

The relation between education level and attending traditional healers in Khartoum locality. Case study in Khartoum State. Sudan

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ABSTRACT: Despite the prevalence of western medicine traditional healers TH still play important role in the society. The study aims to investigate the relationship between education level and attending traditional healers. The sample selected randomly about 1.5% from Khartoum locality's population (1614 families), the survey tool was a standardized questionnaire. The study found that; despite the negative relation between education level and tendency to traditional healers as general (p value= .008), there is a strong positive relation between education and tendency to herbalist (p value= .000). However, the strong factor force people to attend traditional healers is past successful experience(48.7%) which related negatively with education level, then advice from relatives(27.5%) which related positively with education level. Other factors are economic reason, failure of modern medicine in the treatment and availability and accessibility of traditional healers. Also the study found that high percent of respondents 58.9% attend TH for Respiratory diseases, then gastrointestinal tract disturbance (GIT) (58.2%). Therefore, the author recommend in depth study in this area to know why graduated people prefer herbalist more than less educated one. Moreover, put long training plan to improve traditional healers' skill.

KEY WORDS: *Bonesetters, education, herbalist, religious healers, traditional medicine.*

I. INTRODUCTION

Traditional and folklore medicine inherited from generation to generation is rich in domestic recipes and communal practice. According to World Health Organization (2002), "Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being." Diversity, flexibility, easy accessibility, broad continuing acceptance in developing countries and increasing popularity in developed countries, relative low cost, low levels of technological input, relative low side effects and growing economic importance are some of the positive features of traditional medicine (1). Towards the end of 19th century traditional medicine production shifted from a home level production to cottage industry and subsequently to large industrial mass production. According to WHO, the quantity and quality of safety and efficacy data available on traditional, complementary and alternative medicine are far from sufficient to meet the criteria needed to support its use worldwide.

Traditional healer TH is a person who is recognized by his community, using different methods to treat various illnesses physically or psychologically. His knowledge inherited from one healer to another.(2,3). THs continue to play important role in public health for their availability comparing with physician (4).

Traditional healing system is the most prevalent method in many countries for the treatment of physical and mentally sick people mostly due to lack of economic resources, inaccessibility of medical services, and lack of awareness among the population and the high prices of modern medicine especially psychiatric services and difficult for the poor to afford and not available for all. Also, some diseases modern medicine failed in healing it (5), recommendation of relatives, and belief in TM (6,7,8 and 9). The most influencing factor in attending traditional healers were reported in many studies to be with a lower socioeconomic and education status (5,10,11 and 12).

There are different types of traditional healers, in African there are diviners, midwives, and herbalists. According to their culture some diseases returning to stem from ancestral spirits and other influences, and the ability to diagnose an illness is considered a gift from both God and the practitioner's ancestors (13).

In countries such as Sudan, one can observe traditional medical knowledge in various forms such as home remedies that based in inherited knowledge of medicated common diseases. Another form of traditional medicine is attending traditional healers.

Traditional healers in Sudan generally divided into herbalist, religious healer bonesetters, cupping healer...etc. Religious healer or sheikh (as known locally in Sudan) treats spiritual, physical and social disorders, believing in supernatural causes of diseases like jinn. After Islam the view of treatment is change and many healers based his healing technique mainly on Quran and Sunna (Prophet Saied and practices peace upon him)(14, 15).

There are two types of religious healers according to their procedures; Quran healing methods, the treatment based mainly on Holy Quran and the Prophet's hadith. The second type is Sufi healing methods, which is the famous traditional system of interpersonal healing, combing the religious with the super natural powers (16).

Religious healers use different ways in the diagnosis mostly based on spirituals side such as god invocation (*Khayra*), open Quran book (*Fatehelketab*), by beats (*Elsebha*) and numerology (*Aelmelharef*) (17). In the treatment some healers using beside Quran: amulets (*Hijab*), spitting cure (*al-'azima*) and erasure (*al-mihaya*) (6, 18,19 and 20). Traditional and spiritual healers may be involved positively in the management of some diseases such as epilepsy (21).

Bonesetters or *basirs* (local name) is an ancient practice in Sudan and other developing countries without any government supervision or medical guidance. Traditional bonesetter is widely practiced in the community, especially among people of low socioeconomic class and is associated with appreciable risks of complications. The types and severity of complication related to location of fracture and modality of treatment are the traditional healers who heal broken bones, treat sprains, pain and disabilities in the joints. They massage wryneck and ailing muscles. Some bonesetters circumcise boys, and perform cupping and cauterization. In Sudan bonesetters spread in all States, people from different socioeconomic strata go to them for various reasons. Some of them develop their practices by using new instruments for diagnosis and treatment e.g. X-ray and massage machine. Others used some nutritional program for his patients to improve the healing process. Still people consult bonesetters for many reasons; believing, fear of plaster and economic reason (5,22 and 23).

Herbalist described as a traditional healer who specialized in the use of herbs mainly in addition to animal extracts, honey and types of earth, charms, to treat physical diseases, spiritual diseases and cosmetic reasons (hair oils and mixtures for face whitening and general skin beauty). He expected to have extensive knowledge in the efficacy, toxicity, dosage and compound herbs. Most herbalists inherited this knowledge and developed their skills by experiences. There are many reasons to attend herbalist, such as dissatisfaction with modern medicine and efficacy (especially chronic diseases), economic reason, the belief in traditional medicine or on the healer himself and believing in that herbal medicine is safer than chemicals (24,25). Two types of herbalist; Modern herbalists who may be trained through modern way, and traditional herbalist who do not only focus on curing the physical ailments of the patients but deal with the patients' problems holistically (26).

Cupping healer or *hajam* (local name), is a traditional healer who use cup to treat some diseases. Cupping is an old practice in Sudan inherited from generation to generation. It is also one type of the Prophet Mohamed Medicine (peace upon him). Early in Sudan, healers used cow horns to remove poisoned blood, but now many healers (especially in Khartoum State) improved and developed their practice. Some of them used glass instruments (disposable) and antiseptic in sterilization process.

Zar healer treats spiritual, psychological, and social disorders, by various methods like music, songs, and smoking by special plants such as *Securidacal longepedunculata*, *Commiphora murrha* and *Abrus precatorius* L. It is known as a ritual practice; the essence of these rituals is to specify the spirits and then demands through singing, dancing, gifts and sacrifices. Because healers believe that the spirits will be in the body of the possessed person and will continue to make troubles if the person did not obey them (19).

Kujurs or shamans defined as individuals capable of producing a state of trance and mental dissociation interpreted as spirit possession. During this state, kujur is believed to possess powers beyond those of ordinary people, powers that heal, bring down rain or protect the harvest against invading locusts (20).

These types of traditional healers (Zar, Kujurs) rarely found in Khartoum.

Cultural awareness depends upon more than knowledge. Personal attitudes and responses indicate your level of willingness to take on board new information, the main source of knowledge is education. Education is important factor that affected preventing methods and controlling local health problems. However, it is influencing factor in determine health services choices, and affecting negatively the tendency to traditional healers (27, 28).

II. MATERIALS AND METHODS

The study aims to investigate the relation between education factor and attending traditional healers during 2018.

Site:

This research was conducted in Khartoum locality, which is located between latitudes 15°8' 'and 16°45' 'N and longitudes 31°26' ' and 25°34' 'e, at an altitude of 405.6 m above sea level. Total population was about one million. Khartoum is a cosmopolitan area representing people from different social backgrounds.

Design:

This was a cross-sectional study.

Sample size:

The sampling unit used in the study was the family, which defined as a group of individuals living together in a household. The sample selected randomly about 1.5% from all population. Research sample was 1614 families.

Data collection and analysis:

The survey tool was a standardized questionnaire having close – ended questions relevant to the study objectives. The data was entered and analyzed using a computer program SPSS program (statistical package for social sciences).

III. RESULTS AND DISCUSSION

Table (1) Demographic characteristics of families:

Sex –		
Male	352	21.8%
Female	1262	78.2%
Age group-		
≥40	849	52.6%
≤41	765	47.4%
Education level-		
Under graduate	977 Male:201 Female:776	60.5% 20.6% 79.4%
Graduated	646 Male:151 Female:486	39.5% 23.7% 76.3%
Economic status-		
Low	1046	64.8%
High	572	35.2%

Source: fieldwork (2018)

The percentage of female 78.2% is more than male because the survey conducted in the morning and most males in their works. The percentage of people under forty is higher 52.6%.

The study also found that the level of education is higher within male, the percentage of graduated male 23.7% comparing with 20.6% under graduated. Whereas, the percentage of under graduated is more than graduated within female group. Most family 64.8% live in low economic status.

Table (2) Attending traditional healers:

Attending TH	Frequency	Percentage
Yes	895	55.5%
No	719	44.5%
Total	1614	100.0

Fieldwork (2018)

Traditional healing system is the most prevalent method in Sudan for the treatment of physical and mentally sick people, from the survey 55.5% from sample attending traditional healers with their various specializations (religious healer, bonesetter, and herbalist....etc.).

Table (3) The relation between education level and attending traditional healers:

Education		Attending TH		Total
		Yes	No	
	Count	566	411	977
	% within under graduate	57.9%	42.1%	100.0%
	Count	329	308	637
	% within graduate	51.6%	48.4%	100.0%
Total	Count	895	719	1614
	% within education	55.5%	44.5%	100.0%

Chi² (p= .008)

Source: fieldwork (2018)

Concerning the relation between education and attending traditional healers, the study found that there is strong negative relation between them (p value= .008). 57.9% from whom attend traditional healers under graduated, whereas, the percentage decrease within graduated people 51.6%. This result agrees with many studies that the high percent of whom attending traditional healers have low socioeconomic and education status (5, 10, 11 and 12). But there is variation in this relation within different types of traditional healers.

Comparing the relation between respondent's education level with different types of traditional healers, the study found variation in the relation which clear in the tables below.

Table (4) Education and religious healers

Education		Attending religious healer		Total
		Yes	No	
	Count	308	669	977
	% within under graduate	31.5%	68.5%	100.0%
	Count	155	482	637
	% within graduate	24.3%	75.7%	100.0%
Total	Count	463	1151	1614
	% within education	28.7%	71.3%	100.0%

Chi² (p= .001)

fieldwork (2018)

The table above shown that there is a negative strong relation between attending Religious healers and education level (p value= .001). The percentage of people attend religious healers increase within under graduated people

24.3%. This may return to that religious healers treats spiritual and social disorders, believing in supernatural causes of diseases like jinn (14, 15), which maybe difficulty explaining by logic. Therefore, most of their respondents' diseases have psychological symptoms or social disorder which known by educated person.

Table (5) Education and Bonesetter

Education		Bonesetter		Total
		Yes	No	
	Count	253	724	977
	% within under graduate	25.9%	74.1%	100.0%
	Count	151	486	637
	% within graduate	23.7%	76.3%	100.0%
Total	Count	404	1210	1614
	% within education	25.0%	75.0%	100.0%

Chi² (p=.175)Source: fieldwork (2018)

Among whom attend bonesetter the relation also negative with education but very weak (p value=.175).This due to that most people consulting bonesetters for believing that traditional healing is better than surgery and plaster, and other reason than allopathic healing is very expensive and not accessible to all people (5, 22 and 23).

Table (6) Education and herbalists

Education		Attending herbalist		Total
		Yes	No	
	Count	105	872	977
	% within under graduated	10.7%	89.3%	100.0%
	Count	124	513	637
	% within graduated	19.5%	80.5%	100.0%
Total	Count	229	1385	1614
	% within education	14.2%	85.8%	100.0%

Chi² (p=.000) fieldwork (2018)

The relation between herbalists and education is different from other traditional healers, the level of education increase within whom attend herbalist. From table above the percentage of whom attending herbalist increase within graduated people 19.5% more than undergraduate people and the relation is strong (p value= .000). This positive relation may be due to many reason such as the educated person know that herbs is more safety, so the fear from side effect of many chemicals drug encouraging them to search natural drugs especially in the chronic disease which need long treatments. However, successful experiences in the treatment or alleviate symptoms of intractable diseases (24, 25).

Reasons for attending traditional healers:

There are different reasons force people to attend traditional healers, such as, traditional medicine is cheaper than modern medicine, past successful experience, failure of modern medicine, advice from relative and modern medicine not available and accessible to all.

Table (7)Reasons for attending traditional healers

Reason	Percentage	Relation with education level
Success experience	48.7%	Chi ² (p= .008)
Advice from relative	27.5%	Chi ² (p= .003)
Failure of MM to treat	11.4%	Chi ² (p= .01)
Economic reason	9.5%	Chi ² (p= .04)
Availability Of traditional healers	2.9%	Chi ² (p=0 .3)

Fieldwork (2018)

From table above the strong factor force people to attend traditional healers is past successful experiences 48.7%, then advice from relatives 27.5% which to some extent related to each other. However, there is strong negative relation between education level and who attend traditional healers for successful experiences. The study found that most of those respondents attend bonesetters and herbalists, which due to fear from surgery and high cost of modern medicine.

The study found that there is a positive strong relation between education level and who attend healers for advice from relative (p value= .003). We observed that high number of them attend bonesetter and religious healers.

Concerning the respondents who attend traditional healer after failure of modern medicine there is strong positive relation with education level (p value=0.01). The high number of these type of patients attend herbalists and religious healers, this may be due to that some herbalists' claims they treat chronic diseases such as HIV, AIDS. According to religious healers they claim to treat spiritual diseases and some people believe in supernatural causes of some ailments.

Accordingtoeconomic reason, there is a negative strong relationship with education level. However a high percent of them attend bonesetter because the allopathic healing of bones and fraction is very expensive (5, 22 and 23).

In the areas where allopathic medicine not available people force to attend traditional healers whatever their education level, which agree with study (4).However, the study found that most of them believing in religious healers.

Table (8) Diseases treats by TH:

N	Diseases	Frequency	Percentage
1	Respiratory diseases	950	58.9%
2	Gastrointestinal tract disturbance (GIT)	939	58.2%
3	Menstrual cramps	392	24.3%
4	Bone complications	265	16.4%
5	Renal diseases	234	14.5%
6	Spiritual diseases	158	9.8%
7	Headache	138	8.6%
8	Dermal	101	6.3%
9	Dental pain	78	4.8%
10	Diabetes	69	4.3%
	Total population	1614	

Fieldwork 2018

Throughout the study, the author chose top ten diseases respondents resorted traditional healers as first choice for treatment. High percent of them 58.9% attend TH for Respiratory diseases, then gastrointestinal tract

disturbance (GIT) 58.2%. This type of diseases considered not dangerous. On the other hand, dental pain 4.8% and diabetes 4.3% occupied the last list because respondent prefer modern medicine's healing.

V. CONCLUSION

Traditional healing system is the most prevalent method in Sudan for the treatment of physical and mentally sick people. Traditional healers have a rich traditional medical knowledge inherited from healers to others, they healing common diseases. Education level affecting the tendency to traditional healers. The study found that there is a negative relation between education level and tendency to traditional healers as general (p value= .008). But different result found when we test the relation between education and tendency to herbalist, the education level increase within their patients (p value= .000).

There are different reasons force people to attend traditional healers. The strong factor force people to attend traditional healers is past successful experience 48.7%, then advice from relatives 27.5%. Other factor is failure of modern medicine in the treatment 11.4% and for economic reason 9.5%. The last reason is the availability and accessibility of traditional medicine in the areas where health services is rare 2.9%. When we observe the relation between reasons and the education level of respondents, the study found that there is appositive relationship between education level with advice from relative and the failure of modern medicine in the treatment. Otherwise, there is a negative relation between education level with the reasons; past successful experience and economic reason. In the rural areas where modern medicine is not available people force to attend traditional healers whatever their education level.

Throughout the study, high percent of respondents 58.9% attend TH for Respiratory diseases, then gastrointestinal tract disturbance (GIT) 58.2%. On the other hand, dental pain 4.8% and diabetes (4.3%) occupied the last list because respondent prefer modern medicine's healing.

VI. ACKNOWLEDGMENTS

This study is sponsored by the Traditional Medicine Dep. Medicinal and Aromatic Plants and Traditional Medicine Research Institute. National Center for research. The author also would like to thanks deeply the research assistants and technicians for collecting the data.

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