TRADITIONAL MEDICINAL VALUE OF CAMEL IN BABILIE AND KEBRIBEYAH WOREDAS OF THE JIJIGA ZONE, SOMALI REGION, ETHIOPIA.

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ABSTRACT

The study was conducted between July, 2005 and January, 2006 in Babilie and Kebribeyah woredas, Jijiga Zone of the Somali Regional State with the objective of identifying the traditional medicinal value of camel milk, meat and urine in the study areas. The method of data collection employed was a single visit formal survey. The data were analyzed using Statistical Package for Social Sciences (SPSS) version 12.

The existence of a wealth of indigenous knowledge for treating human and animal diseases was identified in this study. Almost all Respondents from Babilie and Kebribeyah recognize the medicinal value of camel milk but the therapeutic value of camel meat and urine is only known by some of the respondents of the same woredas. For corresponding human and animal diseases there is traditional ways of treatment using camel milk, meat and urine and for some diseases (human and animal) even dosages were indicated.

1.INTRODUCTION

The camel is among the animals mentioned in the Qur'an as a miracle of God (Deurasech, 2005). It is common practice to let camels to eat certain plants in order to use the milk for medicinal purpose (Yagil, 1986).

In all camel rearing countries, the breeders are convinced that camel milk has special medicinal properties, especially for dropsy, jaundice and conditions affecting the lungs and spleen (Yagil, 1982; Knoess *et al*., 1986; Alemayehu, 2001). Similarly Tezera (1998) reported the importance of camel milk for treating malaria or jaundice, gastro-intestinal disorder and strong cough (pneumonia). Research by Indian scientists supports the therapeutic value of camel milk in the treatment of several diseases, including tuberculosis (Ilse, 2004).

Giving camel milk to children suffering from biliary atresia and postpartum respiratory insufficiency kept them alive until a liver transplant could be performed and the lungs developed (Yagil, 1994). These observations are very subjective and studies will be necessary to establish the effect of camel milk on various diseases. Beg *et al*. (1986 as quoted in Yagil 1994), stated that successful stabilization of juvenile diabetes could be related to the finding that one of the fractions of camel milk protein bears an amazing similarity to insulin. Camel milk is also thought to have aphrodisiac properties as well as healing properties. Among the diseases successfully treated with camel milk are cirrhosis of the liver, rickets, constipation, asthma, and anaemia. Camel colostrum is even called

"Black milk", probably because of the powerful cathartic effect on humans. Often, colostrum is milked on to the ground. In many African tribes, mystical properties are attached to camel colostrum and it is drunk at ceremonial gatherings (Yagil, 1994).

Consumers appreciate camel milk for its medicinal properties. It is reputed to be an anti-infectious, anti-cancerous and anti diabetic. More generally, it is regarded as an energy-giving product for convalescents. Camel milk is commonly used to help treat infectious diseases such as tuberculosis in humans. Camel milk is also used in Kazakhstan as an adjunct to chemotherapy for some cancers, especially those of the digestive tract. With the consumption of 0.5 lt of camel milk per day, the insulin demand decreased in diabetic patients and glycaemia was better balanced (Guakhar and Bernand, 2004).

Camel meat is claimed by the Somali people to have a remedial effect for at least 13 different kinds of diseases, including hyperacidity, hypertension, pneumonia and respiratory diseases and also to be an aphrodisiac (Kurtu, 2004).

2. MATERIALS AND METHODS

The survey was conducted in Jijiga Zone of the Somali Regional State. The Somali Regional State, which forms part of the Federal Democratic Republic of Ethiopia, is situated in the eastern part of the country.

The field wok was undertaken between July 2005 and January 2006. Both primary and secondary data were collected. Primary data sources were the household heads and key

informants during group discussion in the respective woredas whereas the secondary data were collected from different concerned line ministries

The sampling procedure was purposive sampling because strictly random sampling procedure might not be possible due to mobile, scattered and less accessible nature of pastoral communities (Tezera, 1998). The household heads were selected based on camel possessions and willingness to be part of the survey.

Forty camel herders from Babilie and sixty camel herders from Kebribeyah woredas were interviewed using a semi-structured questionnaire. For conducting the field survey, five enumerators and two supervisors who have the knowledge about the area and well acquainted with the culture and can speak local language were recruited and "trained" on the methods of data collection and contents of the interview.

The method of data collection employed was a single visit formal survey (ILCA, 1990). The data were analyzed using the computer software SPSS (Statistical Package for Social Science) version 12.

3. RESULTS AND DISCUSSION

3.1. Traditional Medicinal Value of Camel

Pastoralists have indigenous knowledge in treating their animals and themselves. Due to the fact that they are living at periphery and very remote area where social services are in

scarce or even absence, pastoralists depend on traditional remedies. Camel milk, meat and urine are among the materials used as traditional medicines.

3.1.1. Camel milk therapy

Respondents (97.5 and 85% for Babilie and Kebribeyah, respectively) recognize the medicinal value of camel milk. This finding is in agreement with those of Yagil (1982), Knoes *et al*. (1986), Tezera (1998) and Alemayehu (2001) who stated that in all camel rearing countries, the breeders are convinced that camel milk has special medicinal properties, especially for dropsy, jaundice and conditions affecting the lungs and spleen.

Respondents from Babilie indicated the medicinal value of camel milk for gastritis (17.5%), asthmatics (7.5%), stomach discomfort (2.5%), HIV (7.5%), *hamot (kar)* (12.5%), tuberculosis (12.5%), fever (2.5%), urinary problems (5%) and hepatitis (2.5%). Respondents in Kebribeyah indicated the medicinal value of camel milk for jaundice (18.33%), common cold (1.67%), *dearbeh* ("diarrhea") (1.67%), *daarta* ("vomiting") (1.67%) and diabetics (1.67%). Respondents in both woredas in common indicated the medicinal value of camel milk for constipation (7.5, 41.67%), *yewefbeshita* (15, 6.67%), for Babilie and Kebribeyah, respectively. This finding is in conformity with those of Yagil (1994) and Guakhar and Bernand (2004) who reported the medicinal value of camel milk for cirrhosis of the liver, rickets, constipation, asthma and anaemia.

For corresponding diseases there are traditional ways of treatment (Table 1) and for some diseases even dosages were given.

3.1.2. Camel meat therapy

Despite the fact that camel meat is more preferred than beef, mutton or chevon in both study woredas, due to its bigger size and higher value, slaughtering camel is not common. Most respondents (70 and 56.67% for Babilie and Kebribeyah, respectively) recognize the medicinal value of camel meat. According to respondents camel meat is important for treating fracture, asthmatics, HIV, tuberculosis, draft (*birdbeshita*), and gastritis at least in one of the study woredas. This finding is in agreement with Kurtu (2004) who stated that camel meat is claimed by the Somali people to have a remedial effect for at least 13 different kinds of diseases, including hyperacidity, hypertension, pneumonia and respiratory diseases and also to be an aphrodisiac. For corresponding disease treatments are forwarded (Table 2).

3.1.3. Camel urine therapy

Camel urine for having traditional medicinal value is known only by 35 and 63.33% of respondents in Babilie and Kebribeyah, respectively. According to these respondents, it is

useful for treating scabies, *ekek, yewefbeshita* and some other diseases. Corresponding treatment procedures (Table 3)are also given.

4. CONCLUSSIONS

The role of indigenous knowledge has paramount importance on the day-to-day life of the pastoralist. As pastoralists are very far from human and animal health centers and other modern health services, any illness treatment depends on the traditional medicine. In addition to remoteness of the pastoralist areas, easily availability and the cheapest price of traditional medicines are among the factors that made them preferable by the pastoralist.

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Table 1. Traditional treatment of major diseases using camel milk in Babilie and KBH

Type of disease	Treatment for corresponding disease	Percentages of respondents	
		Babilie (N= 40)	KBH (N= 60)
Gastritis	- Drinking camel milk morning and evening	10.00	0.00
	- Drinking 2-3 cups of camel milk daily	2.50	0.00
	- Drinking camel milk	2.50	0.00
	- Drinking raw camel milk	2.50	0.00
	- Drinking camel milk now and then	2.50	0.00
	- Drinking more camel milk	7.50	0.00
	- Drinking fresh camel milk	2.50	0.00
Asthmatics	- Drinking camel milk	5.00	0.00
	- Drinking camel milk morning and evening	5.00	0.00
	- Drinking camel milk immediately after milking	2.50	0.00
Constipation	- Drinking camel milk	2.50	1.67
	- Drinking 2-3 cups of camel milk	2.50	0.00
	- Drinking more amount of camel milk at once	5.00	0.00
	- Drinking 2 liters of camel milk for 2 days	2.50	0.00
	- Drinking of camel milk in large amount daily for months	2.50	0.00
	- Drinking of 1 liters of camel milk for 15 days	2.50	0.00
	- Drinking 4 liters of camel milk at once	2.50	0.00
	- Drinking fresh camel milk	0.00	51.67
Tuberculosis	- Drinking 2 liters of camel milk daily for 3 months	2.50	0.00
	- Drinking 4 liters of camel milk daily for 3 months	2.50	0.00
	- Drinking 3 liters of camel milk daily for months	2.50	0.00
	- Drinking more camel milk for months with no limit	7.50	0.00
	- Drinking 2 liters of camel milk daily	2.50	0.00
	- Drinking 3 liters of camel milk for 6 months	2.50	0.00
	- Drinking 4 liters of camel milk for months	5.00	0.00

KBH= Kebribeyah, N= Number of respondents

Table 2. Traditional treatment of major diseases using camel meat in Babilie and KBH

Type of disease	Treatment for corresponding disease	Percentages of respondents	
		Babilie (N= 40)	KBH (N= 60)
Fracture	- Feeding boiled or roasted camel meat	2.50	0.00
	- Feeding boiled hump	2.50	0.00
	- Feeding boiled hump and drinking its soup	2.50	0.00
	- Hump is well known for fracture	2.50	0.00
	- Feeding boiled camel meat	17.50	0.00
	- Feeding camel meat till regains his/ her health	25.00	0.00
	- Feeding camel meat	2.50	0.00
	- Feeding boiled or roasted hump	5.00	0.00
	- Feeding boiled camel meat and drink its soup	2.50	0.00
Tuberculosis	- Feeding camel meat for longer times	2.50	0.00
	- Feeding camel meat till regains his/her health	2.50	1.67
	- Hump fat is given	0.00	25.00
	- Feeding camel meat and hump	0.00	5.00
	- Feeding camel meat	0.00	1.67
	- Feeding fresh camel meat	0.00	20.00
Asthmatics	- Feeding boiled or roasted hump	2.50	0.00
HIV	- Feeding boiled camel meat and drinking its soup	2.50	0.00
	- Feeding boiled or roasted camel meat	5.00	0.00
	- Feeding camel meat and fat	2.50	0.00

N= Number of respondents KBH= Kebribeyah

Table 3. Traditional treatment of major diseases using camel urine in Babilie and KBH

Type of disease	Treatment for corresponding disease	Percentages of respondents	
		Babilie (N= 40)	KBH (N= 60)
Scabies	- Washing the infected area with camel urine	2.50	46.67
Cadho	-Smearing the infected area with camel urine and exposing it in the sun for 1-3 hours	2.50	0.00
	- Smearing the infected area day and night	5.00	1.67
	- Boiled urine	0.00	3.33
Yewefbeshita	- Drinking camel urine	2.50	0.00
OMCB	- Smearing of camel urine on the cattle bull	2.50	0.00
Shivering disease	- Drinking camel urine once a day	2.50	0.00
Hamot (kar)	- Drinking camel urine	2.50	0.00
Stomach discomfort	- Drinking a mixture of camel milk and urine	2.50	0.00
Eye disease	- Washing face with camel urine for 7 days	5.00	0.00
	- Washing with camel urine	2.50	0.00
	- Washing of the infected eye with came line	5.00	0.00
Tuberculosis	- Drinking camel urine for 3 months	2.50	0.00
Anemea	- Smearing camel urine for 2 months	2.50	0.00
Small pox	- Washing hand with camel urine	0.00	3.33

N= Number of respondents KBH= Kebribeyah OMCB= Over mating behavior of cattle bull