

Health Help lines Literacy among Rural & Urban Clients in Muzaffarnagar (India): An impact evaluation study

Sanjeev Davey¹, Anuradha Davey^{2,*}, Santosh Kumar Raghav³, Tauseef Alvi⁴, Nirankar Singh⁵, Jai Vir Singh⁶

¹Associate Professor, ³Lecturer-cum-Statistician, ⁴PG Student, ⁵Professor, ⁶Professor & HOD, Muzaffarnagar Medical College & Hospital Muzaffarnagar, Uttar Pradesh, ²Associate Professor, Dept. of Community Medicine, Subharti Medical College, Meerut, Uttar Pradesh

*Corresponding Author:

Email: dranuradha.davey786@gmail.com

Abstract

Introduction: The data regarding knowledge and experiences of patients using health helplines available in India is lacking in literature, which makes it inevitable to research this area, as attempted by authors in this article.

Materials and Methods: This cross-sectional study was carried out in the field practice areas of RHTC & UHTC respectively; attached to a medical college in district Muzaffarnagar from July 1st 2016 to March 31st 2017. All age group of Clients in selected area were studied on 12 important toll free health helplines from a simple random sample of 450 Clients (225 each from RHTC & UHTC area). The data was analyzed by appropriate statistical test such as Chi-square test.

Results: The % of health helplines literacy for >than 10 helplines known was 0.9% (RHTC area) and 0.4% (UHTC area) and <5 health helplines known were 83.1% (RHTC area) and 85.8% (UHTC area). The most useful health helpline as perceived by clients were HIV/AIDS in both RHTC area (77.3%) and UHTC area(77.1%). However there were no statistically significant differences ($p>0.05$) on 3 areas: (a) Utility of 5 Major National health programmes related helplines; (b) The knowledge of helplines among different type of clients & c) Awareness for helplines according to literacy levels.

Conclusion: There is an urgent need for focus on many National Health Programme related health help lines in terms of their advertisements at multiple levels and channels, if a sufficient dent needs to be made for improving health care system of India.

Keywords: Health, Helpline, Literacy, RHTC, UHTC, Muzaffarnagar, Qualitative study

Introduction

A typical Helpline consists of a specific phone number which a person is able to call for obtaining a range of services. When such helpline is used to gain access to a range of health care services it constitutes a "Health Helpline". The common modes for health helplines are telephonic / mobile phone consultations, counseling, service complaints, and information on facilities, drugs, equipment, and/or available mobile health clinics for a person who has called for a help.⁽¹⁾

Many examples across the globe reveal the success story of health help lines in countries such as US & UK.⁽²⁻⁴⁾ Many follow up studies of callers across the world towards health helpline services against tobacco also suggest that- they are perceived as valuable by callers and often associated with pleasing quit rates.⁽⁵⁻¹⁵⁾ Study on utility of Mental helpline services in UK, also suggest that Stakeholders feel more benefit from greater awareness amongst statutory and primary care agencies and these helplines contribute to maintaining the mental health of service users and can be particularly helpful in dealing with self-harm.⁽¹⁶⁾

Although in a developing country such as India; the importance of an effective helpline is well recognized, but what is required is a progressive work and focus on several weaker aspects in its implementation.^(2,17) The aim often with which helplines are introduced in India are; for helping persons in need of either counseling or emergency care such as Suicide victims, Rape victims, Diabetes, Heart

Diseases (cardiac arrests), HIV/AIDS etc. with the added advantage that call is completely under the control of the caller and can be discontinued at his will- but the data reveals that main users of the these kind helpline are urban ,young, educated males, that too often for HIV/AIDS.⁽¹⁸⁾ Moreover it has been seen that Health help lines can work in Indian set ups; provided some good strategies are also chalked out in India as seen in Tobacco control by National Tobacco Control Helpline- a national level 24x7 toll free helpline, which was done for reporting violations of provisions under comprehensive tobacco control legislation [Kaur J & Jain DC (2015)].⁽¹⁹⁾ It has also been found that the telephonic help lines are a effective way of getting persons into contact with mental health services due to their features such as cost-effectiveness, confidentiality and without any stigma in India [Chavan BS et al (2012)].⁽²⁰⁾

Although many kinds of Helplines are available in literature who have direct or indirect influence on health.⁽¹⁻²⁰⁾ But the actual impact of all Health Specific help lines has not been studied till this date. Moreover the data on usage of Government and private health help lines by patients is also lacking in literature, that too in area of Muzaffarnagar, Uttar Pradesh, where literacy level are also still not satisfactory.

Hence a Qualitative study of this kind can provide a new insights into their patterns of usage and can enlighten on either the need for the other help lines in India or better quality helplines from both government

and private sector. So there is also a great requirement of need assessment study of clients regarding utility of available health help lines in India. So Indian health system can be helped a lot by this kind of study, for improving health help lines in India. This was the main reason for choosing this study area by authors.

Materials and Method

Research question: What is the literacy status of toll free health helplines and their perceptions regarding them; among Clients in areas of health training centres in Muzaffarnagar by way a Qualitative Cross Sectional Study?

Ethical approval: First approval of Ethical Committee of the Institution was sought by submitting the proposal to IEC Committee and their consequent approval from them. This was followed by Clients consent for their participation in this study – after explaining the purpose of this study.

Duration of study: 1st July 2016 to 31st March 2017 (9 months)

Place of Study: The study was carried out at RHTC & UHTC attached to a medical college in district Muzaffarnagar. The RHTC catered to 43, 261 population and UHTC 20000 Population. RHTC covered 6 villages- where representation of all 6 villages patients were confirmed by their addresses noted during their OPD Visits. Same was also followed for UHTC which covered 5 urban Mohallas. In RHTC & UHTC Area, various health and family welfare training programmes were organized, in terms of OPD activity, IPD Services, Specialist Services, Health days celebration activities, health camps as well as separate visits by Medical Social Workers and Health Educators in which various health related information's were passed to all age group of Clients whether-Adolescent, Adult & Elderly. The Helpline related information were also passed sporadically to Clients from time to time by field staff of RHTC & UHTC respectively- since the inception of health training centres-RHTC & UHTC. So it was presumed that the Clients had some knowledge regarding health helplines before the study.

Study Population: The study was carried out on all age group of Clients whether-Adolescent, Adult & Elderly- whosoever came in sampling irrespective of any bias in study (based on Simple random selection criteria).

Sampling technique: The study was carried out on 12 Major health helplines on clients residing in RHTC & UHTC area respectively from a simple random sample of 450 Clients for 9 months duration by adopting a Qualitative Cross Sectional Study approach (225 from RHTC & 225 from UHTC- this also corresponds to the sample size calculation criteria by WHO that at least 50% Clients may be having knowledge on this area by assuming $P=50\%$ $N=4PQ/L^2=384$, at 10% relative level of error) out of 5,000 patients seen on half-yearly basis from both RHTC & UHTC.

First the knowledge regarding various health helplines were known from 225 random sample of clients each in RHTC & UHTC area- who were divided in such a way that -Clients in each category were randomly sampled from Adolescents, Adults and Elderly Category from both RHTC & UHTC area in 9 months duration. Then all these Clients in each category ,were assessed for their perceived benefits and utility of these helplines for them after knowing their knowledge regarding individual health helplines. All these data were taken by 3 kinds of Investigators- Field staff, PG students and authors for analyzing the findings. The results were then compiled and appropriate statistical test were applied to find the significance of these findings.

Inclusion criteria: The following types of Helplines were used in study: General Health helplines including both medical conditions as well as for programmes for specific diseases and their conditions were taken in this study. Following 12 important health Helpline numbers were asked from patients- 104-Health Information for Rural India, 108-Medical helpline of UP State, 1056-Health Helpline of NRHM,1057-Swine Flu helpline,1066-Antipoison helpline,1097-HIV/AIDS Helpline,1098-Child helpline,1800-180-1104-Government of India National Health Programme Guidelines, 040 2779 0278-Drug De-addiction and alcoholism helpline,1800116555-Jansankhya Shirtaa Kosh-Reproductive Health, Family Planning and Infant Health, 9910516562- Cancer Helpline, 1860 266 2345-Mental health Help line.

Exclusion criteria: All other kinds of help lines which were not related to the health even such as General Emergency helplines such as Police, Fire, Ambulance, Women, Violence Suicide & Senior Citizen and other private helplines etc. however were excluded due to the objective taken in study. Moreover Children were also excluded from this study due to the questionable quality of their responses.

Data analysis: As per the objectives of the study, the collected data was analysed with using appropriate Statistical package- Epi-info & Atlasti software. The Qualitative data was analyzed by Chi-Square test.

Results

- a. **Socio-demographic Profile of Clients:** The majority of Clients; in both RHTC area(58.2%) and UHTC area (49.5%) were in Adult age groups (20-40 Years), majority being female (68.4% -RHTC area, 55.1%- UHTC area, with more Hindus in RHTC area (53.8%) as compared to UHTC area (47.6%), were Illiterate (56%-RHTC and 60.9%-UHTC), with more SC/ST in RHTC area (52.4%) as compared to General Category in UHTC area (42.2%).
- b. **Health Help lines Awareness:**
 1. **No. of Health Help lines Known:** In both area only < 5 Health helplines were known, though

more in UHTC area (85.8%) as compared to (RHTC-83.1%) area[Fig. 1].

- Awareness of Health Helplines by types of Clients:** The overall awareness level of Adults(69.7%) were significantly more as compared to Elderly age groups(8%) and Adolescents (2.2%). In UHTC area more adolescents were aware(66%) as Compared to RHTC area(34%) though in Adults category more RHTC area Clients(54.7%) as compared to UHTC clients (45.2%) were aware. Similar was case in Elderly category (RHTC-52.7% & UHTC -47.3%)[Table 1].
- Awareness of 12 major Health Help lines:** Among the 12 major health helplines awareness of clients only health helpline no (107-HIV/AIDS toll free helpline was maximum known (UHTC area-40.4% and RHTC area-39.1%) and helplines no: 18602662345,040-27790278,1057,108,104 all were known below 20% in both RHTC & UHTC area, additionally in UHTC area- helplines no 1800116555 &

9910516562 were known less than 20% [Table 2].

- Awareness of 5 major National Health Programme related Health Help lines:** The most useful helplines perceived by RHTC area clients were HIV/AIDS helpline (No:107)[77.3%] and Medical Helpline of UP state(No: 108) [77.3%], whereas Clients in UHTC area felt that National Health programme Helpline of Government of India was most useful(77.8%) followed by AIDS helpline (77.1%). Though in UHTC Drugs De-addiction and alcoholism helpline was also felt to be good(76.4%)[Table 3].
- Overall analysis of utility of health Helplines:** The perceived utility of health helplines among RHTC and UHTC clients was not a significant finding ($p>0.05$) when both centre areas were compared and the perceived utility of health helplines among RHTC and UHTC clients was also not a significant finding even according to their Basic literacy levels ($p>0.05$) [Table 4].

Table 1: Awareness of Health Helplines among Clients in Area of RHTC & UHTC [N=450]

Sr. No	No of Help lines known	Adolescents (n=100)(2.2%)		Adults (n=314)(69.7%)		Elderly (n=36)(8%)		Total
		RHTC (n=34)	UHTC (n=66)	RHTC (n=172)	UHTC (n=142)	RHTC (n=19)	UHTC (n=17)	
1	<5	29	57	141	122	16	15	380
2	5-10	04	08	31	19	03	02	67
3	>10	01	01	0	01	0	0	03
4	Total	34	66	172	142	19	17	450
Chi-Square test		X ² with yates correction=0.23, df=2, p>0.05		X ² with yates correction=2.41, df=2, p>0.05		X ² with yates correction-Invalid, df=2		

Table 2: Awareness of 12 major Health Helplines among Clients in Area of UHTC & RHTC

Area	Types of Health Help lines numbers Known [Multiple Responses]											
	104	108	1056	1057	1066	1097	1098	1800-180-1104	1800-11655-5	1860-266-2345	(040)-2779-0278	99105-16562
RHTC (n=225)	33 (14.7)	22 (9.8)	68 (30.2)	30 (13.3)	79 (35.1)	88 (39.1)	79 (35.1)	53 (23.6)	46 (20.4)	21 (9.3)	24 (10.7)	66 (29.3)
UHTC (n=225)	24 (10.7)	12 (5.3)	54 (24)	21 (9.3)	65 (28.9)	91 (40.4)	87 (38.7)	45 (20)	37 (16.4)	42 (18.7)	43 (19.1)	44 (19.6)

Table 3: Perceptions towards 6 Major National Health Programme related Helplines among Clients in Area of UHTC & RHTC

Sr. No	Patients Belonging to Area	Perceptions towards major Health Help lines numbers					
		1800-116555 JSK Helpline	1097 AIDS Helpline	108 Medical Helpline UP state	1056 NHM Helpline	(040)-2779-0278 Drugs De-addiction & Alcoholism	1800-180-1104 NHP GOI Helpline
1.	RHTC (n=225) [Multiple Responses] (n=46) (n=88) (n=22) (n=68) (n=24) (n=53)						
	Very useful	26	68	17	48	14	33

		(56.5)	(77.3)	(77.3)	(70.6)	(58.3)	(62.3)
	Some what useful	13 (28.3)	17 (19.3)	02 (9.1)	15 (22.1)	07 (29.2)	09 (17.0)
	Cannot say	02 (4.3)	01 (1.1)	01 (4.5)	03 (4.4)	01 (4.2)	07 (13.2)
	Not useful	04 (8.7)	01 (1.1)	01 (4.5)	01 (1.5)	01 (4.2)	02 (3.8)
	Useless	01 (2.2)	01 (1.1)	01 (4.5)	01 (1.5)	01 (4.2)	02 (3.8)
	Total	46	88	22	68	24	53
2.	UHTC (n=225) [Multiple Responses] (n=37) (n=87) (n=12) (n=54) (n=43) (n=45)						
	Very Useful	17 (45.9)	67 (77.1)	05 (41.7)	34 (63.0)	33 (76.4)	35 (77.8)
	Some what useful	09 (24.3)	09 (10.3)	04 (33.3)	10 (18.5)	06 (14.0)	05 (11.2)
	Cannot say	07 (18.9)	05 (5.7)	01 (8.3)	07 (13.0)	03 (7.0)	02 (4.4)
	Not useful	02 (5.4)	03 (3.4)	01 (8.3)	02 (3.7)	01 (2.3)	02 (4.4)
	Useless	02 (5.4)	03 (3.4)	01 (8.3)	01 (1.8)	01 (2.3)	01 (2.2)
	Total	37	87	12	54	44	45

Table 4: Overall Analysis of Utility of 5 Major health helplines related to National Health Programmes among Clients as well as by their literacy level

Clients	Useful	Not useful	Useless	Cannot say
RHTC	269	10	07	15
UHTC	234	11	09	25
Chi-Square test: $\chi^2= 4.4$, $df=3$, $p>0.05$				
Clients	Illiterate		Literate	
RHTC	127		98	
UHTC	137		88	
Chi-Square test: $\chi^2= 0.93$, $df=1$, $p>0.05$				

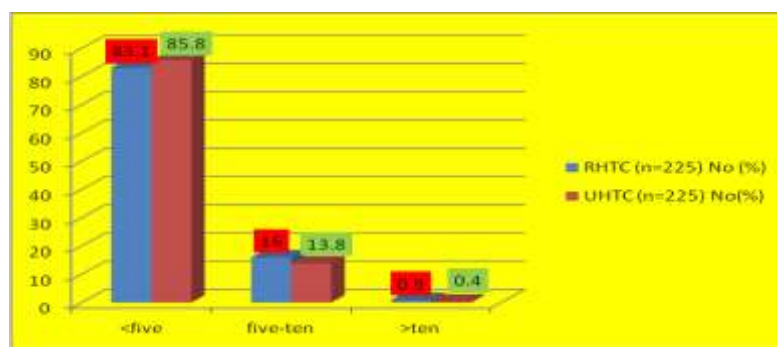


Fig. 1: Awareness of Health Helplines among Clients in Area of UHTC & RHTC [N=450]

Discussion

In our study, the socio-demographic profile of clients in Muzaffarnagar District were weak in terms of Illiteracy (56%-RHTC and 60.9%-UHTC), belonging to SC/ST caste in RHTC area(52.4%), with more females availability at the time of interview(68.4% -RHTC area, 55.1%- UHTC area). However predominance of Adult age groups(20-40 Years) was a good opportunity to avail the services of health helplines, provided they had good awareness. This was reflected in the very low %

of knowledge of >than 10 health helplines(0.9% - RHTC area and 0.4% -UHTC area) and <5 health helplines known were know to 83.1% (RHTC area) and 85.8% (UHTC area). Our this finding was in unison with the study results of Chavan B S et al (2012)⁽⁵⁾ where they found -significant number of persons (around 13.%) often called the helplines for marital, academic, stress-related problems. But this type of finding in our present study- was however also in

contrast with many studies on health helplines across the Globe.^(4-6,8,10-12,15,19-21)

Moreover many studies^(2,3,4) in Developed countries have clearly emphasized the upcoming role of health helplines in health system improvement such as US Help line No (911) has shown that, it can give excellent results.⁽²⁾ Studies on Telephone crisis line services internationally have also been proven to play a vital role in the early development of crisis intervention knowledge and practice.⁽³⁾ Studies in other countries such as UK on NHS regarding cancer help lines also reveal that : they allow time to discuss their issues, anonymity, convenience, and an open outlet for anyone affected by cancer including family/friends(Ekberg K et al 2014).⁽⁴⁾ It has been seen that helplines which are often immune to stigma, allows patients a safe alternative when they need help.⁽²¹⁾

The above success stories of health helplines as seen from studies in other developed countries^(2,3,4,21) are very encouraging; but the real question is are these success stories, really workable in Developing countries such as India- which has been found out on positive side also in our present study.

In our present study, the overall awareness level of 12 major health helplines were significantly more among Adults(69.7%) as compared to Elderly age groups(8%) and Adolescents (2.2%), though this was not statistically significant($p>0.05$) for RHTC & UHTC area in combination, which indicates that the knowledge of Clients is irrespective of their age groups- indicating some other factors for awareness may be operating in the study area. Our this study finding was similar to the study by the Delhi-based Multiple Research Action Group (MARG), who undertook a study of the 100 and 1091 help lines in late 2012, covering nine districts of Delhi and they found that there is a need for better understanding and focus on developing empathetic communication skills.⁽²⁾

In our present study, among the 12 major health helplines awareness of clients only health helpline no(107-HIV/AIDS toll free helpline was maximum known (UHTC area-40.4% and RHTC area-39.1%) and helplines no: 18602662345,040-27790278,1057,108,104 all were known below 20% in both RHTC & UHTC area, this hints towards more popularity of HIV/AIDS Programme in terms of awareness and probably Government of India is not focusing on Importance of other health helplines. This issue has also been stressed by *Akshara(a Mumbai Based Organization)*, on strengthening helpline no-103, by organizing trainings, better data systems and directories of supporting agencies in a ward-wise and theme-wise manner with linkages to protection officers, medical institutions, rescue homes etc. and this may work for health helplines in India also.^[2]

In our present study, the most useful helpline perceived by RHTC area clients were HIV/AIDS helpline (No:107)[77.3%] and Medical Helpline of UP

state(No: 108) [77.3%], whereas Clients in UHTC area felt that National Health programme Helpline of Government of India was most useful(77.8%) followed by AIDS helpline (77.1%).This finding may be due to individual perceptions of Clients, which might be influenced by many factors. But we additionally found that the perceived utility of health helplines among RHTC and UHTC clients was not a significant finding($p>0.05$) and it was not significantly influenced not even by their literacy levels($p>0.05$), indicating the possible existence of less advertisement strategies used by GOI for many health helplines.

Finally our main finding was in unison with the study by Aggarwal A et al (2015)⁽²²⁾ where they found that the helplines may serve as an important mechanism for accessing hard-to-reach Clients, and can improve prevention programs just similar to findings in our present study also.

Limitations of Study

In our study we only offered a simple explanation of the data of clients regarding health helplines. Moreover exclusion of Emergency helplines and inability to procure large sample size is also a limiting factor in terms of true picture of helplines and generalizations of findings of this study, should therefore be done with great caution.

What was known earlier before this study?

Only few specific health related health helpline utilization information in Indian Context.

What this study adds?

Throws light on Scenario of Overall utilization of Health helpline in Indian Population.

Conclusion

It emerges from our study that; implementation of many Health related health help lines is weak, possibly in terms of advertisements by Government of India, though the perceived utility among clients reveal that they can be a good source to consult for a specific health issue. What is therefore really required is that - their proper advertisements for improving health care system of India. Authors however suggest more in-depth studies on this area, before jumping towards a definite conclusion.

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