Migration Letters

Volume: 19, No: S8 (2022), pp. 1450-1454

ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online)

www.migrationletters.com

Healthcare Professionals' Sources Of Knowledge Of Complementary Medicine In An Academic Center

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Abstract

Background: The use of complementary medicine (CM) in academic healthcare settings is increasing, yet debates persist regarding its efficacy, risks, and benefits. Healthcare professionals often feel uncertain discussing CM with patients, highlighting the need to understand their sources of knowledge and attitudes towards CM.

Objective: To assess healthcare professionals' sources of knowledge and attitudes towards complementary medicine (CM) within an academic hospital setting.

Design and Participants: A cross-sectional web-based survey was conducted , involving 4,925 healthcare professionals employed .

Main Measures: The survey aimed to identify factors influencing healthcare professionals' opinions on CM, their knowledge levels, and their communication practices regarding CM.

Key Results: The survey received responses from 1,247 healthcare professionals. Key factors influencing opinions on CM included personal experience, clinical experience, and evidence supporting CM's physiological mechanisms. Personal experience notably influenced nurses and midwives more than physicians, as well as professionals trained in CM compared to non-trained counterparts. Physicians tended to rely more on randomized controlled clinical trials compared to nurses. A significant majority of respondents acknowledged a lack of knowledge about CM, with many noting that patients-initiated discussions on CM.

Conclusions: Healthcare professionals used varied strategies to form opinions on CM, with physicians leaning towards scientific evidence and nurses/midwives emphasizing personal experiences. Despite these differences, most respondents felt unprepared to discuss CM with patients. Enhancing interprofessional education could empower providers to engage in meaningful discussions about CM, enabling patients to make informed healthcare decisions.

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Keywords: *complementary medicine (CM), healthcare professionals, patients.*

Introduction

The utilization of complementary medicine (CM) among the population ranges from a quarter to a third, showing a 25% rate. There's a growing interest among healthcare professionals and patients, leading to CM's integration in academic centers and medical education. However, challenges like policy gaps, low patient referrals, and medical skepticism hinder CM's hospital implementation. Concerns mainly revolve around the lack of biomedical evidence, clinical efficacy, knowledge gaps, and safety issues, keeping CM's legitimacy in hospitals contentious. (Clarke et al., 2015)

Advancements in statistics and epidemiology have fueled substantial clinical research growth, advocating for Evidence-Based Medicine (EBM) and Practice (EBP). Knowledge translation, applying evidence to enhance healthcare, has become pivotal but also overwhelming for healthcare providers due to information overload.

Given CM's potential for interactions and side effects, patient disclosure to physicians and informed discussions are crucial. However, non-disclosure rates of CM use by patients range widely, underscoring the need for improved communication. Despite calls for physicians to be knowledgeable about both traditional and non-traditional care, many still feel uneasy discussing CM due to knowledge gaps. (Klein et al., 2015)

Despite CM's integration in academic settings, little is known about healthcare professionals' knowledge, information sources, and communication abilities regarding CM with patients. This study aims to evaluate physicians', nurses', physical therapists', and midwives' knowledge and attitudes towards CM within an academic hospital context. (Hall et al., 2017)

Methods:

A cross-sectional survey was conducted among healthcare professionals, including physicians, nurses, physical therapists, and midwives. To enhance recruitment, every fifth respondent was offered a voucher for a local bookshop.

Given the absence of a specific questionnaire on how healthcare professionals acquire information about CM, we developed our own based on previous studies. The

, available in Arabic ofand English, defined CM as practices not part of a country's tradition or integrated into the dominant healthcare system. We conducted forward and backward translation to ensure question consistency. The final questionnaire, with 32 closed-ended questions, covered sociodemographic data, attitudes toward CM in chronic pain treatment at academic centers, and general attitudes toward CM. Likert-type scales assessed attitudes and knowledge, with the survey taking approximately 20 minutes to complete. The survey was approved by the ethics commission.

We analyzed data using univariate logistic regression, with attitudes and knowledge about CM as dependent variables and gender or profession as explanatory variables. Ordered logistic regressions were used for ordinal variables. Statistical significance was set at $p<0.05$, and missing data were handled by excluding "I do not know" responses. Multivariate analysis was not conducted, and Stata software version 14.1 was used for statistical analyses.

Results:

Out of 4,925 email invitations for the questionnaire, 1,247 healthcare professionals responded (25.3% response rate). Among respondents, 922 were women (73.9%, response rate = 28.8%), and 320 were men (25.7%, response rate = 18.5%). The distribution by profession was 879 nurses (70.5%, response rate = 32.6%), 257 physicians (20.6%, response rate = 13.0%), 68 physical therapists (5.5%, response rate = 45.9%), and 34 midwives (2.7%, response rate = 30.6%).

On average, professionals had 13.32 years of experience after graduation and 8.82 years working at the university hospital. Most (93.5%) worked directly with patients. About 15.8% of respondents were trained in a CM modality, with reflexology, aromatherapy, massage, and hypnosis being the most common.

The top three factors influencing professionals' opinions on CM were personal experience, clinical experience, and evidence of CM's physiological mechanisms. Case reports in CM journals had the least impact. Age and main activity (clinical practice, management, research) did not significantly affect opinions.

Regarding knowledge about CM, 82.5% agreed they lacked knowledge, but 84.0% believed healthcare professionals should be knowledgeable about prominent CM treatments and inform patients about CM.

More than half (65.0%) reported patients initiating CM discussions. Females and nurses/midwives were more likely to initiate discussions than males and physicians, respectively. Training in CM was associated with a higher rate of discussion initiation.

Overall, the sample represented a good mix of genders and professions compared to non-respondents, as detailed in another article.

Discussion:

Our study revealed distinct influences on healthcare professionals' attitudes toward CM in a academic hospital. Personal experience, recommendations from others (both healthcare professionals and non-professionals), and clinical experience were more influential for nurses, midwives, and females compared to physicians and males, who were more inclined to consider results from randomized controlled trials. This echoes findings from a US study where physicians prioritized randomized controlled trials and evidence of treatment mechanisms in forming their CM attitudes. The impact of medical training on distancing physicians from human perspectives in medicine has been noted before, with time constraints and knowledge gaps hindering knowledge implementation into practice. (Templeman & Robinson, 2011)

Nurses predominantly relied on personal experiences and informal sources for CM information, reflecting a gap between theory and practice in nursing. Despite understanding the importance of Evidence-Based Practice (EBP), nurses often based their practice on intuition and tradition. Reflective skills and theoretical knowledge were highlighted as essential for bridging this gap. Similarly, physical therapists, while knowledgeable about EBP and literature research, favored social interactions as information sources over EBP steps. (Hollenberg et al., 2011)

In our study, patient-initiated discussions about CM were common, highlighting a need for healthcare professionals to improve their knowledge about CM. Despite acknowledging their lack of CM knowledge, professionals agreed they should be informed about prominent CM treatments and able to educate patients. Female and CM-trained professionals were more likely to initiate CM discussions, aligning with previous findings of CM users being more likely to recommend CM. (Straus et al., 2009)

Interprofessional education could be key in enhancing healthcare professionals' CM knowledge and promoting coordinated care. Encouraging professionals to initiate CM discussions with patients, regardless of their backgrounds, is crucial. However, our study has limitations, including the use of a non-validated questionnaire, a low response rate, and potential bias towards CM-interested professionals. Generalizing our results beyond our hospital and addressing these limitations are important for future research. (Hollenberg et al., 2011)

Conclusion

In conclusion, our findings underscore the need for healthcare professionals to actively engage in CM discussions with patients and enhance their CM knowledge. Accessible, high-quality CM information at hospitals and interprofessional collaboration are vital steps forward.

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