A Clinical Practice Guideline Summary for Pharmacological Management of Adults with Major Depressive Disorder in Malaysia

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Authors' contributions
This work was carried out in collaboration among all authors. Authors AAA and NCG conceived of the work. Authors AAA, LSY and KCK performed the data collection, analysis and interpretation and drafted the article. Authors AAA, AHS, HZH and NCG critically revised the article for important intellectual content. Authors AHS, HZH and NCG provided the final approval of the version to be published. All authors read and approved the final manuscript.

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ABSTRACT

Background: Clinical Practice Guidelines (CPGs) are systematically developed statements to assist practitioners and patients with appropriate health care for specific clinical circumstances. However, evidence suggests that the uptake of these recommendations in routine care is still limited, particularly in resource-constrained countries.

Objectives: This article aimed to (1) identify current CPGs for the pharmacological management of MDD that address and are compatible with the needs of Malaysian psychiatrists (2) collate and summarise these CPG recommendations to produce a more culturally sensitive and end-user friendly guideline summary.

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Materials and Methods: A multidisciplinary steering group followed an adapted development approach that included; (1) searching for guidelines on the pharmacological management of adults with depression, (2) screening them for relevant recommendations, (3) critical appraising these guidelines, and (4) extracting the required information. A panel of experts then reviewed the developed guideline summary.

Results: Six potentially relevant guidelines for the pharmacological management of depression in adults were identified. The developed summary included a decision algorithm to guide the selection of antidepressant therapy based on clinical factors, potential drug-drug interaction, tolerability, and cost of the medications. The review panel considered the summary recommendations easy to use and had the potential for uptake by busy psychiatrists.

Conclusion: A CPG summary for the pharmacological management of depression was developed that focuses on evidence-based, contextually relevant recommendations that are feasible for implementation within the local healthcare settings in Malaysia.

Practical Implications: The developed guideline summary has the potential to enhance the implementation of evidence-based practice in the management of Major Depressive Disorder within the Malaysian context.

Keywords: Major depressive disorder; clinical practice guidelines; evidence-based practice.

1. INTRODUCTION

Clinical Practice Guidelines (CPGs) are systematically developed statements to assist practitioners and patients with appropriate healthcare for specific clinical circumstances [1]. Guideline concordant care has been shown to enhance the standardisation of best practices, lessen disparities or unnecessary variation in patient care, and encourage proven interventions while discouraging those that may be potentially ineffective or harmful [2]. Furthermore, studies across different health conditions, including depression, have demonstrated improved patient compliance, reduced healthcare cost, decreased health care utilisation, and reduced length of hospitalisation [2-8] following the use of CPGs.

Depression is among the most prevalent and disabling mental health illnesses. Global health estimates rank depressive disorders as the most significant contributor to non-fatal health loss and worldwide disability, with up to 80% of the disease burden occurring within low to middle-income countries [7,8]. In Malaysia, Major Depressive Disorder (MDD) is one of the most significant contributors to Years Lived with Disability (YLD) and Disability-Adjusted Life Years (DALYs) [9], largely impacting the country's socioeconomics [10]. Nevertheless, the availability of clinically effective pharmacotherapeutic options has made it possible to mitigate the disease burden, particularly in the presence of evidence-based recommendations to guide its use.

Despite the increased number of available guidelines and the intense efforts to promote its wide dissemination, evidence suggests not only limited uptake of the guideline recommendations but a decline in implementation shortly after its acceptance [11-13]. Within the Malaysian context, a study conducted among primary care physicians revealed that the majority prescribed antidepressants for less than the recommended period after remission; similarly, a quarter of the respondents admitted to not managing depression at all. It is also worth noting that the Malaysian depression CPG is one of the few recommending suicidal risk assessment; however, less than half the physicians surveyed routinely addressed it in practice [14]. Another aspect consistent with the mismatch between routine care and the recommended practice was the respondents’ lack of awareness of the exciting local practice guidelines.

Research on the implementation of CPGs highlights significant role of physicians in the uptake and use of these guidelines. Clinicians often do not have sufficient knowledge or training in CPG utilisation. A study examining barriers to guideline uptake among physicians found that more than 10% of respondents described guidelines as inconvenient while 38% found them difficult to use [11]. Further exacerbating this is the complexity of the information presented in the CPGs that often increases the cognitive burden of decision-making [15,16]. Moreover, the expanding body of research also makes it difficult for physicians to familiarise themselves with the most recent CPGs [17,18]. In Malaysia, similar barriers have been reported to limit the uptake of
depression management CPGs; however, these are further compounded by resource constraints [19]. Then again, CPGs that are easily comprehended, accessible to physicians, particularly within resource-constrained environments and culturally sensitive to local contexts, have a higher success rate [20-23].

While de novo CPG development is usually the preferred approach, it is time-consuming and resource-intensive, often requiring a multidisciplinary team of experts to systematically review and synthesise the usefulness and relevance of primary evidence [24]. This poses feasibility issues in resource-constrained low and middle-income countries like Malaysia, where healthcare practitioners may already be increasingly stretched. For instance, the most recent update for the Malaysian CPG for MDD management was in 2019, 12 years after the previous edition in 2007 [25], which suggests that the previous management of MDD was based on evidence and protocols more than a decade old. It begs the question as to whether there may be more cost-efficient and less resource-heavy alternatives to CPG development, especially in cases where relevant, high-quality CPGs already exist. Recent years have seen proposed alternatives to de novo CPG development, such as adopting, adapting or contextualising current high-quality CPGs to produce recommendations appropriate for local contexts [26,27]. As such, we explored how currently available, well-written CPGs might be adopted, adapted or contextualised to guide MDD management for psychiatrists working in Malaysian health care environments.

Given the significance of antidepressants in the management of depression [28,29], this article aims to (1) identify current CPGs for the pharmacological management of MDD that address and are compatible with the needs of Malaysian psychiatrists as well as (2) collate and summarise these CPG recommendations to produce a more culturally sensitive and end-user friendly guideline summary.

2. MATERIALS AND METHODS

Several steps were undertaken to develop the CPG summary, the details of which are delineated in the following sections. The process was guided by the Filipino guidelines contextualisation project [30]; however, it does not fully align with it.

2.1 Scoping and Steering Group

A multidisciplinary team of experts with relevant expertise advised the development, evaluation, and implementation of the guideline summary. The steering group contributed to the different development phases, including defining the guideline’s scope and purpose, critical appraisal of the guidelines, reviewing and amending the document drafts.

2.2 Search for Appropriate Guidelines

A thorough literature search was conducted for clinical practice guidelines on the pharmacological management of Major Depressive Disorder, for which we targeted the following databases, PubMed, Cochrane, EBSCO discovery, and Web of Science. The search terms used were “clinical practice guidelines” or “practice guidelines” or “best practice” or “clinical practice” AND “depression” or “major depressive disorder” or “depressive disorder”. This was supplemented by a manual search of guideline websites, including the National Institute for Health and Care Excellence, Canadian Network for Mood and Anxiety Treatments, Royal Australian and New Zealand College of Psychiatrists and Scottish Intercollegiate Guidelines Network. The search was conducted from January 2009 to January 2019. Only guidelines published in English and available as full text were included in the study.

2.3 Screening the Guidelines for Relevant Recommendations

The guidelines were screened for relevant scope and purpose related to the pharmacological management of adults with Major Depressive Disorder within the Malaysian healthcare system. Current guidelines driven by a credible evidence base and addressing relevant clinical questions were considered for inclusion. Furthermore, it was vital to ensure that the guidelines aligned with the needs of the local psychiatrists. These requirements were determined by published literature on clinicians’ adherence to the Malaysian clinical practice guideline for depression [18] and expert opinion from the lead psychiatrist within the steering committee.

2.4 Critical Appraisal of the Guidelines

The screened guidelines were qualitatively appraised for methodological quality by two
independent reviewers. In case of disagreement, a third opinion was sought for consensus. The critical appraisal assessed five main domains, the scope and purpose of the guideline, availability of full text, currency, quality of the evidence base, rigour of the development process. Only the current high-quality guidelines were retained.

2.5 Extraction of Information

The steering group extracted the recommendations relevant to the management of patients within the local healthcare settings. While some relevant recommendations were sourced from the same evidence base, they were often presented differently across different guidelines. When in confusion or need of further clarification, the original references and other relevant information sources were consulted. All the recommendations were collated without the underlying evidence strength due to variability in its reporting.

2.6 Expert Panel Review

A panel of lead psychiatrists experienced in the management of depression reviewed the draft document and proposed amendments to enhance interpretation of the recommendations. The expert panel focused on the applicability and uptake of the guideline summary in routine clinical practice. The steering group implemented the panel recommendations, and the final version of the document was produced.

3. RESULTS

3.1 Scoping and Steering Group

The scope and purpose of the guideline were decided upon after deliberation among the steering committee members. The aim was to develop summary recommendations to determine rational, evidence-based pharmacologic treatment for adults with Major Depressive Disorder. The guideline summary was expected to align with the needs of the local psychiatrists including usability, feasibility, and cultural sensitivity to the local context.

The steering committee consisted of a lead psychiatrist experienced in the management of depression, one PhD student in Psychological Medicine, and two pharmacists experienced in psychiatric pharmacy. All the members had relevant expertise in the evidence-based management of depression, developing and implementing guidelines, and critical appraisal of guidelines.

3.2 Search, Appraisal, and Synthesis of the Information

Six potentially relevant guidelines for the pharmacological management of depression in adults were identified. Two were excluded due to lack of currency, the Australian and New Zealand CPGs for the Treatment of Depression [31] and the NICE Guidelines for Depression in Adults [32]. The remaining four guidelines were included, the Practice Guideline for the Treatment of Patients with MDD [33], the CANMAT Clinical Guidelines for the Management of Adults with MDD [34], the Royal Australian and New Zealand College of Psychiatrists Clinical Practice Guidelines for Mood Disorders [35], the NICE guidelines for Antenatal and Postnatal Mental Health [36]. Further research was conducted to obtain information on the use of antidepressants during pregnancy and breastfeeding.

All the relevant recommendations were extracted and summarised to produce the first draft. The steering group accounted for medication availability issues and included recommendations applicable to the local healthcare system.

The developed CPG summary addressed the pharmacological management of adults with depression in Malaysia. It included a decision algorithm to guide the selection of antidepressant therapy based on clinical factors, potential drug-drug interaction, tolerability, and cost of the medications. To enhance the usability of the guideline, the information was collated into matrices. Recommendations for several dimensions and clinical specifiers of depression included anxiety, psychotic distress, catatonic features, melancholic features, cognitive dysfunction, sleep disturbance, somatic features, obsessive compulsion, and dementia. These clinical specifiers were considered based on the manifestation of depression in the Malaysian population.

Furthermore, the guideline summary included common co-morbid medical conditions like post-stroke, cardiac disease, hypertension, diabetes mellitus, Parkinson’s disease, malignancy, hepatic, and renal impairments. The use of
antidepressant medications during pregnancy and breastfeeding was also addressed. Common side effects and potential drug-drug interaction were included in a matrix to tackle patient tolerability to medications.

### 3.3 Expert Panel Review

A panel of three lead psychiatrists reviewed the guideline summary. They believed that it was easy to use and had a high potential for uptake by busy psychiatrists. The members identified errors and oversights and provided comments to enhance the wording and presentation of the guideline. The steering group then revised the recommendations based on the panel feedback.

### 4. DISCUSSION

Clinical practice guidelines are fundamental to the practice of evidence-based healthcare. However, to ensure the currency of the guideline recommendations, there is a constant need for updating the underlying evidence base. While necessary, this may not be feasible, particularly in resource-constrained low and middle-income countries, thereby making a case for simple and systematic approaches to produce guidelines that are applicable and relevant to the needs of developing countries.

This study aimed to outline the development of a guideline summary based on current, high-quality CPGs for the pharmacological management of MDD. The strength of the developed guideline lies in its usability, feasibility, and cultural appropriateness, i.e., it fits the needs of Malaysian psychiatrists. Furthermore, it was a priority for the development team to summarise and appropriately contextualise the relevant body of evidence while ensuring the intent of the original recommendations was maintained; this was challenging mainly due to the variability in the writing styles across different guidelines. However, the expert panel review minimised the risk of the summary guidelines deviating from the original intent of the underlying evidence base.

The expert panel members recognised the utility of the developed guideline summary in promoting evidence-based practice, particularly in the stretched psychiatry practice in Malaysia. However, due to the lack of field testing, it seems plausible that the psychiatrists require training on implementing the recommendations in routine clinical care. Although the present research cannot rule out these explanations, it is essential to point out issues that may conflict with our results.

The outlined approach can also serve as a guide to developing guidelines for the management of other medical conditions. It offers a less time-consuming and financially efficient alternative to de novo guideline development that is structured yet feasible.

### 5. CONCLUSION

This study delineates an approach for developing a guideline summary for the pharmacological management of depression that focuses on evidence-based, contextually relevant recommendations that are feasible for implementation within the healthcare settings in Malaysia.

### CONSENT

It is not applicable.

### ETHICAL APPROVAL

It is not applicable, this article does not contain any studies on human or animal subjects.

### COMPETING INTERESTS

Authors have declared that no competing interests exist.

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