



## RESEARCH ARTICLE

## Social Influence, Control, and Ethnomedicine Between Historical and Mythical Etiologies in Some African Communities

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### ABSTRACT

Socio-cultural indigenous beliefs about ill health and the links among medical, cultural, social, and common folk remedies deserve careful examination. This work addressed the links among medical, cultural, religious, and social anthropological forms of knowledge and perception concerning the divine or supernatural power of the healers and social control in some representative African communities in Egypt, Sudan, South Sudan, and Somalia. A qualitative ethnographic survey method was used. Twenty-five participants representing rural communities from Egypt, Sudan, South Sudan, and Somalia were surveyed. SPSS program v26 (IBM, New York, NY, USA) was used to conduct non-parametric tests for the frequencies and percentages, while the chi-squared test was used for the qualitative variables. Qualitative variables were coded as needed for statistical analysis purposes. Causes of ill health can be supernatural, natural, or due to social elements. The importance of the social control element in maintaining good health and the link between social misconduct and ill health in local communities were assured. Local healers can support patients as they understand their cultural and social context and can set up treatment protocols that can be useful in social control within the limits of community taboos and totems. Patients' self-judgment and social judgment can enhance the efforts of local healers in supporting patients. The proven relationships between supernatural, natural, and social factors in ill-health causation can help provide health care and social control strategies. Local communities' beliefs must be considered when planning health promotion and disease prevention programs.

### INTRODUCTION

Africa and African people are considered to be the oldest base of human civilization. The first healing art was known in Africa about 3200 BC (Van Sertima, 1991). The sociological bases of the ethnomedical system in Africa include the belief in one great God

who existed as a member of society, the belief in the perpetual existence of life (pregnancy, life, death, and reincarnation), and the belief in marriage as a relationship that confers social status and produces children. The ethnomedical system in Africa is based on active medical substrates that include plants, soil,

insects, animal parts, and spiritual forces. The African healer's power is determined by his knowledge of adequate materials and the prevailing taboos and totems (Iwu, 2014). The healers should be familiar with curses, charms, spirits, and witches, as these forces must be aligned with the healer's knowledge of the medicinal uses of local plants. The healer's power is also based on family and socially inherited relationships, the use of tools, including incantation and invocation of psychotropic drugs, and spiritual actions. All these tools are used along with remedies made of plant or animal materials. Because of the general belief in spirits as a significant cause of disease, symbols, artifacts, magic, and rituals are essential in healing, which is considered a gift of the spirit (Atkinson and Haran, 2005). Prescriptions are not good enough to cure unless healers can induce the patient's internal power and well-being. Regardless of the treatment practices, the traditional thought is that healing is a blessing from God and is coordinated by the patient's body (Iwu, 2014).

African communities' traditions focused on protecting the weak, preventing dangers, ensuring freedom of life practice, helping with evil spirits, and protecting influential community members and entities (Waite, 1981). The African medicine practitioner or healer is an essential person in his society. He is not only a doctor but also a visionary, a seer, and maybe a priest. He may come to healing through training, divination (selected by God), or family heritage. He is believed to have magical powers. African healers include the diviner or fortune-teller, the herbalist, the midwife, the birth attendant, the surgeon, and the medicine man, who has general knowledge or specializes in certain diseases (Aniakor, 1981). African societies attach various levels of importance to natural and supernatural causes of illness (Young, 1983). African community ideologies play essential roles in determining the cause and the appropriate treatment of a disease. Natural causes may include infections, stress, organic deterioration, accidents, and overt human aggression (Kahissay et al., 2017). Supernatural causes include mystical causes, animistic causes, and magical causes (Murdock, 1980).

The variety of conventional subjects that have served as a framework for ethnomedical research was

introduced by Quinlan (2022). In particular, global public health research adopted Arthur Kleinman's "explanatory model" ethnomedical principle. People worldwide have various ideas about the body, or what anthropologists call "body image." The field of ethnomedicine, known as "ethnophysiology," focuses on cultural conceptions of the human body's form and function, including ideas about the function and positioning of the internal organs. Many low-income nations have a medical pluralism where biomedicine is practiced alongside traditional popular and folk medicine.

The knowledge-practice-belief combination of indigenous and local knowledge systems is essential for social management and ethnomedicine in indigenous territories. However, very little research has examined the interactions between social mechanisms that support knowledge production, transmission, and accumulation and the understanding of ill health in African communities. Our research focuses on the factors influencing change in some African communities and ethnomedicine, which may utilize regional botanical resources and other items of social significance. Constant and Tshisikhawe (2018) investigated plant uses, practices, and beliefs in systems developed among the native Vhavenda in South Africa for maintaining indigenous plant resources and highlighted some of the forces of change influencing the gathering and sharing of knowledge in the Vhavenda local community. Their results indicated that Food and medicine were the two main uses of vhavenda plants. The Vhavenda has a variety of practices for managing plant resources related to taboos against the use of particular species, encouragement of sustainable harvesting methods, and plant species propagation. Apprenticeships with traditional healers were the primary means of passing down plant knowledge and management techniques. Barriers to social collaboration and information sharing include the destruction of cultural institutions, changes in traditional learning platforms, and altering value systems.

This study aimed at using anthropological parameters in a social context to examine healers' and patients' beliefs regarding the causes, treatments, and social meaning of disease across different rural communities in Egypt, Sudan, South Sudan, and Somalia to provide

an opportunity to identify and analyze similarities and differences in health-related beliefs and practices in each community. We paid specific attention to the role of health-related beliefs, such as theories and ideas of disease causation and natural and supernatural ways of treatment, in addition to personal and societal stigma, in fostering social control. Even though plural medicine has been a relevant theoretical discussion since the 1980ies, our focus was on traditional medicine in the social context and those individuals who, in most cases, have no access to advanced healthcare facilities and live behind the law and law enforcement authorities to stress traditional social control that is belonging to local taboos and totems. This research aimed to investigate the relationship between ethnomedicine and social control and determine if local inherited beliefs related to ethnomedicine function as a means of social control. Some other objectives were to address the socio-cultural indigenous beliefs in ill health perceptions and explore the link between ethnomedicine, local cultural and social norms and traditions, and the biological factors in communities. Explore the common beliefs regarding the effect of some common folk remedies and the ideas about the divine or supernatural power of the healers.

## LITERATURE REVIEW

Socio-cultural indigenous beliefs about ill health and the links among medical, cultural, social, and common folk remedies deserve careful examination and study. Many authors addressed the links among medical, cultural, religious, and social anthropological forms of knowledge and perception concerning the divine or supernatural power of healers. Few others linked that to the idea and context of social control.

Using interviews and observations, Ullah et al. (2020) highlighted conflicts between state demands for assimilation and traditional healthcare practices in a fishing community in Gwadar, Pakistan. Muslim authorities considered the local community's traditional healing methods unreligious and archaic by medical staff representing the state. Also, state authorities undermined traditional healing practices both in the treatment of ailments and their use of social control. Social control can result from traditional healing in any community (Winkelman,

2008; Ali et al., 2010). Social controls prompt people to sustain normative obligations toward norms and resume or adopt appropriate behaviors. Waitzkin (1989) explained the relationship between folk medicine and social control. Social control and norms are closely related in ethnomedicine, where societies' and families' behaviors are adjusted to become more socially appropriate. Social control is not necessarily an objective in traditional medical practices. Still, it is an unintentional result that requires the management of emotions such as anger, anxiety, unhappiness, isolation, depression, loneliness, and distress. Due to a lack of education and scientific knowledge in some African societies, sickness, and death are considered punishments for destructive behaviors (Yehya and Dutta, 2010). Treatment or therapy usually involves efforts to restore social harmony. Accordingly, avoiding misconduct to avoid the disease's occurrence is an example of social control. Both good and poor health conditions and changes in the direction of health-seeking ways can be linked to community rules, controlling power, and dominance (Franco et al., 2004; Malik et al., 2022). The community's ideological forces achieve consent and suppress resistance from local or external groups, leading to their social control. In our case, the ethnomedicine, natural, and supernatural ideas behind illness and well-being exert ideological effects on the indigenous people, assimilating them to normative values and practices.

Gadoeva (2022) investigated the origins of a healthy way of life in ethnomedical culture and their dialectical relationships throughout socio-historical development. The emergence of ethnomedical experiences and traditions is connected to developing a healthy lifestyle as a historical, cultural, and social phenomenon. The connection between these traditions and experiences results from faith in supernatural forces or regular, practical experiences and observations. Moreover, Gadoeva (2022) described the ethnomedicinal culture as a collection of people's and a country's experiences with self-healing, preserving, enhancing, and safeguarding health to leave a healthy generation. It is only natural that the beliefs and practices of the ancient people regarding the first forms of primitive medicine and healthcare do not align with contemporary scientific and medical beliefs and notions.

Erinoso and Aworinde (2018) thoroughly reviewed ethnobotany in Nigeria and prepared a review of the state of ethnobotany as an academic discipline in Nigeria. They highlighted the field's future potential in Nigeria and connected its socio-cultural importance to biodiversity preservation. They employed ethnobotanical information from historical, theological, literary, linguistic, and pharmacological perspectives. They concluded that most ethnobotanical studies in Nigeria focus on traditional medical practices, cooperative initiatives aimed at effective health service delivery, and the accreditation or recording of traditional healers and herbal medicine dealers in the local social context.

Green (2019) emphasized the factors controlling the spread and control of AIDS. To stop the spread of AIDS and other STDs in Africa, a coordinated action program incorporating traditional healers is required. Green focused on elements that have gotten less attention in the literature but that control the transmission and control of AIDS. Traditional healers need to be scientifically informed about these ailments to learn more about them over time. Traditional healers and suppliers of herbal medications must have accreditation or other supporting evidence.

Bilal et al. (2017) conducted a cross-sectional study to address the medicinal plant knowledge of the people and identify factors determining the use of medicinal plants in Jigjiga Woreda, Somali Regional State, eastern Ethiopia. They collected ethnomedicinal information from five tribes using the semi-structured questionnaire that was administered to 800 heads of households. The study indicated a prevalence of 40% using herbal medicine during the month-long recall period, where 45 medicinal plant species were collected and botanically identified. They identified age, gender, educational status, and occupation as essential determinants for the use of herbal medicine. This ethnomedicinal study showed that the community in Jigjiga Woreda relies on traditional medicinal plant species to treat a broad spectrum of human ailments. Therefore, more in-depth studies are suggested to explore the potential of traditional medicine in the region and preserve this indigenous knowledge. Significant reasons for preferring herbal drugs were their lower price, efficacy, and geographic inaccessibility to modern medicine.

Issa et al. (2018) documented the traditional medicinal uses of plants by healers in Algoz (South Kordofan), Sudan, where they collected ethnobotanical data over eight months using semi-structured interviews with 30 healers (24 male and 6 female) living in the investigated area. Ninety-four medicinal plants belonging to 45 families and 81 genera were recorded in the study area. Most remedies were found to be administered orally with infusion and laceration to treat poisonous animal bites, urinary system diseases, blood system disorders, and gynecological diseases. They reported a high diversity of medicinal plants that can play an essential role in the healthcare systems of local communities in the study area. Traditional medicine in the Egyptian Delta, as a representative of the Middle East (Millar and Lane, 1988), had historical traditions. In Egypt, four literate medical systems extended over 4000 years. These are pharaonic medicine, Unani medicine, prophetic medicine, and European biomedicine. Millar and Lane (1988) documented the employment of these four traditional therapies by residents and healers of the northern Egyptian farming community. African societies attach various levels of importance to natural and supernatural causes of illness (Young, 1983). African community ideologies play essential roles in determining the cause and the appropriate treatment of a disease. Natural causes may include infections, stress, organic deterioration, accidents, and overt human aggression (Kahissay et al., 2017). Supernatural causes include mystical causes, animistic causes, and magical causes (Murdock, 1980). According to van der Geest and Hardon (2006), pharmaceuticals' social and cultural consequences should be considered while developing treatment strategies. According to Lewis and Butterfield (2005), social roles are important when the aim of social control is influence and regulation. The assumption of social roles causes obligation-based norms to predominate in a society. They put forth a model of the causes and effects of societal control on health. They indicated that health behaviors are social control antecedents using their approach. They discovered that behaviors or acts related to healthcare increased social control.

## MATERIALS AND METHODS

A quantitative ethnographic survey was applied to the studied communities. Nomadic life in the communities is based on animal grazing, medicinal herb collection, and farming. The participants were herbalists who collect and sell herbs and prescribe remedies in the rural communities located in the north-west of Egypt (Mersa Matruh Governorate), the western desert oases (AL-Kharja), the southern zone of Egypt (Halayeb and Shelateen), and the Sinai Peninsula. Some of them were professional healers. Others were just herbalists who collected and sold herbs for a profit. Respondents' opinions on suitable approaches to care and treatment and the most common health problems were surveyed.

### Context and respondents

Non-probability sampling for representatives of different communities was done. The participants were individuals dealing with and having direct

experience with the research subject or having indirect experience as users or community representatives. Selected individuals were Egyptians, seasonal workers, or immigrants from Sudan, South Sudan, and Somalia. All participants belong to rural communities. African rural communities are diverse and heterogeneous. They differ significantly from rural life in the West. African rural communities usually face chronic poverty, a lack of infrastructure, inadequate education systems, and poor or no official healthcare services. Members of such rural communities are more interested in food security and a potable water supply for survival. There are no official social protection mechanisms, and, in most cases, people rely on the elderly, healers, or fortune tellers for informal social support. Rural communities typically resolve their disagreements and issues locally, emphasizing the value of social control. Socio-demographic characteristics are summarized in Table 1.

**Table 1: Socio-demographic characteristics of the participants in the study**

Demographic Characters		Frequency	Percentage
Sex	Male	15	60%
	Female	10	40%
	Other	-	-
Age	40-45years	3	12%
	45-50years	8	32%
	>50 years	14	56%
Nationality	Egyptian	11	44%
	Sudanese	6	24%
	South Sudanese	5	20%
	Somali	3	12%
Education	Illiterate	5	20%
	Some school	10	40%
	College graduates	10	40%
Marital Status	Married	15	60%
	divorced	2	8%
	Single	-	-
	Widow/widower	8	32%
Household monthly income (US Dollars)	200-300	6	24%
	300-400	9	36%
	400-500	8	32%
	>500	2	8%
Career	Herbalist	9	36%
	Healer	6	24%
	No job	10	40%

### Sampling procedure and data collection

We used participant observation as an initial and central tool and in-depth, unstructured interviews as the second data collection tool. Twenty-five

participants were chosen based on their aptitude for understanding illness and recovery and their prior expertise in prescribing treatments for themselves or other sick people. Participants were over 40

years of age and knew the local health traditions in the communities they belonged to or came from. They were also experienced in treating the common diseases in their local communities. Men and women were surveyed. The sample of women was smaller because only a few women have the required experience to be healers or work in this field. Interviews were done during the spring and summer of 2021. Each interview lasted between 60 and 90 minutes. No interviews were recorded with an audio device, but field notes were taken. Using the research ideas of Attride-Stirling (2001), fundamental questions were identified. The basic questions covered the following: the most common diseases in local communities, the leading causes of diseases, the most common treatment protocols, patient self-judgment, and community judgment of patients. Social control tools were found to be based on the perceived relationship between individual well-being and being well-behaved in the community. The study was designed to lead to a global idea of whether ethnomedicine can play a role in social control. Five major interview questions were asked. 1) What are the most common diseases in your local community? 2) What are the main reasons for diseases from your point of view? 3) What are the most common treatment protocols in your local community? 4) How do patients think of themselves in your local community? 5) How do people in your local community think of patients? These questions were designed to carry out the proposed research objectives. The interviewees' anonymity and confidentiality were guaranteed in writing. We conducted semantic analyses to ensure the statements and answers were semantically correct since our participants came from different areas and

had different languages and accents. The interview questions were prepared following examples from previous work (Morote and Hernández, 2020; Morote and Hernández, 2022; Morote et al., 2021; Kamarudin et al., 2018; Saleh et al., 2023). The interview questions were reviewed by four researchers, two from the Department of Anthropology and two from the Department of Natural Resources, Faculty of African Postgraduate Studies, Cairo University.

**Data analysis**

SPSS program v26 (IBM, New York, NY, USA) was used to conduct non-parametric tests (statistical-inferential analysis) for the frequencies and percentages. In contrast, chi-squared testing was used for different variables. Variables were coded as needed for statistical analysis purposes to indicate trends and give an indication to help quantify results and observations. Coding nominal variables with numbers is very common for statistical analysis for survey measures or visual estimations, while ordering needs to be considered, and arithmetic operations are unnecessary. Independent and dependent variables were decided based on each question to be answered.

**RESULTS**

**Most common diseases**

In the first analyzed question (What are the most common diseases in your local communities?) the overall data revealed that the most common diseases are diabetes and malaria, followed by gastrointestinal disorders and diarrhea, cardiovascular diseases, respiratory infections and cough, arthritis and inflammatory disorders, cancer, snake bites, and the lowest were sexually transmitted diseases and AIDS (Table 2).

**Table 2: Common diseases in the local communities of the survey participants**

Disease	Frequency	Percentage
Diabets	18	72
Malaria	16	64
Gastrointestinal disorders and diarrhea	11	44
Cardiovascular diseases, respiratory infections and Cough	9	36
Arthritis and inflammatory disorders (Rheumatism)	8	32
Cancer	6	24
Snake bites	2	8
Sexually transmitted diseases and AIDS	1	4

When analyzing these data per sex, age, and nationality, significant differences were found. Responses indicated that the most common diseases in Egypt were diabetes, cardiovascular diseases, and cancer. Malaria, diarrhea, yellow fever, polio, and cardiovascular diseases were the most common in Sudan. In South Sudan, diarrhea, respiratory tract infections, and malaria were the most common. In contrast, malaria, respiratory infections, diarrhea, and tuberculosis were the most common diseases in Somalia, arranged in order of importance as mentioned. The Chi-Squared test revealed that the association between education and age was significant (Pearson's Chi-Squared = 60.211;  $p = 0.001$ ), suggesting that both education and age are dependent characters and contribute to the understanding of community problems since responders of higher education or older age were able to give similar responses in terms of the most common diseases in their local communities. Other demographic characteristics were not significant. Nationality was an independent variable because association or interactions among countries were not an objective for this study. Overall, descriptive statistics indicated that diabetes and malaria were the most common diseases (72 and 64%;  $n = 18$  and  $16$ , respectively), followed by gastrointestinal disorders and diarrhea (44%,  $n =$

11), cardiovascular diseases, respiratory infections, and cough (36%,  $n = 9$ ), arthritis and inflammatory disorders (32%,  $n = 8$ ), cancer (24%,  $n = 6$ ), snake bites (8%,  $n = 2$ ), and finally sexually transmitted diseases and AIDS (4%,  $n = 1$ ) (Table 2).

**Leading causes of diseases**

The responses of those surveyed regarding the main causes of diseases in their local communities varied significantly based on age, sex, and education level. Their responses drew connections between what they believed in and what they knew about their communities. Regarding the causes, the findings showed that three equally significant factors were cited by respondents in equal numbers when the total data (25 responses) were included. These are the supernatural causes, the social causes (taboos and totems), and the natural, biological, and physiological causes (72%;  $n = 18$ ) (Table 3). Next in importance are both black magic or sorcery and the genetic causes (64%;  $n = 16$ ). Environmental causes and causes related to evil spirits were less critical, as indicated by the responders (44 and 12%;  $n = 11$  and  $3$ , respectively) (Table 3). The Chi-Squared test reveals a significance (Pearson's Chi-Squared = 50.976;  $p = 0.001$ ) in the association between age and education in their responses in explaining disease causes ( $p < 0.05$ ).

**Table 3: Common causes of diseases in the local communities of the survey participants**

Causes	Frequency	Percentage
Supernatural causes	18	72
Social Causes (taboos and totems)	18	72
Natural, biological and physiological causes	18	72
Black magic or sorcery	16	64
Genetic causes	16	64
Environmental causes	11	44
Evil spirits	3	12

**Common treatment protocols**

Overall results regarding the most common treatment protocols in responders' local communities indicate that the majority of the responses were related to herbal remedies (36%;  $n = 9$ ) and, in second place, magic and rituals (veils, charms, and spells) (24%;  $n = 6$ ) (Table 4). The association between the education of the responders and the herbal remedy protocol was significant ( $p < 0.05$ ). (Pearson's Chi-Squared = 50.211;  $p = 0.01$ ). The education of the responders

and the herbal remedy protocol were dependent. Other mentioned treatment protocols include Qurbani or sacrifice that can be done by slaughtering animals or paying cash (12%;  $n = 3$ ), particular KORAN (Moslims Holy Book) recitation (REQUIA) (12%,  $n = 3$ ), and advising to stay away from sins and to respect taboos and totems (8%;  $n = 2$ ). Two respondents (8%) could not comment or did not know the treatment protocols (Table 4). Education level, sex, and age were associated with logical treatment protocols such

as Herbal remedies. The respondents who believed in supernatural causes of diseases also believed in supernatural treatment protocols.

**Table 4: Most common treatment protocols in the local communities of the survey participants**

Treatment Protocol	Frequency	Percentage
Herbal remedies	9	36
Magic and rituals (veils, charms, and spells)	6	24
Qurbani or sacrifice (Slaughtering animals or paying cash)	3	12
Special Koran (Muslim’s Holy Book) recitation. (Roquia)	3	12
Advice to stay away of sins (respect taboos and totem)	2	8
No response	2	8

**Patient self-judgment**

Statistical analysis indicated significant differences among participants ( $p < 0.05$ ) in patients' self-judgment regarding their illnesses. The overall data (a total of 25 responses) revealed that most patients

either thought that they went against prevailing taboos and totems (36%;  $n = 9$ ) or did not respect parents or the elderly (36%;  $n = 9$ ). Some related it to fate (16%;  $n = 3$ ), and others considered themselves sinners (12%;  $n = 3$ ) (Table 5).

**Table 5: Patients’ self-judgment in the local communities of the survey participants**

Patients’ Self-judgment	Frequency	Percentage
Went over prevailed taboos and totems	9	36
Did not respect parents or elderly	9	36
Fate	4	16
Sinner	3	12

**Community judgment of patients**

Responses regarding the societal judgment of patients varied significantly among participants ( $p < 0.05$ ). The most frequent response (32%;  $n = 8$ ) was viewing the patient as a sinner regarding community taboos and totems, while 24%,  $n = 6$ , thought that local

communities considered the patient a stigmatized person. Others indicated that their communities treated patients as enchanted or fascinated persons (16%;  $n = 4$ ), unlucky persons (12%;  $n = 3$ ), or demon-possessed persons (8%;  $n = 2$ ) (Table 6).

**Table 6: Patients’ society-judgment in the local communities of the survey participants**

Patients’ Society-judgment	Frequency	Percentage
Sinner in terms of taboos and totems	8	32
Stigmatized	6	24
Enchanted or fascinated	4	16
Unlucky	3	12
Demon - Possessed	2	8

**DISCUSSION**

Survey participants had different ideas about the reasons behind illness and ways of healing for different diseases. These include supernatural causes (forces capable of putting spells on humans and forces that also have the power to heal, e.g., Almighty God or Allah) or spirits, e.g., Jinn. And human

supernatural agents such as black magic). All participants acknowledged the importance of God or Allah in their everyday lives and practices. Malaika, or God's angels, are sent to people's homes to guard and rescue their lives. Some participants attribute many diseases to spirits like Jinn. They are believed to have superpowers and must be honored to reward people with good health. They may stop providing protection



if ignored, resulting in illness or death.

Black magic can cast spells that cause ill health or death. Other causes include biological and physiological factors (aging, accidents, epilepsy, infertility, and mental illness). Also, social causes of ill-health (trust, lying, or cheating in marriage) in addition to family dynamics and social support (fighting and less cooperation) Violation of social taboos, for example, not respecting mothers, fathers, or older people in general, could cause sickness. On the other hand, natural causes of ill health include infection, poverty, hunger, stress, and worry.

The African healer knows effective materials and the prevailing taboos and totems (Iwu, 2014). Healers are familiar with curses, charms, and spirits and have knowledge of the medicinal uses of surrounding plants. Healers' experience is based on family and social relations. The employment of magic, the summoning of psychoactive substances, spiritual actions, and the use of natural plant- or animal-based treatments are just a few of the many methods available to healers. Because of the general belief in spirits as a significant cause of disease, symbols, artifacts, magic, and rituals are essential in healing, which is considered a gift of the spirit. The conventional belief is that the patient is being healed by their body and God, regardless of the treatment methods.

Traditional African healers use herbal remedies and other traditional spiritual practices to treat common diseases. As concluded from the responses of the survey participants, Malaria is treated with the leaves of lemongrass (*Cymbopogon citratus*), lime (*Citrus aurantifolia*), and guava (*Psidium guajava*) in the form of tea. Vapors from a steaming pot of herbs (leaves of neem (*Azadirachta indica*), lemongrass, pawpaw (*Carica papaya*), mango (*Mangifera indica*), and guava) are also used. Herbalists use several herbal drugs to treat a group of illnesses called "rheumatism." Arthritis is usually blamed on the Gods or evil spirits. One or more herbs can be used in the treatment along with a sacrifice to contradict the action of the offended spirit, Gods, witches, or other unknown supernatural forces. Preparations from licorice (*Glycyrrhiza glabra*), annonas (*Annona squamosa*; *A. muricata*; *A. cherimola*; *A. glabra*; *A. crassiflora*), ginger (*Zingiber officinale*), and colchicum (*Colchicum speciosum*)

can be used in the treatment process. Some sexually transmitted diseases such as gonorrhea, syphilis, acquired immunodeficiency syndrome (AIDS), genital herpes, genital warts, chlamydial genital infections, trichomoniasis, vaginitis, and vulvo-vaginitis can be treated by traditional healers using medicinal plants such as axle wood (*Anogeissus acuminata*), Indian gooseberry (*Embelica officinalis*) (*Phyllanthus embelica*), locoweed (*Astragalus membraceous*), guduchi (*Tinospora cordifolia*), licorice (*Glycyrrhiza glabra*), aloe (*Aloe barbadensis*), green chiretta (*Andrographis paniculate*), bitter cola (*Garcinia kola*), horse radish tree (*Moringa oleifera*), winter cheery (*Withania somnifera*), holly basil (*Ocimum sanctum*), mango (*Mangifera indica*), ira odan (*Bridelia ferruginia*), candle bush (*Cassia alata*), neem (*Azadirachta indica*), African cardamom (*Aframomum danielli*), kan (*Chasmanthera dependens*), wild sunflower (*Aspilia Africana*), and salt and oil tree (*Cleitopholis patens*). Infusions of Prekese (*Tetrapleura tetraptera*), leaves of alligator yam (*Ipomoea digitata*), and young figs (*Ficus* spp.) boiled with washed pebbles are all used to treat stomach grips, GI problems, and infantile seizures. *Rauvolfia vomitoria*, ginger, lemongrass, and guava leaves are employed for indigestion. *Musa sapientum* and species of *Ficus*, *Entada*, *Gossipium*, *Maesofrya*, and *Dichrostachys* are used to treat systemic diarrhea. Most snakes in Africa are poisonous, and their bites can be fatal. Time is an urgent factor in the treatment process. The wound should be examined to remove snake teeth, and mouth suction should be done to stop bleeding. Medicinal plants to be used as antidotes include alde (*Schumanniophyton magnificum*), *Basananthe* (*Tryphostemma longifolium*), Tsadar Biri (*Olox manni*), gymnema (*Gymnema sylvestre*), and hound's tongue (*Cyanoglossum geo-metricum*). These plants can be used either orally or by application to the wound.

Diabetes is a newly discovered disease in African societies. Effective herbal remedies in the treatment of diabetes include bitter melon (*Mormodica* spp.), which is a source of P-insulin, lady's finger or okra (*Abelmoschus esculentus*), true indigo (*Indigofera tinctoria*), forest ghost flower (*Aeginetia indica*), water plantain or mad dog weed (*Alisma plantago*), water spinach (*Ipomomea aquatic*), river

tamarind (*Leucaena leucocephala*), African boxthorn (*Lycium Africana*), onion (*Allium cepa*), aloe (*Aloe barbadensis*), Noni (*Morinda citrifolia*), desert date (*Balanites aca*), ginger (*Zingiber officinale*), *Zygophyllum* (*Zygophyllum cornutum*), curcuma (*Curcuma longa*), bitter yam or cluster yam (*Dioscorea dumetorum*), and bitter cola (*Garcinia kola*).

The use of medicinal plants to treat specific diseases worldwide has been reported in many studies. Wild plant materials collected by low-income populations living in rural areas are essential for meeting their daily requirements, particularly for medicine. Guo et al. (2022) illustrated the diversity of the forms and purposes of Yadong Tibetan traditional plant knowledge in a study to chronicle the ethnobotanical knowledge of Tibetans in Yadong County, China. In this region, knowledge of edible and therapeutic plants is prevalent, demonstrating the ability to deal with the lack of access to basic family healthcare. Traditional plant cultures in the research region interacted with their surroundings. The commercial value of medicinal plants has expanded due to socioeconomic growth, and locals are now looking for ways to implement sustainable development to address the overconsumption of plant resources. Nicosia et al. (2022) surveyed the important medicinal plants in ethnomedicine in the Limpopo National Park, Gaza Province, Mozambique, and presented the traditional knowledge related to their use.

Adodo and Iwu (2020) provided comprehensive information on using herbal medicines in West Africa. Combining a pharmacological and pharmaceutical approach to phytomedicine with an empirically informed ethnobotanical perspective, They provided evidence of how African traditional medical principles may be maintained in a modern clinical setting. They discussed the background and myths surrounding the traditional use of herbs by the local populace and how they are used in modern phytotherapy in Nigeria and other parts of West Africa. They detailed the safety profile, efficacy, and scientific integrity of plants used to treat illnesses and improve health in a composite catalog of phototherapeutic and wellness agents. They also critically assessed the scientific justification for using these plants in ethnomedicine.

Suhaili and Manshoor (2022) investigated the potential use of *Hibiscus sabdariffa* L. as

ethnomedicine in some countries, as well as its bioactive components and therapeutic properties. They concluded that it is frequently used to treat digestive, stomach, and liver or blood toxicity. They discovered that it includes phenolic substances such as phenolic acids, anthocyanins, and flavonoids. Their research gave scientific support to the claim that *H. sabdariffa* and its bioactive components can treat a variety of ailments.

Solanki (2020) found that medical diversity in India significantly impacted the ethnomedicine of the Siddis tribe. The Siddis are an ethnic group from Gujarat, India, descended from Africa. The Siddis practiced healing by combining spiritual medicine and ethnobotanical medicine. Both of these medicines originated in Africa. The Siddi herbal pharmacopoeia provides descriptions of 149 distinct plant species and information on how to use and prepare them. Siddi healing is significant for social control and being at the nexus of medicine and religion, and it is a medical illustration of cultural syncretism. The study examines the crucial roles played by Siddi ancestral saints and the diasporic history of Siddis to contextualize the spiritual aspects of Siddi healing. Many Siddis have reinvented themselves as spiritual teachers to carve out a place and identity in India through their healing art, and some Siddi mausoleums or temples have grown into important therapeutic facilities for people of various religions and socioeconomic classes. As a result, a certain level of social control was established in local communities due to the interaction between social elements and the neighborhood healthcare system (Solanki, 2020). Most patients believe they hold some responsibility for their illness, thinking either that they violated prevailing taboos and totems or did not respect their parents or the elderly. Some related it to fate, and others considered themselves sinners. Regarding local taboos and totems, local communities view the sick as sinners and stigmatized people. These societies viewed their patients as bewitched, entranced, unlucky, or demon-possessed. In holding the ill responsible for disease, communities wield social control, urging people to understand that good behavior is necessary for good health and community acceptance.

Differences among the surveyed communities in

illness causation and explanation were found. Like many local communities in developing countries worldwide (Foster and Anderson, 1978; Kahissay et al., 2017), people relate illness to the acts of supernatural forces. In addition, they shared beliefs about natural causes of illness, such as infection or a lack of nutrition. In interaction with modern theories of disease-causing, the locally accepted ideas of disease causation require the interaction of both ways of thinking before a disease occurs or during treatment (Peterson, 1970). Social relationships are essential to maintaining good health, and the beliefs in supernatural and natural causes reported in this study survey are similar to those described in previous studies (Murdock, 1980). Many authors have described cultures in which illness is believed to be caused by supernatural forces, including witchcraft, sorcery, breaching taboos, and disease-causing spirits (Antoniotto, 1983; Beattie and Middleton, 1969; Ulin, 1980; Yehya and Dutta, 2010). Supernatural explanations also dominated the discourse of ill-health causation in our study. Belief in God, or Allah, was prevalent in the study communities. The finding that God or Allah is held responsible, at least indirectly, for causing most illnesses is a prevalent finding among African communities (WHO, 2001). For example, Lidell and Bydawell (2005) described the relationship of Sub-Saharan people with God and how it helps protect family and community health. When health is restored through any method, ritual acknowledgment of the nature-spirit intervention is still required for many local peoples to ensure healing (Atkinson and Haran, 2005).

One of the critical findings of this study was the connection between well-being and social connections, social support, and control. The relationship between social misconduct and poor health has been ingrained in local traditions in the studied areas. In addition to supernatural and natural elements, the survey outcomes suggested that social causes of illnesses must be included to explain the relationship between illness and social control. Responses obtained from our survey participants indicated that the role of social prohibitions and the consequences of their violation are crucial factors causing health problems in the studied local communities. The connection between ill health

and social misconduct needs further exploration by indigenous and local communities elsewhere in Africa. Designing excellent health and disease prevention programs, as well as resolving social misconduct and meeting social norms, all depend heavily on understanding the study communities' ideas of sickness etiology and methods of disease prevention (Mishra et al., 2003). The respondents in the present study indicated that supernatural forces are an important cause of sickness. They also acknowledged the role of natural causes and social relationships in maintaining good health. To provide a link between the deep beliefs in supernatural causes of illness and modern ways of thinking, locally educated healers who have some knowledge of herbal remedies and are aware of communities' taboos can be of great help. Similar conclusions were drawn from studies on the communities living inside the Shey-Phoksundo National Park (Aumeeruddy-Thomas et al., 2004) and the communities of the Alpine Zone of Nepal (Kunwar et al., 2006). The local economy relies on agriculture, grazing, and seasonal trade, and most people rely on collecting wild medicinal plants for subsistence. They are engaged particularly in collecting medicinal herbs and raw food items as part of their traditional ventures (Kunwar, 2002). The Himalayan region is encouraged to collect medicinal plants by commercial demands from a larger market. ? (2006) argued that pharmaceuticals' social and cultural effects should be considered in treatment plans. Social roles are significant when the goal of social control is influence and regulation, according to Lewis and Butterfield (2005). Occupying social roles leads to the dominance of norms of obligation within a society. They proposed a model of the antecedents and reactions to health-related social control. Through their model, they suggested that health behaviors are social control antecedents. They found that healthcare actions or behaviors raised more social control. Our study provides clues on how healers can support patients as they understand their cultural and social context and set up treatment protocols that can be used to satisfy community taboos and totems.

## **CONCLUSION**

Local communities adhered to their traditional health system to satisfy their physical requirements

and cultural identity. Dominant local ideologies and cultures are displayed everywhere through perceptible manifestations of community power, particularly when they are used to explain illness, well-being, healthcare practices, and the real or imagined causes of diseases. A lack of cultural competency in healthcare surveillance and the methods of social control can be seen as potential causes for either a good community lifestyle or bad community health based on the dominant taboos and totems, despite the ethnographic study's suggestion that social control functions in a positive sense foster community solidarity, power, and dominance. These factors should be used in assessing the health condition of any subordinate and marginalized ethnic group or local African community. This ethnographic study of a few African cultures in the area showed that social, natural, or supernatural factors can contribute to poor health. Responses in this survey confirmed the importance of the social control element in maintaining good health in local communities. The link between social misconduct and ill health is unique to these local cultural settings. Local healers can support patients as they understand their cultural and social context and can set up treatment protocols that can be useful in social control within the limits of community taboos and totems. Patients' self-judgment and social judgment can enhance the efforts of local healers in supporting patients. The proven relationships between supernatural, natural, and social factors in ill health causation can help provide health care and social control strategies. It is essential to consider local communities' beliefs when planning health promotion and disease prevention programs

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