



Assessing Barriers and Facilitators for Implementing Clinical Practice Guidelines (CPGs) in the Middle East and North Africa (MENA): Delphi Study

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INTRODUCTION

Clinical Practice Guidelines (CPGs) are defined by the Institute of Medicine as "systematically developed statements to assist practitioner and patient decisions about appropriate healthcare for specific clinical circumstances".⁽¹⁾ They have potential benefits to improve health outcomes by promoting proven interventions, discouraging ineffective ones, and providing standardization of care.⁽²⁾

In 2020, a systematic review of barriers to and facilitators of adherence to CPG in the Middle East and North Africa (MENA) region⁽³⁾ included studies from Saudi Arabia, Palestine, Egypt, Jordan, Iran, United Arab Emirates, and Sudan. The results showed that the most reported barriers and facilitators to implementing CPGs were environmental and Clinician-related factors.

This systematic review reports a wide array of barriers and facilitators for implementing CPGs in the MENA region. Identifying the most important factors for CPGs implementation helps guide decision-makers to implement specific strategies targeting them.

OBJECTIVES

Our aim is to determine the most important factors for implementing CPGs in the MENA region using the Delphi method.

METHODS

Study Design

A two-round modified Delphi survey approach was used; Survey Monkey⁽⁴⁾ was used to create and share the survey.

Study Participants

The study included researchers and scholars who were either involved in developing guidelines or publishing papers assessing barriers and facilitators for implementing CPGs in the MENA region. We identified potential participants by referring to the reference lists of two systematic reviews^(3,5) conducted on CPGs in the MENA region. In addition, we identified researchers who contributed to the guideline international network conference 2021⁽⁶⁾, and participants were asked to send the survey to other researchers in the field.

Survey Design

A pilot test was conducted with 3 researchers to validate the survey's content and appropriateness, and if there were any additional factors that needed to be added.

A set of barriers (n= 26) and facilitators (n= 15) were identified from 3 previously published studies^(3,7,8) and during survey validation.

Delphi process

In the first-round participants were asked to rate each barrier and facilitator statements on a five-point scale (1: not at all important to 5: very important). In the second round of the study, participants were asked to re-score statements that did not reach our pre-defined criteria in the first round and any additional statements added by the participants. Consensus criteria were defined as 70% agreement per round. Experts had the opportunity to give feedback on each statement and add any factors they thought were missing.

Lastly, all participants who had completed the first and/or second round were invited to rank the statements (1 = the most important) that have reached the pre-defined criteria from the previous rounds.

Statistical Analysis

Descriptive statistics were conducted to present the characteristic of the respondents, summarize the distribution of scores, calculate the spread and agreement for each Delphi survey statement, and to demonstrate the most and least perceived barriers and facilitators.⁽⁹⁾

RESULTS

Demographic

A total of 217 participants were identified by their publications, including the corresponding authors and all co-authors. Out of 217 invited, 30 responded to the invitation. Among these respondents, 57% were male, 57% were above 50 years old, 50% were physicians and 80% had experience for more than 15 years. Two participants did not complete demographic information. The participant's country of practice/ research is shown in **Figure (1)** and their expertise with CPGs is shown in **Figure (2)**

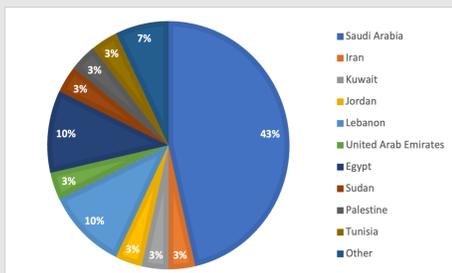


Figure (1) Participant's Country of Practice/ Research

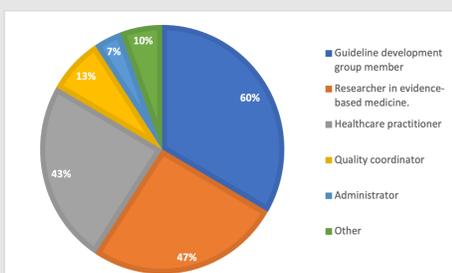


Figure (2) Participant's Expertise with CPGs

RESULTS

First-Round Results

The first-round was completed by 25 participants. Out of 26 barrier and 15 facilitator statements that were identified, 2 barriers and 6 facilitators reached consensus, ranging from (72%-80%) and (70% - 78%), respectively. Barriers involved statements regarding Healthcare Practitioners (HCPs) preferences and policy makers' support. Whereas facilitators were mainly around guidelines-related factors, such as their customization to local setting, ease of access and flexibility. 3 barriers and 2 facilitators have been suggested and added. **Figure (3)** presents the 8 statements that reached consensus.

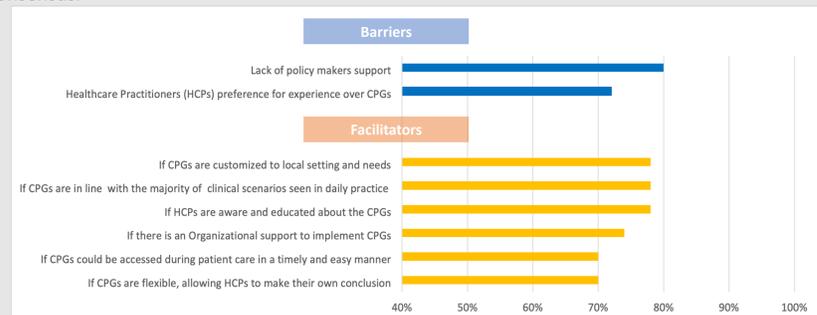


Figure (3) First-Round Results

Second-Round Results

The second-round was completed by 19 participants. Out of 27 barrier and 11 facilitator statements that were identified, 8 barriers and 7 facilitators reached consensus, ranging from (71%-90%) and (71% -81%), respectively. Barriers involved statements regarding HCPs communication, research and self-learning skills. Whereas facilitators involved HCPs training and if CPGs were obligated.

Figure (4) presents the 15 statements that reached consensus.



Figure (4) Second-Round Results

Ranking results

A total of 10 barriers and 13 facilitators have reached consensus at this point. All participants who had completed the first and/or second round were invited to rank the most important factors. Thirteen Participants completed this round. **Table (1)** summarizes the overall ranking for barrier statements and **Table (2)** summarizes the overall ranking for facilitator statements.

Ranking	Barriers for Implementing CPGs in MENA Region
1	Healthcare Practitioners (HCPs) preference for experience over CPGs.
2	Lack of policy makers' support.
3	Lack of motivation.
4	Lack of training in CPGs implementation.
5	Lack of CPGs customization to practice settings, culture, and patients' groups.
6	Lack of clinical audit and feedback.
7	Lack of evidence from local settings.
8	Lack of effective Communication between healthcare team.
9	Lack of effective research and self-learning skills.
10	Lack of training in CPGs adaptation.

Table (1): Ranking Results, barrier statements

Ranking	Facilitators for Implementing CPGs in MENA Region
1	If HCPs are aware and educated about the CPGs.
2	If CPGs could be accessed during patient care in a timely and easy manner.
3	If CPGs are customized to local setting and needs.
4	If CPGs are in line with the majority of clinical scenarios seen in daily practice.
5	If there is organizational support to implement CPGs.
6	If CPGs are obligated by institution/department head.
7	If CPGs are flexible, allowing HCPs to make their own conclusion.
8	Networking with existing organizational projects (e.g., accreditation, scientific production, patient safety initiatives, etc.).
9	If clinical and quality champions are supporting the implementation of these specific CPGs.
10	If CPGs materials are advertised and disseminated.
11	If CPGs training courses are available to Healthcare Practitioners.
12	If CPGs are available in plain language summary directed to the patients.
13	If consultation team are available to answer questions about the CPGs.

Table (2): Ranking Results, facilitator statements

CONCLUSION

The study defined barriers and facilitators to CPGs implementation that can be used to develop targeted interventions aimed at Interactive learning to improve healthcare practitioners research knowledge. The findings suggest that there is a need to Implement a hospital program focusing on clear communication and health literacy techniques.

REFERENCES



SURVEY

