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RESEARCH ARTICLE

FACTORS AFFECTING HEALTH CARE UTILIZATION AMONG POPULATION RESIDING IN SELECTED RURAL COMMUNITY

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ABSTRACT

A descriptive study was conducted to assess the factors affecting health care utilization and to find association of factors affecting utilization of health care services with treatment seeking behavior among population residing in selected rural community of district Faridkot. Out of 200 adults who were selected through two stage cluster random sampling technique, 127 adults (who had taken treatment for any illness) in previous year were interviewed. Research tools used were Socio-demographic data sheet and Interview schedule to assess factors affecting health care utilization. Treatment seeking behavior included treatment taken or not taken from any public or private health facility. Analysis was done by using the descriptive and inferential statistics using IBM SPSS version 20 statistical package. Results showed that the factors which affected the health care utilization were availability of medical staff, availability of free health care services, availability of services at lower cost, type of sickness, seriousness of illness and influence of health care workers. There was significant association was found between these five factors and treatment seeking behavior.

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INTRODUCTION

Health is the precious possession of all human beings as it is asset for an individual and community as well. Health can be defined negatively, as the absence of illness, functionally as the ability to cope with everyday activities, or positively, as fitness and well-being (Blaxter, 1990). Health Care utilization is based on the decision or an action taken by an individual to maintain, attain, or regain good health and to prevent illness. The decisions made encompasses all available health care options like visiting a public or private and modern or traditional health facility, self-medication and use of home remedies or not to utilize the available health services etc. As for health care system, in almost all the developing countries, the public and the private health sector coexist but private care provider are usually preferred all around due to easy accessibility even in the night, quick relief and individual attention. Whereas, Public hospitals in India are known for low quality treatment, long waiting period, long distance, inconvenient location, and inadequate facilities (Chand, 2015). Health care is the basic necessity of society. Health care embraces the multitude of services provided to individuals or

communities for promoting, maintaining, monitoring or restoring health. It involves prevention, treatment and management of illness and preservation of mental and physical well-being through the services offered by the medical, nursing and allied health professionals. In Punjab, it is the responsibility of the Department of Health and Family Welfare to provide preventive, promotive and curative health services to the people of the state. This department, under the Ministry of Health and Family Welfare, guides and supervises the health and family welfare programmes in the state (Saini, 2015). Besides peoples' choice of health care differs in sociodemographic, socio-economic and cultural compositions which have an effect on their health care seeking behavior (Chand, 2015). Urbans are generally believed to be open to new ideas and willing to try certain things on a trial and error basis (Pillai, 2004). To the contrary, rural are seen as prone to tradition, unchanging and unwelcoming to change, and willing to hang onto traditional values and practices (Sudha, 2003; Keith, 2005). Health care utilization is a result of a complex interaction of provider, patient, illness and household characteristics. It is influenced by a variety of socioeconomic variables, including gender, age, the social status of women, the type of illness, access to services and perceived quality of the service etc (Pillai, 2003). While hospital data remains the main source of information regarding the disease pattern, community based studies well reflects the preferences in

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seeking health care services.⁵In Punjab state, 37.48% people live in urban regions and 62.52% live in the villages of rural areas. In Faridkot District, 35.15% lives in urban regions and 64.85 % population lives in rural areas.⁷People of India are mainly rural and less educated they have misconceptions about the available health care services and medicines. An awareness of the health seeking behavior is paramount in the treatment of patients (www. Healthdata.org/sites/default/.../Punjab_disease_burden_profile%5B1%5D.pdf.). The knowledge of health seeking behavior is pivotal for prevention, treatment, management of disease and promotion of health. It is the perceptions of the rural consumers of health care services that make the community health programmes and initiatives successful or failure. Knowledge of utilization of health services and associated factors is important in planning and delivery of interventions to improve health services coverage.⁹This study attempts at community level to find out those factors which affects the health care utilization among population residing in village Bajakhana.

Objective of the study

- To assess the factors affecting health care utilization among population residing in selected rural community of district Faridkot.
- To find out association of factors affecting utilization of health care services with treatment seeking behavior.

MATERIALS AND METHODS

Research Design & Approach: Non- experimental, descriptive; survey design and quantitative research approach was used to assess factors affecting health care utilization.

Research setting: Study was conducted at village Bajakhana of district Faridkot of Punjab. Faridkot is located in the Punjab plains. Village Bajakhana is 32 kms away from Faridkot city. The village lies on the main road from Faridkot to Bathinda and has link roads from many other places like Barnala, Jaito and nearby villages. The means of communication like buses, taxis and rickshaws were available. Village Bajakhana comprised of 1146 families having total population of approximately 6227(2018), including 3224 (52%) males and 3015 (48%) females. Bajakhana village has one CHC with Sub center, emergency and two private clinics.

Sample and sampling technique: The sample selected by two stage cluster random sampling technique was 200 adults residing in village Bajakhana of district Faridkot, Punjab. Subjects were selected village Bajakhana was divided into eight clusters (Cluster A to H). Out of these eight clusters, four clusters (Cluster-D, Cluster-G, Cluster-F and Cluster-B) were selected by lottery method. From selected four clusters, houses were again selected by lottery method. Equal number of study subjects i.e. 50 was taken from each selected cluster. But 127 adults, who were sick during previous year, were interviewed to assess factors. Adults above the age of 18 years, residing from last five years in selected village and willing to participate in the study were included in the study. The migrated population and pregnant mothers were excluded from the study.

Description of Tool: Research tools of the study includes following two parts:

Part A: Socio demographic profile. This part of tool consisted of 8 items which included demographic information of study subjects such as age, gender, religion, educational status, occupation, marital status, type of family and family monthly income. Part B: Semi-structured Interview schedule to assess the factors affecting health care utilization. This part of tool consisted of 1 question related to treatment and 12 factors which affects the health care utilization.

Ethical considerations: Study approval was taken from Research and Ethical committee of the University College of Nursing and Baba Farid University of Health Sciences, Faridkot to protect the rights of the participants who were willing to participate were included in the study. Written permission was also taken from Sarpanch of the village. Study procedure was explained and Informed written consents was taken from the subjects.

RESULTS

Table 1 shows the distribution of population according to different socio- demographic profile. Out of 200 study subjects, 39.5% (79) study subjects were in age group of 18-33 years. 56% (112) study subjects were females whereas 44% (88) subjects were males. Majority of the study subjects 86.5% (173) belonged to Sikh religion. Almost half of the study subjects i.e. 48% (96) were unemployed. 71% (142) study subjects were married. More than half i.e. 55.5% (111) study subjects were having family monthly income of Rs. 10,001-15,000, followed by 24.5% (49) study subjects were having Rs. 15,001-20,000 family monthly income. Table 2 depicts frequency and percentage distribution of utilization of health services on the basis of treatment whether they have taken or not. Out of 200 study subjects, 127 study subjects were sick and from those 127 sick study subjects, majority 87% (110) of study subjects took treatment and rest 13% (17) study subjects were sick but they did not take any treatment.

Table 4 depicts frequency and percentage distribution of factors affecting health care utilization of people who were sick and had taken treatment. Out of 127 study subjects, Maximum 84.2% (107) study subjects preferred health care facilities because there is availability of medical staff followed by 79.5% (101) study subjects were using those health facilities which were near to their residence area, 59% (75) study subjects preferred health care facilities because there were good lab investigation facilities. Table 4 depicts frequency and percentage distribution of factors affecting health care utilization of people who were sick and had taken treatment. Out of 110 study subjects, Maximum 89% (98) study subjects preferred health care facilities because there is availability of medical staff followed by 78.1% (86) study subjects were using those health facilities which were near to their residence area, 61.8% (68) study subjects preferred health care facilities because there were good lab investigation facilities. Equal 50% (55) study subjects preferred health care facilities because of the good behavior of the staff, self-medication as a better choice of treatment and those health care facilities which were at lower cost than others, 42.7% (47) study subjects preferred home remedies as better choice of treatment, 21.8% (24) study subjects preferred health care facilities because there was availability of free health care services, 16.3% (18) study subjects said that quality of health services was poor from where they have taken treatment. 10.5% (21) of the study subjects had taken treatment because

Table 1. Distribution of study subjects according to selected Socio-demographic variables

		N ₁ =200	
Characteristics		Frequency (n)	Percentage (%)
Age (years)	18-33	79	39.5
	34-49	66	33
	50-65	41	20.5
	66 & above	14	7
Gender	Male	88	44
	Female	112	56
Religion	Hindu	18	9
	Muslim	08	4
	Sikh	173	86.5
Qualification	Christian	01	0.5
	Illiterate	46	23
	Primary	19	9.5
	Middle	29	14.5
	Secondary	35	17.5
	Sen. Secondary	46	23
Occupation	Graduate and above	25	12.5
	Unemployed	96	48
	Labor	03	1.5
	Agriculture	52	26
	Private job	24	12
	Government job	01	0.5
	Student	24	12
Marital status	Married Unmarried	142	71
	Widow/Widower/ Separated/Divorced	42	21
		16	8
Type of family	Joint	170	85
	Nuclear	30	15
Family monthly income (Rs.)	Less than 5,000	00	0
	5,001 - 10,000	37	18.5
	10,001- 15,000	111	55.5
	15,001- 20,000	49	24.5
	More than 20,000	03	1.5

Table 2. Frequency and percentage distribution of study subjects on the basis of treatment seeking behavior

		N ₁ = 200	
Responses of study subjects		Frequency (n)	Percentage (%)
Not sick		73	36.5
Were sick & taken treatment		110	55
Were sick & not taken treatment		17	8.5

N₁= Total number of study subjects**Table 3. Frequency and percentage distribution of factors affecting health care utilization of people who were sick**

		N ₂ = 127	
S no.	Factors	Response (frequency)	Percentage (%)
		Yes	Yes
1	Study subjects preferred health care facilities because: they were near to their residence area	101	79.5
2	there was availability of medical staff	107	84.2
3	behavior of staff was good.	63	49.6
4	there was availability of free health care services	24	18.8
5	quality of health care services was poor	24	18.8
6	there was availability of health care services at lower cost than others	69	54.3
7	there was good lab investigation services	75	59
8	the sickness was not so serious to get treatment	26	20.4
9	home remedies were better	61	48
10	self-medication was better	64	50.3
11	they were influenced by health care worker during home visit or hospital visit	21	16.5

N₂= Number of study subjects who were sick**Table 4. Frequency and percentage distribution of factors affecting health care utilization of people who were sick and had taken treatment**

		N ₃ = 110	
S no.	Factors	Response (frequency)	Percentage (%)
		Yes	Yes
1	Study subjects preferred health care facilities because: they were near to their residence area	86	78.1
2	there was availability of medical staff	98	89
3	behavior of staff was good.	55	50
4	there was availability of free health care services	24	21.8
5	quality of health care services was poor	18	16.3
6	there was availability of health care services at lower cost than others	55	50
7	there was good lab investigation services	68	61.8
8	the sickness was not so serious to get treatment	9	8.1
9	home remedies were better	47	42.7
10	self-medication was better	55	50
11	they were influenced by health care worker during home visit or hospital visit	21	19

N₃= Number of study subjects who were sick and had taken treatment

Table 5. Frequency and percentage distribution of factors affecting health care utilization of people who were sick and had not taken any treatment

S no.	Factors Study subjects did not prefer health care facilities because:	Response (frequency) Percentage (%)	
		Yes	Yes
1	they were near to their residence area	15	88.2
2	there was availability of medical staff	09	52.9
3	behavior of staff was good.	08	47
4	there was availability of free health care services	00	00
5	quality of health care services was poor	06	35.2
6	there was availability of health care services at lower cost than others	14	82.3
7	there was good lab investigation services	07	41.1
8	the sickness was not so serious to get treatment	17	100
9	Home remedies were better	14	82.3
10	self-medication was better	09	52.9
11	they were influenced by health care worker during home visit or hospital visit	00	00

N₄= Number of study subjects who were sick and had not taken treatment

Table 6. Frequency and percentage distribution of other factors affecting health care utilization as mentioned by study subjects who were sick and had taken treatment

S no.	Responses of the subjects	Frequency (n)	Percentage (%)
1	Always private medications are prescribed in Government hospitals so I prefer private hospital.	05	33.4
2	Firstly, try home remedies then go to hospital if not treated.	02	13.2
3	Government hospital visit wastes your time so go to private for treatment.	05	33.4
4	Doctors in Government hospitals suggests to visit their private clinics.	03	20

N₅= Number of sick study subjects who had taken treatment and gave some other factors

Table 7. Association between factor affecting health care utilization (Near to residence area) and treatment (taken or not)

Treatment (taken or not)		Near to residence area		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	86 (78.1)	24 (21.9)	1	$\chi^2=0.914$ p= 0.3390 ^{NS}
No	17	15 (88.2)	02 (11.8)		

N₂= Number of study subjects who were sick NS = Non- significant at p< 0.05 level

Table 8. Association between factor affecting health care utilization (Availability of medical staff)and treatment (taken or not)

Treatment (taken or not)		Availability of medical Staff		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	98 (89)	12 (11)	1	$\chi^2=14.50$ p=0.0000 ^S
No	17	09 (53)	08 (47)		

N₂= Number of study subjects who were sick S= Significant at level p< 0.05

Table 9. Association between factor affecting health care utilization (Good behavior of staff) and treatment (taken or not)

Treatment (taken or not)		Good behavior of staff		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	55 (50)	55 (50)	1	$\chi^2= 0.510$ p= 0.8214 ^{NS}
No	17	08 (47)	09 (53)		

N₂= Number of study subjects who were sick NS = Non- significant at p< 0.05 level

Table 10. Association between factor affecting health care utilization (Availability of free health care services) and treatment (taken or not)

Treatment (taken or not)		Availability of free health care services		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	24 (21.9)	86 (78.1)	1	$\chi^2=4.57$ p =0.03 ^S
No	17	00 (0)	17 (100)		

N₂= Number of study subjects who were sick; S= Significant at level p< 0.05

Table 11. Association between factor affecting health care utilization (Poor quality of health services) and treatment (taken or not)

Treatment (taken or not)		Poor quality of health services		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	18 (16.4)	92 (83.6)	1	$\chi^2=3.442$ p= 0.063 ^{NS}
No	17	06 (35.3)	11 (64.7)		

N₂= Number of study subjects who were sick; NS = Non- significant at p< 0.05 level

Table 12. Association between factor affecting health care utilization(Availability of services at lower cost)and treatment (taken or not)

Treatment (taken or not)		Availability of services at lower cost		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	48 (43.6)	62 (56.4)	1	$\chi^2=8.83$ p= 0.0029 ^S
No	17	14 (82.4)	03 (17.6)		

Table 14: Association between factor affecting health care utilization (Seriousness of the sickness) and treatment (taken or not)

Treatment (taken or not)		Seriousness of the sickness		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	101 (91.8)	9 (9.1)	1	$\chi^2=76.24$ p value- 0.0000 ^S
No	17	00 (0)	17 (100)		

N₂= Number of study subjects who were sick; S= Significant at level p< 0.05

Table 15. Association between factor affecting health care utilization (Influence of the health care worker) and treatment (taken or not)

Treatment (taken or not)		Influence of the health care Worker		df	Chi square & p value
		Yes (%)	No (%)		
Yes	110	21 (19)	89 (81)	1	$\chi^2=3.884$ p= 0.048 ^S
No	17	00 (0)	17 (100)		

N₂= Number of study subjects who were sick; S= Significant at level p< 0.05

they were influenced by health care workers during home visits or hospital visits and remaining 8.1% (9) study subjects said that their sickness was not so serious to take treatment but they had taken. Table 5 shows that out of 17 study subjects, all 100% (17) study subjects said that their sickness was not so serious to take treatment so they had not taken followed by 88.2% (15) study subjects said that health care facilities were near to their residence area but they had not taken the treatment, 82.3% (14) study subjects said that health care facilities serves them at lower cost, equal 52.9% (9) study subjects said that self-medication is the better choice of treatment and there was availability of medical staff in the health care centers, 47% (8) study subjects said that the behavior of the staff was good in the health care centers and rest 35.2% (6) study subjects said that quality of services were poor in the health care centers.

Table 6 depicts frequency and percentage distribution of 4 other factors which affects the health care utilization of the study subjects. Out of 15 study subjects who gave other factors, equal 33.4% (5) number of study subjects said that they prefer private hospital because always private medications are prescribed in Government hospitals and Government hospital visits means wastage of time so they prefer private hospital for treatment, 20% (3) study subjects said that they visit private hospitals because doctors in Government hospitals suggested them to visit in their private clinic and only 13.2% (2) study subjects said that firstly they prefer home remedies and if not treated then they visit hospital. Table 8 depicts association between factor affecting health care utilization (Availability of medical staff) and treatment (taken or not). On the basis of availability of medical staff, in 110 study samples who had taken treatment maximum 89% (98) study subjects preferred health care facilities because there was availability of medical staff. In 17 study samples who had not taken treatment, half of the study subjects 53% (9) said that there is availability of medical staff in the health care centers. Chi square value was computed. The chi square value of 14.50 was found statistically significant at p= 0.000 level. Table 9 shows association between factor affecting health care utilization (Good behavior of staff) and treatment (taken or not).

On the basis of good behavior of staff, in 110 study samples who had taken treatment maximum half of the study subjects 50% (55) study subjects preferred health care facilities because of good behavior of the staff. In 17 study samples who had not taken treatment, 47% (8) study subjects said that behavior of the staff is good in the health care centers. Chi square value was computed. The chi square value of 0.510 was found statistically non-significant at p= 0.821 level. Table 10 depicts association between factor affecting health care utilization (Availability of free health care services) and treatment (taken or not). On the basis of availability of free health care services, in 110 study samples who had taken treatment only 21.9% (24) study subjects preferred health care facilities because there was availability of free health care services.

In 17 study samples who had not taken treatment, no any study subject said that there is availability of free health services in the health care centers. Chi square value was computed. The chi square value of 4.57 was found statistically Significant at p= 0.000 level. Table 11 illustrates association between factor affecting health care utilization (Poor quality of health services) and treatment (taken or not). On the basis poor quality of health services, in 110 study samples who had taken treatment only 16.4% (18) study subjects said that quality of health services was poor from where they have taken treatment. In 17 study samples who had not taken treatment, 35.3% (6) study subjects said that the quality of the health services was poor in the health care centers. Chi square value was computed. The chi square value of 3.44 was found statistically non-significant at p= 0.063 level. Table 12 shows association between factor affecting health care utilization (Availability of services at lower cost) and treatment (taken or not). On the basis of availability of health services at lower cost, in 110 study samples who had taken treatment 43.6% (48) study subjects preferred those health care facilities which were available at lower cost than others. In 17 study samples who had not taken treatment, 82.3% (14) study subject said that there is availability of health services at lower cost in the health care centers. Chi square value was computed. The chi square value of 8.23 was found statistically significant at p= 0.0029 level. not taken treatment.

Chi square value was computed. The chi square value of 76.24 was found statistically significant at $p=0.000$ level. Table 15 interprets association between factor affecting health care utilization (Influence of the health care worker) and treatment (taken or not). On the basis of Influence of the health care worker, in 110 study samples who had taken treatment only 19% (21) study subjects were influenced by health care worker. In 100% (17) study samples who had not taken treatment, no any study subject was influenced by health care worker. Chi square value was computed. The chi square value of 3.884 was found statistically significant at $p=0.000$ level.

DISCUSSION

In the present study, majority 39.5% study subjects were in the age group of 18-33 years. Similar findings were found by Singh T et al (2018)¹⁰ that majority 70% were in the age group of 15–60 years. In the present study, approximately more than half of the study subjects were female and 23% study subjects were illiterate. Similar findings were found by Chand CR et al (2015)² which revealed that majority 84.5% study subjects were females and 1/3rd of study subjects were illiterate. In the present study, approximately more than half of the study subjects were having family monthly income between Rs. 10,001-15,000. Similar findings were found by Rose AD et al (2013)¹¹ that majority 41.2 % of the families were having a monthly income between Rs. 10,001-25,000. In the present study, factors which affected health care utilization 89% study subjects reported that there was availability of medical staff and 50% preferred those health care facilities which were at lower cost than others which is similar to the study done by Chand CR et al (2015)¹ which reveals that availability of services, free of cost was reported as most common reason for preferring health care facility. In the present study, findings reveal that out of 200 study subjects, 63.5% study subjects were sick. Out of those 127 sick study subjects, majority 87% of the study subjects took treatment for their illness and among reasons for not taking treatment by 15.4% sick study subjects, equal number 100% of study subjects believe that their sickness was no so serious to take treatment. Same findings were reported by Ngugi AK et al (2017)¹² which revealed that 19.1% household members reported an illness. Of these, 76.7% sought healthcare in a health facility and those who were sick but did not seek any treatment, 10% indicated that their sickness was no so serious to take treatment.

Conclusion

Study concluded that factors affecting the health care utilization were availability of medical staff, availability of free health services, availability of services at lower cost and type of sickness and influence of health care workers. Thus, knowledge of these factors is pivotal for prevention, treatment and management of disease and promotion of health and very important in planning and delivery of interventions to improve health services coverage.

Conflict of Interest

There is no conflict of interest as researcher had not any financial support from institute or individual. Project was self-financed.

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