP improves patient care	72	28

Table 3 reveals that only 35% of respondents had heard of the Cochrane Library, and just 18% had ever accessed it. The most frequently reported barriers were lack of training (67%) and limited institutional access (58%).

Table:3 *Awareness and Use of the Cochrane Library among Participants*

Cochrane Awareness Item	Yes (%)	No (%)
Heard of the Cochrane Library	35	65
Ever accessed Cochrane Library	18	82
Identifies lack of training as a barrier	67	33
Reports limited institutional access	58	42

Discussion

This study highlights moderate awareness of EBP but limited familiarity with the Cochrane Library among allied health care professionals in Karachi. While more than half of participants had heard of EBP, fewer than half understood its principles, and less than one-fifth had accessed the Cochrane Library. These findings underscore the gap between theoretical knowledge and practical application of evidence-based resources.Our results are consistent with findings from India and Saudi Arabia, where allied health professionals demonstrated moderate awareness but low practical application of EBP, primarily due to lack of formal training and restricted institutional access.[10–11] Similar outcomes were noted in Nigeria, where barriers included workload and insufficient ICT infrastructure.[12] In contrast, higher levels of EBP awareness have been reported in high-income countries, attributed to structured integration of EBP into education and clinical practice.[14–15]

Awareness of the Cochrane Library was notably poor, despite its role as a gold-standard source of systematic reviews.[2] Most participants identified lack of training and access as major obstacles, findings supported by regional studies emphasizing the importance of institutional capacity-building and digital infrastructure.[16–17] The strengths of this study include its focus on an underexplored population—Pakistani allied health professionals—and the use of a structured questionnaire. Limitations include the reliance on self-reported data, which may introduce bias, and the use of convenience sampling, which reduces generalizability. The cross-sectional design also prevents causal interpretations. Future studies should adopt multi-center and longitudinal designs and evaluate the impact of structured EBP training programs.In conclusion, the findings highlight the urgent need for integrating EBP training into allied health curricula and providing institutional access to databases such as the Cochrane Library. Improving awareness and utilization of these resources can strengthen evidence-informed clinical practice in Pakistan.

Conclusion

Awareness of EBP among allied health professionals in Karachi was moderate, but knowledge and use of the Cochrane Library were limited. Key barriers included lack of training and restricted access. Addressing these through structured educational initiatives and institutional support is essential for promoting evidence-based health care delivery in Pakistans.

Author Contributions:

Ms Saira Sami verifies the full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis

Concept and design: Saira Sami

Acquisition, analysis, or interpretation of data: Shaista Ayoob Gabol

Drafting of the manuscript: Saira Sami

Critical review of the manuscript for important intellectual content: All Authors

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