

# A Qualitative Study on Cultural Bloodletting Among Ethiopian Immigrants

Howard Tandeter MD<sup>1</sup>, Mirta Grynbaum MD<sup>1</sup> and Jeffrey Borkan MD PhD<sup>2</sup>

<sup>1</sup> Department of Family Medicine, Faculty of Health Sciences, Ben-Gurion University, Beer Sheva, Israel

<sup>2</sup> Department of Behavioral Sciences, Sackler Faculty of Medicine, Tel Aviv University, Ramat Aviv, Israel

**Key words:** bloodletting, transcultural medicine, synergy, blood sampling

## Abstract

**Background:** Bloodletting is practiced in Ethiopia. Physicians in Israel engaging in transcultural encounters with Ethiopian immigrants are generally unaware of these ethno-medical beliefs and practices.

**Objective:** To assess the past and present use of bloodletting among Ethiopian immigrants in Israel.

**Methods:** We interviewed a sample of 50 adult patients of Ethiopian origin about present and past use of bloodletting. A second consecutive sample of 10 adult patients of Ethiopian origin who often asked their doctors to perform blood tests were identified and interviewed. Data analysis was performed by "immersion-crystallization" analysis.

**Results:** More than half of the interviewed patients reported the use of bloodletting. Scars were commonly present on their upper extremities. A qualitative analysis identified the different reasons for the use of bloodletting, the technique used and its appreciated efficacy. We also found an unexpected cultural synergy between traditional bloodletting and western medical blood sampling.

**Conclusions:** Some Ethiopian immigrants continue to perform traditional bloodletting in their new country of residency, a practice that local physicians may not be aware of. Bloodletting-type scars on the upper extremities may be common in these patients. Patients may ask for blood sampling as a culturally accepted way to perform bloodletting (synergy).

*IMAJ 2001;3:937-939*

Bloodletting as a healing technique has been used extensively throughout the ancient and modern world. Although the first textual recording of this procedure is found in the works of the *Corpus hippocraticum*, bloodletting has been performed since the time of the ancient Egyptians, Babylonians and Hindus for at least the last two and a half millennia [1,2]. Although it is still used as a traditional therapy in societies such as Ethiopia [3], it has all but disappeared from western medicine, except for very narrow indications such as polycythemia, polycythemia vera and porphyria cutanea tarda.

In Ethiopia, traditional medicine is promoted as part of the government's health policy [4]. Cushitic, Arab and Amharic

medical traditions co-exist with cosmopolitan western medicine [5], and bloodletting is still practiced within the traditional healthcare system [6,7]. The major role of bloodletting is as a treatment for "purifying disease" [8].

The present study provides a qualitative description of this procedure among Jewish Ethiopian immigrants in Israel. It also describes the unexpected cultural synergy between traditional bloodletting and western medical blood sampling (bloodletting "disguised" as a blood test under sterile conditions). Since Ethiopian immigrants live in Israel as well as in many European countries, Canada and the United States, our findings may help physicians from these countries improve their understanding of Ethiopian patients in these transcultural encounters.

## Materials and Methods

During May 1998, interviews were conducted with a consecutive sample of 50 adult patients of Ethiopian origin who presented to a community health center in Beer Sheva, a city in southern Israel. This health center is operated by Clalit Health Services, a health maintenance organization that provides healthcare to nearly 65% of the Israeli population. The age of the subjects ranged between 21 and 87 years (mean 44 years).

Interviews were conducted by the patients' family physicians (H.T. and M.G.). At the end of a medical consultation, the physician requested permission from the patient to inquire about bloodletting and to examine the patient's arms for scars left by the procedure. If found, the type of scar and site were noted. Demographic information was also recorded. Questions pertaining to bloodletting focused on its use in the present and in the past, the reasons for its performance, the techniques and instruments employed, its effectiveness, and related issues. The interviews were conducted in Amharic with the help of a translator. Interviews were recorded in writing and not tape-recorded.

Following the analysis of results from the first set of interviews, an unexpected insight arose regarding the synergy between traditional bloodletting and western medical blood sampling. To further explore this association, a second consecutive sample of 10 adult patients of Ethiopian origin who often asked their doctors to perform blood tests were identified and interviewed.

Data analysis was performed by "immersion-crystallization," a qualitative analytic style. Immersion-crystallization involves

cycles of concentrated textual review of the data, emerging after concerned reflection with intuitive insights, until reportable interpretations become apparent [9].

## Results

About half of the patients interviewed (56%) reported that they use bloodletting as a traditional remedy either currently or in the past, and for different periods. Many described having undergone this practice in Ethiopia or during their difficult transitional period in Sudan prior to immigration to Israel. Some of them had scars in their upper extremities from earlier procedures.

Although most admitted to knowing others (family or neighbors) who underwent or performed bloodletting, four subjects adamantly denied any knowledge of this procedure and appeared uncomfortable discussing the subject. Some of the patients who had not undergone the procedure explained that they had always been healthy previously and did not require the intervention.

### Reasons for bloodletting

There were variations between subjects as to why they practiced bloodletting, and a host of indications for this procedure were offered. In general, however, subjects explained that bloodletting was usually performed when the patient was unable to visit a western-style physician or preferred traditional treatment. The most common reason was that "the blood was too black." This served as both an etiological explanation of their sickness and a good indication to perform the procedure. According to traditional beliefs, peripheral blood – seen as "black" (literally too dark in color) or impure due to disease – should be drawn out of the body to regain health. Several patients recounted that traditional healers would make cuts on the patient's arm and while watching the blood flow tell them that it was "too black."

Another important indication for bloodletting is "feeling pressure" or "pressure in the blood." This term appears similar to the western term "hypertension," although it is presumably linked to traditional concepts of high blood pressure or *dembizat*, which literally means "a lot of blood" [R. Hodes, personal communication]. Other indications include headaches, high temperature, fainting, weakness, or nausea. Treatment was sought for symptoms as well as for the disease.

### Bloodletting techniques

Three types of scars were found on the upper extremities: venesections at the right or left antecubital area; small longitudinal scars along the anterior aspect of the forearms; and larger, parallel scars, two proximal and two distal to the antecubital fossae. Subjects also described two other areas used for bloodletting on the lower extremities and the trunk. (These were not searched in our study due to concerns regarding modesty). The procedure was (and is) performed with a razor blade broken into a triangular shape, often with no antisepsis for either the blade or the skin. Some of the subjects treated themselves, while others described a non-physician "specialist

in blood or in bloodletting" who was asked to perform the procedure. Some even talked about their parents and teachers carrying out this intervention during their childhood.

### Efficacy and outcome of bloodletting

Subjects were nearly unanimous in their descriptions of the efficacy of bloodletting – namely, people recovered almost immediately with this procedure. For example, as one subject described: "About 17 years ago I underwent this procedure due to weakness. I couldn't wake up from my bed and received a prescription from a doctor that didn't help me. We then invited a specialist in bloodletting who made me bleed three times a day, day after day. Almost immediately I felt better. The blood was black."

Some of the most striking recoveries were among those persons in whom bloodletting was performed to treat fainting. As one patient told us: "I once saw a woman who fainted on the street; they made her bleed and she instantly recovered."

### Synergy between bloodletting and blood sampling

Subjects described an association between traditional bloodletting and western blood sampling. Venipuncture for blood testing appears to have become a culturally acceptable way of performing bloodletting and is seen as having much the same effect. For example, a 32 year old patient with a scar on her right antecubital fossae who had performed bloodletting in Ethiopia discontinued the practice upon immigration to Israel. Nonetheless, she reported that every time she does not feel well due to ill-defined conditions she asks her doctor to take blood from her. Such behavior, with frequent requests for "taking some blood," appears to be relatively common among Ethiopian immigrants in the Beer Sheva area.

An association between these practices may even have been present among those who refused using bloodletting. For example, a 28 year old man with an obvious scar on the right antecubital fossae, who denied bloodletting, nonetheless told of visiting his doctor to do "blood tests" every time he feels sick.

Some subjects were able to articulate the synergy between bloodletting and blood sampling practices as well as to note the advantages of the latter over the former practice. Performing tests on the blood withdrawn appears to be a more acceptable and "scientific" option than the tradition of throwing the blood away. As one subject noted, "...by making tests you can see if we have a disease and give medications." The use of the needle seems to be an attractive alternative to the excessive bleeding that may have accompanied the traditional method. As one subject noted: "The procedure is done with a razor blade cutting the vein. Blood goes out and you feel better... It always helps. Once I did it by myself, but here [in Israel] you don't do it by yourself. In this country you behave with the same customs as the rest of the people living here. I think that blood drawing for testing has the same effect as bloodletting. I will keep asking my doctor to take blood from me if I do not feel okay. I will ask the doctor to test the blood he draws (to know what happens in my body), and not just to throw it away." Another subject voiced

additional insight: "When a physician (in Israel) takes blood it has the same effect as when they did bloodletting in Ethiopia. I will ask to take blood whenever I feel bad. If blood is taken it is better to perform tests with it than just discard it." Another explanation for the shift from traditional bloodletting to western blood sampling may be found in one of our patients' description of the risk of infectious diseases (presumably AIDS): "I don't do it but I see my neighbors doing it all the time. Doctors in Ethiopia said to us that there's a terrible disease transmitted by blood and they prohibited us from performing bloodletting."

## Discussion

The results of this study provide evidence that bloodletting is common among the cohort of Ethiopian immigrants who visit their family health center, both at present and in the past. The sample size in our study was too small for quantitative conclusions, and therefore we limit our discussion to the qualitative data.

The fact that patients were approached at the end of the consultation with the doctor, and that the results of the consultation were not linked to their acceptance or refusal to answer, prevented any possible fear by the patient that their medical treatment could be jeopardized by their answers (a possible source of bias).

The presence of scars in the upper extremities may serve as a "door" to initiate discussions on the use of traditional medicine in general and the performance of this procedure in particular. Such conversations may be beneficial for the ongoing doctor-patient relationship, mutual respect and understanding (particularly regarding dual patterns of healthcare utilization), and patient education. Patients' interests may well be served by discussing the risks of the procedure and the need for antiseptic technique. Recognizing these "scar patterns" may also be important since the scars may be mistaken for those resulting from a suicide attempt.

The possibility of "synergy" between traditional bloodletting and blood sampling arose in our study. Patients may expect the physician in Israel to perform bloodletting "disguised" as a blood test under sterile conditions. It may well be that the access to western medical services has replaced the traditional bloodletting of the home or village. Undoubtedly this has been reinforced by knowledge on the AIDS epidemic and viral hepatitis and their relationship to blood and bloodletting [10,11]. It may also be related to the use of the health center as an entrance point to Israeli society, acculturation and assimilation. This hypothesis is supported by the work of Shuval and Antonovsky [12], who detected similar patterns among previous waves of immigrants who garnered the "latent functions" of the clinic.

Immigration almost always involves major cultural changes in dietary, social and health-related beliefs and behavior [13]. Physicians around the world are faced with the challenge of treating patients from cultures different to their own. Due to cultural and idiomatic barriers, it is crucial that the physician

has a basic knowledge of the common medical problems and health beliefs that are singular to a given population [14]. For the physician dealing with immigrants and refugees from Ethiopia, and perhaps also other areas of Africa, knowledge of the performance of traditional bloodletting may be important because of the potential for unwanted effects of the procedure (iron deficiency anemia, local infections, and as a possible source of blood-transmitted diseases). Awareness of the process of synergy described here may help physicians discriminate between the real need for blood testing and the disguised request of the patient for a "culturally accepted" performance of bloodletting. It may also open the door to cross-cultural discussions and understanding, both in this example and in many others.

## References

- Kerridge IH, Lowe M. Bloodletting: the story of a therapeutic technique. *Med J Aust* 1995;163(11-12):631-3.
- Ackermecht EH. Therapeutics from the Primitive to the Twentieth Century. New York: Hafner Press, 1973:10.
- Maru M. Epidemic hysteria in Gondar city, Western Ethiopia. *E Afr Med J* 1982;59:311-14.
- Bishaw M. Promoting traditional medicine in Ethiopia: a brief historical review of government policy. *Soc Sci Med* 1991;33(2):193-200.
- Slikkerveer LJ. Rural health development in Ethiopia. Problems of utilization of traditional healers. *Soc Sci Med* 1982;16(21):1859-72.
- Hodes R. Cross-cultural medicine and diverse health beliefs. Ethiopians abroad. *West J Med* 1997;166(1):29-36.
- Hodes RM, Teferedegne B. Traditional beliefs and disease practices of Ethiopian Jews. *Isr J Med Sci* 1996;32(7):561-7.
- Baur FD, Hinnant M. Normal and revolutionary divination. A Kuhnian approach to African traditional thought. In: Exploration in African System of Thought. Bloomington: Indiana University Press, 1980:213-35.
- Miller WL, Crabtree BF. Qualitative analysis: how to begin making sense. *Fam Pract Res J* 1994;14(3):289-97.
- Coimbra JC, Santos RV, Yoshida CF, Baptista ML, Flowers NM, Do VA. Hepatitis B epidemiology and cultural practices in Amerindian populations of Amazonia: the Tupi-Monde and the Xavante from Brazil. *Soc Sci Med* 1996;42(12):1735-43.
- Hardy DB. Cultural practices contributing to the transmission of human immunodeficiency virus in Africa. *Rev Infect Dis* 1987; 9(6):1109-19.
- Shuval JT, Antonovsky A. Illness: a mechanism for coping with failure. *Soc Sci Med* 1973;7(4):259-65.
- Trostler N. Health risks of immigration: the Yemenite and Ethiopian cases in Israel. *Biomed Pharmacother* 1997;51(8):352-9.
- Ackerman LK. Health problems of refugees. *JABFP* 1997;10(5): 337-48.

**Correspondence:** Dr. H. Tandeter, Dept. of Family Medicine, Faculty of Health Sciences, Ben-Gurion University of the Negev, P.O. Box 653, Beer Sheva 84105, Israel.

Phone: (972-8) 647-7436

Fax: (972-8) 993-3722

email: howard@bgumail.bgu.ac.il