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Health Seeking Behavior of Diabetic Patients in Koohzar Village in Damghan city

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ABSTRACT

Introduction: The present study which is carried out in the field of medical anthropology seeks to investigate the meaningful medical behaviors of people with diabetes living in the village of Koohzar have taken to improve or reduce the problems associated with the disease regarding to knowledge and resources available in the country. **Material and methods:** Field and in-depth study are used as research methods. After determining the people with diabetes which were 17 persons, interview and questionnaire have been used to collect the data. **Results:** The findings indicate that 3 factors including lack of health facilities, poverty and financial problems and finally cultural issues are most influential factors in determining the health behaviors of villagers, respectively.

Key words: Medical Anthropology, Health Behavior, Diabetes, Koohzar.

1. INTRODUCTION

Medical anthropology studies have made important contributions to the understanding of the behavior of the patients and their family members in seeking health care (1-6). Medical anthropologists make a distinction between illness and disease and say the distinction is necessary to understand the perception of ill health (7, 8)) which influences one's health seeking behavior. David Landy has called

Medical Anthropologists a heterogeneous lively group busily engaged in myriad activities, studying and writing about behavior of human collectivities and infinities and individuals in understanding and coping with disease and injury (9, 10). Harwood discusses the relationship between ethnicity and health beliefs and behavior in his book Ethnicity and Medical Care (6). Tipping and Segall talk of two directions in studying the health seeking as "the process" and as "the end point" while the end point directed studies study the utilization of health care services, "the process" directed studies look at how the people seek health and explore the factors that influence illness response (11, 12)).

1.1. Review of literature

Dressler points out that health seeking behavior is influenced by such matters as availability of services, transportation and wealth of the patient or his immediate group (3). Leininger is also of the opinion that people who frequently use the popular or folk sector choose this system as they are easily accessible and it is less expensive than the professional sector (9). Slikerveer opines that economic status of the patients is the decisive factor in the choice of therapy (11).Freed and Freed have discussed the concept of health and sickness in a North Indian village called Shantinagar. The village was no longer conservative and unchanging. It was exposed to innovations from urban centers. The villagers were using different systems of medicine such as indigenous, western, Ayurveda, unani etc (5).

Chrisman's model is a step further in the illness behavior studies. He identified components of health seeking, which include 'symptom definition', 'Illness–related shift in role behavior', 'lay consultation and referral' 'treatment action and adherence'. The significance of this framework is the integration of cultural and social factors into the framework (2).

In (2009) a number of studies conducted in India have emphasized the role of cultural factors in the choice of therapy. Basity found that villagers resorted to the use of multiple therapy and the factors influencing the decisions were religious, economic and educational. (1).

1.2. Objectives of the present study

The present study of health seeking behavior of diabetic patients forms a part of a wider study of health seeking process in a village of Damghan district (Iran). According to Kleinman for each illness there is a set of beliefs about its etiology, onset of symptom development, severity and treatment as well as an appropriate role for those afflicted (8).

The paper attempts to examine the health seeking behavior of the diabetic patients in a Damghan village. It examines the health seeking behavior in the context of

the patients' awareness and sensitivity to the symptoms of diabetes and the resort pattern in a pluralistic system.

2. MATERIAL AND METHODS

The paper examines with the help of case studies, the symptomatic stage at which the patient becomes sensitive to experience of the disease and seeks to approach the treatment provider, the process of one's becoming aware of being suffering from diabetes, exercise of options, and resort to a particular medical system and his norms of adherence. It also examines his resort to a substitute, supplementary or complementary therapeutic system.

The study began with selection of a village convenient in size, population, and conveyance and conducting a preliminary survey to record various demographic socio economic and educational data of the people along with the different kinds of disease and illnesses found in different households.

The second step was a selection of 50 families with at least one ill person, for case studies. Case studies were conducted by collecting data using general anthropological techniques of observation, participant observation and interview.

Out of the 50 cases studied the cases of diabetes were selected for focused study of perceived symptoms, sensitizing symptoms, first consultation, referral consultation, awareness of being sick, preference of healing system, adherence to treatment and choice of alternate or parallel systems and adherence.

3. RESULTS

3.1. Koohzar village

Koohzar is one of the villages of Damghan city, located 95 km far away in the south route as a part of Ghahabe rastagh. The family population is amounted to 149, including 668 permanent settlers. It also comprises 359 male and 309 females respectively.

There are 1 school, 1 mosque, 1 primary health center and other facility in the village. Koohzar village economy relies primarily on agriculture. Animal husbandry is the next engagement of the villagers. Rising, Goat and Sheep is the main source of villagers' sustenance.

On surveying the village it was found that some families either migrated to other places or are not regularly living in the village and only 149 households could be located. The households surveyed and the number of houses found with sick members and their percentage is given in the following Table 1.

No	Village	House holds		
		Surveyed	Found with illness	Percentage
1	Koohzar	149	50	33/55

Table 1. households surveyed and households found with ill members in Koohzar village

The people were found to suffer from 26 kinds of illnesses. The names of the illnesses and the number of persons suffering from each illness during the period of study are listed in table 2.

Out of the 149 houses surveyed in Koohzar village, diabetic patients were found in 17 houses. Among 668 persons surveyed, 17 persons complained of diabetes.

No	Name of illness	Male	Female	Total
1	Allergy	01	01	02
2	Appendicitis	00	01	01
3	Arm pain	01	00	01
4	Asthma	02	4	06
5	B.P.	09	13	22
6	Cancer	01	00	01
7	Chest pain	02	01	03
8	Chicken gunya	00	02	02
9	Cold	02	01	03
10	Cough	04	02	06
11	Diabetes	09	08	17
12	Ear pain	01	00	01
13	Eye trouble	03	01	04
14	Fever	02	01	03
15	Headache	08	012	20
16	Heart problem	06	05	11
17	Heart attack	01	02	03
18	Intestine pain	01	00	01
19	Jaundice	04	01	05
20	Kidney stone	00	01	01
21	Knee pain	07	09	16
22	Lipid disorders	01	03	04
23	Skin disease	02	03	05
24	Stomach pain	03	05	08
25	Throat pain	00	02	02
26	Waist pain	00	02	02

Table 2. The names of illnesses and the total number of persons sex -wise suffering from each illness

It is (2/54%) of the population surveyed which is a significant number. This was next only to B.P found in 22 persons. It is followed by Headache found in 20 cases.

3.2. Diabetes:

People living in koohzar called Diabetes as Maraze Ghand. Out of 668 persons inhabited in Koohzar, 17 persons (2/54%) are infected to Diabetes type 1 and 2 including 9 (1/34%) male and 8 (1/20%) female. Table 3.

No. Sl	Age group	Male	Female	Total	%
1	21-30	0	1	1	5/88
2	31-40	1	1	2	11/76
3	41-50	2	1	3	17/65
4	51-60	3	2	5	29/41
5	61-70	2	3	5	29/41
6	71-80	1	0	1	5/88
	Total	9	8	17	100

Table 3. Age group wise number of persons suffering from diabetes in Koohzar village

The youngest and the oldest patients with Diabetes inhabited in Koohzar are a 27 years-old female and 76 years-old male, respectively. Most of the patients are contained in age groups (51-60) including 5 patients in which 3 male and 2 female (29/41%), and also age group (61-70) including 5 patients in which 2 male and 3 female.

Patients with diabetes			Damghan cities			Gorgan cities		
Male	Female	Total	Male	Female	Total	Male	Female	Total
9	8	17	7	6	13	2	2	4
52/94%	47/06%	100%	77/78%	75%	76/47%	22/22%	25%	23/53%

Table 4. Visiting modern health center and using health services

Patients with diabetes			Chemical medicine		
Male	Female	Total	Male	Female	Total
9	8	17	8	6	14
52/94%	47/06%	100%	88/89%	75%	82/35%

Table 5. Using chemical medicine

Patients with diabetes			traditional health center		
Male	Female	Total	Male	Female	Total
9	8	17	7	5	12
52/94%	47/06%	100%	77/78%	62/5%	70/58%

Table 6. Visiting the traditional health center

Patients with diabetes			Ritual healing		
Male	Female	Total	Male	Female	Total
9	8	17	9	7	16
52/94%	47/06%	100%	100%	87/5%	94/12%

Table 7. Health Seeking Behaviors, Resort to Ritual healing

Sl. No	Combination of illnesses	Male	Female	Total
1	Diabetes and Asthma	1	0	1
2	Diabetes and BP	2	3	5
3	Diabetes and Heart problem	1	1	2
4	Diabetes and knee pain	2	2	4
	Total	6	6	12

Table 8. Number of diabetics complaining multiple illnesses

Out of all the patients, minimum numbers of patients belong to the age group (21-30) only one female (5/88%), and age group (71-80) only one male (5/88%). In the other age groups such as (31-40) 2 patients including 1 male and 1 female (11/76%). age group (41-50) 3 patients including 2 male and 1 female (17/56%).

Health center here means hospital, infirmary, and clinic which are located out of villages or in urban area. All the people with diabetes inhabited in Koohzar were recommended by practitioner of home care to go to other cities such as Damghan or Gorgan cities to be diagnosed and treated better. Because the centers located in the cities are better equipped with appropriate health facilities than rural area. To come to this purpose, 7 male and 6 female (76/47%) traveled to Damghan city and also 2 male and 2 female (23/53%) traveled to Gorgan city. In between 1 female (5/88%) visited the centers in both cities.

Eight (8) out of 17 patients' with diabetes are male and 6 are female (82/35%) consuming the chemical medicine such as insulin and glycemic control pills prescribed by practitioners. 1 male and 2 female never use any chemical medicine.

Traditional health center is consisted of home remedy which is located in villages or other places to treat the patients traditionally and to prescribe herbal medicines. Seven (7) male and (5) female (70/58%) out of 17 patients with diabetes were treated by traditional health center and are consuming herbal prescribed medicines. The reasons behind applying these medicines according to the patients are that they are harmless, cheap and available. But they believe that the traditional medicines have less health benefits than the chemical medicines and treating process is slower. In between there are 2 male and 3 female who never visited the traditional health centers and didn't consume any traditional medicine. Ineffectiveness of treating through traditional medicines is of reasons expressed by them.

All of activities related to the religious beliefs which are parts of the culture are called health practice. 9 male and 7 female (94/12%) out of 17 patients' with diabetes plane to perform some of health practice such as vow and pray to treat their own disease and then expressed their own satisfaction. However, there was only 1 woman (5/88%) who didn't perform any of these.

3.3. Diabetes patients with multiple complaints

Among the 17 patients suffering from diabetes, 12 patients have multiple complaints. From total amount patients - 70 (58%) of the diabetes is suffering from multiple complaints, 29 (41%) of all diabetic patients (N=17) and (41/66%) of the diabetic patients with multiple complaints (N=12) are suffering from B.P. This is followed by Knee pain with 4 patients i.e. (23/53%) of all the diabetic patients (N=17) and (33/33%) of the diabetic patients with multiple complaints (N=112).

In all the cases diabetes was detected later than the other complaint, pointing to the possibility of diabetes being a later development.

3.4. Case studies

Case 1: female, 27 years old, married, housewife, diploma

It was about 3 years ago that I visited the home care due to lethargy, thirst and frequent urination. The doctor told me to go to the city for blood test. I traveled to the Damghan to go to the Social Security Clinic and did blood test. After getting the result and presenting it to the doctor, I realized that my blood sugar is around 260 and I am suffering from type 2diabetes. The doctor told me that I should inject insulin to control the disease before the breakfast. I also use herbal medicines as supplement. Every 3 month I visit the Social Security Clinic located in Damghan to measure the level of my blood sugar. High cost of medicines, tests and commuting are among my problems for which I always should borrow some money from my brother. I believe to the Imams and at the martyrdom night of Imam Ali pray and distribute dates as charity.

Case 2: male, 63 years old, married, unemployed, illiterate

5 years ago, I always was lethargic and tired. Thirst, severe asthenia and frequent urination were my problems. A medicine was prescribed by doctor of home care but it couldn't improve my bodily condition. A friend of mine recommended me to go to a clinic in Damghan. The doctor advised me to do blood test. After testing, it was evi-

denced that my blood sugar (hyperglycemia) is high and I suffer from type 2 diabetes. I am inhibited to eat bread, rice and candy. Last year, my finger was cute in Rezaee hospital of Damghan due to infection. I currently take insulin injections and use opium for decreasing pain and hyperglycemia (blood sugar). I have made a vow to go to the imam Reza's shrine if I get recovered.

Case 3: female, 48 years old, housewife, illiterate

I missed my husband because of an accident 6 years ago. Since then I was depressed. After that I felt some tingling in my body fingers and also some pain in my stomach and head. The village doctor told me that I must do blood test. I traveled to the city according to my brother's advice. After blood test, I realized that I am suffering from high blood sugar. The doctor prescribes me the related medicines which are hard to provide. Nowadays, I'm using pills for controlling my disease. The pills are also expensive. In my opinion there is no benefit for herbal medicines, so I use none of them.

3.5. Perceived symptoms:

The patients always narrate the symptoms as they perceived. The symptoms, they experienced as narrated by them are listed below:

a) Frequent urination
b) Severe thirst for water and hunger
c) Difficulty in doing hard work or walking long distances
d) Spasm sensations in hands and feet
e) Numbness of the hand and feet
f) Tiredness and fatigue
g) Heaviness of the head
h) Delay in healing of wounds.

It is found that frequent urination was a common initial symptom, along with severe thirst and hunger. In addition to this spasm sensation and numbness were in the links also found in some cases.

Generally it was found that the initial symptoms were not paid attention and diabetes was detected either when the patient reported to doctors after failing in getting an injury healed in time or for some other complaints like fever or spasm sensation. Some found that they had diabetes during investigations in the course of treatment for diseases like B.P or knee pain.

3.6. Perceived causes:

Regarding the cause of the disease that almost all attributed it to eating more sweets. But there are two persons who believe that their addiction to locally made cigarette is also a cause. Two persons attribute it to irregular meals, fasting (starving) and heavy work. One person told that he got it genetically from his mother who had diabetes.

3.7. Health seeking:

Iranian villages, specially, those in the proximity of the cities are generally said to have medical pluralism. Medical pluralism is defined as the co-existence of more one method of prevention, diagnosis and cure. Medical pluralism, which flourishes in all class divided societies, tends to mirror the wider sphere of unequal social relationships, with the patterns of hierarchy among co present medical system being based upon the reigning structure of class, , racial, ethnic, regional, religious, or gender distinctions. It is perhaps more accurate to say that national medical systems in the modern or postmodern world tend to be "plural", rather than "pluralistic", in that biomedicine enjoys a dominant status over all heterodox and ethno medical practices (Ember and et al, 2004:29).

Home remedies, folk medicines, classical Ayurveda, and Homeopathy are the systems said to exist side by side in Iran.

3.8. Detection of diabetes:

Diabetes was found to be detected generally in referral hospitals or on being tested by referral doctors. Except in the case of the above referred boy in whose case diabetes was confirmed by urine test, in all other cases blood tests were conducted. Thus, it can be said that the people here perceive that they are suffering from diabetes only after it is diagnosed and declared by a doctor by testing blood.

3.9. Exercise of option:

Ones the diabetes is diagnosed the patients are found to take the allopathic medicines regularly, generally tablets or injections. Some patients mentioned that they are taking insulin injections. They are found to adhere to the medicine, dosage and timings prescribed by the doctors.

No one is found to seek, folk medicine, Ayurveda medicine, homeopathy, for treatments of diabetes, but many were found to seek ritual or sacred therapy simultaneously.

3.10. Diet:

All the patients told that they are reducing or totally avoiding sweets and oil preparations. They are taking sugarless coffee or tea. They reduce eating rice and take more. They try to conform to the advice of the doctors as far as possible.

3.11. Utilization of public health care service:

Though there is no hesitation or reservations against visiting local P.H.C, it is found that diabetes is always diagnosed in referral hospitals.

3.12. Cost:

Naturally those who had gone to private health care providers had to spend more. Some had to borrow money.

4. DISCUSSION

This study aims to determine the factor effective on health behavior of people with type 2 diabetes in Koohazar village, Damghan. Out of total 668 people living in the village aged 21 to 80 years old, 17 persons (both male and female) are suffering from diabetes. According to the findings, different behaviors and strategies are considered by the patients in order to diagnose, control and improve their own disease. The results show that factors such as facilities deficiency in the village, financial status and cultural issues are effective on the health behavior. All 17 patients visited the home care for the first time, but they traveled to Damghan and Gorgan for more accurate diagnose and better treatment. Out of all patients, 13 patients (76/47%) traveled to Damghan and 5 patients (29/41%)

traveled to Gorgan and 1 female (5/88%) traveled to both cities. According to the patients, the reason behind their tendency to travel to these cities is that there are more appropriate health care facilities and more skillful doctors than the village. The patient traveled to Gorgan believed that the facilities available in Gorgan are more appropriate than damghan's. Therefore, in can be stated that lack of appropriate health facilities is the most significant factor effective on health behavior. Financial status and the patients' income is another factor effective on health behavior. All the patients traveled to the other cities for diagnosis and treatment expressed their dissatisfaction for transportation cost and also some expensive and unavailable medicines, so that they should spend a lot of time to provide the drugs. Sometimes they must borrow some money from their relatives. For this reason, 16 patients expressed their dissatisfaction about using chemical medicines. Culture is another factor that can affect the behavior. Many customs, traditions and rites (health practice) are parts of culture. Health practices performed by 16 patients (94/12%) are derived from religious beliefs of villagers. So they were totally satisfied by them. In between there only was a woman who didn't perform the heath practice because she believed that I would be ineffective.

CONFLICT OF INTEREST: NONE DECLARED.

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