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Abstract

Background: Adapted clinical practice guidelines (CPGs) are based on existing recommendations from other developers.

Aims: To produce a mapping summary of the methods used for adaptation of CPGs in the Eastern Mediterranean Region (EMR).

Methods: We conducted a literature review of studies describing adaptation of CPGs in the EMR. Databases and official websites were searched for studies published between 2006 and 2022. We excluded de novo development of CPGs and adaptation of other types of guidelines such as public health guidelines.

Results: As an overview of the current situation of CPG adaptation in the EMR, we identified the 2 main categories: informal and formal adaptation. Six formal adaptation frameworks were used in the EMR: ADAPTE, Adapted-ADAPTE, GRADE-ADOLOPMENT, RAPADAPTE, CAN-IMPLEMENT, and KSU-Modified-ADAPTE. The validation of adapted CPGs to the local context is not well defined in the literature.

Conclusion: Despite the successful use of CPG formal adaptation frameworks, there is no international standardized guidance to identify which framework is most suitable for specific healthcare contexts in the EMR. Each institution has adapted its CPGs differently. A standardized selection tool is needed to enhance the appropriate selection of the adaptation method that fits the local resources and context. We encourage EMR countries and organizations to register their old and new CPG adaptation projects to avoid duplication in guideline synthesis.

Keywords: clinical practice guidelines, guideline adaptation, adaptation methodologies, Eastern Mediterranean adaptation frameworks, Eastern Mediterranean Region

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Introduction

Guidelines adaptation is a systematic approach to using or modifying guidelines produced in a particular cultural and organizational setting for application in a different setting. It is a valid alternative to de novo guidelines development (1–4). Relevant concepts for adaptation include adoption and contextualization. De novo guidelines development is the process of establishing new clinical practice guidelines (CPGs) from primary or secondary literature. Adoption means implementation of guidelines recommendations in their entirety, without modification or caveat,

in a new healthcare context. In guidelines contextualization, additional considerations are required for guidelines implementation (e.g. local workforce, training, health systems, equipment, and accessibility) (1–7).

Adaptation of CPGs was not widespread until the ADAPTE Collaboration published its framework in 2006. Guidelines adaptation may involve additional work to search for local research, or obtain local consensus, regarding how best to make changes to recommendations so that care is relevant to the local context (1–3,5).

Healthcare institutions have a strong interest in obtaining quality evidence to create new CPGs for patient care. However, de novo guidelines development is often costly, time-consuming, and requires a highly experienced team who can review and critique published research (3,5,6,8). Healthcare institutions find adapting CPGs to local practice practical and feasible, and it helps reduce costs for low-income countries, reduces duplication of efforts, and enhances the effectiveness of high-quality guidelines recommendations (3,5,9,10).

Formal guidelines adaptation frameworks provide a systematic approach and increase methodological rigor and quality of CPGs (10). From 2006, apart from ADAPTE, several frameworks have been established to provide an evidence-based approach to guidelines adaptation [e.g. Adapted-ADAPTE, Alberta-Ambassador-Program-Adaptation-Phase, GRADE-ADOLOPMENT, MAGIC (Making GRADE the Irresistible Choice) (or SNAP-IT), RAPADAPTE, Royal College of Nursing, Systematic Guideline Review, Adopt–Contextualize–Adapt Framework, DELBI, KSU-Modified ADAPTE, and PAGE] (5,11–21,22).

Four reasons have been identified for guidelines adaptation: (1) developing CPGs from 1 or more source guidelines that are then contextualized to intended healthcare settings; (2) implementing, endorsing, or adopting source guidelines; (3) updating existing guidelines; or (4) analysing conflicting recommendations (16).

The ADAPTE Collaboration performed a systematic review of guidelines adaptation and proposed a stepwise structured framework (1,2,21). The development process took place between 2005 and 2007 and was refined in 2009 with an updated version of its Guideline Adaptation Manual and Resource Toolkit (1). ADAPTE has been used by many organizations to develop high-quality CPGs through 3 phases (set-up, adaptation, and finalization), 9 modules, and 24 steps (Table 1) (1).

In 2010, after evaluating its manual and resource toolkit, the ADAPTE Collaboration dissolved and transferred its resources to the Guidelines International Network (GIN) to make them available to the international community (1,5,6). The GIN Adaptation Working Group aims to provide methods, resources, and training to standardize and improve guidelines adaptation (1,23). Among the 111 member organizations and 240 individual members from 61 countries in the GIN, there are 6 organizational members from 4 EMR countries: Think Pink: Bahrain Breast Cancer Society; Ministry of Public Health and Primary Health Care Corporation (Qatar); National Center for Evidence-Based Medicine, Saudi Health Council (Saudi Arabia); King Saud University Medical City (Saudi Arabia); and National Authority for Assessment and Accreditation in Healthcare (Tunisia). GIN established 7 regional communities, including an Arab Regional Community, that aimed to support increasing regional interest in evidence-based healthcare and CPGs (24,25).

In 2015, Adapted-ADAPTE was published by the Alexandria Center for Evidence-Based Clinical Practice Guidelines (launched in 2008) to support more clarity, simplicity, and practicality, and to reduce the resources and time needed for guidelines adaptation projects (18,19). In 2018, the Egyptian Pediatric Clinical Practice Guidelines Committee was established as a national initiative by faculty staff in the paediatrics departments of 15 Egyptian universities and the Supreme Council of Egyptian University Hospitals. The Committee used Adapted-ADAPTE to adapt 32 national CPGs (26–29).

In 2014, the first adapted CPG published by King Saud University and King Saud University Medical City was followed by guidelines adaptation projects that were published as articles and presented at scientific conferences. The 2009 stakeholder expert collaboration between the Quality Management Department and Research Chair for Evidence-Based Health Care and Knowledge Translation in Riyadh led to formation of an organization-wide CPG steering committee and departmental committees that functioned as a CPG programme (30). King Saud University and King Saud University Medical City continue to support guidelines adaptation projects at the local (n = 42) and national (n = 8) levels using KSU-Modified-ADAPTE, which was based on Adapted-ADAPTE and the original ADAPTE, with addition of new tools and modification of others, and a proposed section for guidelines implementation tools and strategies (5,31–34).

In 2017, the GRADE-ADOLOPMENT framework was developed (20). It was the first framework to address CPG adaptation, adoption, and de novo guidelines development processes (hence the new acronym ADOLOPMENT). It aimed to develop high-quality guidelines recommendations for local use within a short period. The ADOLOPMENT process consisted of 3 stages (Table 2) (20,33,34). GRADE-ADOLOPMENT was developed as part of a

collaborative national CPG initiative between the Saudi Ministry of Health and McMaster University, Canada (20,35,36). The GRADE-ADOLOPMENT and KSU-Modified-ADAPTE frameworks did not benefit from each other, probably because the 2 initiatives were ongoing at the same time, and each had a different scope and purpose. The former was based on GRADE and was part of a national initiative, while the latter was based on ADAPTE and was part of an institutional initiative (16).

RAPADAPTE was used successfully in the EMR. It benefited from ADAPTE and GRADE methods by extending guideline adaptation to evidence database adaptation, through simplifying mapping of DynaMed evidence ratings to GRADE ratings. RAPADAPTE was used to produce the first national evidence-based CPG for breast cancer in Bahrain (39,40).

Some limitations of guidelines adaptation frameworks were identified: (1) most were developed and used in high-income settings; (2) many lacked

formal evaluation of their impact on patient outcomes; (3) many were resource and time consuming; and (4) most often did not describe in detail how to implement adapted guidelines recommendations (10,16).

Wang et al. explored the range of experiences with guidelines adaptation from the perspectives of WHO regional and country offices, and identified 2 dominant models (41): (1) a pragmatic approach to copying or customizing WHO guidelines to suit local needs; and (2) building local capacity for evidence synthesis and guideline adaptation frameworks to support local development of national CPGs informed by international CPGs. Their findings could help improve adaptability of WHO CPGs. They also suggested clarifications to the process of guidelines adaptation in WHO and academic literature, to help adaptors and implementers of CPGs decide on the appropriate course of action according to their specific circumstances (41,42).

The aim of this study was to produce a mapping summary of the methods used for guidelines adaptation in the EMR.

Methods

Sources and methods of selection

We conducted a literature review of studies describing CPG adaptation in the EMR. Databases (including Springer link, EBSCO, ProQuest, and PubMed) and governmental or institutional official websites (e.g. GIN) were searched for studies published between 2006 and 2022. For PubMed, the MeSH terms included (Eastern Mediterranean Region[Title/Abstract]) OR ("Middle East and North Africa*"[Title/Abstract]) OR ("Gulf Cooperation Council"[Title/Abstract]) AND ("guideline adaptation"[Title/Abstract] OR "adapt*"[Title/Abstract]) AND ("clinical practice guideline*"[Title/Abstract]). We included studies, adapted CPG documents, methodology manuals that addressed adaptation (e.g. WHO Handbook), and reviews that described CPG adaptation in the EMR. We excluded de novo guidelines development and adaptation of guidelines other than CPGs, such as public health or social care guidelines. Any studies that focused on subjects other than CPG adaptation (e.g. adaptation of tools and other healthcare quality improvement interventions) were excluded. The search was updated before final submission.

Results and Discussion

Compilation and interpretation of data

The WHO EMR comprises 21 Member States and the occupied Palestinian territory (including East Jerusalem), with a population of nearly 679 million people (43). Table 3 shows a sample of recently adapted CPGs in the EMR. WHO has focused on adapting and implementing CPGs for low-income EMR countries. In November 2015, the WHO Regional Office for the Eastern Mediterranean organized an expert consultation on evidence-based de novo guidelines development and guidelines adaptation, which included experts from Egypt, France, Lebanon, Norway, and Saudi Arabia, as well as WHO staff. Several challenges to producing high-quality CPGs were identified (8).

The first attempt to adapt published CPGs in the EMR was when a panel of 7 committees of oncologists and experts reviewed the 2009 National Comprehensive Cancer Network (NCCN) CPGs (11–14). NCCN published their first CPGs adapted for the EMR in 2014 (12), with an update in 2019 to improve regional recommendations and facilitate access to high-quality evidence (13,14). NCCN guidelines adaptation aimed to develop high-quality standard practice accepted by healthcare practitioners in the EMR. However, the CPGs identified a large gap in knowledge and limited evidence relevant to the CPG health topics in the EMR. These limitations reduced the practical utility and efficiency of the CPGs. The wide range of areas covered by the guidelines was another limitation. The diversity of healthcare services provided in different countries made it difficult to provide standardized guidance throughout the EMR. The socioeconomic situation, limited resources, and infrastructure were other challenges identified (13).

Kidney Disease: Improving Global Outcomes adapted their CPGs to the EMR in 2014, using a nephrology expert group from the region (9 stakeholders) along with an international nephrology

expert. The CPGs did not include a clear description about how they were adapted methodologically and how the CPG group managed the conflicts of interest (15).

In 2017, a collaboration between Weill Cornell Medical College – Qatar Rheumatoid Arthritis Consortium and American University of Beirut GRADE Center in Lebanon resulted in a Middle Eastern adaptation of the American College of Rheumatology guidelines for treatment of rheumatoid arthritis, using GRADE-ADOLOPMENT. The panel searched for local research and modified the guidelines recommendations based on cost, health equity, benefits and harms, and acceptability (35).

The Alexandria Center for Evidence-Based Clinical Practice Guidelines finalized 11 guidelines adaptation projects between 2010 and 2015 with additional CPG projects in progress. They used Adapted-ADAPTE as a formal guidelines adaptation framework, including the AGREE II instrument, to assess CPG quality. Evidence-based guidelines recommendation and implementation tools were included in the Adapted-ADAPTE CPGs (18,27–29). This methodology was used for the guidelines adaptation projects of the Egyptian Pediatric Clinical Practice Guidelines Committee (27–29).

In 2013, there was a collaboration between the Saudi Center for Evidence-Based Health Care, a former department of the Ministry of Health, and the GRADE Working Group at McMaster University. This collaboration was initiated to develop Saudi CPGs based on GRADE and the GRADE Evidence to Decision framework, which led to development of GRADE-ADOLOPMENT and 20 national CPGs (20,36,44).

In Tunisia, The National Authority for Assessment and Accreditation in Health Care was established in 2012 as an independent public authority supervised by the Ministry of Health, and launched several national projects for health technology assessments, clinical pathways, and CPGs. The CPG projects were generated using GRADE-ADOLOPMENT with methodological support from the American University of Beirut GRADE Center (e.g. breast cancer screening) (45).

In Bahrain, the first national evidence-based CPG for breast cancer was generated in 2019 using RAPADAPTE through a collaboration between Think Pink: Bahrain Breast Cancer Society, National Health Regulatory Authority, Supreme Council of Health, and the former Bahrain Branch of the UK Cochrane Centre. Formulation of the CPG involved an international advisory board and review panel of guideline methodologists, a multidisciplinary expert group of

clinicians, and a range of GI tools (39,40).

In Qatar, SA Qader (graduate nursing student, Hamad Medical Corporation, Doha) and ML King (Faculty of Nursing at University of Calgary in Qatar) led a CPG project for ostomy nursing care, using the AGREE II Instrument and CAN-IMPLEMENT. The latter was originally based on the knowledge-to-action process with an increased focus on guidelines implementation (46,47).

In the United Arab Emirates, a 2020 CPG for type 2 diabetes was adapted by the Emirates Diabetes Society using an informal approach (48).

In the Islamic Republic of Iran, several guidelines adaptation projects were conducted. Zadegan et al. were supported by Tehran University of Medical Sciences and the Ministry of Health and Medical Education to adapt a CPG for traumatic brain injury from 2 source guidelines, guided by the AGREE II assessment (16,49). Another research group adapted CPGs for end-of-life care for patients with cancer, using a modified ADAPTE process in addition to a qualitative study and consensus ratings by a multidisciplinary panel of experts based on local healthcare needs (50).

An early initiative was the Sudan Evidence-Based Medicine Association, which was launched in 2006 to establish infrastructure in health services and medical education for implementing evidence-based healthcare, with a focus on clinical pathways and other guidelines implementation tools and interventions. This association was 1 of the early GIN members in the EMR. Later, the association founders established a new body, Altababa Advanced Training Center, which continued to provide evidence-based healthcare education and training (51,52). Other Sudanese professional societies have produced CPGs (e.g. for systemic hypertension in adults) using an informal guidelines adaptation or adoption approach (53,54).

A systematic review found that, despite improvements in CPGs over the last 2 decades, the quality remained moderate to low when evaluated by AGREE II (55–57). Another recent AGREE II assessment showed that the number of published CPGs was limited, considering the large geographical area of the EMR. The main AGREE II domains that had high scores were clarity of presentation, scope, and purpose, whereas rigor of development and applicability had low scores. The authors recommended that policymakers identify areas for improvement of CPGs, such as training of individuals and recruitment of international experts (56).

A systematic review of 24 CPGs published in Gulf Cooperation Council countries found that 32.78% of all articles were published in Saudi Arabia. The data showed poor adherence to CPGs by healthcare professionals, lack of clear guidelines implementation strategies, lack of awareness of CPGs, and poor access to evidence (58).

The WHO Regional Office for the Eastern Mediterranean and GIN encouraged and facilitated collaboration and networking on capacity building for guidelines adaptation through recognized experts in the region. Collaborators included King Saud University/King Saud University Medical City CPG Programme, American University of Beirut GRADE Center, and National Authority for Assessment and Accreditation in Healthcare and WHO Country Office in Tunisia (5, 8, 45).

The use of formal guidelines adaptation methods for production of organizational or national CPGs is 1 of the proposed solutions to address the knowledge gaps in the adaptation process (6,10).

Evidence-based gap analysis in the EMR is at its initial stage; however, Egypt, Islamic Republic of Iran, Bahrain, Saudi Arabia Tunisia, Qatar, and United Arab Emirates, have already begun adapting CPGs at institutional and national levels using 6 of the formal methods and frameworks. Transparent descriptions of the guidelines adaptation processes and high-quality recommendations are the cornerstone for implementing these adapted guidelines. Multidisciplinary teams of local and national stakeholders should be involved in evaluating evidence-based guidelines recommendations and their applicability to local settings (8,10,59,60).

Implementation of evidence-based guidelines recommendations is the main goal of establishing the CPGs, and the absence of a clear plan for guidelines implementation renders any guidelines useless. Guidelines implementation tools and strategies, such as failure modes and effects analysis and clinical algorithms, were reported for some of the KSU-Modified-ADAPTE CPGs e.g. venous thromboembolism prophylaxis, glaucoma, antiemetics for chemotherapy, surgical antimicrobial prophylaxis, and paediatric status epilepticus (5,32,61–64). Other adapted CPGs in the EMR did not report guidelines implementation projects (e.g. NCCN, Middle East Rheumatoid Arthritis Consortium, Ostomy Care, and Kidney Disease: Improving Global Outcomes) (12,15,34,45).

Currently, validation and applicability of adapted CPGs to the local context are not well defined in the literature. Some CPGs in healthcare lack information about the adaptation processes and

outcomes (8–10). Without a clear understanding of how much time and resources are saved by guidelines adaptation, CPG developers or adapters cannot be sure that it is worthwhile. There is no global standardized tool to assess methods for adapting CPGs. However, 2 studies used AGREE II or AGREE Reporting Checklist to assess the adaptation process and quality of CPGs, although AGREE II was designed to assess quality of de novo guidelines development rather than adaptation (38,47). An international expert collaborative panel developed an extension of the RIGHT statement, the RIGHT-Ad@pt Checklist, which was designed specifically for reporting adapted CPGs (65). Another extension of AGREE II that informed adaptation of surgical CPGs (AGREE-S appraisal instrument) was recently published (66). Abdul–Khalek and her colleagues showed that only 40% of adapted CPGs reported using a published method or framework for adaptation, and compliance with ADAPTE varied. The mean score for AGREE II assessment of adapted CPGs was lowest for the rigour of development (56.79%), applicability (50.14%), and editorial independence (42.54%) (67). Apart from the published review that reported an AGREE II assessment of CPGs in the EMR, clinical validity of the current adapted CPGs was not evaluated (56). Future studies should focus on the usability and health impact of adapted CPGs (31,61–64).

Formal guidelines adaptation frameworks provide clearly defined steps toward achieving adapted evidence-based recommendations, and increased transparency for future groups to understand, evaluate, or imitate the process (6,58). To date, there is no evidence supporting the efficiency of 1 guideline adaptation framework over another. However, the Adapted-ADAPTE, CAN-IMPLEMENT, GRADE-ADOLOPMENT, KSU-Modified-ADAPTE, and RAPADAPTE frameworks have been updated from the original ADAPTE, and include additional tools, resources, and templates, and input from many experts. These adaptation methods used in the EMR were based on the original ADAPTE (Adapted-ADAPTE, CAN-IMPLEMENT, and KSU-Modified-ADAPTE) or GRADE (GRADE-ADOLOPMENT) methods, or both (RAPADAPTE) (10,16,19).

Early identification of potential barriers and challenges to processes of guidelines adaptation and implementation should be incorporated during the planning stage of adaptation projects. Previous studies have suggested possible solutions to address these challenges (16,61).

The recent wave of published CPGs of varied quality in response to the COVID-19 pandemic has encouraged the international CPG research community to work on novel evidence-based methodologies for rapid production of guidelines that can address such global public health crises. One suggested solution was the use of formal guidelines adaptation processes (68).

There are significant knowledge gaps and many barriers to the development or adaptation of

CPGs in the EMR. Future research with high-quality standards should focus on answering the questions raised in this specific population. Adapted guidelines should be evaluated to improve their applicability and clinical validity for local use. They should have a clear plan for reviewing and updating, and simple enough for further adaptation.

Recommendations to improve collaboration, share and standardize existing CPGs in the EMR

In 2019, Resolution RC66/R.5 of the WHO/EMRO endorsed a regional action plan to increase capacity for evidence-informed policymaking for health. The Regional Network of Institutions for Evidence and Data to Policy highlighted the importance of: (1) developing and regularly updating the priority list for guidelines adaptation and development and health technology assessments; (2) establishing evidence-informed decision-making programmes (e.g. national health technology assessment and guidelines adaptation and development in collaboration with large academic organizations); and (3) supporting policy development and adaptation of WHO guidelines for national priorities by Member States (68–72).

We add our voice to the call in the 2016 WHO report on developing and adapting evidence-based CPGs in the EMR for actions by academic and healthcare delivery organizations and the WHO/EMRO (8). This includes but is not limited to: (1) increased number of academic staff, healthcare providers, and professionals specializing in clinical epidemiology and guidelines methodology; (2) formulation of a regional guidelines advisory committee in the WHO/EMRO that will coordinate with the WHO collaborating centres and centres of excellence in evidence-based healthcare and CPGs; (3) encouragement of research in evidence-based healthcare and CPGs; (4) networking with experts and stakeholders on evidence-based healthcare and CPGs, and collaboration with CPG global organizations like GIN, AGREE Enterprise, GRADE working group, networks, centres, MAGIC Foundation, and RIGHT Working Group; and (5) identifying different formal adaptation frameworks and methodologies in EMR countries and organizations, and the feasibility and sustainability of each framework (22).

Future coordination and integration is recommended in CPG projects, especially those with a national scope. Registration of CPG projects is a global recommendation to avoid duplication of efforts. Two existing international registries are available: GIN International Guideline Library and Registry (https://g-i-n.net/international-guidelines-library/), and PREPARE (Practice guideline REgistration for trancPAREncy) that is hosted by the Evidence-Based Medicine Center, University of Lanzhou, China (http://www.guidelines-registry.org/) (37,38). We recommend that CPG groups in the EMR should register their finalized and in-progress work to establish a regional database and encourage more networking and collaboration.

Conclusions

Despite the successful use of formal guidelines adaptation frameworks, there is no international standardized guidance for identifying which is most suitable for specific healthcare contexts in the EMR. Each institution is adapting its CPGs differently. Several national CPG projects are using different methods within the same countries. A standardized selection tool is needed to enhance appropriate selection of the adaptation method that fits the local resources and contexts. We encourage EMR countries and organizations to register their old and new guidelines adaptation projects to avoid duplication in CPG formation, especially within the same country, and collaborate with global CPG networks and reference organizations.

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Cadres méthodologiques pour l'adaptation des lignes directrices mondiales de pratique clinique au contexte national dans la Région de la Méditerranée orientale

Résumé

Contexte : Les lignes directrices de pratique clinique adaptées sont basées sur les recommandations existantes de développeurs tiers.

Objectif : Fournir un résumé cartographique des méthodes utilisées pour adapter les lignes directrices de pratique clinique dans la Région de la Méditerranée orientale.

Méthodes : Nous avons mené un examen de la littérature portant sur les études décrivant l'adaptation des lignes directrices de pratique clinique dans la Région. Les études publiées entre 2006 et 2022 ont été recherchées dans des bases de données et sur des sites Web officiels. Nous avons exclu la littérature sur l'élaboration de novo de ces lignes directrices et l'adaptation d'autres types de lignes directrices, telles que celles utilisées en santé publique.

Résultats : À titre d'aperçu de la situation actuelle de l'adaptation des lignes directrices de pratique clinique dans la Région de la Méditerranée orientale, nous avons identifié deux catégories d'adaptation principales : les modèles informel et formel. Six cadres d'adaptation formelle y ont été utilisés : ADAPTE, Adapted-ADAPTE, GRADE-ADOLOPMENT, RAPADAPTE, CAN-IMPLEMENT et KSU-Modified-ADAPTE. La validation des lignes directrices de pratique clinique adaptées au contexte local n'est pas bien définie dans la littérature.

Conclusion : Malgré l'utilisation réussie de cadres d'adaptation formelle pour les lignes directrices de pratique clinique, il n'existe pas d'orientations normalisées au niveau international pour identifier le cadre le plus adapté aux contextes spécifiques des soins de santé dans la Région. Chaque établissement a adapté ses lignes directrices différemment. Un outil de sélection normalisé est nécessaire pour améliorer l'adéquation des méthodes d'adaptation aux ressources et au contexte locaux. Nous encourageons les pays de la Région de la Méditerranée orientale et les organisations à enregistrer leurs anciens et nouveaux projets d'adaptation des lignes directrices de pratique clinique afin d'éviter les doublons dans la synthèse de ces lignes directrices.

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References

1. The ADAPTE Collaboration (2009). The ADAPTE Process: resource toolkit for guideline adaptation. version 2.0. resources – GIN [website]. Guidelines International Network; 2021 (https://g-i-n.net/get-involved/resources/, accessed 10 March 2023).

2. Fervers B, Burgers JS, Haugh MC, Latreille J, Mlika-Cabanne N, Paquet L, et al. Adaptation of clinical guidelines: literature review and proposition for a framework and procedure. Int J Qual Health Care. 2006 Jun;18(3):167–76. https//doi.org/10.1093/intqhc/mzi108 PMID: 16766601

3. Fervers B, Burgers JS, Voellinger R, Brouwers M, Browman GP, Graham ID, et al. Guideline adaptation: an approach to enhance efficiency in guideline development and improve utilisation. BMJ Qual; Saf. 2011 Mar 1;20(3):228–36. https//doi.org/10.1136/bmjqs.2010.043257 PMID: 21209134

4. Cuello-Garcia C. The movement for adopting or adapting clinical guidelines and recommendations. J Clin Epidemiol. 2021 Mar;131:166–7. https//doi.org/10.1016/j.jclinepi.2020.12.025 DOI: 10.1016/j.jclinepi.2020.12.025 PMID: 33359985

5. Amer YS, Wahabi HA, Abou Elkheir MM, Bawazeer GA, Iqbal SM, Titi MA, et al. Adapting evidence-based clinical practice guidelines at university teaching hospitals: a model for the Eastern Mediterranean Region. J Eval Clin Pract. 2019 Aug;25(4):550–60. https//doi.org/10.1111/jep.12927. PMID: 29691950.

6. Dizon JM, Machingaidze S, Grimmer K. To adopt, to adapt, or to contextualise? The big question in clinical practice guideline development. BMC Res Notes. 2016 Sep 13;9(1):1–8. https//doi.org/10.1186/s13104-016-2244-7 PMID: 27623764

7. Birbeck GL, Wiysonge CS, Mills EJ, Frenk JJ, Zhou XN, Jha P. Global health: the importance of evidence-based medicine. BMC medicine. 2013;11(1):1–9. https://doi.org/10.1186/1741-7015-11-223

8. Developing/adapting evidence-based guidelines in the Eastern Mediterranean Region. East Mediterr Health J. 22(4):286–7. http://www.emro.who.int/emhj-volume-22-2016/volume-22-issue-4/developingadapting-evidence-based-guidelines-in-the-eastern-mediterranean-region.html

9. Grimshaw, J., M. Eccles, and I. Russell, Developing clinically valid practice guidelines. J Eval Clin Pract. 1995 Sep.1(1):37–48. https//doi.org/10.1111/j.1365-2753.1995.tb00006.x PMID: 9238556

10. Wang Z, Norris SL, Bero L. The advantages and limitations of guideline adaptation frameworks. Implement Sci. 2018 May 29;13(1):72. https://doi.org/10.1186/s13012-018-0763-4

11. Coordinating office established to advance MENA/NCCN collaboration. Business Wire, 2010 Summer (http://search.ebscohost.com.sdl.idm.oclc.org/login.aspx?direct=true&db=rps&AN=bizwire.c30894883&site=eds-live, accessed 15 August 2022).

12. Jazieh AR. Adaptation of NCCN Guidelines to the Middle East and North Africa Region. J Natl Compr Canc Netw. 2014 Jul 1;12(7):961–2. https://doi.org/10.6004/jnccn.2014.0091

13. Jazieh AR, Azim HA, McClure J, Jahanzeb M. The process of NCCN guidelines adaptation to the Middle East and North Africa Region. J Natl Compr Canc Netw. 2010 Jul 1;8(Suppl_3):S5–7. https//doi.org/10.6004/jnccn.2010.0125 PMID: 20697132

14. Middle East & North Africa (MENA) editions of NCCN guidelines [website]. National Comprehensive Cancer Network (https://www.nccn.org/global/what-we-do/regions/middle-east-north-africa, accessed 10 March 2023).

15. Al Rukhaimi M, Al Sahow A, Boobes Y, Goldsmith D, Khabouth J, El Baz T. et al. Adaptation and implementation of the" Kidney Disease: Improving Global Outcomes (KDIGO)" guidelines for evaluation and management of mineral and bone disorders in chronic kidney disease for practice in the Middle East countries. Saudi J Kidney Dis Transpl. 2014 Jan;25(1):133–48. https//doi.org/10.4103/1319-2442.124536 PMID: 24434398

16. Song Y, Ballesteros M, Li J, García LM, de Guzmán EN, Vernooij RW et al. Current practices and challenges in adaptation of clinical guidelines: a qualitative study based on semistructured interviews. BMJ Open. 2021 Dec 2;11(12):e053587. https//doi.org/10.1136/bmjopen-2021-053587 PMID: 34857574

17. Annual report 2013. Guidelines International Network; 2014 (http://www.g-i-n.net/document-store/annual-reports/g-i-n-annual-report-2013.pdf, accessed 15 August 2022).

18. Amer YS, Elzalabany MM, Omar TE, Ibrahim AG, Dowidar NL. The 'Adapted ADAPTE': an approach to improve utilization of the ADAPTE guideline adaptation resource toolkit in the Alexandria Center for Evidence-Based Clinical Practice Guidelines. J Eval Clin Pract. 2015 Dec;21(6):1095–106. https//doi.org/10.1111/jep.12479 PMID: 26662728

19. Darzi A, Abou-Jaoude EA, Agarwal A, Lakis C, Wiercioch W, Santesso N et al., A methodological survey identified eight proposed frameworks for the adaptation of health related guidelines. J Clin Epidemiol. 2017 Jun;86:3–10. https//doi.org/10.1016/j.jclinepi.2017.01.016 PMID: 28412463

20. Schünemann HJ, Wiecioch W, Brozek J, Etxeandia-Ikobaltzeta I, Mustafa RA, Manja V et al. GRADE Evidence to Decision (EtD) frameworks for adoption, adaptation, and de novo development of trustworthy recommendations: GRADE-ADOLOPMENT. J Clin Epidemiol. 2017 Jan;81:101–10. https//doi.org/10.1016/j.jclinepi.2016.09.009 PMID: 27713072

21. Palda VA, Graham I, Davis D, Burgers J, Brouwers M, Cluzeau F et al. Guideline adaptation: an appealing alternative to de novo guideline development. Ann Intern Med. 2008 Apr 1;148(7):564. https//doi.org/10.7326/0003-4819-148-7-200804010-00022 PMID: 18378957

22. Yao X, Xia J, Jin Y, Shen Q, Wang Q, Zhu Y et al. Methodological approaches for developing, reporting, and assessing evidence-based clinical practice guidelines: a systematic survey. J Clin Epidemiol. 2022 Jun;146:77–85. https//doi.org/10.1016/j.jclinepi.2022.02.015 PMID: 35271968

23. Working groups [website]. GIN Guidelines International Network; 2022 (https://g-i-n.net/get-involved/working-groups/, accessed 15 August 2022).

24. Regional communities [website]. Guidelines International Network; 2022 (https://g-i-n.net/get-involved/regional-communities/, accessed 15 August 2022).

25. GIN Connect (membership software by Very Connect) [website]. Guidelines International Network (https://connect.g-i-n.net/members/addressbook?roles=Associate%20Member&roles=Consumer%20Organisation&roles=Lower%20Middle%20Income%20Organisation&roles=Partner%20contact&roles=Honorary%20Patron&roles=Individual%20membership&roles=Lower%20middle%20income%20countries%20individual&roles=Organisational%20Member&roles=Patient%20Representative&roles=Student%20membership&signedupfilter=true>, accessed 15 August 2022).

26. Abdel Baky A, Omar T, Amer Y. 2021. Towards evidence-based pediatrics: a national clinical practice guidelines program in Egypt on behalf of the Egyptian Pediatric Clinical Practice Guidelines Committee (EPG). 16th Guidelines International Network Conference 2021 Online [website]. Guidelines International Network; 2021. (https://g-i-n.net/wp-content/uploads/2021/10/GIN-Conference-2021-Abstract-Book.pdf, accessed 10 March 2023).

27. Egyptian Pediatric Clinical Practice Guidelines Committee [website] (http://epg.edu.eg/, accessed 10 March 2023).

28. Moustafa BH, Rabie MM, El Hakim IZ, Badr A, El Balshy M, Kamal NM et al. Egyptian pediatric clinical practice guidelines for urinary tract infections in infants and children (evidence based). Egypt Pediatric Association Gaz 69, 43 (2021). https://doi.org/10.1186/s43054-021-00073-z

29. Abdel Baky A, Fouda EM, Hussein SM, Sobeih AA, Abd Al Razek AA, Hassanain AI, et al. Bronchiolitis diagnosis, treatment, and prevention in children: An evidence-based clinical

practice guideline adapted for the use in Egypt based on the 'Adapted ADAPTE' methodology. Egypt Pediatric Association Gaz 2022;70:article number 1. https://doi.org/10.1186/s43054-021-00094-8

30. Wahabi HA, Alansary LA. Great expectations from the chair of evidence-based health care and knowledge translation. Saudi Med J. 2009 Aug;30(8):989–90. PMID: 19668876

31. Ciocson M, Hernandez M, Atallah M, Amer Y. Central vascular access device: an adapted evidence-based clinical practice guideline. J Assoc Vasc Access. 2014;19(4):221–37. https://doi.org/10.1016/j.java.2014.09.002

32. Titi MA, Alotair HA, Fayed A, Baksh M, Alsaif FAA, Almomani Z, et al. Effects of computerised clinical decision support on adherence to VTE prophylaxis clinical practice guidelines among hospitalised patients. Int J Qual Health Care. 2021 Mar 22;33(1):mzab034. https://doi.org/10.1093/intqhc/mzab034

33. Bashiri FA, Albatti TH, Hamad MH, Al-Joudi HF, Daghash HF, Al-Salehi SM et al. Adapting evidence-based clinical practice guidelines for people with attention deficit hyperactivity disorder in Saudi Arabia: process and outputs of a national initiative. Child Adolesc Psychiatry Ment Health 2021 Feb 8;15(1):6. https://doi.org/10.1186/s13034-020-00351-5 PMID: 33557914

34. Alhabib S, Almadani WH, Owaidah T, Al Khadra A, Amr A, Bakhsh E et al. Evidence-based clinical practice guideline: screening, prophylaxis and management of venous thromboembolism (VTE). Saudi Health Council, National Center for Evidence-Based Medicine; 2021 (https://shc.gov.sa/Arabic/Documents/CPG%20Screening.pdf, accessed 10 March 2023).

35. Darzi A, Harfouche M, Arayssi T, Alemadi S, Alnaqbi KA, Badsha H et al. Adaptation of the 2015 American College of Rheumatology treatment guideline for rheumatoid arthritis for the Eastern Mediterranean Region: an exemplar of the GRADE ADOLOPMENT Health Qual Life Outcomes, 2017 Sep 21;15(1):183. https//doi.org/10.1186/s12955-017-0754-1 PMID: 28934978

36. Saudi Arabian handbook for healthcare guideline development. Riyadh: Ministry of Health; 2014 (https://www.moh.gov.sa/en/Ministry/Structure/Programs/TCP/Documents/Saudi%20Arabian%20Handbook%20for%20Healthcare%20Guideine%20Development-updated16-7.pdf, accessed 10 March 2023)

37. Chen Y, Guyatt GH, Munn Z, Florez ID, Marušić A, Norris SL, et al. Clinical Practice Guidelines Registry: toward reducing duplication, improving collaboration, and increasing transparency. Ann Intern Med. 2021 May;174(5):705–7. https//doi.org/10.7326/M20-7884 PMID: 33721516

38. Harrow E, Twaddle S, Service D, Kopp IB, Alonso-Coello P, Leng G. Clinical Practice Guidelines Registry. Ann Intern Med. 2021 May;174(9):1346–7. https//doi.org/10.7326/L21-0492 PMID: 34543600

39. Alper BS, Tristan M, Ramirez-Morera A, Vreugdenhil MM, Van Zuuren EJ, Fedorowicz Z. RAPADAPTE for rapid guideline development: high-quality clinical guidelines can be rapidly developed with limited resources. Int J Qual Health Care. 2016 Jun 1;28(3):268–74. https//doi.org/10.1093/intqhc/mzw044 PMID: 27097885

40. Sprakel, J, Carrara, H, Manzer, BM, Fedorowicz, Z. A mapping study and recommendations for a joint NGO (Think Pink) and Bahrain Government Breast Cancer project.

J Evid Based Med. 2019 Aug;12(3):209–17. https://doi.org/10.1111/jebm.12357 PMID: 31441238

41. Wang Z, Grundy, , Parker, L, Bero L. Variations in processes for guideline adaptation: a qualitative study of World Health Organization staff experiences in implementing guidelines. BMC Public Health 2020 Nov 23;20(1):1758. https://doi.org/10.1186/s12889-020-09812-0 PMID: 33228608

42. WHO handbook for guideline development. 2nd ed. Geneva: World Health Organization; 2014 (https://www.who.int/publications/i/item/9789241548960, accessed 10 March 2023).

43. World Health Organization Regional Office for the Eastern Mediterranean [website] (http://www.emro.who.int/countries.html, accessed 10 March 2023).

44. Al-Hameed FM, Al-Dorzi HM, Abdelaal MA, Alaklabi A, Bakhsh E, Alomi YA, et al. The Saudi clinical practice guideline for the prophylaxis of venous thromboembolism in medical and critically ill patients. Saudi Med J. 2016 Nov;37(11):1279–93. https//doi.org/10.15537/smj.2016.11.15268 PMID: 27761572

45. Kahale L, Ouertatani H, Brahem A, Grati H, Hamouda M, Saz-Parkinson Z et al. Contextual differences considered in the Tunisian ADOLOPMENT of the European Guidelines on Breast Cancer Screening. Health Res Policy Syst. 2021 May 13;19(1):80. https//doi.org/10.1186/s12961-021-00731-z PMID: 33985535

46. Qader SAA, King ML. Transcultural adaptation of best practice guidelines for ostomy care : pointers and pitfalls. Middle East J of Nurs. 2015 Apr;9(2):3–12. http://www.me-jn.com/April2015/Ostomy.pdf

47. Harrison MB, Graham ID, Van Den Hoek J, Dogherty EJ, Carley ME, Angus V. Guideline adaptation and implementation planning: a prospective observational study. Implement Sci. 2013 May 8;8:49. https//doi.org/10.1186/1748-5908-8-49 PMID: 23656884

48. Alawadi F, Abusnana S, Afandi B, Aldahmani KM, Alhajeri O, Aljaberi K et al. Emirates diabetes society consensus guidelines for the management of type 2 diabetes mellitus – 2020. Dubai Diabetes Endocrinol J. 2020;26:1–20. https://doi.org/10.1159/000506508

49. Zadegan SA, Ghodsi SM, Arabkheradmand J, Amirjamshidi A, Sheikhrezaei A, Khadivi M et al. Adaptation of traumatic brain injury guidelines in Iran. Trauma Mon. 2016 Mar 20;21(2):e28012. https//doi.org/10.5812/traumamon.28012 PMID: 27626012

50. Irajpour A, Hashemi M, Taleghani F. Clinical practice guideline for end-of-life care in patients with cancer: a modified ADAPTE process. Support Care Cancer 2022 Mar;30(3):2497–505. https://doi.org/10.1007/s00520-021-06558-2 PMID: 34786639

51. Wahabi HA. Rapid response: Health in the Middle East. BMJ 2006;333:815. https://www.bmj.com/rapid-response/2011/10/31/evidence-based-health-care-sudan

52. Sharif A. Share experience: AlTababa group advocacy for evidence based healthcare through empowerment and competency-focused training, Khartoum, Sudan. In: 7th Annual Conference International Society of Evidence Based Healthcare [website]. Ajman: Gulf Medical University; 2016 (https://gmu.ac.ae/evidence-based-healthcare/program-outline.php, accessed 10 March 2023).

53. Abdelgadir HS, Elfadul MM, Hamid NH, Noma M. Adherence of doctors to hypertension clinical guidelines in academy charity teaching hospital, Khartoum, Sudan. BMC Health Services Res. 2019 May 14;19(1):309. https//doi.org/10.1186/s12913-019-4140-z PMID: 31088467

54. Sudan guidelines for the management of systemic hypertension in adults, 2nd ed. Sudan

Society of Hypertentsion and Non communicable Diseases Directorate; 2014 (http://ssh-sd.org/guidelines/, accessed 15 August 2022).

55. Alonso-Coello P, Irfan, Solà I, Gich I, Delgado-Noguera M, Rigau D et al., The quality of clinical practice guidelines over the last two decades: a systematic review of guideline appraisal studies. Qual Saf Health Care, 2010 Dec.19(6):e58. https//doi.org/10.1136/qshc.2010.042077 PMID: 21127089

56. Almazrou SH, Alsubki LA, Alsaigh NA, Aldhubaib WH, Ghazwani SM. Assessing the quality of clinical practice guidelines in the Middle East and North Africa (MENA) Region: a systematic review. J Multidiscip Healthc. 2021 Feb 9;14:297-309. https//doi.org/10.2147/JMDH.S284689 PMID: 33603389

57. Brouwers M, Spithoff K, Lavis J, Kho M, Makarski J, Florez I. What to do with all the AGREEs? The AGREE portfolio of tools to support the guideline enterprise. J Clin Epidemiol. 2020 Sep;125:191–7. https//doi.org/10.1016/j.jclinepi.2020.05.025 PMID: 32473992

58. Koornneef E, Robben P, Hajat C, Ali A. The development, implementation and evaluation of clinical practice guidelines in Gulf Cooperation Council (GCC) countries: a systematic review of literature. J Eval Clin Pract. 2015 Dec;21(6):1006–13. https//doi.org/10.1111/jep.12337 PMID: 25756849

59. Penney GC. Adopting and adapting clinical guidelines for local use. Obstetrician Gynaecologist 2007 Jan;9(1):48–52. https://doi.org/10.1576/toag.9.1.048.27296

60. Wang Z, Norris SL, Bero L. Implementation plans included in World Health Organisation guidelines. Implement Sci. 2015;11:76. https://doi.org/10.1186/s13012-016-0440-4

61. Babiker, A, Amer, YS, Osman, ME, Al-Eyadhy A, Fatani S, Mohamed S et al. Failure Mode and Effect Analysis (FMEA) may enhance implementation of clinical practice guidelines: An experience from the Middle East. J Eval Clin Pract. 2018; 24: 206– 211. https//doi.org/10.1111/jep.12873 PMID: 29285849

62. Alshowaeir D, Almasoud N, Aldossari S, Alsirhy EY, Osman E, Turjoman A et al. Primary open angle glaucoma management in a tertiary eye care center in Saudi Arabia: a best practice implementation pilot project. JBI Evid Implement. 2020 Dec 5;19(2):208–16. https//doi.org/10.1097/XEB.0000000000000257 PMID: 34061052

63. Al-Salloum HF, Amer YS, Alsaleh KA. Monitoring the adherence to an adapted evidence-based clinical practice guideline on antiemetics in 669 patients with cancer receiving 1451 chemotherapy doses at a University oncology center in Saudi Arabia. J Nature Sci Med. 2021;4(1):33. https//doi.org/10.4103/JNSM.JNSM_10_20

64. AlMohaimeed B, Hundallah K, Bashiri F, AlMohaimeed S, Tabarki B. Evaluation of adherence to pediatric status epilepticus management guidelines in Saudi Arabia. Neurosciences. 2020 Jul;25(3):182–7. https//doi.org/10.17712/nsj.2020.3.20190106 PMID: 32683397

65. Song Y, Alonso-Coello P, Ballesteros M, Cluzeau F, Vernooij RW, Arayssi T et al. A reporting tool for adapted guidelines in health care: the RIGHT-Ad@ pt Checklist. Annals of Internal Medicine. 2022 May;175(5):710–9. https://doi.org/10.7326/M21-4352 PMID: 35286143

66. Antoniou SA, Florez ID, Markar S, Logullo P, López-Cano M, Silecchia G et al. AGREE-S: AGREE II extension for surgical interventions: appraisal instrument. Surg Endosc. 2022 Aug;36(8):5547–58. https//doi.org/10.1007/s00464-022-09354-z PMID: 35705753

67. Abdul–Khalek RA, Darzi AJ, Godah MW, Kilzar L, Lakis C, Agarwal A et al. Methods used in adaptation of health–related guidelines: a systematic survey. J Glob Health, 2017

Dec;7(2):020412. https//doi.org/10.7189/jogh.07.020412 PMID: 29302318

68. Munn Z, Twaddle S, Service D, Harrow E, Okwen PM, Schünemann H, et al. Developing guidelines before, during, and after the COVID-19 pandemic. Ann Intern Med. 2020 Dec 15;173(12):1012–4. https//doi.org/10.7326/M20-4907 PMID: 32931327

69. Developing national institutional capacity for evidence-informed policy-making for health. East Mediterr Health J. 2021;27(3):314–5. https://doi.org/10.26719/2021.27.3.3141 PMID: 33788222

70. Summary report on the first formal meeting of the regional Network of Institutions for Evidence and Data to Policy (NEDtP) to enhance national capacity for evidence-informed policy-making, virtual meeting 30 March 2021. Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2022 (https://apps.who.int/iris/handle/10665/352578, accessed 10 March 2023).

71. Framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region [website]. Cairo: World Health Organization Regional Office for the Eastern Mediterranean (http://www.emro.who.int/health-topics/health-information-systems/framework-for-action-to-improve-national-institutional-capacity-for-the-use-of-evidence-in-health-policy-making-in-the-region.html, accessed 10 March 2023).

72. Regional action plan for the implementation of the framework for action to improve national institutional capacity for the use of evidence in health policy-making in the Eastern Mediterranean Region (2020–2024). Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2021 (https://applications.emro.who.int/docs/9789290229124-eng.pdf?ua=1, accessed 10 March 2023).

73. Alshehri A, Almazrou S, Amer Y. Adaptation of clinical practice guidelines in the Middle East and North African (MENA) Countries. In: GIN Conference 2021 Online. [website]. Guidelines International Network; 2021 (https://g-i-n.net/wp-content/uploads/2021/10/GIN-Conference-2021-Abstract-Book.pdf, accessed 15 August 2022).

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