

Cultural Considerations in Biomedical Translations

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Abstract

Biomedical translations do not occupy the most central position in the world of medicine, it certainly plays an important role in knowledge mediation, which involves sharing medical research results, publicizing new findings in the international scientific community and marketing new medical products and services. This study explores the place of cultural consideration in biomedical translation in Nigeria. Conceptual clarification on culture, cultural considerations Biomedical translation was done. Cultural consideration in biomedical translation were discussed. Strategies for managing cultural considerations were highlighted. It was suggested amongst other that prospective medical expert should be encouraged to consider the differences cultures while consuming the products of Biomedical translations.

Keywords: cultural, considerations, biomedical, translation

1. Introduction

Biomedical translation is a new effort to bridge the gap between scientific discovery and the development of new strategies to diagnose, treat and prevent disease. Teibowei (2022) submitted that biomedical translations do not occupy the most central position in the world of medicine, it certainly plays an important role in knowledge mediation, which involves sharing medical research results, publicizing new findings in the international scientific community and marketing new medical products and services. It is an important area of medical science that has significantly improved the consumption of products of medical research across cultures globally.

Concerning effectiveness, Teibowei (2022)

submitted that translation in must be accompanied by the appropriate knowledge of culture. Al-Bannay (2013) also reported that for translation to be effective in health promotion research; cultural awareness must be increased consistently.

Culture is suggested multi-system considerations that will inform research design, implementation, effectiveness and dissemination efforts, while increasing the translatability of intervention results at the individual and system levels. Culture has the potential to mar or make the products of translation irrespective of the field of endeavor. Since the product of translation in medical research have direct impact on human life, then there is need for articulate clarification projecting the place of

cultural considerations in biomedical translation.

2. Conceptual Clarification

2.1 Culture

Culture has been defined in many ways, for example, 'an historically transmitted pattern of meaning embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men (sic) communicate, perpetuate and develop their knowledge about and attitudes toward life' (Geertz, 1973). Another definition of culture is 'a socially constructed and historically transmitted pattern of symbols, meaning, premises, and rules' (Philipsen, 1992). Culture is the product of interacting human minds, and hence a science of culture will be a science of the most complex phenomenon on Earth. It will also be a science that must be built on interdisciplinary foundations including genetics, neuroscience, individual development, ecology and evolutionary biology, psychology and anthropology. In other words, a complete explanation of culture, if such a thing is ever possible, is going to comprise a synthesis of all human science. Such a synthesis poses significant conceptual and methodological problems, but also difficulties of another kind for those contributing to this science. Scholars from different disciplines are going to have to be tolerant of one another, open to ideas from other areas of knowledge. (Plotkin, 2001)

According to Triandis (2004), culture is classified as either objective or subjective. Objective culture 'refers to the institutional aspects of culture, as such as political and economic systems, and to the products of culture, such as art, music, cuisine, and so on' (Landis et al., 2004). Subjective culture, on the other hand, 'refers to the experience of social reality formed by the experience of the social reality formed by a society's institutions-in other words, the worldview of a society's people' (Landis et al., 2004). A contemporary definition of culture is 'a system of meaning that guides the construction of reality in a social community' (Cheney et al., 2004). Purnell, in his book *Guide to Culturally Competent Health Care* (Purnell, 2009) notes that 'major influences that shape people's worldview and the extent to which people identify with their cultural group of origin are called the primary and secondary characteristics of culture.

The primary characteristics are nationality, race, color, gender, age, and religious affiliation. The secondary characteristics include educational status, socioeconomic status, occupation, military experience, political beliefs, urban versus rural residence, enclave identity, marital status, parental status, physical characteristics, sexual orientation, gender issues, reason for migration (sojourner, immigrant, or undocumented status), and length of time away from the country of origin' (Purnell, 2009).

From the above one can succinctly say, culture includes many agreed upon elements, that is, 'patterned ways of thinking, feelings, acquired and transmitted mainly by symbols, consisting of the distinctive. Culture is often confused with ethnicity, which categorizes people based on their physical characteristics, place of birth, name, language, history and origins, religion, and nationality' (Isaacs, 1975).

2.2 Translation

Catford (1965, p. 20) defined translation as the replacement of textual material in one language by equivalent textual material in another language. In this definition, the most important thing is equivalent textual material. Yet, it is still vague in terms of the type of equivalence. Culture is not taken into account. Nida and Taber (1969) explain the process of translating as, translating consists of reproducing in the receptor language the closest natural equivalent of the source language message, first in terms of meaning and secondly in terms of style. Translation, involving the transposition of thoughts expressed in one language by one social group into the appropriate expression of another group, entails a process of cultural de-coding, re-coding and en-coding. As cultures are increasingly brought into greater contact with one another, it is the cultural aspect of the text that we should take into account. As translators we are faced with an alien culture that requires that its message be conveyed in anything but a strange way. Sugeng-Hariyanto in "The Implication of Culture on Translation Theory and Practice" states: Related to translation, culture manifests in two ways. First, the concept or reference of the vocabulary items is somehow specific for the given culture. Second, the concept or reference is actually general but expressed in a way specific to the source language culture. In practice, however, it is suggested that a translator should take into account the purpose of the translation in

translating the culturally-bound words or expressions. The translation procedures discussed should also be considered. The inclusion of cultural perspective in the definition of translation unfortunately does not continue. The later ones keep on not touching this matter.

See the following definition: “Translation involves the rendering of a source language (SL) text into the target language (TL) so as to ensure that (1) the surface meaning of the two will be approximately similar and (2) the structure of the SL will be preserved as closely as possible, but not so closely that the TL structure will be seriously distorted (McGuire, 1980, p. 2). Alfred Louis Kroeber and Clyde Kluckhohn define culture as: Culture consists of patterns, explicit and implicit of and for behavior acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment in artefacts; the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values. Culture systems may, on the one hand, be considered as products of action, on the other hand, as conditioning elements of future action.

2.3 Cultural Considerations

Teibowei (2021) defined cultural considerations as the process of promoting the delivery of services in a culturally competent manner to all irrespective of ethnic background, disabilities, gender, sexual orientation. It is the degree to which cultural awareness plays a role interaction with a particular cultural group. Cultural considerations are relevant to medical research because it accommodates generalizability of research findings and ultimately usability of results, like being able to recognize if a vaccine has a different efficacy or side effects in different subgroups. Thoughtful, attempts to incorporate cultural considerations helps to facilitate positive research interactions and successful research participation.

3. Science-Culture Divide in Biomedical Translations

During the last 20 years, the use of metaphors of translation have become increasingly prominent, in order to map the relation between biomedical science as research, and its social use as care and cure. It has been observed that the term ‘translation’ was introduced into medicine in the late 1990s as a reaction to the ‘disconnection between the promise of basic science and the

delivery of better health’ (emphasis added) (La-Veist, 2014). There was a widespread concern that ‘despite increased efforts and investments into research and development, the output of novel medicines has been declining dramatically’ (Montagu, 2017). Dominant research methods were questioned, and the need for more applied or ‘translational’ approaches was emphasized: ‘Animal experiments, test tube analyses and early human trials do simply not reflect the patient situation well enough to reliably predict efficacy and safety of a novel compound or device’ (NIH, 2005). Thus, new methods for clinical testing were required to bridge the gap and facilitate the transition from bench to bedside. Such methods were referred to as ‘translations’ and categorised into different steps and stages of a chain, as illustrated in figure 1.

This chain—or ‘pipeline’, another frequently used metaphor, is regularly defined in terms of two separate steps: T1: Translation between basic science and development and testing of new therapies. T2: Translation between recommendations gathered in medical guidelines and routine clinical practice (Montagu, 2017). Although the metaphor of translation first emerged in medicine in the late 1990s, the idea of translating research into clinical application and bridging the space between scientific knowledge and social practice has a long pedigree. Genealogically speaking, the idea can be traced back to the Baconian understanding of science as an instrument of regaining ‘dominion over creation’ and thereby (in Francis Bacon’s own wording) enlarging ‘the bounds of human empire, to the effecting of all things possible’.

A similar instrumental understanding of science was also central to Louis Pasteur’s scientific ambition. Pasteur wrote that, ‘to him who devotes his life to science, nothing can give more happiness than increasing the number of discoveries, but his cup of joy is full when the results of his studies immediately find practical applications’ (Abe-Kim, et al., 2001). What is actually new with the translational turn in medicine, however, is the recognition and acceptance of the challenge of translation.

In Jane Maienschein’s formulation, the novelty ‘is an explicit recognition that translation is not easy, not inevitable’—and, as she added, is ‘indeed, not happening’ (Salant & Lauderdale, 2003). Now translation is no longer conceived as

an integral and organic part of scientific progress itself as in the Baconian paradigm, and Pasteur's dream of a science that 'immediately finds practical applications' has been undermined. Translation is not an event that follows automatically with the production of new scientific knowledge and scientific progress. On the contrary, translation implies conscientious action and active manipulation, or else it is simply not happening. To 'make translation happen', it is vital to reflect critically on how the 'message' is best accommodated to what we—in the language of translation studies (TS)—could call the various target texts and target cultures of KT. In other words, research must be made relevant and understandable to patients, clinicians, researchers and other target users. But the approach to culture in medical KT has largely been asymmetrical, the underlying assumption being that culture is a 'problem' relating solely to the target culture and target audience of medical knowledge (patient, practitioners), and not to the science itself, which is construed as transculturally valid and thus universally applicable. In KT ideology, then, clinicians and patients are broadly conceived as recipients of non-cultural scientific knowledge produced by biomedicine and other natural sciences. Thus, culture is understood as what we have called an 'epistemological lubricant' (Freund, 2019), to facilitate understanding and communication with clinicians and patients, but it is simultaneously excluded from the conceptualization of science and scientific evidence. This lack of reflection about culture in KT does not mean that medicine is not concerned with adaptation to local context.

On the contrary, the attempt to 'individualize' the evidence is a frequently used mantra in KT. 'Context' in these approaches is not seen as the result of a 'thick description', however (Airhihenbuwa, 2015). Rather, the attempts to individualize and adapt the evidence and treatment contextually are paradoxically haunted by an understanding of evidence as universal and acontextual—and hence, non-cultural. Moreover, cultural factors in KT are generally associated with an exception, not the norm, and often with cultural 'otherness'. This seems to imply that culture is something you either possess or do not, or at least can have in different amounts; the more cultural the context, the more challenging the translational process is considered to be.

Accordingly, several scholars have drawn attention to the particular challenges related to KT in explicit intercultural contexts. Santesso and Tugwell (2016), for instance, underscored the importance of cultural factors when performing KT in 'developing countries', and they further claimed that 'success rests with tailoring KT strategies to the salient barriers and supports found within the setting. Furthermore, Summerfield argued that Western definitions and solutions to mental disorders cannot be routinely applied to people in 'developing countries' (Lynn, 2000).

Referencing Kleinman and Good (2014), they asserted that Cultural worlds may differ so dramatically that translation of emotional terms means more than finding semantic equivalents. Describing how it feels to be aggrieved or melancholic in another society leads directly into an analysis of a radically different way of being a person (Lipton, 2014). In the cited examples, 'culture' seems to be associated with particular cases relating to 'development countries' and 'mental disorders'. Culture is associated with cultural 'otherness', generally as the polar opposite to modernity (developing countries), and with particular 'soft' aspects of medical practice (mental health). Hence, the cultural approach to these medical contexts is still characterized by what Bauman and Briggs have called 'a poetics of otherness', describing people living before or outside scientific modernity, and ruled by individual or collective representations contrary to reason and the logos of biomedicine (Bates, 2013).

Thus, in the KT approach we have dealt with here, the importance of cultural factors is not accounted for symmetrically (drawing on the notion of symmetry in Bloor and the sociology of science). A symmetrical account would admit that the place where science is produced, and not just the place of its reception, forms a part of culture, and that the translation between the laboratory and society is a translation between different cultural places—not between universally valid science and a local 'prejudice'.

4. The Importance of Culture in Translation

The definition of "culture" as given in the Concise Oxford Dictionary varies from descriptions of the "Arts" to plant and bacteria cultivation and includes a wide range of intermediary aspects. More specifically concerned with language and translation,

Newmark defines culture as “the way of life and its manifestations that are peculiar to a community that uses a particular language as its means of expression” (1988: 94), thus acknowledging that each language group has its own culturally specific features. He further clearly states that operationally he does “not regard language as a component or feature of culture” (Newmark 1988: 95) in direct opposition to the view taken by Vermeer who states that “language is part of a culture” (1989: 222). According to Newmark, Vermeer’s stance would imply the impossibility to translate whereas for the latter, translating the source language (SL) into a suitable form of TL is part of the translator’s role in transcultural communication.

The notion of culture is essential to considering the implications for translation and, despite the differences in opinion as to whether language is part of culture or not, the two notions appear to be inseparable. Discussing the problems of correspondence in translation, Nida confers equal importance to both linguistic and cultural differences between the SL and the TL and concludes that “differences between cultures may cause more severe complications for the translator than do differences in language structure” (Nida, 1964: 130). It is further explained that parallels in culture often provide a common understanding despite significant formal shifts in the translation. The cultural implications for translation are thus of significant importance as well as lexical concerns.

Lotman’s theory states that “no language can exist unless it is steeped in the context of culture; and no culture can exist which does not have at its centre, the structure of natural language” (Lotman, 1978: 211-32). Bassnett (1980: 13-14) underlines the importance of this double consideration when translating by stating that language is “the heart within the body of culture,” the survival of both aspects being interdependent. Linguistic notions of transferring meaning are seen as being only part of the translation process; “a whole set of extra-linguistic criteria” must also be considered. As Bassnett further points out, “the translator must tackle the SL text in such a way that the TL version will correspond to the SL version. To attempt to impose the value system of the SL culture onto the TL culture is dangerous ground” (Bassnett, 1980: 23). Thus, when

translating, it is important to consider not only the lexical impact on the TL reader, but also the manner in which cultural aspects may be perceived and make translating decisions accordingly.

5. Strategies for Managing Cultural Considerations

Atonye (2014) submitted that two general approaches have been used in creating educational interventions to address the issue of cultural considerations, they are:

- programs aimed at improving knowledge that is group-specific, and
- programs that apply generic or universal models.

Concerns have been raised about cultural competency programs that use a group-specific approach to teach providers about the attitudes, values, and beliefs of a specific cultural group leading to stereotyping and oversimplifying the diversity within a particular priority group. The universal approach to training proposes that cultural considerations can be taught through reflective awareness, empathy, active listening techniques, and the cognitive mechanisms contributing to cultural insensitivity or blindness, such as implicit biases or stereotype threats. In line with the above, Teibowei (2019) summarized some common strategies for managing cultural considerations as:

- Provision of interpreter services
- Provide training to increase cultural awareness knowledge and skills
- Incorporate specific attitudes and values into health promotion tools
- Provide linguistic competency that extends beyond clinical encounter to the appointment desk, advise lines, medical billing and other written materials.

6. Conclusion

As frequently emphasized by different translation scholars, the issue of culture and its complex relationship with language in terms of culture-specific items are among the thorniest issues that a translator or interpreter may face. Accordingly, the issue will be also important to those people who are going to teach and/or evaluate how to translate different texts or pieces of speech from language into another. On this note, the study suggest that prospective medical expert should be encouraged to

consider the differences cultures while consuming the products of Biomedical translations.

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