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Utilization of Health Services Among Population Residing in Selected Rural Community

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Abstract

Introduction: Health-care system in a society must be built around the term of equity so that each individual should have equal opportunities for maintaining good health, but human societies are characterized by unevenness at every aspect, and it has even not spared the health-care system. Planning for health services provision depends on the health needs and Health Seeking Behavior of the population.

Aim of study: The study is intended to assess the utilization of health services among population residing in selected rural community of district Faridkot.

Methodology: Quantitative research approach with descriptive research design was used. 200 adults residing in selected village were selected through two stage cluster random sampling technique. Tools used were Socio-demographic data sheet and interview schedule to assess utilization of health services from study subjects after seeking willingness. Analysis was done by using the descriptive and inferential statistics.

Results: Study reported that out of 200 study subjects residing in village Bajakhana, majority of study subjects i.e. 63.5% (127) were sick and 36.5% (73) study subjects were not sick in the last one year. From 127 study subjects who were sick, maximum 86.6% (110) of study subjects had taken treatment and rest of 13.3% (17) study subjects had not taken treatment. Age, religion, qualification, occupation and marital

status of adults showed statistically significant impact on utilization of health care services

Conclusion: Study concluded that health care seeking behavior varies with age, educational status, occupation, marital status and religion. Government services were preferred than the private services by study population.

Keywords: Assess, Health Services, Utilization, Rural Community.

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.¹ India's health care system is mix of public and private health care providers. Public health care system is funded through general taxation or public sector health insurance whereas private sector is paid for through out of pocket expenditure or through private health insurance. Equity, along with inter-sectoral co-ordination, community participation and appropriate technology has been described as the principles and pillars of primary health care.²

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. Health care facilities are provided to the people through a network of medical institutions such as sub centres, subsidiary health centres (SHCs) (dispensaries/clinics), primary health centres (PHCs), community health centres (CHCs), sub-divisional and district hospitals and hospitals attached to government medical and dental colleges.³ Indian population mainly lies in rural areas. According to 2011 census 69% of Indian population comprises of rural population.⁴

In 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.⁵ In most developing countries such as India, utilization of basic health services has remained poor even though there has been increasing public and private expenditure on the provision of advanced health care.⁶ Various studies have been done to evaluate the rates of utilization of the public and private sector health services. The utilization rates in public health services systems ranges from 10–30%.⁶⁻⁷

This study attempts at community level to collect the information regarding services utilization and preferences of the individuals between government and private health services among population residing in village Bajakhana.

Objectives of the Study

1. To assess the utilization of health services among population residing in selected rural community of district Faridkot.
2. To find the association of utilization of health services among population residing in selected rural community of district Faridkot with selected demographic variables.

Materials and Methods

Research Design and Approach: Non-experimental, descriptive; survey design and quantitative

research approach was used to assess utilization of health service.

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.

Sample and Sampling Technique: The sample was 200 adults residing in village Bajakhana of district Faridkot, Punjab. Subjects were selected by two stage cluster random sampling technique. 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 keeping in mind the inclusion and exclusion criteria of sample selection. Adults above the age of 18 years, residing from last five years in selected village and willing to participate in the study were include 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 utilization of health services. This part of tool consisted of 10 questions related to utilization of health services.

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: Distribution of study subjects according to selected Socio-demographic variables
N₁ = 200

Characteristics		Frequency (n)	Percentage (%)
Age (years)	18–33	79	39.5
	34–49	66	33
	50–65	41	20.5
	66 and above	14	7
Gender	Male	88	44
	Female	112	56
Religion	Hindu	18	9
	Muslim	08	4
	Sikh	173	86.5
	Christian	01	0.5
Qualification	Illiterate	46	23
	Primary	19	9.5
	Middle	29	14.5
	Secondary	35	17.5
	Sen. Secondary	46	23
	Graduate and above	25	12.5
Occupation	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	142	71
	Unmarried	42	21
	Widow/Widower/ Separated/Divorced	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

N₁ = Total number of study subjects

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: Frequency and percentage distribution study subjects as per their sickness.
N₁ = 200

Responses of study subjects	Frequency (n)	Percentage (%)
Not sick	73	36.5
Sick during last 6 months	95	47.5
Sick during last 7–12 months	32	16

N₁ = Total number of study subjects

Table 2 shows frequency and percentage distribution of study subjects as per their sickness. Out of 200 study subjects, 36.5% (73) study subjects were not got sick in last one year followed by 47.5% (95) study subjects were got sick in last 6 months, whereas 16% (32) study subjects were got sick from first six months (7 to 12 months).

Table 3: Frequency and percentage distribution study subjects as per their type of illness
N₂ = 127

S. No.	Responses of study subjects (type of illnesses)	Frequency (n)	Percentage (%)
1	Acute illness	68	53.5
2	Chronic illness	42	33
3	Other illness	17	13.5

N₂ = Number of study subjects who were sick

Table 3 depicts frequency and percentage distribution of study subjects as per their type of illness. More than half i.e. 53.5% (68) of study subjects were suffered from acute illnesses followed by 33% (42) study subjects were having chronic illnesses and remaining 13.5% (17) study subjects reported other illnesses.

Table 4: Frequency and percentage distribution of utilization of health services according to the place where they get diagnosed.
N₂ = 127

Responses of study subjects	Frequency (n)	Percentage (%)
Not diagnosed	17	13
Government Hospital	66	52
Private hospital	44	35

N₂ = Number of study subjects who were sick

Table 4 depicts frequency and percentage distribution of utilization of health services according to the place where they get diagnosed. Out of 127 sick study subjects, almost half 52% (66) of study subjects were diagnosed in Government hospitals followed by 35% (44) study subjects were diagnosed in private hospitals and only 13% (17) study subjects had not went for diagnosis to any health care facility.

Table 5: Frequency and percentage distribution of utilization of health services according to their frequency of visiting health center in last one year.
N₂ = 127

Responses of study subjects	Frequency (n)	Percentage (%)
Not visited	17	13.3
1–5 times	92	72.4
6–10 times	11	9
Above 10 times	07	5.3

N₂ = Number of study subjects who were sick

Table 5 shows frequency and percentage distribution of utilization of health services according to their frequency of visiting health center in last one year. Maximum 72.4% (92) study subjects visited health care facility 1–5 times in the last one year followed by 13.3% (17) study subjects were not visiting health care centers, 9% (11) study subjects visited 6–10 times, and very few 5.3% (7) study subjects visited more than 10 times in the last one year.

Table 6: Frequency and percentage distribution of utilization of health services on the basis of treatment whether taken or not.

$N_2 = 127$

Responses of study subjects	Frequency (n)	Percentage (%)
Taken treatment	110	87
Not taken treatment	17	13

N_2 = Number of study subjects who were sick

Table 6 depicts frequency and percentage distribution of utilization of health services on the basis of treatment whether they have taken or not. Out of 127 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 7: Frequency and percentage distribution of utilization of health services according to the place preferred for the treatment.

$N_3 = 110$

Responses of study subjects	Frequency (n)	Percentage (%)
Government hospital	58	52.7
Private hospital	50	45.5
Government hospital and private hospital	02	1.8

N_3 = Number of study subjects who were sick and had taken treatment

Table 7 shows frequency and percentage distribution of utilization of health services according to the place preferred for the treatment. Out of 110 study subjects who took treatment, more than half 52.7% (58) of study subjects were taking treatment from Government hospitals followed by 45.5% (50) study subjects were taking treatment from Private hospitals and only 1.8% (2) study subjects were taking treatment from both Civil hospital and Private hospital.

Table 8: Frequency and percentage distribution of utilization of health services as per their referral

$N_3 = 110$

Responses of study subjects	Frequency (n)	Percentage (%)
Referred	06	5.5
Not referred	104	94.5

N_3 = Number of study subjects who were sick and had taken treatment

Table 8 depicts frequency and percentage distribution of utilization of health services according to their referral to higher health facilities. Out of 110 study subjects, majority 94.5% (104) of study subjects were not referred for treatment and very few 5.5% (6) study subjects were referred to other areas for the treatment.

Table 9: Frequency and percentage distribution of utilization of health services according to the place where they get referred.

$N_4 = 06$

Responses of study subjects	Frequency (n)	Percentage (%)
Government hospital	05	83.4
Private hospital	01	16.6

N_4 = Number of study subjects who were sick and referred for the treatment

Table 9 illustrates frequency and percentage distribution of utilization of health services according to the place where they get referred. Out of 6 study subjects who were referred for further treatment, majority 86.4% (5) of study subjects were referred to Government hospital for treatment whereas rest 16.6% (1) study subject was referred to Private hospital for treatment.

Table 10: Frequency and percentage distribution of utilization of health services according to the type of treatment (medical/surgical)

$N_3 = 110$

Type of treatment	Frequency (n)	Percentage (%)
Medical	99	90
Surgery	10	9.1
Both medical and surgical	01	0.9

N_3 = Number of study subjects who were sick and had taken treatment

Table 10 depicts frequency and percentage distribution of utilization of health services according to the type of treatment (medical/surgical). Out of 110 study subjects, maximum 90% (99) study subjects had taken medical treatment followed by 9.1% (10) study subjects had taken surgical treatment and remaining 0.9% (1) study subject had taken both medical and surgical treatment.

Table 11: Association between utilization of health services and selected socio-demographic variables on the basis of treatment whether the participants had taken or not.

$N_2 = 127$

Profile	Taken Treatment (%)	Had not Taken (%)	df	Chi square & p value
Age (in years)				
18–33	27 (21.2)	11 (8.6)	3	$\chi^2 = 12.47$ $p = 0.005^s$
34–49	33 (25.9)	04 (3.1)		
50–65	36 (28.3)	02 (1.5)		
66 and Above	14 (11)	00 (0)		

<i>Gender</i>				
Male	42 (33)	09 (7)	1	$\chi^2=1.334$
Female	68 (53.5)	08 (6.2)		$p = 0.247^{NS}$
<i>Religion</i>				
Hindu	10 (7.8)	(0)	3	$\chi^2=10.33$
Muslim	01 (0.7)	(0.7)		$p = 0.015^S$
Sikh	99 (77.9)	15 (11.8)		
Christian	00 (0)	01 (0.7)		
Any other	00 (0)	00 (0)		
<i>Qualification</i>				
Illiterate	37 (29.1)	03 (2.3)	5	$\chi^2=13.004$
Primary	(9.4)	(0)		$p = 0.023^S$
Middle	(10.2)	(0.7)		
Secondary	(14.9)	04 (3.1)		
Sen. Secondary	(15.7)	03 (2.3)		
Graduate	09 (7)	06 (4.7)		
<i>Occupation</i>				
Unemployed	70 (55.1)	03 (2.3)	5	$\chi^2=30.69$
Labor	00 (0)	(1.5)		$p = 0.0000^S$
Agriculture	24 (18.8)	(2.3)		
Private job	07 (5.5)	(3.1)		
Government job	01 (0.7)	00 (0)		
Student	08 (6.2)	05 (3.9)		
<i>Marital status</i>				
Married	85 (66.9)	09 (7)	2	$\chi^2=24.27$
Unmarried	09 (7)	08 (6.2)		$p = 0.0000^S$
Widow/Widower/ Separated/Divorced	16 (12.5)	00 (0)		
<i>Type of family</i>				
Joint	92 (72)	15 (11.8)	1	$\chi^2=0.234$
Nuclear	18 (14.1)	02 (1.5)		$p = 0.628^{NS}$
<i>Family monthly income (Rs.)</i>				
Less than 5,000	00 (0)	00 (0)	3	$\chi^2=7.159$
5,001-10,000	28 (22)	00 (0)		$p = 0.0669^{NS}$
10,001-15,000	52 (40.9)	09 (7)		
15,001-20,000	28 (22)	08 (6.2)		
More than 20,000	02 (1.5)	00 (0)		

NS = Non- significant at $p < 0.05$ level N_2 = Number of study subjects who were sick

S = Significant at level $p < 0.05$

Table 11 shows association between utilization of health services and selected sociodemographic variables on the basis of treatment whether the participants had taken or not. Results depict that age, religion, qualification, occupation and marital status of adults had statistically significant impact on utilization of health care services, but gender and type of family showed non-significant statistical relationship.

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)⁸ 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)⁹

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)¹⁰ that majority 41.2% of the families were having a monthly income between Rs. 10,001-25,000.

In the present study, maximum 52.7% study subjects were taking treatment from Government Hospitals. Similar findings were revealed by Syeda JR *et al.* (2017)¹¹ which reported that majority of the study subjects preferred the government health facilities (62%) than the private practitioners (17%) for seeking treatment. In the present study, 45.4% study subjects were taking treatment from Private Hospitals. Similar findings were given by Chand CR *et al.* (2015)⁹ which revealed that among 559 study participants, one-third of the study participants visited the private health facilities.

In the present study, it was found that there was significant association between utilization of health services and selected socio-demographic variables such as age and qualification. This was similar to the findings of study done by Rose AD *et al.* (2013)¹⁰ which revealed that there was significant association between health seeking behavior and demographic variables such as age, education and family income. In the present study, it was found that there was significant association between utilization of health services and selected socio-demographic variables such as marital status and age. This was similar to the findings of study done by Sanial S *et al.* (2012)¹² which revealed that there was significant association between age and marital status with the health services utilization.

Conclusion

Out of 200 study subjects, 63.5% (127) study subjects were sick and 36.5% (73) study subjects were not sick in the last one year. From 127 study subjects who were sick, 86.6% (110) study subjects had taken treatment and only 13.3% (17) study subjects had not taken treatment. There was significant association between utilization of health services and age, religion, qualification, occupation and marital status. Gender and type of family had no impact on utilization of health services in the study.

Conflict of interest: Nil

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A Study on the Knowledge and Attitude Regarding Internet Blue Whale Game Among Adolescent School Children in a Private School in a Rural Area of Kerala, South India

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Abstract

Background: "Blue Whale Challenge", is a social network phenomenon which has allegedly been claimed to be an online "suicide game" aiming adolescents and young adults. The story of the Blue Whale challenge began with Rina Palenkova, an adolescent from South-eastern Russia who posted a selfie on 22 November 2015, with a black scarf wrapped around her mouth and nose with her middle finger up at the camera looking as if it's covered with dried blood. The photo's caption read: "Nya bye" "which in Russian language means"good bye "The next day, she took her own life. Later in May 2016, an article in Russian newspaper reported many suicides among teenagers and linked these to a Russian-based VK social network. Thereafter nearly 130 claims of suicide have been made so far linked to the "Blue whale game" all over the world, including India. Present study was undertaken to assess the impact of this deadly game of "Blue Whale Game" among the adolescent students in Thrissur, Kerala.

Material and methods: Present study was a cross sectional study conducted among adolescent students of 06-12 grade of Vidya Vihar Central School, Kakkasery, Thrissur. A total of 189 students were enrolled in the study.

Results: Present study revealed that 74.5% of students used internet every day for 2-6 hours.

Further, 84.7% of them were willing to take the challenges while 94.2% of them were willing to take the risk. The study brings out a negative impact of social media and internet use on academic performance as well as outdoor activities among the study subjects.

Conclusion: The study brings out an urgent need to educate our children about the potential hazards of indiscriminate use of internet and malicious social networking sites.

Keywords: Blue whale Challenge; Social Media; Internet; Suicide.

Introduction

Blue Whale, also known as the "Blue Whale Challenge", is a social network phenomenon is claimed to exist in several countries since 2016. This internet based social site game consists of a series of tasks which are given to the players by game app administrator spread over several days, initially innocuous but finally challenging the player to commit suicide.¹⁻²

The origin of the name "Blue Whale" is not well documented. However, some researcher bring out that in November 2015, a Russian teenager

posted a selfie with the caption “nya bye” before committing suicide and her death was thereafter discussed in internet forums and groups, leading to scare, stories and folklore. Some researchers also report that it took its roots from a song by the Russian rock band Lumen. Its opening lines are “Why scream/when no one hears/what we’re talking about?” and it features a “huge blue whale” that “can’t break through the net. Another group of researchers believe “Blue whale challenge” to be associated with “beaching”, where whales get stranded on beaches and finally die.³

“Blue Whale” first attracted news coverage in May 2016 when an article in Russian newspaper “Novaya Gazeta” linked many suicides among children to members of group “F57” on the Russian-based VK social network, which created panic in Russia. However, this news was later rubbished as it had no causal link to these suicides. Thereafter, several claims of suicide were linked to the “Blue whale game” all over the world but none of them could be authenticated.⁴⁻⁵

According to published reports, this deadly game had spread its tentacles all over the world during 2017. India, reported its first allegedly “Blue whale challenge linked death on 26 July 2017, involving a 16-year-old boy from Kerala in Southern India who reportedly committed suicide, after completing the tasks of this deadly game. The Kerala Chief Minister thereafter wrote to the Prime Minister expressing his concern and requested him to ban the game. Similar incidents were also reported among adolescents from Mumbai and Solapur (Maharashtra), Indore (Madhya Pradesh) and Midnapore (West Bengal). Thereafter, the Supreme Court of India directed the Indian government to ban the game, following which the government responded by clarifying that “Blue Whale Challenge” wasn’t an application, hence it cannot be banned. However, the “Ministry of Electronics and Information Technology”, requested all the internet companies to remove all related links which directed the users to this game. Further, detailed investigations were carried out into this issue by Government of India in 2018, but found no direct evidence that any of these deaths were linked to “Blue Whale Challenge”.⁶⁻⁹

In the backdrop of above, present study was undertaken among adolescent students with the following objectives:

1. To find out the impact of this deadly game of “Blue Whale Challenge” among the adolescent students.
2. To explore the influence of social media and internet use on them.

3. To sensitize the students, teachers and the parents towards the harmful use of malicious and dangerous social networking sites.

Materials and Methods

Present study was carried out among adolescent students of 06-12 grade of Vidya Vihar Central School, Kakkasery, Thrissur. A total of 189 students were selected by stratified sampling method from various classes and asked questions related to the usage of various social networking sites and their impact on them. Besides; newspapers, online journals and various social sites were also browsed using various search engines for extracting relevant information. A self-administered validated questionnaire was used for collection of data.

After collection of data, health education sessions were organized for the students, teachers and their parents. They were explained the importance of the internet as a learning tool, and also how to browse various learning sites; as internet contains wealth of knowledge that can be accessed anytime. They were also explained to stay safe on line and avoid use of dangerous and malicious web sites. Needless to say that student is seeing search engines like Yahoo, Google etc. as additional teachers and the “internet” as a new school.

Results

Table 1 brings out socio-demographic characters of subject adolescents. The study brings out that majority of the adolescents (36.50%) belonged to 17-19 years age group; followed by 14-16 years (35.44%) while remaining (28.04%) adolescents belonged to < 13 years age group. Majority of them (57.15%) were male while female adolescents accounted for the remaining 42.85% study subjects. Further, nearly half (50.26%) of the students under study belonged to senior classes i.e. Xth to XIIth standards, while remaining (49.74%) students belonged to VIth to IXth standards. Further, most of the study subjects (57.67%) belonged to social class II and III.

Table 1: Demographic characters of adolescent (n = 189).

Demographic Variable	Frequency	Percentage
Age		
<13 years	53	28.04
14-16	67	35.44

Demographic Variable	Frequency	Percentage
17-19 years	69	36.50
<i>Gender</i>		
Male	108	57.15
Female	81	42.85
<i>Class/grade</i>		
VI-VII	45	23.80
VIII-IX	49	25.92
X-XII	95	50.26
<i>Social Class*</i>		
Social class I	27	14.28
Social class II	44	23.28
Social class III	65	34.39
Social class IV	41	21.69
Social class V	12	06.34

*Modified BG Prasad Classification.

Table 2 brings out awareness among adolescents about internet, social media and blue whale challenge game, number of hours spent on internet and willingness to take challenge and risk while playing game on the internet. The study brings out that that 98.40% of the adolescents had "fair to good" knowledge about internet and social media. The study also reveals that large proportion of the adolescents (35.6%) learnt about the game from their friends while 25.9% of them learnt it from the web itself. Further, 84.7% of them were willing to take challenge, while 94.2% of the adolescents were willing to take risk while playing the game. It was pleasantly surprisingly to find, that almost all of them (96.3%) knew that this game had been banned. On an average, 53.4% students spent 2-4 hours on the internet, while 21.1% of them spent 4-6 hours every day. Majority of the students (61.9%) also admitted that spending time on internet did affect their studies adversely; as well as their schedule of outdoor games.

Table 2: Distribution of study subjects according to awareness about internet, social media and blue whale challenge.

Variables	Frequency	Percentage
<i>Internet and Social Media Awareness</i>		
Good	89	47.08
Fair	97	51.32
Poor	3	1.58
Total	189	100
<i>Information regarding blue whale challenge</i>		
Friends	67	35.6
Others	73	38.6
Web	49	25.9
Total	189	100.0
<i>Willing to take Challenge</i>		

Variables	Frequency	Percentage
Not sure	5	2.3
No	24	12.7
Yes	160	84.7
Total	189	100.0
<i>Willingness to take risk</i>		
Not sure	1	.5
No	10	5.3
Yes	178	94.2
Total	189	100.0
<i>Average time spent on internet per day</i>		
< 02 hours	41	21.6
2-4 Hours	101	53.4
4-6 hours	40	21.1
>6 hours	07	03.7
<i>Effect of use of internet on studies and outdoor activities</i>		
None	06	3.1
Insignificant	66	34.9
Significant	117	61.9
<i>Knowledge that "Blue whale challenge" is banned</i>		
No	7	3.7
Yes	182	96.3
Total	189	100.0

Figure 1 brings out distribution of availability of "Blue whale challenge" game on the internet and social sites by the students. The study brings out that 48.1% of the students reported its non-availability, while 36.5% said that they had no problem in getting the game on line.

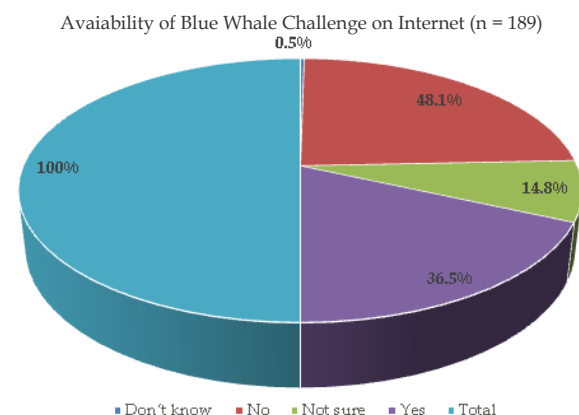


Fig. 1: Distribution of adolescents based on their knowledge of availability of blue whale challenge game on internet.

Table 3 brings out the distribution of students based on the knowledge of availability of game on specific web sites. Surprisingly, a large majority of the students (88.4%) were not aware of any specific web site where the game was available, while a very small number (3.7%) confirmed it be available on 9apps.com/Bluewhale@.com/Bluewhale@.link.

Table 3: Distribution of students based on their knowledge of the game websites (n = 189)

Websites	Frequency	Percentage
9apps.com	5	2.3
Bluewhale@.com	1	.5
Bluewhale@.link	1	.5
Don't know	167	88.4
Facebook	9	4.8
Software apps online	1	.5
Sorry	1	.5
Yes	4	2.1
Total	189	100.0

Discussion

Human life completes its journey through various stages and one of the most vital stages is adolescence. This is the period of transition from childhood to adulthood and brings lot of excitement as well as poses many challenges besides demanding adjustments on many fronts.¹⁰ This is also a period of physical, cognitive, affective and psychological development and brings about a paradigm shift in relationship from parents to friends and peers. Needless to say that at this stage of life, the adolescents start searching for their own identities and recognition besides looking for challenges, even if these are risky or dangerous.

However, every single human life is invaluable. As studies and media reports claim that “Blue Whale Challenge” is a dangerous game and has claimed or endangered many precious lives all over the world, majority of them adolescents, including nearly a dozen children in India. We all know that social networking is an easy platform to meet people, which may be a good pass time for some people while a great opportunity for many. Nonetheless, it is our duty and social responsibility to ensure safety of our children and educate them to use internet and social sites with caution and also how to stay away from malicious, dangerous and misleading social sites, lest it is too late.

Present study brings out that a large proportion of students (84.7%) were willing to take the challenge while 94.2% were also willing to take the risk as well. Majority of them (74.5%) were found to be using internet every day nearly from 2–6 hours. Further, a large number of the students also admitted that indulgence in internet affected their studies as well as outdoor activities.

Wenliang Su, *et al.*, in their study in Italy among 1105 adolescents brought out the crucial role played by attachment on adolescent's excessive internet

use and found unpleasant feelings of isolation, anger, detachment in the relationships with their parents and distress among them.¹¹

In a cross-sectional survey conducted in China in 2009, it was observed that using the internet for catharsis, was related to poor lifestyle habits in adolescents while using the Internet for purposes of gaining knowledge and finding information positively predicted healthy lifestyles among them.¹²

A study by Govidnappa Lakshmana, *et al.*, in Karnataka titled “Internet use among adolescents: Risk-taking behavior, parental supervision, and implications for safety” brought out a significant difference in emotional and personal level risk-taking domains between male and female children indicating boys were taking more risks than girls. The study also revealed significant difference in emotional problems and sex-related risk domains between parental filtering and non-filtering groups indicating higher risk-taking behaviors among internet user adolescents those who were in lack of parental supervision.¹³

Recommendations

1. Parents should spend more time with their children, educate them about various unfriendly social sites and their negative impact, encourage them to open up if they have any problem which is bothering them and encourage them talk to them without any hesitation or fear and advise them what is best for them instead of judging them, when they are confused or stressed.
2. Children, especially adolescents, should spend more time playing outdoor games, exercise and practice yoga and meditation instead of spending time on internet and becoming a social media addict, which may have adverse effects, both on health, as well as on academic performance.
3. The adolescents should first analyze merits and demerits of various social networking sites and follow the advice of their parents and teachers before using any such sites and should not blindly copy their peers and friends.
4. Teachers should keep a close watch on all those students showing abnormal behavior i.e. looking lost, lonely, depressed or show a drop in academic performance. Teachers need to spend more time with students and find out their problems and counsel them regularly.

Limitations

Present study had the limitation of small sample size and being done in a rural school. Further, the period of study was also very short (i.e. three weeks), thus lacked the advantages of a longitudinal study.

Conclusion

Internet and social media bring about a platform where a large number of people can interact and share their knowledge in a most convenient manner and virtually at an insignificant cost. However, this is not without risk, as there are a large number of social sites which are malicious and generally target adolescents and young adults. Needless to say that interacting with such sites can be dangerous and at times, disastrous. Therefore, there is an urgent need that teachers and parents educate their children about the advantages as well as potential hazards of indiscriminate use of internet and interaction with malicious and dangerous social networking sites.

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Assessment of Satisfaction Level Among Indoor Patients Admitted to a Tertiary Care Teaching Hospital: A Cross Sectional Study in South India

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Abstract

Introduction: Patient satisfaction is one of the important goals of any health care institution. While the health care industry is going through a rapid transformation to meet the needs of its clientele, it is not always easy to measure their satisfaction level, as it depends on many factors such as behaviour of doctor and other health staff, cost and quality of clinical and laboratory services, hospital infrastructure, physical comfort, emotional support and respect for the patient and their attenders etc. Present study was undertaken to study the level of patient satisfaction and its determinants, with a view to improve quality of patient care, in a tertiary care teaching hospital.

Methods: A cross sectional study was conducted over a period of three months i.e. from 01 January 2019 to 31 March 2019. Using purposive sampling method, a total of 90 patients were randomly selected by lottery method from different Indoor Clinical departments, except Paediatric ward. A semi-structured questionnaire was used comprising of 30 items to measure core dimension of patient satisfactions. Scoring was done using five-point Likert scale, with 1 and 5 indicating the lowest and highest levels of satisfaction, respectively.

Results: The overall satisfaction level of patients in present study was found to be 73.5%. Majority (82.2%) of the patients expressed satisfaction over the assistance given at registration desk while three fourth (88.8%) of the patients were happy with time devoted by the doctor to attend them in the wards.

Patients were also satisfied with the behaviour of the doctors and other staff. However, 71.1% of the patients were dissatisfied with the taste and Quality of food and its available canteen facilities.

Conclusion: Present study brings out that patients were satisfied with the quality of professional services in the hospital and behaviour of doctors, nursing and paramedical staff.

Keywords: Patient; Satisfaction; Hospital services; Behaviour.

Introduction

Patient satisfaction has been defined as the degree of congruency between a patient's expectations of ideal care and his/her perception of the real care he/she receives in a health care facility.¹ Patient satisfaction is one of the most important goals of any health system, but at the same time, it is difficult to measure as not only the clinical but also the non-clinical outcomes of health care influence patient satisfaction. However, various dimensions of patient satisfaction have been identified, which include responsiveness, communication, quality of services, behaviour of doctor and nurses including other auxiliary staff, cost of services, hospital infrastructure, physical comfort, housekeeping, emotional support and respect for the patient, comforting skills, amenities, food services etc.²

Therefore, patient satisfaction is important, both for evaluation as well as improvement of quality of services and can play a vital role in several other areas of the healthcare, including improving patient retention rates, securing a good local reputation, and preventing possible law suits.³

Patient satisfaction, while always an important factor when delivering health care, has recently gained notoriety as patients are demanding a bigger claim in their healthcare, and expects a certain level of quality services from their health care providers, as they have assumed the role of a consumer in the hospitals today.⁴ Studies reveal that despite the technical quality of care delivered, provider empathy is the main predictor of patient satisfaction. In modern times when expectation from healthcare institutions are increasing, a better understanding of the determinants of client satisfaction will help the decision makers to implement measures which are tailor made to patient's "needs".⁵

In the backdrop of above, present study was undertaken in a tertiary care teaching hospital in Mangaluru (Karnataka) to find out various factors which determine patient satisfaction, with a view to improve quality of care and patient satisfaction.

Materials and Methods

Present study was a cross sectional study was conducted in a tertiary care teaching hospital Mangaluru, Karnataka (India). The study was carried out over a period of three months i.e. from 01 January 2019 to 31 March 2019.

The method of sampling was purposive. A total of 90 patients were randomly selected by lottery method from different Indoor Clinical departments (except Paediatric ward), while critically ill patients and those unwilling to participate were excluded from the study. Each patient was explained the purpose of the study and their written informed consent was taken.

Method of data collection: A semi-structured questionnaire was designed after thorough review of literature and was pilot tested on 15 participants. The questionnaire comprised of 30 items to measure core dimension of patient satisfaction, which were:

- Admission procedure and Perception of waiting time,
- Availability of basic amenities,
- Satisfaction with cost of services,
- Relationship between patient and health providers,

- Availability of laboratory, and pharmacy facilities,
- Information and communication.

Scoring

The questionnaire comprised of five-point Likert scale, with 1 and 5 indicating the lowest and highest levels of satisfaction, respectively. Patients indicated their level of satisfaction by selecting responses ranging from poor = 1, fair = 2, good = 3, very good = 4 and excellent = 5. Those who chose 1 & 2 were considered dissatisfied while those who selected 3 & above were considered satisfied. In order to maintain complete confidentiality no names were recorded on the questionnaire. Collected data was entered in MS EXCEL and analysed using SPSS V 16.

Results

The study brings out that most of the respondents (68.8%), were males, majority of them (50%) belonged to the age group of 30–39 years and three-fourth of them (74.4%) were married. Further, majority of the subjects, 39 (43.3%) were metric and below, while 67.7% of them were skilled workers, small time business men or shop keepers. It was found that 42.2% of the study subjects belonged to Social class IV according to Modified B.G Prasad Socio-economic classification (Table 1 and Figure 1).

Table 2 shows that most of the patients (82.2%) were satisfied with the help provided at the registration desk as they came to the hospital. Nearly three-fourth (75.5) of the patients expressed satisfaction regarding waiting time in the Out Door Patient (OPD) department for consultation of the doctor and found it completely acceptable as it was less than 10 minutes and also felt very satisfied with time given in the wards for subsequent care after admission. However, a large number of patients (65.5%) were dissatisfied with poor assistance given for taking patient from OPD to the wards while 65.0% of them were unhappy with the undue long time taken for initiation of treatment after admission in the wards.

Table 3, brings out that majority of the patients enrolled in the study, were satisfied with the basic amenities provided in the hospital. Looking at the breakdown of main amenities and patient satisfaction levels, it was observed that 83.3% of the patients were satisfied with provision of drinking water, 73.3% were satisfied with cleanliness of toilets, 93.3% were satisfied with cleanliness of

wards, 76.6% were satisfied with waiting/seating arrangements. However, one area which needed improvement was the quality of the food and

canteen services; as 71.1% of the patients expressed dissatisfaction with these services.

Table 1: Socio-demographic Characteristics of the respondents (n = 90)

Variable	Frequency	Percentage
<i>Age group</i>		
< 20 years	11	12.2
20–29 years	20	22.2
30–39 years	45	50
40–49 years	14	15.5
<i>Gender</i>		
Male	62	68.8
Female	38	31.2
<i>Marital status</i>		
Married	67	74.4
Single	15	16.6
Separated/Divorced	0	0
Widowed	8	8.8
Class V	5	5.56
<i>Educational Status</i>		
Graduate and above	5	5.6
Diploma and equivalent	11	12.2
Higher Secondary	35	38.9
Metric below	39	43.3
Illiterate	—	—
<i>Socio-economic class</i>		
Class I	—	—
Class II	20	22.2
Class III	27	30.0
Class IV	38	42.2
Class V	5	5.56

Table 2: Patients Satisfaction with admission procedure and reception (n = 90)

S. No	Parameter	Satisfied		Dissatisfied	
		Frequency	Percentage	Frequency	Percentage
1.	Help at registration desk	74	82.2	16	17.7
2.	Time taken to attend by the doctor	68	75.5	22	24.4
3.	Assistance from OPD to the ward	59	65.5	31	34.4
4.	Time taken from admission to initiation of treatment	54	60.0	36	40
5.	Time devoted by the doctor in the ward	80	88.8	10	11.1

Table 3: Satisfaction level with Basic facilities in the Hospital (n = 90)

Basic Amenities	Satisfied No. (%)	Unsatisfied No. (%)
Drinking water	75 (83.3)	15 (16.6)
Availability of Toilets	90 (100)	0
Cleanliness of toilets	66 (73.3)	24 (26.6)
Cleanliness of wards	84 (93.3)	06 (6.6)
Taste, quality and availability of food facilities	26 (28.8)	64 (71.1)
Waiting area/Seating	69 (76.6)	21 (23.3)
Availability of information on display boards	81 (90)	09 (10)

Table 4: Overall Patient satisfaction with hospital services (n = 90)

Aspect of Care	Satisfied		Unsatisfied	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Admission procedure and perception of waiting time	64	71.1	26	28.8
Availability of basic amenities	74	82.2	16	17.7
Satisfaction with cost of services	81	90	9	10
Relationship between patient and healthcare providers	77	85.5	13	14.4
Availability of laboratory, and pharmacy facilities	84	93.3	06	6.6
Communication about the disease and cost of treatment	79	87.7	11	12.2

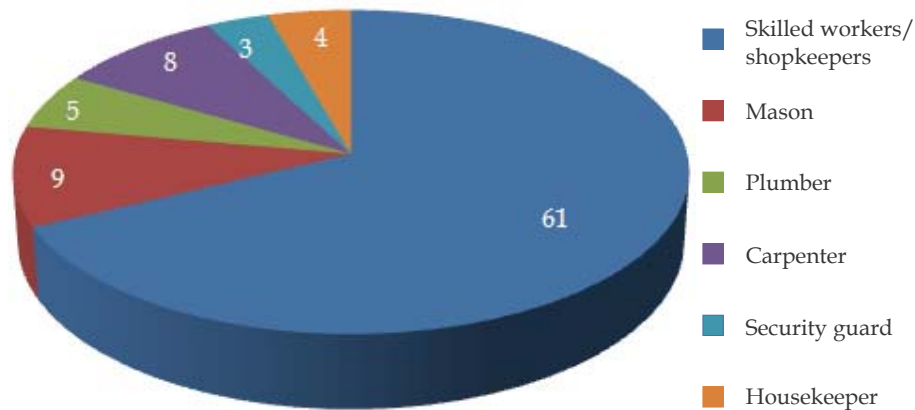
**Fig. 1:** Occupational profile of Study Subjects (n = 90)**Fig. 2:** Satisfaction with behaviour of the healthcare providers (n = 90)

Figure 2, depicts the satisfaction levels of respondents with the behaviour of the healthcare providers in the hospital. The study brings out that 78.8% of the patients were satisfied with the behaviour of the staff of laboratory 67.7%, with pharmacy, 81.1% with registration desk, 75.5% with housekeeping staff, 86.6% with nursing staff while the behaviour of doctors as appreciated by 91.1 of the patients.

Table 4, represents overall satisfaction levels among the respondents with various hospital services and its staff and, it was found to be ranging from 71.1% for “admission procedure and perception of waiting time” to 93.3% for “availability of laboratory, and pharmacy facilities”. Further, 87.7% of the respondents expressed satisfaction over the timely information that was provided to them regarding the disease status, cost of treatment and the prognosis of the disease.

Discussion

The present study attempted to assess the satisfaction of the patients with various aspects of health care in a tertiary care teaching hospital in Mangaluru, Karnataka. Assessing patient satisfaction is an important part of the healthcare system. It helps in identifying problems from patients view point and find out solutions to address them. The results of the present study indicate that most of the respondents interviewed were satisfied with the services they received.⁶ However, a small number of people expressed their dissatisfaction towards some services received which brings attention towards the fact that the hospital administration needs to do more work in improving them in order to achieve better overall patient satisfaction.⁷

Present study brings out that most of our study subjects belonged to the age group 30–39 years (50%). Majority of them were males (68.8%). Similar findings were also reported by Syed Shuja Qadri, et al., in their study conducted in Ambala where 66.4% of the study population comprised of males and Goel Sonu, et al., in their study in Chandigarh, where 78.3 % of the respondents were males.⁸⁻⁹

Literacy rate of majority (43.3%) of our study subjects was below high school while 67.7% of them were skilled workers/shop keepers. However, Syed Shuja Qadri, et al., in their study reported a relatively high percentage of illiterates (44%). Further, Nirmal Verma, et al., in their study at Government Medical College Hospital,

Rajnandgaon (C.G.), observed 19.0% illiteracy rate while 42.0% of the respondents were found to be unskilled labourers. In another study, Rao, M.V., et al., in their study in Narketpally, AP, reported a low percentage (16%) of illiterates while 24% of them were public sector employees.^{8,10,11}

The present study found that 88.8% of the respondents were satisfied with time devoted by the doctor in the ward while 82.2% were happy with the help at registration desk. However, 71.1% patients were not satisfied with the taste and quality of food and canteen facilities. Similar findings were reported by Sathish Raju N, et al., in their study at Mysuru, who observed that 26% of in patients found the quality of food as excellent, 52% felt it was good while 17% rated it as it was average. Four percent of them said it to be poor. Overall, 78% of patients were satisfied with the quality of food served in the hospital while 21% were dissatisfied. In another study, Nirmal Verma, et al., in Chhattisgarh, observed 71.0% of the patients were satisfied with the quality of food.^{10,12}

The overall satisfaction level of patients in present study with services received from the hospital was (73.5%) which is similar to the findings reported by JP Singh, et al., in Bareilly (71.6%) and Kumari, et al., in Lucknow, (81.6%). Further, Abida Sultana, et al., in our neighbouring country, reported that 82.53% of the admitted patients were satisfied with health facilities. In another study by Bishwalata Rajkumari and Polly Nula on “Patient’s satisfaction in a government health facility in North East India, observed 32.5% of the patients were highly satisfied with the overall care received while patients admitted to surgery and allied departments showed a significantly higher satisfaction level ($p < 0.001$) with care received than those admitted in other departments.¹³⁻¹⁶

Conclusion

The present study shows assessing satisfaction of patients is simple, easy and cost-effective way in order to evaluate hospital services. The study has helped in finding the fact that patients admitted were satisfied with behaviour of healthcare givers but reflects small but significant dissatisfaction with the availability of basic amenities more regarding with respect to the taste of food and availability of other food facilities in the hospital, Patients also expressed concern about lack of waiting area facilities for the attender. Appropriate and on-going data collection and analysis could guide more efficient utilization of outpatient services to

achieve better outcomes. However, assessment of patient satisfaction levels are required to improve hospital services.

Limitations: Patient satisfaction is a subjective healthcare measure wherein two patients receiving the same services care, may have different satisfaction levels because they perhaps had different expectations from the health care providers. The present study had the limitation of most of the respondents belonging to urban areas and middle or low socioeconomic class. Further, present study had a small sample size and conducted over a short span of time, hence its findings may not be generalised.

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Conflict of Interest: None declared.

Ethical Approval: The study was approved by the Institutional Ethics Committee.

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A Study to Assess the Effectiveness of Structured Teaching Programme on Traffic Rules Among 8th and 9th Class Students, Little Pearls High School, Neredmet, Hyderabad, Andhra Pradesh, India

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Abstract

A pre-experimental one group pre-test post-test research design was used for the study. 30 sample taken from Little Pearls High school, Hyderabad were selected by simple random sampling technique. Socio-demographic data were assessed using structured questionnaire. Knowledge assessed by structured questionnaire as pre-test followed by structured teaching program implemented and then again knowledge assessed by structured questionnaire as post-test. Data were analysed and interpreted by descriptive and inferential statistics.

Results and Conclusion: The analysis revealed that overall pre-test scores on knowledge related to traffic rules among children were mean 42.63 (SD = 97.47), whereas in post-test highest mean was observed 85.26 (SD = 229.5) with a paired "t" value 14.96 which is highly significant. There is a significant association between demographic variables and knowledge score.

Keywords: Knowledge; Structured teaching program; Traffic rules; Students.

Introduction

Road traffic accidents continue to be a major health and social problem in developing countries. Globally road traffic accidents the 7th leading cause

of death in all age groups, according to WHO estimation road traffic accidents is the 9th leading cause of death as per basic of Daily (Disability Adjusted Life Years lost).¹ More than 40% reported accidents pedestrians and children less than 16 years of age contribute 20% in developing countries due to lack of road safety knowledge leading to unsafe behaviour of children.² So there is a need for road safety education in schools which helps to reduce mortality and morbidity among school going children.³

Statement of Problem

A Study to Assess the Effectiveness of Structured Teaching Programme on Traffic Rules Among 8th and 9th Class Students, Little Pearls High School, Neredmet, Hyderabad, Andhra Pradesh, India.

Objectives

1. To assess the level of knowledge regarding traffic rules among 8th and 9th class students by pre -test.
2. To develop and implement the structured teaching programme on traffic rules.
3. To evaluate the effectiveness of structured teaching programme on traffic rules

by comparing pre-test and post-test knowledge score.

Hypothesis

H₁: The mean post-test knowledge score of the school children regarding traffic rules will be significantly higher than the mean pretest knowledge score.

H₂: There will be significant association between the pre-test knowledge score and the selected demographic variables.

Setting and Design

- Little Pearls High School, Neredmet, Hyderabad.
- Pre-experimental one group pretest and posttest design.

Materials and Methods

- The research approach used for this study was evaluative approach and Pre-experimental one group pre-test and post-test design.

The independent variable was structured teaching programme and the dependent variable was knowledge of school children regarding traffic rules. Simple random sampling technique was used. Sample size 30 students. The data collection was done by structured questionnaire.

Statistical Analysis

The data was analysed by using descriptive and inferential statistics.

Results

The findings in the table 1 and table 2 Chi-square values shows that there is a significant relationship between knowledge and demographic variables like gender, educational background and occupational status of father. The findings in Table 3 the pre-test revealed that only 76.6% had below average, 23.3% had average and none of the students had above average knowledge on traffic rules. The post-test analysis revealed that 6.66% of the students gained high knowledge with highly significant

Table 1: Frequency and percentage distribution of school children.

(n = 30)

Variables	Category	Frequency	Percentage
Age in years	12-14	15	50
	15-17	15	50
Gender	Male	20	66.6
	Female	10	33.3
Educational Background	8 th class	10	33.3
	9 th class	20	66.6
Educational status of the Father	Primary education	4	13.3%
	Secondary education	9	30%
	College education	10	33.3%
	Illiterate	7	23.3%
Educational status of the mother	Primary education	10	33.3%
	Secondary education	6	20%
	College education	4	13.3%
	Illiterate	10	33.3%
Occupational status of the Father	Employee	5	16.6%
	Daily wage worker	17	56.6%
	Self-employment	8	26.6%
	unemployment	—	—
Occupational status of the mother	Employee	3	10%
	Daily wage worker	9	30%
	Self-employment	4	13.3%
	unemployment	14	46.6%
Mode of transportation to School	walk	8	26.6%
	Two wheeler	18	60%
	Bus	2	6.6%
	Four wheeler	2	6.6%
Previous history of accidents	Yes	12	40
	No	18	60

Table 2: Chi-square values showing the relationship of knowledge scores of children with selected demographic variables
N = 30

Variables	X ² value of knowledge	X ² value at 5% level (df)
Age	6.81(NS)	5.99(3df)
Gender	1.64*	3.84(1df)
Educational background	3.35*	3.84(1df)
Educational status of father	15.2(NS)	7.81(3df)
Educational status of mother	12.68(NS)	7.81(3df)
Occupational status of father	4.52*	7.81(3df)
Occupational status of mother	8.47(NS)	7.81(3df)
Mode of transportation	11.31(NS)	7.81(3df)
Previous history of accidents	15.04(NS)	3.84(1df)

Table 3: Frequency and percentage distribution of pretest and posttest level of knowledge among school children on traffic rules

Knowledge variable	Below average		Average		Above average	
	Frequency	%	Frequency	%	Frequency	%
Pre-test	23	76.6	7	23.3	—	—
Post-test	—	—	2	6.66	28	93.3

Table 4: Comparison of mean knowledge score on effectiveness of structured teaching programme among school children on traffic rules.

Knowledge Variable	Maximum Score	Mean	Mean %	SD	Improvement of mean
Pre-test	40	18.1	36.2%	97.74	49.06
Post-test	40	42.63	85.6%	229.5	

** *Significant at 5% level at 29 df

Table value $t = 20.5$

paired 't' value 14.96% followed by above average knowledge 93.3% and none of the students scored low knowledge levels which indicates effectiveness of STP. In table 4 the results of the study showed that overall mean knowledge score of pre-test 42.63 (SD = 97.47) whereas post-test highest mean was observed 85.26 (SD = 229.58), with a paired t value 14.96 which is highly significant and related to research hypothesis.

Discussion

Traffic rules plays a vital role in our daily life especially among school going children to prevent road traffic accidents. Hence the study has undertaken an innovative strategy to impart education on traffic rules among 8th and 9th class students in order to prevent accidents, to preserve health of children which is valuable asset of an every nation. A Pre-experimental study was conducted the pre-test was administered to assess the existing knowledge on traffic rules thereafter structured teaching programme on Traffic rules imparted to 8th and 9th class students. A post-test was administered to assess the effectiveness of

structured teaching programme. The effectiveness of STP to improve knowledge had been supported in prior studies conducted by Zhonghua Liu Xing Xue, 2009 August conducted experimental study to evaluate the intervention effects for road traffic accidents prevention among middle school students Hefei city, China.⁴ The findings improved knowledge levels in intervention group and control group. Education should be carried out in the early stage of childhood with newer and more effective intervention approaches.

Conclusion

The findings revealed that majority of the students were not having adequate knowledge related to traffic rules inspite of inclusion of the topic in the curriculum. The study have implications in the areas of nursing practice (school health nurse), nursing education and administration, community health practice and research. The study proves that education to school children is effective in preventive aspects of community health in order to prevent road traffic accidents for our tomorrow's citizens.

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A Descriptive Study to Assess the Prevalence of Alcoholism Among People Residing in Village Lakhnour, Mohali, Punjab

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Abstract:

Introduction: Alcohol was a part of meal as well as staple in many cultural diets. In addition it was used in celebration of birth and other ceremonies. The use of drug, including alcohol began as a part of tribal ritual. As people became aware of tension reducing and relaxation properties of these substances their use for this purpose increased. In early times alcohol was used to cleanse wounds, as an anesthetic and as an ingredient in salves and tonics. Alcohol was considered to be a divine drink, but gradually its use become more and more common in public leading to opening of the liquor shops in almost every part of universe. People started an indiscriminate use of alcohol leading to various health problems in them and their families. About 2 billion people worldwide consume alcoholic drinks. Over 76 million people are currently affected by alcohol used disorder such as alcohol dependence and abuse. According to 2015 National Survey on Drug Use and Health (NSDUH), 86.4% people ages 18 or older reported that they drank alcohol at some point in their lifetime.

Aims: This study aims to,

1. To assess the prevalence of alcoholism among people residing in village Lakhnour, Mohali.
2. To find the association between the prevalence scores of alcoholic subjects with their demographic variables.

Materials and methods: A descriptive study was conducted to assess the prevalence of alcoholism among men residing in village Lakhnour, Mohali,

Punjab. After getting permission from the area in-charge, a survey was done using a AUDIT questionnaire including socio-demographic variables. Lakhnour is a village of 168 houses with a population of 1080. Out of 168 houses, 76 houses have alcoholics. Random sampling technique was used and the data was collected from 76 subjects in the age group of 30-80 yrs in the month of October 2018. The total score is 40 and it is divided into low risk (0-7), moderate risk (8-15), high risk (16-19) and very high risk (>20) alcoholics. A written consent was obtained from the subjects before conducting the study. The collected data was analysed by using descriptive statistics.

Results: The results shows that most of the alcoholics are males (100%) in the age group from 30-40 yrs (35%), are farmers (38.1%) and have family income of Rs.10,000-Rs.20,000 (77.6%). Majority of the men 34 (44.7%) are high risk alcoholics, 32 (42.1%) are very high risk alcoholics and 10 (13.1%) are moderate risk alcoholics. The study also shows that there is no significant association between the prevalence scores of alcoholic subjects and their demographic variables at the level of $p > 0.05$ significance.

Conclusion: Alcohol damages the liver, heart, pancreas, lungs and kidneys. People who consume it are more prone to infections and have poor immunity. They tend to suffer from hypertension, obesity, diabetes, kidney failure, prostate and urology cancers. Hence alcoholism is a serious threat to the health of the country and proper action is needed at the grass-root level.

Keywords: Alcohol; Prevalence; Consumption, Risk factor.

Introduction

India's annual alcohol intake increased by 38 percent between 2010 and 2017, which has found the total volume of alcohol consumed globally per year has risen by 70 percent since 1990. The study of 189 countries alcohol intake between 1990-2017 and estimated intake up to 2030 suggests that the world is not on track to achieve targets against harmful alcohol use. Between 2010-2017, alcohol consumption in India increased by 38 percent from 4.3 to 5.9 litres per adult per year. Over the same timescale, consumption increased slightly in the US (9.3-9.8 litres) and in China (7.1-7.4 litres). As a result of increased alcohol consumption and population growth, the total volume of alcohol consumed globally per year has increased by 70 percent from 20,999 million litres in 1990 to 35,676 million litres in 2017. The estimates suggest that by 2030 half of all adults will drink alcohol, and almost a quarter (23 percent) will binge drink at least once a month. Alcohol is a major risk factor for disease, and is causally linked to over 200 diseases, in particular non-communicable diseases and injuries.²

Globally alcohol consumption is set to increase from 5.9 litres pure alcohol a yr per adult in 1990 to 7.6 litres in 2030. However, intake varied regionally, between 2010-2017, consumption increased by 34 percent in south east asia (from 3.5 litres to 4.7 litres) with increase in India, Vietnam and Myanmar.¹

According to the National Drug Survey 2019 released by the Union Ministry of Health, Households in India, on an average, consumed 0.18 L of all alcoholic beverages every month (0.22L in rural areas, 0.10 L in urban areas). The absolute quantity of alcohol consumed was higher among the higher income groups in both rural and urban areas. More than half of Punjabi men drink alcohol and the state also houses the highest proportion of children consuming psychoactive substance. Experts say there is considerable heterogeneity regarding prevalence of alcohol use in the country and the states with high prevalence of alcohol use are Chattisgarh (35.6%), Tripura (34.7%) and Punjab (28.5%).²

Finer details of the study reveals that Indians are heavy drinkers. That's evident from the choice of beverage-high-concentration products are preferred over low concentration ones-as well as from the amount of alcohol consumed on a single occasion.⁵

Statement of the problem

A descriptive study to assess the prevalence of

alcoholism among people residing in Village Lakhnour, Mohali, Punjab.

Objectives of the study

1. To assess the prevalence of alcoholism among people residing in village Lakhnour, Mohali.
2. To find the association between the prevalence scores of alcoholic subjects with their demographic variables.

Hypothesis

H₀: There is no significant association between the prevalence scores of alcoholics with their selected demographic variables.

Materials and Methods

Research approach and design

Quantitative research approach and descriptive design was used in this study.

Research setting

The study was conducted in the Village Lakhnour which is 5 km away from the college. It is a village of 168 houses with a population of 1080. Out of 168 houses, 76 houses have alcoholics and majority of them are men.

Study Population

People residing in the Village Lakhour of age group between 30-80 years.

Sampling size and sampling technique

76 alcoholics were selected by simple random sampling technique.

Research tool

The research tool consists of the following parts:

Part I: Socio-demographic variables consists of age, sex, education, occupation and income.

Part II: Alcohol Use Disorders Identification Test was used to collect the data.

- The score between 0-7 indicates low risk alcoholics.
- The score between 8-15 indicates moderate risk alcoholics.
- The score between 16-19 indicates high risk alcoholics.

- The score above 20 indicates very high risk alcoholics.

Ethical considerations

Permissions were taken from the Village Panchayat Leader and the concerned Medical Officers to conduct the study. A written consent was taken from the study subjects. Confidentiality and privacy of the study subjects were taken care off.

Procedure for data collection

Simple random sampling technique was used to select the subjects. After getting consent, they were asked to fill the AUDIT questionnaire. The data was collected for a week in the month of October 2018.

Data analysis

The analysis was done using descriptive statistics like mean and percentage and inferential statistics

such as chi-square test was used to find out the association between the variables. p value <0.05 was considered significant.

Results

Table 1 shows that majority (27) 35.5% of men are in the age group 30–40 yrs, (76) 100% of them are men, (22) 28.9% are having secondary school education, (29) 38.1% are farmers and (59) 77.6% having monthly income of Rs.10, 000-Rs.20, 000.

Figure 1 shows that majority 34 of the men 34 (44.7%) are high risk alcoholics, 32 (42.1%) are very high risk alcoholics and 10 (13.1%) are moderate risk alcoholics.

Table 2 shows that there is no significant association between the prevalence scores of alcoholic subjects and their demographic variables at the level of $p > 0.05$ significance.

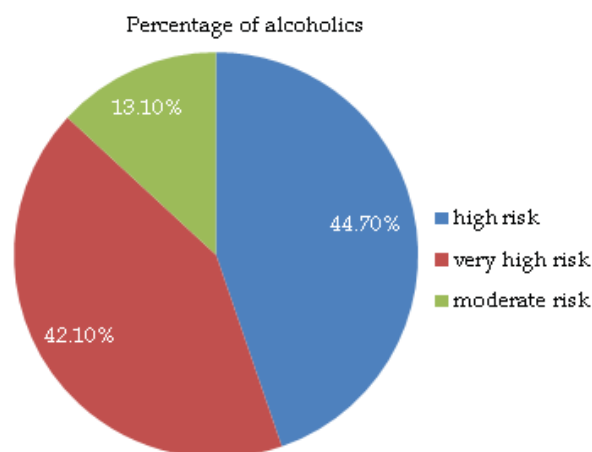
Table 1: Frequency and percentage distribution of demographic variables of the subjects

N = 76

Demographic variables	Frequency	Percentage (%)
<i>Age</i>		
30–40 yrs	27	35.5
41–50 yrs	16	21.0
51–60 yrs	15	19.7
61–70 yrs	14	18.4
71–80 yrs	4	5.26
<i>Sex</i>		
Male	76	100
Female	0	0
<i>Education</i>		
Illiterate	03	03.9
Primary	19	25.0
Secondary	22	28.9
Higher sec.	20	26.3
UG	12	15.7
PG	0	0
<i>Occupation</i>		
Labour	07	09.2
Farmer	29	38.1
Driver	07	09.2
Private Job	26	34.2
Student	01	01.3
Govt. Job	04	05.2
Nothing	02	02.6
<i>Income</i>		
Rs.10,000-Rs.20,000	59	77.6
Rs.21,000-Rs.30,000	10	13.1
Rs.31,000-Rs.40,000	04	05.2
Rs.41,000-Rs.50,000	03	03.9

Table 2: Association of demographic variables of subjects with their risk of alcoholism N = 76

Demographic variables	Low risk		High risk		Very high risk		Chi-square 0.05 significance
	f	%	f	%	f	%	
Age							
30-40 yrs	05	3.10	12	7.45	10	6.21	6.74(NS) <i>p</i> = 15.5 df = 8
41-50 yrs	03	1.86	05	3.10	08	4.96	
51-60 yrs	01	0.62	07	4.34	07	4.34	
61-70 yrs	01	0.62	09	5.59	04	2.48	
71-80 yrs	0	0	01	0.62	03	1.86	
Sex							
Male	10	6.21	34	21.11	32	19.8	0 (NS) <i>p</i> = 5.99 df = 2
Female	0	0	0	0	0	0	
Education							
Illiterate	0	0	0	0	03	1.86	9.44 (NS) <i>p</i> = 18.3 df = 10
Primary	02	1.24	11	6.83	06	3.72	
Secondary	03	1.86	07	4.34	12	7.45	
Higher sec.	02	1.24	11	6.83	07	4.34	
UG	03	1.86	04	2.48	05	3.10	
PG	0	0	0	0	0	0	
Occupation							
Labour	02	1.24	03	1.86	02	1.24	18.8 (NS) <i>p</i> = 21 df = 12
Farmer	03	1.86	13	8.07	13	8.07	
Driver	0	0	02	1.24	05	3.10	
Private.Job	05	3.10	08	4.96	13	8.07	
Student	0	0	01	0.62	0	0	
Govt.Job	0	0	01	0.62	03	1.86	
Nothing	0	0	06	3.72	01	0.62	
Income							
Rs.10,000-Rs.20,000	08	4.96	23	14.28	28	17.39	5.68 (NS) <i>p</i> = 12.5 df = 6
Rs.21,000-Rs.30,000	02	1.24	05	3.10	03	01.86	
Rs.31,000-Rs.40,000	0	0	01	0.62	01	0.62	
Rs.41,000-Rs.50,000	0	0	01	0.62	01	0.62	

**Fig. 1:** Frequency and percentage distribution of the variables according to the level of risk of alcoholism. N = 76

Discussion

The study shows that most of the alcoholics are males (100%) in the age group from 30-40 yrs (35%), are farmers (38.1%) and have family income of Rs.10,000-Rs.20,000 (77.6%). This finding is supported by an epidemiological survey of drug abuse was conducted in 24 rural villages of four Community Development Blocks (CDB) in

three districts of Punjab State bordering Pakistan covering 1276 households. The result shows that in males, the commonest drug used was alcohol (58.3%) and the majority of the female respondents were non-users.⁶

The age group affected by alcoholism in this study is supported by a survey conducted in Bangalore. The result shows that proportion of users was greater in town (15.7%) and among

26-45 years (67.4%). While, overall 17% of the users were heavy-users, frequent-heavy-drinking was more in slum and rural areas.⁹

Another study also supported this that out of a total of 1031 respondents, 23.7 percent were current users, 16.0 percent admitted of alcohol use in the past but were not current users, and 60.3 percent had never had alcoholic beverages. 19.0 percent of Chandigarh urban sample, 31.4 percent of Chandigarh rural sample and 45.9 percent of Jullundur rural sample were current users.⁷

Majority of the men 34 (44.7%) are high risk alcoholics, 32 (42.1%) are very high risk alcoholics and 10 (13.1%) are moderate risk alcoholics. This finding is supported by a study result shows that nearly one in four men (23.8%) had consumed alcohol in the past 12 months, while few (0.6%) women were consumers. Among drinkers, 33.2% (95% CI 28.6% to 38.1%) had AUDIT scores consistent with hazardous drinking, 3.3% (95% CI 2.1% to 5.1%) with harmful drinking and 5.5% (95% CI 3.8% to 8.0%) with dependent drinking.³

The present study also shows that there is no significant association between the prevalence scores of alcoholic subjects and their demographic variables at the level of $p > 0.05$ significance. This finding is supported by a survey conducted in 2018 shows that more than one-third of the sample respondents (38.6%, 95% CI = 29.2-48.8%) reported to be current drinkers and approximately one-fifth (21.7%, 95% CI = 4.2-31.7%) were heavy drinkers and 7.4% (95% CI = 4.6-11.6%) were heavy episodic drinkers. In multivariate analyses, age greater than 50 years (OR = 0.70, 95% CI = 0.56-0.86), being female (OR = 0.08, 95% CI = 0.06-0.09), schooling greater than 12 years (OR = 0.61, 95% CI = 0.50-0.75), owning land (OR = 0.74, 95% CI = 0.65-0.86), and living in pucca house (OR = 0.85, 95% CI = 0.74-0.98) were negatively associated with current drinking status. Higher income (OR = 1.30, 95% CI = 1.08-0.57) and living in urban areas (OR = 1.54, 95% CI = 1.33-1.78) were positively associated with current drinking status.¹⁰

Conclusion

According to a study conducted to assess the prevalence and pattern of alcohol use in a middle-aged and elderly population in Mumbai, India among 50, 220 men aged ≥ 45 years from the lower and lower-middle section of the general population shows that 18.8% were currently consuming

alcoholic beverages. The study concluded that abstinence, and also heavy and frequent use of alcohol, are common in this population and the latter is likely to have significant public health implications.⁸

The present study was conducted to assess the prevalence rate and alcoholic patterns, many more studies can be done on prevention and management of alcoholism. Alcohol damages the liver, heart, pancreas, lungs and kidneys. People who consume it are more prone to infections and have poor immunity. They tend to suffer from hypertension, obesity, diabetes, kidney failure, prostate and urology cancers.⁴ Hence alcoholism is a serious threat to the health of the country and proper action is needed at the grass-root level.

Conflict of interest: Nil

Source of funding: Self

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