Review Article　　　　　　　　　　　　　　　　　　　　　　　**Open Access**

Translation of EPDS Questionnaire into Kiswahili: Understanding the Cross-Cultural and Translation Issues in Mental Health Research

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Abstract

The need for a suitable tool for assessing postpartum depression in Kenya led to the process of translation of the 10 items Edinburgh Postnatal Scale into Kiswahili. The idea was to seek semantic, conceptual as well as normative equivalence in this translation. The paper discusses issues and the process of translation and provides in depth discussions around translation from the point of view of cross-cultural mental health research and practice. The English version of the EPDS screening tool was finally successfully translated into Kiswahili and the translated version is attached with this paper.

Keywords: Postpartum depression; Kiswahili; Mental health

Introduction

Why is translation needed in behavioral research?

Our interest in translation of Edinburgh Postnatal Scale was necessitated by Kenyan respondents who were more comfortable responding to the tool in Kiswahili. Mental health research in different geopolitical regions requires translation and adaptation of psychological tools. It is the interest in cross-cultural research or cross cultural application of psychological tools that has contributed enormously to developments in the field of translational research in social and behavioral sciences. The design, method and analysis of cross-cultural studies have various unique features that are uncommon or even at times absent in the intra-cultural studies [1]. Quite often researchers whose work offers specialist insights into one particular (single) culture feel the need to expand the domains of their inquiry and thereby state-of-knowledge by extending their work to look at intercultural similarities and differences. For these purposes, researchers carry out translation or adaptation based studies to extend their own work to other cultures or varied populations so that the cultural differences are incorporated or accounted for in their own research work and their findings generalized to large populations, or cultural influences and interactions are better understood. When an instrument widely used in one culture with good reliability validity and one showing strong results becomes weak and unreliable in another culture, it may be due to variations in construct, semantic and normative level of measurement between the two cultures. This necessitates reworking on the design as well as measurement to see if one is dealing with biases at the level of method or at the level of the construct itself.

The need for translation of psychological measures was very apparent in our case. Technically speaking, translation of tools is usually undertaken when a particular instrument is not available in the language for which it is needed in fieldwork. The need to translate a questionnaire is sometimes apparent from the outset as in the case of this research or if one or more targeted populations are known to need a different language from the one in which the questionnaire is or will be designed [2]. Alternatively, the need for a translation may become apparent only at a later stage of research when the source language instrument may not deliver well.

Transcultural psychiatry and adapting tools appropriately

Culture is defined as a set of behavioral norms, meanings, and values or reference points utilized by members of a particular society to construct their unique view of the world, and ascertain their identity[3]. The impact of culture on the experience and expression of mental illness, as well as the course and outcome of psychiatric disorders has been documented widely [3-7]. Numerous research projects on the cross-cultural manifestation of schizophrenia and depression show that presentation of these disorders varies significantly across cultures [8-10]. Depending on the setting, presentations may be marked with somatic, emotional or psychological expressions [11]. Hence, a clinician understands and evaluation of a patient's cultural background and identity is paramount. The lifetime prevalence of mental disorders has been shown to differ widely across different cultures [12,13]. This may be partly attributable to the accuracy of psychiatric screening instruments being used in countries other than where they were developed. Concepts and phrases in these instruments used to describe mental syndromes may not be culturally sensitive [14-16,13,17]. Following this type of variability in expectations and experiences, strict translation of screening instruments has been found to be insufficient in multiple settings [18]. Linguistic and semantic equivalence are important in preparing instruments for transcultural research [19,20]. A major barrier to screening and evaluating interventions is a lack of culturally appropriate mental health assessment instruments. In low and middle income countries like Kenya, little emphasis is given to mental health in terms of human resource and budgeting allocation [21] hence, a need to integrate mental health into primary health care. In the process of integrating mental health into primary health care, focus must be put on adapting and developing screening tools as this is an essential component of identifying those in need of care [22].

The translation process: Standard format for cross-cultural adaptation of tools

There are some concerns expressed within cross-cultural psychology about the appropriateness of attempting to translate questionnaires and other paper-pencil measures in different areas of applied psychology and other academic disciplines. Some of these reservations are based on arguments from an indigenous psychology viewpoint which strongly opposes the essentialist-universal discourse of Western psychological theories and constructs. This viewpoint argues that these theories are mainly ethnocentric and dismiss psychological variations without much articulation for 'local' realities or cultural sensitivities, and psychological testing and methodology becomes a tool to denigrate and deny presence of culture within the psychic life of an individual.

However sensitive this viewpoint is to culture, this extreme 'nativist' approach creates barriers in transferability and expansion of knowledge as it assumes that there are no universals. Recent work in cultural psychology has tried to address this problematic issue in a more informed and in-depth manner. The most significant contribution in this direction made by cultural psychologists is the elaboration of the difference between 'emic' and 'etic' [23,24] and consequent stress on the importance of considering these conceptualizations [25] in psychological research across cultures. Berry (1969) has offered a clear distinction between these two terms. 'Etic' constructs are those that exist in identical or near identical form across a range of cultures and 'emic' constructs that are limited to a single culture. As a result, many cross-cultural psychologists used the terms 'etic' and 'emic' to refer, respectively, to (a) comparative, across-cultures studies, and to (b) careful, internal exploration of psychological phenomena in local cultural terms. Whenever such 'emic' research succeeds, it would be expected to provide indigenous, culturally based meanings, which were most probably missed when making the initial imposed 'etic' approach to psychological phenomena in various cultures. As a result of doing these comparisons, one could emerge with what has been termed a "derived etic" [23], which is clearly to be preferred over an "imposed etic" [24]. Derived 'etic' approach works on the assumption that there are universals but also keeps the space to incorporate cultural differences and similarities.

Basic requirements to produce translation

To begin with, it is very important to select for translation those measures that have already been tested for reliability, validity and utility in the source language (language in which these originally exist) [25]. This merely ensures that the effort put in translation is not wasted on a tool not useful or inadequately designed. But satisfactory levels of these properties in the original instrument do not guarantee that the target population version will possess them as well (ibid: 9). Also, merely demonstrating that a translated questionnaire possesses the basic characteristics (in terms of reliability, validity, statistical significance as well as practical, economic utility) might not be enough. In addition, the researcher must show that it exhibits appropriate levels of semantic and conceptual equivalence relative to the source language measure and that it and the procedures through which it is administered minimize any problems created by lack of normative equivalence (ibid: 15). There are three kinds of equivalence discussed in the literature [25-27]. Semantic equivalence entail choosing such terms and sentence structures which ensure the meaning of the source language is kept intact. Conceptual equivalence refers to the degree to which a concept, independent of the words used to operationalize it, exists in the same form in both source and target cultures. Normative equivalence refers to the degree to which the researcher has dealt successfully with the problems created by differences due to societal rules such as openness with which certain topics are dealt with, ways and manner in which particular ideas are expressed and ways in which particular strangers or in general how strangers asking questions are dealt with [25].

Basic procedure for translation

Behling and Law (2000) have presented a simple and clear model for basic translation procedure that makes issues associated with the three levels of equivalence clearer. But with an existing instrument solving semantic problems is more urgent.

There are four criteria to be followed when looking at semantic problems

Informativeness: Is the degree to which the technique provides the researcher with objective indications of the semantic equivalence of the target language version of the instrument and pinpoints the nature of specific problems with it.

Source language transparency: is the degree to which the technique provides useful information to the researcher who lacks fluency in the target language (assuming that the principal investigator is not familiar at all or very well with the target language). Thus the technique should be able to apprise monolingual researcher to understand, take decisions about translation and solve potential problems – also interpret results emanating from the translation.

Security: is the degree to which the technique builds in opportunities to check the work of the original translation. This is important as it allows other bilingual individuals to compare and examine translator's choices and compare back-translated versions to the original source items. High security increases confidence in the procedure and accuracy of translation.

Practicality: is the degree to which the technique yields a finished target language instrument quickly, cheaply and easily.

Establishing semantic level equivalence is the most basic and necessary step when a widely used and robust tool is to be translated. Semantic level problems are quite common and the resolution of these is crucial towards building a reliable and valid tool. When creating a new tool or instrument, apart from these procedures described above in Table 1, there are specific measures that can be used to resolve semantic problems:

1. Decentering - it is a technique that begins from a preliminary draft questionnaire in the source language in order to produce final questionnaires in two languages (source and target) [2,25]. It is informative as well as rich in source language transparency.

2. Source Language Centering- the researcher develops the instrument in the source language and then translates it into the target language using some mix of procedures above.

3. Multicultural Team Approach- it involves creation of a team that looks at the translation stage by stage adjusting the 'emic' and 'etic' dimensions of the measure. It is a potentially more informative but time-consuming exercise. The involvement of a translator and the role they play in the entire process right from doing a direct translation in the beginning to incorporating and deliberating on the back-translations by other team members is a crucial part of this entire exercise.

EPDS items	Translation from English to Kiswahili	Back translation with two translators	Final translation into Kiswahili by entire team	Re translation into English
1. I have been able to laugh and see the funny side of things	Nimeweza kucheka na kuona mambo ya kuchekesha katika jambo	I have managed to laugh and to see things to laugh about.	Nimeweza kucheka na kuona jambo la kuchekesha katika mambo	I have managed to laugh and to see something funny in things
2. I have looked forward with enjoyment to things	Nimetarajia mambo kwa furaha	I have looked forward to things with joy	Nimetarajia mambo kwa furaha	I have looked forward to things with joy
3. I have blamed myself unnecessarily when things went wrong	Nimejilauma bila sababu wakati mambo yakienda vibaya	I have blamed myself without reason when things went badly	Nimejilaumu bila sababu wakati mambo yalipoenda vibaya	I have blamed myself without reason when things had gone badly.
4. I have been anxious or worried for no good reason	Nimekuwa na wasiwasi bila sababu	I have been worried without any reason	Nimekuwa na wasiwasi bila sababu nzuri	I have been worried without any good reason
5. I have felt scared or panicky for no very good reason	Nimeshikwa na woga au hofu bila sababu	I have felt fearful and afraid without reason	Nimeshikwa na woga au hofu bila sababu njema	I felt fearful and afraid without good reason
6. Things have been getting on top of me	Mambo yamekuwa yakinishinda	I have been failing in things.	Mambo yamekuwa yakinilemea	I have felt overwhelmed by things
7. I have been so unhappy that I have had difficulty sleeping	Sijafurahi kwamba nimekuwa na shida ya kulala	I have not been happy that I have missed sleep	Nimekuwa na huzuni sana hadi nimekuwa na ugumu kupata usingizi	I have been so unhappy that I have had difficulty finding sleep
8. I have felt sad or miserable	Nimehuzunika ama kutaabika	I have been sad and distressed	Nimesikia huzuni sana na kutokua na furaha	I have been so sad and unhappy
9. I have been so unhappy that I have been crying	Nimekuwa na huzuni sana kwamba nimekuwa nikilia	I have been so sad because I have been crying	Sijakuwa na furaha kabisa hadi nimetokwa na machozi	I have been completely unhappy that I have cried tears
10. The thought of harming myself has occurred to me	Nimekuwa na fikira ya kujidhuru/ kujiumiza	I have had thoughts of harming myself/injuring myself	Nimekuwa na mawazo ya kujitendea mabaya	I have had thoughts of hurting myself/doing bad things to oneself

Table 1: Translation and Back translation of EPDS.

Methodological issues and details of translation process

Process in its barebones: A group of psychiatrists and clinical psychologists at the University of Nairobi decided to undertake the linguistic translation of EPDS. Two of the researchers, a clinical psychologist (Obadia Yator) and a psychiatrist (Linnet Ongeri) are working on projects that assess postpartum depression in women in Nairobi. As a group, there was a sense that, though EPDS is the most appropriate tool for screening postpartum depression, it cannot be used without translation into Kiswahili as most women visiting Kenyatta National Hospital and Mbagathi Hospital are not fluent or comfortable filling out the form in English.

One psychiatrist and a clinical psychologist who are faculty members in the Department of Psychiatry, University of Nairobi, led the process of translation along with a postdoctoral researcher; a medical anthropologist and a clinical psychologist intern took time in February 2014 to undertake the translation. Three bilinguals first started by translating the tool into Kiswahili. One of these bilinguals was a social worker, one was a medical anthropologist and another one a clinical psychologist. Subsequently, three back-translations into English were carried out to look at semantic equivalence. Then the entire group assembled to look at the three translations-back translations-re-translations in depth to arrive at a single version of a Kiswahili translated EPDS. In all these deliberations, one researcher was writing the group comments and another one writing the EPDS items that were translated in this process. The entire group participated in the writing process, revising and building on the items that were translated but also around issues that were discussed concerning the translation.

Step-by-step process of translating EPDS

1. The EPDS was translated to Kiswahili by three independent bilingual translators. All three people had no medical background with one being a social worker, second person being an anthropologist and the third person being a linguist and each of the three are fluent in both English and Kiswahili.

2. Back translation was then done for each of the three Kiswahili translations by a group of another three independent members of the team who were also fluent in both English and Kiswahili

3. Synthesis of the three translations into an acceptable one that met the following features and discussions held as one group to settle for the phrases that were:

- Simple terms that could easily be understood by the target population. Colloquial Kiswahili versus grammatically correct. In some instances the grammatically correct word was inserted in brackets so as not lose meaning

- Grammatically sound

- Retained the meaning of the English version statement. Semantics and medical meaning were kept intact.

We would like to add that a translation by the linguist was observed to be too technical for the general population to easily understand. Hence more focus was put on simple, grammatically correct and spoken Kiswahili.

One of the concerns that resonated with the group was when depressed women see a clinician they do not always express themselves using the language that is used in assessment tools, even when they are fluent in the language used, as in English the school language in Kenya. Consequently questions in assessment tools are met with surprise and affirmation because they express feelings that the patient does not consider as being part of illness or even as being relevant to others, other than self. An example of this in the EPDS assessment tool is- Item no 1. 'I have been able to laugh and see the funny side of things'. In clinical settings in Kenya patients are more likely to express "not having joy in life" which would be covered under item 2, "I have looked forward with enjoyment to things." However if asked whether they see the funny side of things they might express with surprise that they are not able to laugh at funny stories or incidences anymore.

On the other hand, an item such as 3, 'I have blamed myself

unnecessarily when things went wrong', might be expressed from the perspective of item 6, 'Things have been getting on top of me" to imply: "due to my incapacity to accomplish tasks things go wrong and therefore I blame myself" and thus the term "unnecessary" is disqualified. Other questions may be considered sensitive such as Item 9, 'I have been unhappy that I have been crying', crying is considered a weakness, as childish behavior and is culturally not encouraged. The word crying is, in the Kenyan context, translated as audible wailing associated with severe pain or injury or grief in adults, in other words with a tangible event. And even in grief and physical pain there is cultural variation in the social acceptance of audible crying. To ask an adult patient whether he/she cries may therefore be met with resistance. Patients who are depressed talk about tears running without a cause. So there were several reasons to deliberate and understand the specificity of the postpartum depression in Kenyan context further.

Kiswahili translation and process discussion

Difficulties and Challenges encountered in the process are as follows:

- Title: Translation of Postpartum Depression. No clear Kiswahili translation of the word Depression. Hence description of it being a psychological illness

- Item 1: The phrase seeing the funny side of things. Difficulty in settling on an exact translation as this is a phrase and also some difficulty in understanding the true meaning after translation. E.g most translations read " Nimeweza kufurahia mambo" which was back translated as to be happy about things. A translation that the team found tended to lose the original meaning. Phrase settled on was- "Nimeweza kucheka na kuona jambo la kuchekesha katika mambo"- I have been able to laugh and see the funny things in different situations.

- Item 4: No clear translation of the word anxious. In Kiswhahili, 'anxious' and 'worried' had similar expressions "wasiwasi". Hence team decided to use the word "wasiwasi"for both anxious and worried.

- Item 5: It was noted that the understanding of Question 4 and 5 carried similar meanings following the translations. Even in English the difference between the two questions are very slight. One asks about anxiety and worry, while the other question focuses on scary and panicky moments. Another dilemma the team found was that no clear words to directly translate panicky. Hence we settled for "hofu na woga". Woga means fear while hofu means a deeper fear. The meaning of the question was retained in this way.

- Item 6: Things have been getting on top of me is an English Phrase. Team was careful not to directly translate instead focus on semantics of the phrase "Mambo yamekuwa yakinilemea".

- Item 7: Different ways of understanding the question actually brought out different translations. One interpretation was- I have been lacking sleep hence unhappy "Sijafurahi kwamba-nimekuwa na shida yakulala". The team gave emphasis to the sadness that resulted in lack of sleep "Nimekuwa na huzuni sana hadi nimekuwa na ugumu kupata usingizi"- Back translation- I have been so sad, that I have had difficulties getting sleep.

- Item 8: No clear meaning of miserable in Kiswahili. The translating team chose to emphasize sadness using a similar meaning to the word. "Huzuni na kutokua na furaha"- back translated as sadness and unhappiness.

- Item 9: Observation made of the cultural meaning and understanding of the term crying. In African setting it is more acceptable for adults to tear than to cry (kulia) when sad. Hence the team settled for the translation "tokwa na machozi" back translated as shed tears/ cry tears rather than "lia" which means to cry. Another observation made here was in understanding the meaning behind the question, the lay translator understood the question as having been sad because they had been crying. Meaning the crying actually brought on their sadness and not the other way round.

- Item 10: Regarding thoughts of harming oneself. Debate over the Kiswahili translation "kujiumiza"- meaning to injure oneself, and "kujitendea mabaya" meaning to do bad things to oneself. The latter encompassed a broader sense of harming oneself and hence we settled on it. Kujidhuru is also another synonym to harming oneself but meaning would not be understood by many lay people in Kenya as it is not a commonly used term.

Following the translations, we noted the difficulty in attempting to tease out the different intensities of each likert response. Within the group recommendations were made to also include a visual aid e.g. a pie chart to help the participant understand the different degrees of intensity each choice offered. After piloting both a pie chart description and the circles containing descending amount of smaller circles, we settled on the circles. They were easily comprehensible to both the patients and perhaps also to researchers who might use them to collect data on postnatal depression within a semi-literate or illiterate population.

Conclusion

The paper starts with a discussion on the need for translation of tools in mental health and cultural psychological research. There is also a need for translation and adaptation of tools required for clinical practice where early identification of problems via appropriate screening tools is necessary. In Kenya mental health researchers bank on a lot of freely available, well researched tools like EPDS and it was therefore chosen for translation. While highlighting the challenges and issues in a group process of translation, we finally arrived at a translated version of this tool that can be used by Kenyan and other East African researchers.

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