

History & Philosophy of Medicine

Toward understanding the '*Kooko*' syndrome in traditional medicine in Ghana

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Highlights

In this review, the researchers summarized what characterized '*Kooko*' in traditional medicine based on the social and cultural heritage of different communities. Also, causes and descriptions of diseases given are based on traditional beliefs common to a given community. The knowledge of a disease is important to help in its management.



Abstract

Objective: Traditional medicine practices vary widely in keeping with the social and cultural heritage of different communities. Beliefs regarding the causes of diseases are passed on from generation to generation. Descriptions given to various diseases are based on traditional beliefs common to a given community. A number of diseases are defined based on culturally specific conceptions. A disease such as ‘*Kooko*’ finds a number of descriptions from different cultures in Ghana. The knowledge of its explanation and meaning is important to help its management. **Methods:** Qualitative and quantitative self-administered questionnaires were used to collect data. **Results:** Among the three ethnic groups interviewed for the study, 45% defined ‘*Kooko*’ with regard to its relationship with growth at the anus. All respondents defined ‘*Kooko*’ with respect to its clinical manifestations. The signs and symptoms of ‘*Kooko*’ were given as; 63.33% bloody stool, 60% growth at the anus, 40% mucoid stool and 31.66% said constipation. On the causes of ‘*Kooko*’ 39% of the respondents said diet, 33% said aging and 25% attributed it to hereditary. 86.66% said ‘*Kooko*’ affects only men however, 13.34% said women and children had equal chances of being affected. Respondents in the Upper West gave four distinct types of ‘*Kooko*’: dry, deep, external and internal. In the Ashanti and Greater Accra Regions, ‘*Kooko*’ was classified based on the site of the body it affects however, most of them stressed on the anus as the common site. **Conclusion:** ‘*Kooko*’ is a syndrome encompassing a wide range of conditions which includes haemorrhoids and other conditions of the body including, the eye. **Keywords:** Kooko, Diseases, Traditional medicine, Generation, Beliefs, Ethnic groups

Abbreviations:

TMP, traditional medicine practitioners.

Ethical Clearance

Ethical clearance was obtained for the study.

Competing interests:

The authors declare that there is no conflict of interest.

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Background

'*Kooko*' is a disease which is well-known in Ghana through oral tradition. The name '*Kooko*' is of Akan origin but is widely understood among the Gas and Ewes to mean the same thing. It is widely known to be synonymous with haemorrhoids or piles but the term as used by the indigenous people suggests more than what is understood as haemorrhoids among health professionals. '*Kooko*' appears to be ill-defined with myriads of symptoms including ocular symptoms and signs [1].

In Akan medicine, '*Kooko*' is a symptom of social and cosmic disorder, the consequence of a divine punishment. It is described as a red protuberance, index of a very serious disease, appearing all over the body; the brain, ears, uterus, anus or penis. In the latter case '*Kooko*' causes increasing sexual weakness [2].

Different treatment methods such as the use of medicinal plants are based on the social, cultural, and religious background as well as on the knowledge, attitudes and beliefs that are prevalent in a particular community regarding physical, mental and social well-being and the causes of disease and disability [3].

In Akan medicine, about 60 percent of disease names describe symptoms rather than a clearly defined disease, for example; 'abunu' for fever, 'yadee *Kokoo*' for yellow disease or jaundice [4]. The practice of traditional medicine varies greatly from country to country and from region to region as they are influenced by factors such as culture, history and personal attitude as stated earlier on [5].

The long history of established practices therefore ought to receive respect from the individual who is unfamiliar to a particular culture. Certain practices and issues concerning diseases such as '*Kooko*' call for deep research. This would bring out the explanations given on such diseases by the indigenous people. Though the issue on '*Kooko*' has become a topical issue in Ghana, very little research has been conducted on it [2]. The aim and objective of the study was therefore to clarify certain commonly used but unclear definitions about '*Kooko*', to unravel the ambiguity that surrounds '*Kooko*' disease in Ghanaian traditional medicine and finally to harmonize the use of certain accepted and important terms in traditional medicine on '*Kooko*' with the traditional herbalist, medical herbalist and other health professionals.

Methods

Design of the study

Design of the study was a prospective, qualitative, quantitative and cross-sectional, using self-administered questionnaires as well as interviews to collect data. The target groups were the traditional medicine practitioners and a sample size of sixty (60)

was used in the study. Twenty from each of the three regions were selected based on their knowledge about the '*Kooko*' syndrome. The Traditional Medicine Practitioners (TMPs) are known in the communities where they reside for their specialization in the treatment of various diseases. Different communities have association of TMPs whose competencies and specializations are known among themselves. In the current study, TMPs were identified for their reputation in the treatment of '*Kooko*'.

Sample size

Once a TMP is reached as a study participant, he/she then assists in getting other potential subjects; thus a snowball sampling technique was employed in the research.

Study site

The research was carried out in some communities in the Upper West, Ashanti and Greater Accra Regions of Ghana making up the upper, middle and southern sectors of Ghana respectively. Ethical approval (TGH/HMU/EC/001/20) was obtained from the Ethical Review Committee of the Tafo Government Hospital.

Inclusion criteria

- (1) Traditional Medicine Practitioners.
- (2) Must belong to an association of traditional medicine practitioners.
- (3) Practitioners must be Indigenes of study area.
- (4) Practitioners who treat '*Kokoo*'.

Exclusion Criteria

- (1) Practitioners who are not Indigenes of the study areas.
- (2) Practitioners who do not treat '*Kokoo*'.
- (3) No a member of an association of traditional medicine practitioners.

Data Analysis

The data was analyzed for frequency of response using SPSS-IBM software program.

Results

Gender distribution of respondents

A total of 8 females and 52 males making up 13% and 87% respectively were interviewed. This is as shown in Table 1 below.

Age of respondents

Majority of the respondents fall between the ages of 40 and 60 making 49 per cent of the total respondents. 59 respondents gave their ages while one respondent declined to reveal his. The oldest respondent was 120 years old in Sakai in the Upper West Region and he had had 20 years' experience as a practitioner. This is as shown in Table 2 below.

Number of years in practice

The evidence of the number of years of practice bearing little reflection to age of respondents could be seen from the data of three respondents with ages 56, 57, 58 and number of years of practice: 10, 2 and 7 respectively. They all fall within the range of 5-10 years. In another instance three respondents with ages 48, 48, 55 have number of years of practice: 12, 15 and 15 respectively. They fall within the range of 11-15 years from the table below. One would have expected a respondent who was advanced in years to have had more years of experience in the practice of traditional medicine but this was not the case. See [Table 3](#) below.

Educational background of respondents

Most of the respondents (32) had no formal education while 25 had had various levels of formal education as seen from [Table 4](#) below. Three of the respondents refused to disclose their level of education to the researcher. The education levels are; (kindergarten, primary school, lower secondary school), secondary (upper secondary school, technical and vocational education) and tertiary (universities, polytechnics and colleges).

Understanding and definition of 'Kooko' by respondents

Many of the respondents (45%) defined 'Kooko' with regard to its relationship with the growth at the anus. All respondents defined 'Kooko' with respect to its clinical manifestations. Only one respondent compared the resemblance of 'Kooko' with hernia. Interviews revealed that, growth on any part of the skin was because the disease is in the blood stream, this is as represented in [Table 5](#) below.

Types of 'kooko' as stated by Respondents

Respondents in the Upper West gave four distinct types of 'Kooko'. With regard to the type referred to as 'dry', the patient grows lean while in the type known as 'deep' the patient presents with a generalized oedematous state. The other types included growth on body parts including the anus and one that respondents described as within the body.

In the Ashanti and Greater Accra Regions, respondents did not give such distinct classification of 'Kooko'. They classified it mainly on the site of the body where it affects. Most of them stressed on the anus as very common site. The types of 'Kooko' as given by respondents as shown in [Table 6](#) below.

Signs and symptoms of 'Kooko'

Among the signs and symptoms of 'Kooko' 63.33% of the respondents gave bloody stool or haematochezia, 60% gave growth at the anus, 40% gave mucoid stool and 31.66% gave constipation as the major signs and symptoms. Other signs and symptoms included

headache, dizziness, diarrhoea, generalized oedema, red-shot eyes, dysuria, protruded abdomen, vomiting, and polyphagia, loss of weight and loss of appetite. Interviews revealed that some of the signs and symptoms result from the sites where the disease affects. Thus waist pains 'Kooko' in the waist; itchy eyes and blurred vision-'Kooko' in the eyes. See [Figure 1](#) for signs and symptoms of 'Kooko'.

Causes of 'Kooko'

39% of the respondents gave diet as the main cause of 'Kooko' while 33% gave aging. 25% attributed it to hereditary. The other predisposing factors were breach of taboos, poor hygiene and sexual intercourse.

Interviews revealed that diet that would predispose one to 'Kooko' were specific to some communities whereas others were common for all the communities. Diet such as fresh milk, fresh meat, fresh fish and fresh groundnut were specific to communities in the Upper West. Others such as cocoyam, cassava, okra, groundnuts were common to all the study areas. The taking of much sweetened meals was a common answer from respondents in the Ashanti and Greater Accra Regions.

Most affected people by 'Kooko'

Most of the respondents (86.66%) admitted that 'Kooko' affects men though they agreed that women and children had equal chances of being affected. However, respondents said the occurrence of 'Kooko' among children is rare. Interviews revealed an instance where a one-year three-month-old baby girl was found affected by 'Kooko'.

Body parts frequently affected

The most frequently affected parts of the body include the anal region and the eye ([Figure 2](#)). Interviews revealed that 'Kooko' could occur as growth in the vaginal and ureteral orifices.

Are spiritual forces implicated in the acquisition of 'Kooko'?

In this question, there were 49 respondents. 82% of the respondents were so sure of 'Kooko' not having any spiritual implication.

Does 'Kooko' have a complete cure?

This question received an 82% affirmative response. Interviews revealed that only the use of herbs could result in the complete cure. No other form of treatment would work to that extent. The other respondents, who disagreed, based their reason on the fact that 'Kooko' is inherent in all individuals.

Treatment of 'Kooko'

Generally, treatment is aimed at giving lasting treatment to prevent complications. Others treated complications such as sexual weakness and infertility.

Table 1 Gender distribution of respondents

Gender	Total number
Males	52 (87%)
Females	8 (13%)

Table 2 Age distribution of respondents

Age/Years	Frequency
25-39	8
40-60	29
Above 60	22

Table 3 Number of years of practice of respondents

Number of years of practice	Frequency
5-10 years	13
11-15 years	19
16-20 years	17
21 years. and above	11

Table 4 Educational background of respondents

Educational level	Frequency
None	32
Basic level	16
Second cycle	8
Tertiary	1

Table 5 Frequency of Definitions given to 'Kooko' by respondents

Definition	Frequency (%)	
A growth at the anus which is characterized by bloody stool, mucoid in nature and usually originate from the abdominal system	14	25
A disease in the blood system which manifest at the anus as a growth	25	45
A disease which closely resembles hernia	2	4
A disease in the blood system characterized by itching in the eyes and anus	5	9
A disease which affects very fleshy parts of the body	1	4
'Kooko' is a collective name for a range of diseases	8	15

Table 6 Types of 'Kooko' as indicated by respondents in the Upper West Region

Type of 'Kooko'	Frequency
'Kooko' within the body	4
Dry type (lean body)	7
Deep (generalized oedema)	6
Growth on body parts	3

Table 7 Definitions given to 'Kooko' by respondent in Ashanti and Greater Accra Regions

Type of 'Kooko'	Frequency
No specific type, associated with a lot of diseases	8
Type that affects the uretral orifice	1
Type that results in growths at the anus	12
Type that affects the eyes	2

Table 8 People most affected by 'Kooko'

Group	Frequency
Men	7
Women	6
Children	3

Treatment involves the use of herbs for topical application at the affected part, oral administration of decoctions of particular herbs and use of enemas.

Complications of 'Kooko'

Blindness and infertility were the commonest complications that respondents agreed could result from 'Kooko'. With regard to infertility, it was not limited to females but males were also involved.

Discussion

'Kooko' has no specific medical term and appears to be a combination of diseases with various symptoms. It is made up of a wide range of diseases including haemorrhoids, skin diseases and cataract. Medically,

haemorrhoids are the specific name of 'Kooko' that affects the anus or rectum. 'Kooko' affecting the eyes may be cataract but 'Kooko' occurring at other parts of the body has no specific name available in literature. The description 'Kooko' is dependent on the culture and traditions of a people. The indigenous peoples' understanding of the disease is different from modern medicine.

From the study, several types of 'Kooko' can affect a person at the same time. Hence, the herbalists, based on their experiences gave the same term (*kooko*) to refer to conditions that present in association with other symptoms. The exact relationship of the different types of symptoms is that the presence of one is an indication of further development of others. However; one form of 'Kooko' may exist independently without.

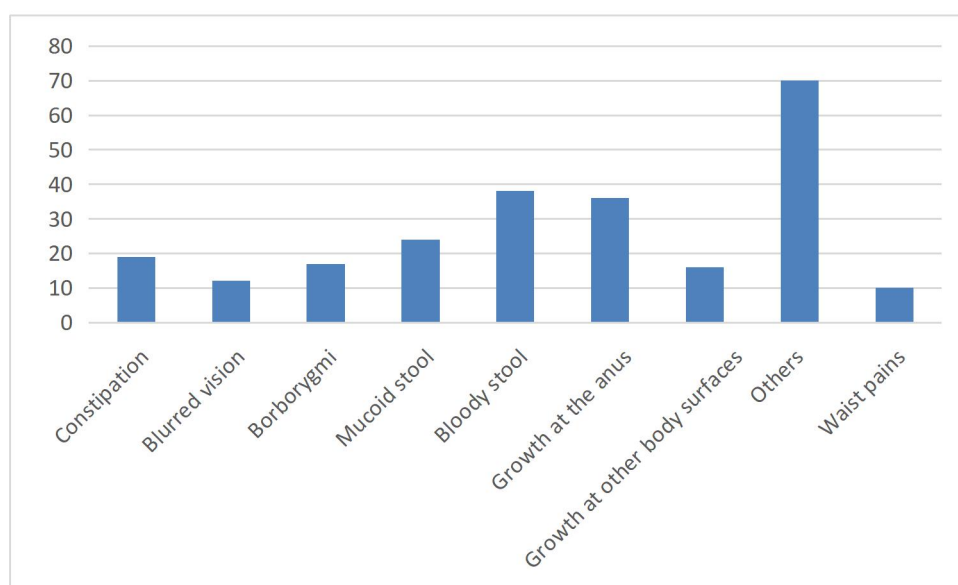


Figure 1 Signs and symptoms of 'Kooko' as indicated by respondents



Figure 2 Picture showing growth on the lower eye lid describing a type of 'Kooko' by a respondent.

It is important to note that, from the research, a herbalist with fifty years of experience gave the same connection to the other. treatment to different patients who presented different complaints. In the above instance, the herbalist argued that he actually treated the same ailment in those patients. He also argued that it is '*Kooko*' presenting in different forms in these situations.

It was revealed that 52.33% of the respondents have no formal educational background as indicated. Considering the high level of the herbalists' knowledge of the disease, they may be considered to be masters of what they talk about so far as '*Kooko*' is concerned. Some of the symptoms given by herbalists could clearly be found in literature. This gives an indication of the knowledge some of the herbalists have about

some diseases. However, formal education is required to ensure that there is sanity in the practice of traditional medicine in Ghana. The few herbalists who have gone through formal education could give correct definitions of the disease as in the literature (Table 7). They also gave clinical manifestations in a manner that had been given by those who were uneducated. Doctors with formal education consider '*Kooko*' (haemorrhoids) symptoms as follows: bleeding per rectum, anal itching, prolapsed rectum and tender lumps near your anus, which occurs only at the rectum. The generalization the herbalists from different parts of the country described the disease in very similar terms is a matter of great significance. This confirms that health, sickness, and medical conceptions are closely related in other cultures [4].

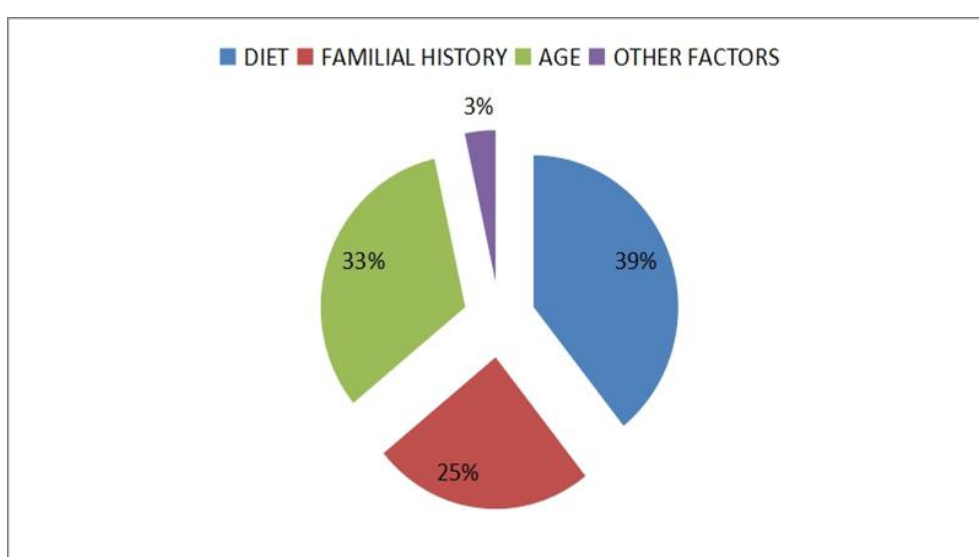


Figure 3 Percentage distribution of the causes of '*Kooko*'

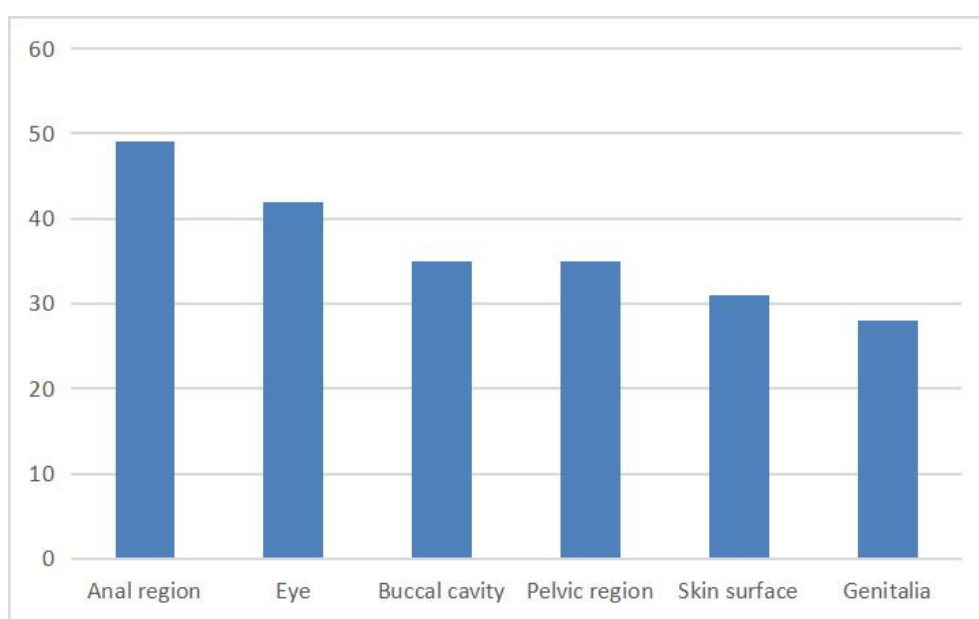


Figure 4 Parts of the body frequently affected by '*Kooko*'

The herbalists claim that there are certain symptoms associated with '*Kooko*'. Prominent among the symptoms presented in the results were constipation, haematochezia, mucus in stool, anal itching, swelling or presence of lumps at the anus, prolapse of rectum and pain. Whereas most of the herbalists across the study areas mentioned these symptoms; others thought otherwise (Figure 1). 31.66% of the respondents were emphatic that constipation brings about '*Kooko*' whiles the others had a different view. The relationship between haemorrhoids, constipation and straining is not constant [6]. It is also difficult to know whether haemorrhoids is caused by constipation [7]. However, someone with bleeding haemorrhoids is to ensure not to have diarrhoea and constipation as it aggravate the condition. This is due to that fact that, tissue paper will persistently be robbed at the anal region and constipation may bruise the anal tag with lesions.

On the incidence of '*Kooko*', though it affects all age groups, all the herbalists stressed that it was more common among adults than children (Table 8). It has been established that patients may present at any age with symptomatic haemorrhoids, although they are rare in childhood [8].

Diet was implicated as being a possible cause of '*Kooko*' as indicated in Figure 3; diet has been established to be a predisposing factor in some individuals to haemorrhoids. Among the different parts of the body that the herbalists say '*Kooko*' could affect, the anal region was very prominent (Figure 4). Clinically, haemorrhoids affect the anal region of the body [9]. There is therefore the need to avoid foods implicated. Figure 5 is a response to whether '*Kooko*' has a spiritual implication or not.

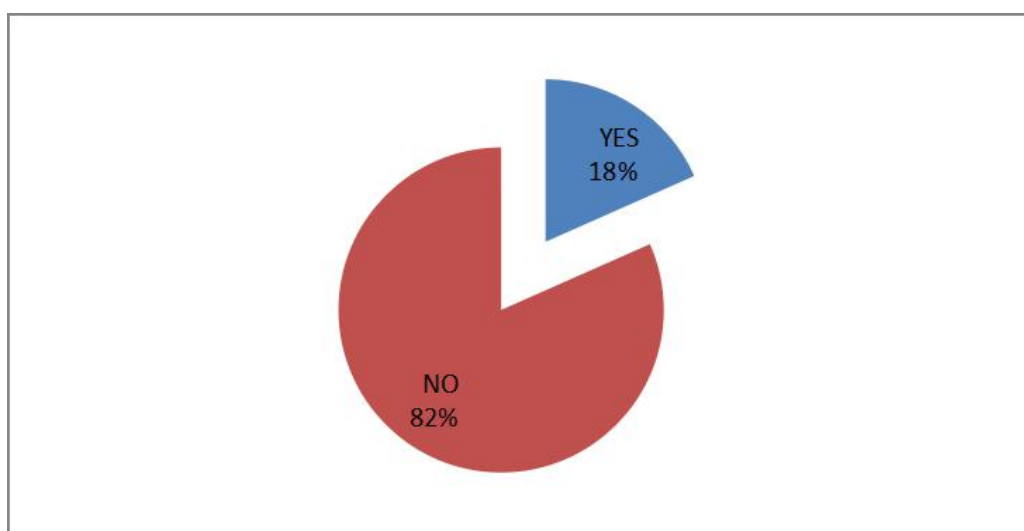


Figure 5 Response to whether '*Kooko*' has a spiritual implication

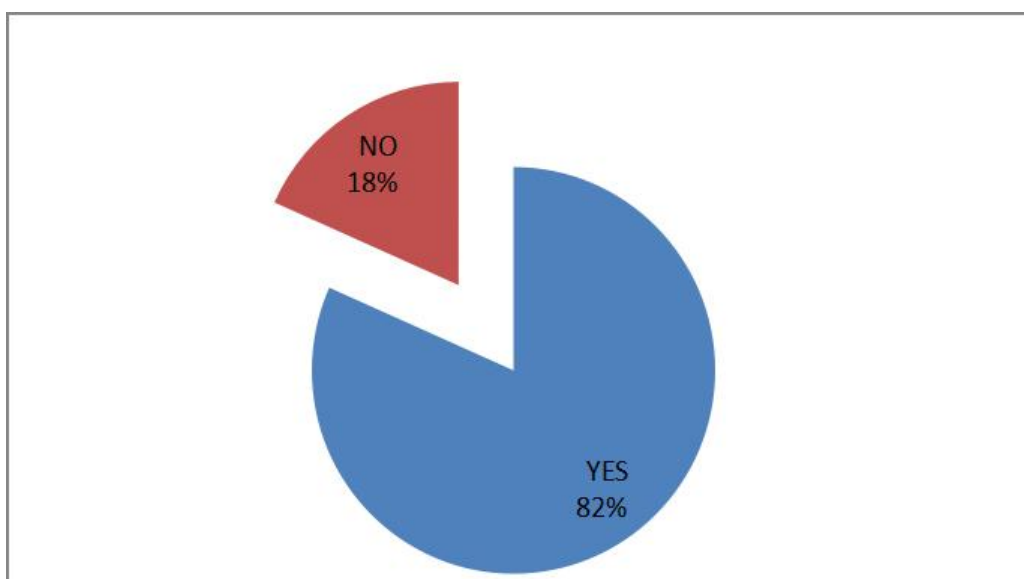


Figure 6 Respondents' answers to whether there is a complete cure for '*Kooko*'

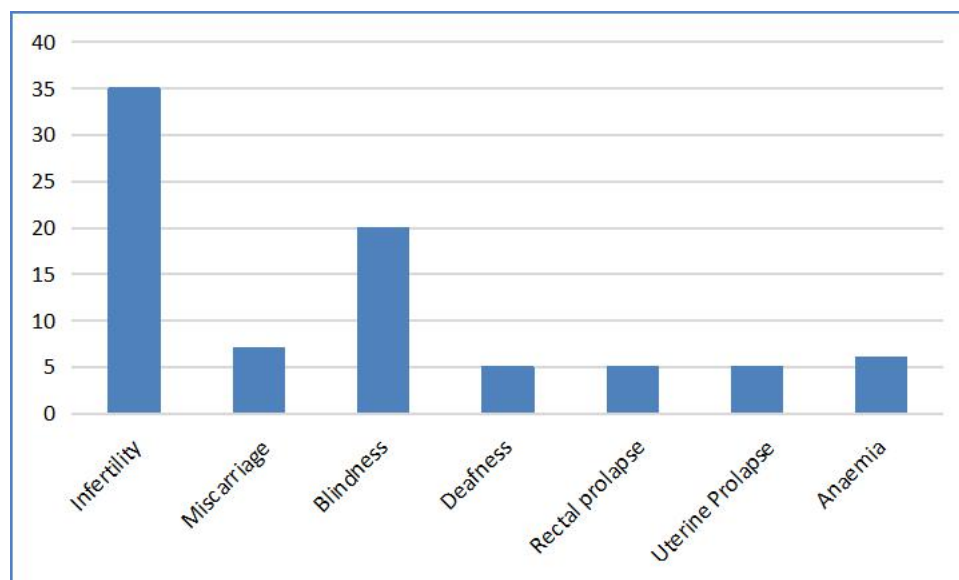


Figure 7 Complications of 'Kooko'

Among the Sissalas, there exist two main types of 'Kooko' whereas the Asantes and Gas explained types of 'Kooko' by referring to body parts where it could occur. In Sissala land, 'Kooko' may manifest in either a patient losing weight or gaining weight. In the latter case, the condition worsens to a generalized oedematous state. It has been pointed out that, varicose veins with less drainage of the blood, tissues of the leg and foot may become oedematous and painful [10]. This is linked to pedal oedema whereas the Sissalas talk about a generalized oedematous state. This presents the manifestation of 'Kooko' from the perspective of Sissala very different from specific conditions of haemorrhoids. However, there are presentations of associated symptoms to what the Sissala community understands to be 'Kooko' as 'Kooko' is locally referred to.

There are definite name for 'Kooko' occurring in the anus (haemorrhoids) whereas among the indigenous people of different cultures a general term is given to presentation of symptoms as 'Kooko'. Perhaps, the different cultures go through the same experience of finding particular words for different diseases. But what would make the above statement much significant may be the fact that all the study areas do present similar patterns of 'Kooko' and hence gave it the same name. The development of healing systems and medical practice is influenced by culture passed on from generation to generation. Life experience and specific cultural characteristics contributing to understanding of diseases and treatment are; ethnicity, religion and spiritual beliefs, and geographic origin. This has contributed to the understanding of 'Kooko'. On whether 'Kooko' can be cure, 82% of the respondent said yes while 18% indicated no. This is as

shown in Figure 6.

According to the respondents, the complications of 'Kooko' are chronic waist pain resulting in impotence in men Figure 7. Men are at a greater risk of impotence when injuries occur at the pelvis and sometimes the perineum. 'Kooko' occurring at the vaginal and ureteral orifices impedes movement of sperm and therefore results in infertility in females [11].

Conclusion

'Kooko' is presented with several symptoms such as constipation, haematochezia, mucus in stool, anal pruritus. Other symptoms like waist pains, oedema, blurred vision, itchy eyes, growth on body surfaces and other parts of the body such as vaginal and ureteral orifices suggest that 'Kooko' has other associated conditions.

Therefore, 'Kooko' is a syndrome encompassing a wide range of conditions which includes haemorrhoids and other conditions of the body including the eyes which are determined by how different cultures perceive the condition.

In addition, cataracts are defined as any opacity of the lens either localized or generalized. From the results 'Kooko' occurring in the eyes presents with similar clinical manifestations. Hence, cataract may be the traditional medical term for 'Kooko' in the eyes since 'Kooko' also presents with opacity of the lens.

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