



Evidence Summary

Indigenous Traditional Medical Practitioners' Lack of Formal Medical Education Impacts their Choices of Information Resources for the Treatment of Sickle Cell Anemia

A Review of:

Olatokun, W. M., & Ajagbe, E. (2010). Analyzing traditional medical practitioners' information-seeking behavior using Taylor's information-use environment model. *Journal of Librarianship and Information Science*, 42, 122-135.

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Abstract

Objective – To determine the information seeking behaviours of traditional medical practitioners who treat sickle cell anemia patients.

Design – Qualitative, interviewer-administered, structured questionnaire.

Setting – City and surrounding rural area of Ibadan, Nigeria.

Subjects – The researchers selected for this study 160 indigenous traditional medical practitioners who specialize in the treatment of sickle cell anemia. The majority of the

subjects were male, with 96 male and 64 female. The practitioners were selected from four traditional medical practitioner associations in Ibadan, Nigeria. The researchers met with the leaders of the four organizations and identified which of the 420 members specialize in the treatment of sickle cell anemia.

Methods – The subjects were asked survey questions orally during face-to-face interviews. The decision to conduct interviews and ask the survey questions orally (rather than having the subjects complete the survey questions on their own) was based on the perceived low literacy level of the traditional medical practitioners. Survey questions were

written using the analytical framework of Taylor's information use environment model. According to the authors, the premise of Taylor's information use environment model is that individuals can be grouped according to their "professional and/or social characteristics" (p. 124). The group is then characterized by the members' approach to problem solving: the type of problems they encounter, the setting they find themselves in during the problem, and how the group as a whole determines what course of action needs to be taken in order to solve the problem. The problem solving strategy of the group impacts its need for information and how that information is located and used.

The questions asked by the researchers fell into one of five research areas:

- the environment of the group
- the diagnosis and treatment methods of traditional medical practitioners and how they obtain information that shapes their diagnosis and treatment choices
- sources of information for the treatment of sickle cell anemia and the factors that encourage or discourage the use of those sources
- how information about sickle cell anemia is communicated amongst the traditional medical practitioners
- the extent to which orthodox and traditional approaches to the treatment of sickle cell anemia are integrated.

All 160 subjects completed the interview and all of the surveys were determined to be usable.

Main Results – The main sources of professional knowledge and training of the traditional medical practitioners are their fathers (55%) and master healers (42.5%). This knowledge is orally preserved: none of the respondents completed a formal training program at a university.

The information used to select the best treatment options for patients with sickle cell

anemia is the patient's diet or eating habits (62%) and new traditional remedies (55%). New traditional remedies are defined by the authors as "the location and potency of herbs, roots, bark and parts of animals used to compound drugs or make ritual sacrifices" (p. 128).

The information found least useful by the traditional practitioners is the authenticity of new remedies (20%). The traditional practitioners would wait for their patients to report back regarding the success or failure of the treatment they were provided.

The researchers also discovered that traditional practitioners rarely, if ever, share their diagnosis and treatment methodologies with other practitioners. The diagnostic tests for sickle cell anemia used most often by traditional practitioners are visual observation (32.5%) and history taking (48%). Only a fraction of the practitioners (10%) utilize "orthodox methods" which include Hb electrophoresis. The treatment option of choice by the majority of practitioners is concoctions (62.5%).

The traditional practitioners favour informal sources of information over formal sources. The informal sources most commonly used are local associations (55%), colleagues (55%), and master healers (52.5%). Such formal resources as medical journals, seminars or workshops, the Internet, and libraries are rarely if ever used. The factors influencing the practitioners' resource choice include relevance (87.8%), suitability (70%), and availability (67.5%).

Many practitioners also refer their patients to other traditional medical practitioners; however, very few (27.5%) refer patients to orthodox physicians. The traditional practitioners felt that they can treat their patients on their own and do not need the orthodox physician's help. The traditional practitioners also feel that there is little or no information sharing between the traditional practitioners and the orthodox physicians: the only time information is exchanged between the two groups is when the orthodox

physicians want to conduct research on traditional medical practices.

Conclusion – The traditional practitioners rely heavily on information from local experts to guide their treatment plans for *sickle cell anemia* patients. The success or failure of a given treatment plan is also based on what did or did not work in the past. These practitioners do not have a formal education and have a low literacy level. This group is not recognized by western medical culture as a result of their lack of professional, western medical training. Another issue is that there is not a solid documentation system of the treatment and management of *sickle cell anemia* by this group. This is due to their fears of having their methods “stolen” by fellow practitioners. Recommendations by the authors include having the association leaders document and track the treatment and disease management methods used by their members and implementing a training program for the indigenous traditional medicine practitioners. Further research needed includes exploring the various ways to integrate western medical practices with traditional practices as well as investigating ways to encourage collaboration and sharing of information between indigenous medical practitioners.

Commentary

Though the data provided would be of interest to librarians whose patron population includes indigenous traditional medical practitioners and the patients this group serves, the subject selection process, study design, and methodology employed by the researchers puts the credibility of the data into question.

The credibility concerns with this study began with the selection of research participants. There was no randomization of subjects selected: the leaders of the four traditional medical associations selected the research subjects and those subjects were the only individuals interviewed. This lack of randomization presents possible bias. Also,

there is no indication that ethics approval or consent from the research participants was obtained prior to conducting the interviews.

The study design and methodology are also lacking in sufficient detail. The article does not indicate who conducted the 160 interviews or where the interviews were held. The only identifiable evidence of these two logistical matters is the citations under the tables on pages 128-130. It appears that this survey was conducted in the “field” between June 2007 and July 2007. This information is not provided in any other section of the article. The research instrument is not provided and there is no information regarding the number of questions asked or the content of those questions. The researchers did provide details regarding the five research questions they were seeking to answer; however, the lack of details regarding the specific questions asked negatively impacts the credibility of the study. A specific area of concern regarding insufficient details is the term “orthodox methods.” The authors, unfortunately, do not provide a specific definition for “orthodox methods.” This leaves the reader to infer that “orthodox methods” are current, modern medical methods as opposed to traditional methods. Also of interest is that the use of SPSS was never mentioned in the article: SPSS is only mentioned in the abstract. Further information regarding who handled the data or what, if anything, was done to minimize bias was not provided in the article. The researchers also state that all 160 surveys were usable. Regrettably, there was no discussion on what criteria was used to determine usability of the surveys nor were any confounding variables addressed.

The findings of this study underscore the need for further research on the information seeking behaviours of indigenous medical practitioners; however, the lack of an adequate description of the study gives the reader pause as to the credibility of the information provided.