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# Adaptation of international evidence based clinical practice guidelines: The ADAPTE process

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## KEYWORDS

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**Abstract** Evidence-based clinical practice guidelines are important tools to unify practice and improve patient's outcomes in terms of morbidity and mortality. The generation of EBCPGs is not an easy task. It requires a lot of resources, expertise and time. So, in low resources countries, adaptation of high quality guidelines is the way to go. This can be done in a scientific way using the ADAPTE methodology and toolkits.

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## 1. Why evidence based clinical practice guidelines?

Medical practice suffers from great variation in practice. The same patient can be treated differently in different hospitals and even by different physicians in the same hospital. Besides, physicians rely on their rather “old” knowledge, varying opinions, and personal experiences with certain interventions in their daily practice. In our specialty, it is a common practice to find one gynecologist who starts treatment of a 23 year old primary infertile woman with WHO Group II ovulation disorder with clomiphene citrate, a second who would start treatment with FSH injections and a third gynecologist who would proceed to ovarian drilling immediately. Such variation is not acceptable and, for sure, it is not to the benefit of the patient.

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Clinical Practice Guidelines (CPGs) are systematically standardized, and scientifically developed statements, designed to help practitioners in decision making about appropriate healthcare for specific clinical conditions or health care issues (1). Clinical Practice Guidelines have evolved from opinion-based guidelines, to consensus-based guidelines and to evidence-based guidelines currently. Both opinion-based and consensus based guidelines were created by small non-representative groups of physicians in a non-standardized format that is liable to many forms of bias. Researches showed that expert opinion does not always reflect the state of current medical knowledge (2).

Evidence-Based Clinical Practice Guidelines (EBCPGs) are based on systematic literature search, identification and synthesis of the highest quality research to generate the best available scientific evidence. Valid scientific research is translated, after thorough critical appraisal and analysis of risk of bias, into evidence of clinical effectiveness then transformed into recommendations for healthcare practitioners. EBCPGs serve as helpers to medical practitioners and form the basis for the standards of health care against which the practice can be measured.



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Evidence-Based Clinical Practice Guidelines aim at improving patients' outcomes by minimizing morbidity and mortality, improving health care practice for certain difficult conditions, maximizing benefits of various therapeutic interventions and diagnostic modalities, and reducing variations in medical practice ultimately improving the quality of patient care and health care in the community at large.

The importance of relying on scientific research evidence in the decision making process in health care is emphasized by the work of the clinical evidence team who systematically examined what proportion of commonly used treatments are supported by good evidence from randomized controlled trials, what proportion should not be used or used only with caution, and what proportion have no evidence of effectiveness. In the latest issue of clinical evidence, they reported that among 3000 commonly used treatments, only 11% were categorized as beneficial, 24% were categorized as likely to be beneficial, 7% as having tradeoff between benefits and harms, 5% as unlikely to be beneficial, 3% are likely to be ineffective or harmful, and half the treatment modalities examined (50%) were found to be not supported by randomized controlled trials' evidence and were categorized as having an unknown effectiveness (3). These data are updated every 6 months and submitted to the UK NHS Health Technology Assessment Program to help in the direction of medical practice and scientific research (Fig. 1).

## 2. Methodology of EBCPGs development

Creation of EBCPGs is never an easy task. It needs huge resources, long time, and a lot of experienced personnel. That is why there is no single country in the world that has guidelines for all diseases.

There are many reputable sources for high quality EBCPGs that follow high standards in guidelines generation. A short list of these resources includes the National Institute for health and Clinical Excellence (NICE; in the UK), the Scottish Intercollegiate Guidelines Network (SIGN, in Scotland), the Agency for Healthcare research and Quality (AHRQ, in the USA) or the National Guidelines Clearing House (NGC, in the USA), the Guidelines Advisory Committee (GAC, in Canada), the Australian National Health and Medical Research Council (NHMRC, Australia), and the New Zealand Guide-

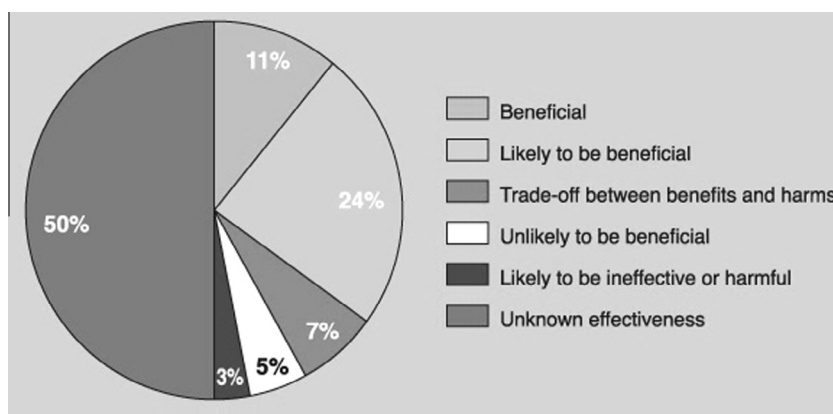
lines Group. Guidelines are published in the corresponding web sites and can be downloaded for free to help its dissemination and implementation in practice.

Development of evidence-based clinical practice guidelines follows a strict systematic and highly scientific methodology. The methodology followed for guidelines development includes:

1. Topic selection: topics about conditions affecting a large number of people, conditions with high morbidity and/or mortality, or conditions with clinical uncertainties are usually chosen.
2. Development of multidisciplinary teams including clinicians from all concerned specialties, EMB experts, nurses, bioethicists, economic analysts, consumers (patients), and others.
3. Determination of the purpose and scope of the guideline including the presentations of the disease to be addressed, patients' characteristics, and domains to be studied (diagnosis, prevention, treatment, etc. . .).
4. Transforming the various diagnostic and/or therapeutic modalities and transforming the guideline into key PICO questions.
5. Systematic literature review for every key question including a wide search for studies in electronic databases, gray literature, hand search in journals, and author's contact to get all published as well as unpublished research.
6. Quality assessment of retrieved studies and the formation of evidence tables.
7. Drafting and grading of recommendations.
8. Consultation and peer reviewing.
9. Finalization of the guideline, its publication and dissemination to be present free of charge for all concerned practitioners at the point of care.
10. Implementation of the guideline.
11. Auditing, reviewing and updating.

## 3. Adaptation of international EBCPGs

The production of de novo high quality evidence based guidelines necessitates the presence of a lot of experienced persons,



**Figure 1** Effectiveness of 3000 treatments as reported in RCTs selected by clinical evidence.

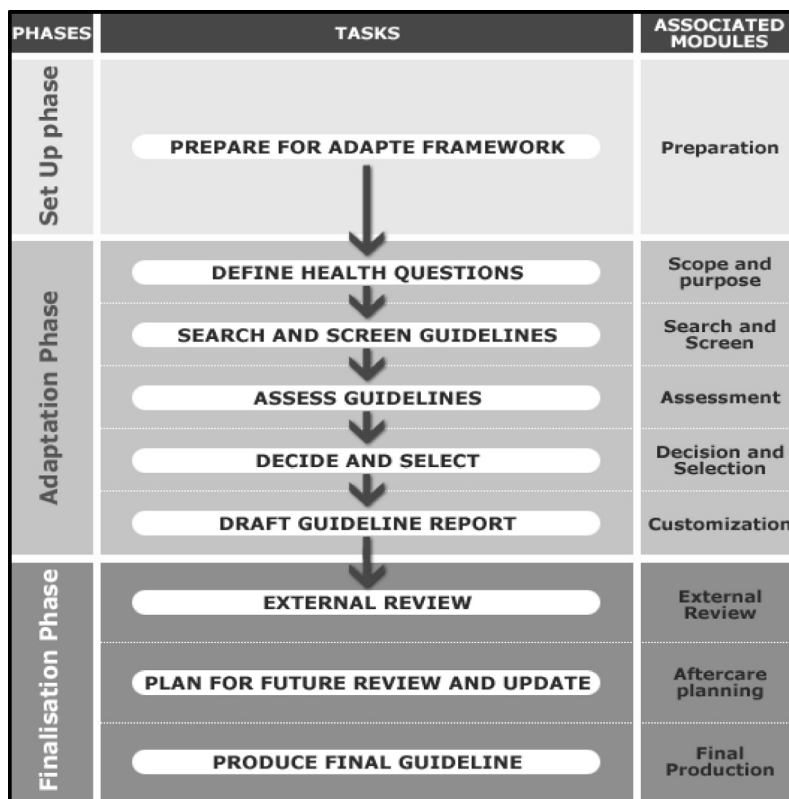


Figure 2 Summary of the ADAPTE process.

takes a long time, and also requires enormous resources. Thus, low-resources countries like Egypt cannot replicate the above methodology to produce its own guidelines. But the good side of this is that we do not have to reinvent the wheel. Guidelines are there and we can use them. But this will call a question that is always asked about the utility of “*the other’s*” guidelines. The question is: given the vast differences in health care systems between our country and the developed world; can we apply “*their*” guidelines in “*our*” local community given our unique circumstances? The answer is simple: some of the recommendations can be used and applied as such and others need some form of modification to ensure their acceptability and applicability in local circumstances in our hospitals. In other words, guidelines may need some form of adaptation. This adaptation can be achieved through a scientific process for the customization of high quality international EBCPGs.

Adaptation of guidelines is a systematic approach to modify guidelines produced in one cultural and organizational setting to be applicable in another context (4). Adaptation makes guidelines suitable to a particular country, region, or hospital circumstances.

The ADAPTE collaboration is a group of researchers, guideline developers, and guideline implementers who proposed a scientific process and a methodology for the adaptation of guidelines. Their aim is to promote the development and use of clinical practice guidelines through the adaptation of existing guidelines. The group’s main endeavor is to develop and validate a generic adaptation process that will foster valid and high-quality adapted guidelines as well as the users’ sense of ownership of the adapted guideline” (4).

The ADAPTE collaboration has proposed a framework and a systematic procedure for the adaptation of clinical practice guidelines (5). They also published a manual and a toolkit that can be downloaded from the website of the guidelines of international network (6).

The proposed procedure includes three phases (Fig. 2) the main steps of which are:

- 1- Determination of the topic, scope and purpose of the required guideline.
- 2- Searching for existing guidelines on the topic.
- 3- Quality appraisal of the retrieved guidelines and determination of the guideline(s) to be adapted.
- 4- Revising the recommendations and determining their acceptability and applicability taking into account the cultural and local context.
- 5- Drafting of the guideline, peer reviewing and dissemination.

#### 4. Conclusion

Evidence-based clinical practice guidelines are important tools to unify practice and improve patient’s outcomes in terms of morbidity and mortality. The generation of EBCPGs is not an easy task. It requires a lot of resources, expertise and time. So, in low resource countries, adaptation of high quality guidelines is the way to go. This can be done in a scientific way using the ADAPTE methodology and toolkits.

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