



Use of Health Information by Citizens in Gulbarga City, Karnataka State, India

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Abstract

Explores the use made of television, radio, print materials, human, and institutional sources by citizens of Gulbarga City for obtaining health information. Little use and low rating of these sources in getting health information compel the need for targeting more and more information on health – physical, mental, social and spiritual - through different channels. Suggests the need for public health awareness combined with educational programs to create awareness and educate the citizens in the use of information sources for making best use of health information.

Keywords: Health Information, Citizens, Use, Gulbarga City, Karnataka, India.

Introduction

Information is indispensable in every field of human efforts. The information is needed to take the best decision possible - to select a garment, vote for a candidate, evaluate career opportunities, select a course, plan meals, choose a doctor. Such actions are common in our daily life. The information is required for taking proper decision of about our health too. To keep good health and to remain physically fit, the knowledge on health is important. The citizen's awareness, up-to-date knowledge, timely access and use of information by them in the domain of health are critical.

The World Health Organization defines health as 'a physical, mental and social well-being and not merely the absence of a disease or illness'¹. Any piece of information on health domain constitutes health information. It deals with curative and prevention of diseases and healthy living of the human being. The saying 'Health is Wealth' is relevant in all ages. The nation's wealth depends on people's health. So, the people's health is natural wealth of a nation. The World Health Organization's call 'Health for all by 2000 AD' in 1977 is still relevant. Since, Nation's development depends on the health of the people, it is important for India to provide enough attention to health care and education programs².

In modern days, the spread of health information to different sections of the society takes place through television, radio, print materials, cinema, public speeches, and posters; door-to-door canvassing and Internet. Retrospective Search was undertaken using LISA on CD, J Gate, Emerald, Sociofile, Psycholit, ERIC, and PubMed. Many studies have been reported at the international level³⁻⁸. Bhadrashetty and Maheswarappa⁹ reported a study on the use of health information by elderly in a rural place. Reports the citizen's use of television, radio, printed materials like newspapers, magazines and publicity materials,

human and institutional sources for receiving health information.

Objectives: The study aims to find out the answers to the following investigative questions:

- (i) Do the citizens watch television (TV)? If Yes
 - (a) How much time do they spend in watching it every day?
 - (b) At what time of the day, do they watch TV often?
 - (c) How do they rate TV programs in getting health information?
 - (d) How do they rate the special programs of TV channels in getting health information?
- (ii) Do they listen to a radio? If Yes,
 - (a) How much time do they spend in listening to it every day?
 - (b) At what time of the day, do they listen to the radio often?
 - (c) How do they rate the radio programs in getting health information?
- (iii) Do they read printed materials? If Yes,
 - (a) How much time do they spend in reading print materials every day?
 - (b) At what time of the day, they read the print materials often?
 - (c) How do they rate the different types of print materials in getting health information?
 - (d) How do they rate the general magazines, health magazines, and newspapers in getting health information?
- (iv) How do they rate the human and institutional sources in getting health information?

Methodology

To have a clear understanding of the topic and to identify a suitable research method to follow, investigators undertook the background reading of literature. The structured interview schedule is used to gather information from the citizens' of Gulbarga city. The schedule consisted of background information of respondents and set of questions on television,

radio, print materials, human, and institutional sources. For the purpose, we scanned all the leading daily newspapers in English and Kannada - local, regional, and national. Identified five types of programs namely, News Stories, Public Service Announcements, Talk Shows, Advertisements, and Special Programs on television and broadcast through radio. We also identified the special sections of newspapers, general magazines, and health magazines, human and institutional sources on health. We measured the use of these sources on a scale of 1- 5. Where, 1 = you get no information, 2 = little information, 3 = some information, 4 = most information, and 5 = Doesn't Apply.

Study population and sample: The citizens of Gulbarga City constitute the universe. The study employs the area sampling technique for selection of the study population. Gulbarga Legislative Assembly constituency consists of 335 polling booths. We selected Brampur - Polling booth number 191 as the sample unit. The voters list of the constituency formed the sampling frame. It comprised of 1333 voters - 715 males and 618 females. A senior member from each family was selected following convenience sampling technique giving equal chance to the males and females. Interviewed two hundred and five citizens and edited the data before processing using SPSS Version 20 for Windows.

Results and Discussion

The citizens interviewed comprised of the equal number of males (N=103) and females (N=102). More than half fell in the age group of 35-50 years (54.1%), followed by < 35 years (30.2%) and to 51 > years (15.6%). Eighty-two percent belonged to forward castes and the rest (18%) to backward castes. Occupation wise, housewives accounted for 47.3% followed by government servants (24.4%), private jobholders (11.7%), business people (15.6%) and agriculturists (1%). A large majority (93.2%) represented married people and followed by widowed (3.9%) and bachelors (2.9%). More than three-fourth were literates (76.6%). Illiterates accounted for 23.4%. Among the literates (N=157), matriculate makeup 29.9%, intermediate 24.2%, graduates 24.8%, postgraduates 1.97% and the remaining (19.1%) below matriculate. Half (50.7%) had the income ranging rupees 25001-65000, followed by the group (27.30%) having income more than Rupees 65000, while 22% had their income less than Rupees. 25000 (table-1).

Use of Television: Television is the main constituents of mass media and used as one of the most effective channels for providing health education. Ninety percent of citizens' interviewed watch television. Only one in ten not watched (table-2) television. Majority spend 60 minutes (40.2%) a day, while 37% for two hours, few (14.7%) for three hours, and still few for half an hour for watching television (table-3). Many watch television more often during afternoons (47.8%) than late afternoons (42.4%). Some watch during early evenings (7.7%), and still a few during mornings (2.7%) (table-4). Not many

watch television during mornings and late afternoons. Advertising (72.8%) and public service announcement (60.9%) programs were useful in getting little information. While talk shows (23.9%) and special programs (29.3%) were useful to get a greater deal of information (table-5). Most of the citizens' interviewed do not watch special programs of television channels on health (table-6). This problem may be because of unawareness of health programs on television or may not watch health related programs.

Table-1
Characteristics of Study Population

Characteristics		Count	%
Sex	Male	103	50.2
	Female	102	49.8
Age (in years)	<35 Years	62	30.2
	36-50	111	54.1
	51-> Years	32	15.6
Caste	Forward Caste	168	82.0
	Backward Caste	37	18.0
Occupation	Government Servants	50	24.4
	Private Job	24	11.7
	Business	32	15.6
	Agriculturists	2	1.0
	Housewife	97	47.3
Marital Status	Bachelor	6	2.9
	Married	191	93.2
	Widowed	8	3.9
Education	Illiterate	48	23.4
	Literate	157	76.6
Literate	Below Matriculate	30	19.1
	Matriculate	47	29.9
	Intermediate	38	24.2
	Graduate	39	24.8
	Post-Graduate	3	1.9
Family Income (in rupees)	< 25,000	45	22.0
	25,001 - 65,000	104	50.7
	> 65,001	56	27.3
Total		205	100.0

Table-2
Watching TV

Watching TV	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	184	89.8	89.8	89.8
No	21	10.2	10.2	100.0
Total	205	100.0	100.0	

Table-3
Watching TV: Time Spent (in Minutes)

Watching TV: Time Spent (in Minutes)		Frequency	Percent	Valid Percent	Cumulative Percent
30		7	3.4	3.8	3.8
45		1	.5	.5	4.3
60		74	36.1	40.2	44.6
90		2	1.0	1.1	45.7
120		68	33.2	37.0	82.6
180		27	13.2	14.7	97.3
240		3	1.5	1.6	98.9
280		1	.5	.5	99.5
300		1	.5	.5	100.0
Total		184	89.8	100.0	
Missing	System Missing	21	10.2		
	Total	21	10.2		
Total		205	100.0		

Table-4
Watching TV Frequently

Watching TV Frequently		Frequency	Percent	Valid Percent	Cumulative Percent
Morning		5	2.4	2.7	2.7
Afternoon		88	42.9	47.8	50.5
Late Afternoon		13	6.3	7.1	57.6
Late Evening		78	38.0	42.4	100.0
Total		184	89.8	100.0	
Missing	System Missing	21	10.2		
	Total	21	10.2		
Total		205	100.0		

Table-5
Rating of TV Programs

T V Programs		No Information	Little Information	Some Information	Greater Information	Do Not Apply
News Stories	Count	26	50	14	32	62
	%	14.1	27.2	7.6	17.4	33.7
Public Service Announcement	Count	6	112	22	13	31
	%	3.3	60.9	12	7.1	16.8
Talk Shows	Count	6	41	20	44	73
	%	3.3	22.3	10.9	23.9	39.7
Advertising	Count	11	134	12	9	18
	%	6	72.8	6.5	4.9	9.8
Special Programs	Count	3	30	18	54	79
	%	1.6	16.3	9.8	29.3	42.9

Table-6

Rating of Special Programs of TV Channels

Special Programs		Little	Some Information	Greater Information	Do Not Apply
Udaya: Yoga	Count	00	4	17	163
	%	00	2.2	9.2	88.6
Z TV: Fitness Plus	Count	2	10	5	167
	%	1.1	5.4	2.7	90.8
DD1	Count	00	3	47	134
	%	00	1.6	25.5	72.8
DD2: Mind, Body and Soul	Count	2	4	3	175
	%	1.1	2.2	1.6	95.1
DD2: Sunday: Wealthy Health	Count	2	5	2	175
	%	1.1	2.7	1.1	95.1
CNN (Weekly): Your Health	Count	1	3	3	177
	%	0.5	1.6	1.6	96.2
Z News: Sun, Mon, Wednesday: HealthShow	Count	00	6	6	172
	%	00	3.3	3.3	93.5
Discovery Channel: Health Show Case	Count	00	4	15	165
	%	00	2.2	8.2	89.7

Use of Radio: Radio is one of the oldest, popular and effective mass media used for providing health education. Majority (79%) does not listen to the radio (table-7) and few (21%) listened to it. Among those who listen to it (N=43), only half listen for half an hour a day (table-8). Of the remaining, 14% listen for one hour a day. Among the people who listen to it, majority listens during mornings (table-9). Public service announcements (58.1%) and advertising (53.5%) on health were useful only in getting little information. The special programs (58.1%), talk shows (44.2%) and news stories (30.2%) on health do not apply for the majority (table-10).

**Table-7
 Listening to Radio**

Listening to Radio	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	43	21.0	21.0	21.0
No	162	79.0	79.0	100.0
Total	205	100.0	100.0	

Table-8

Listening to Radio: Time Spent (in Minutes)

Listening to Radio: Time Spent (in Minutes)	Frequency	Percent	Valid Percent	Cumulative Percent
15	1	.5	2.3	2.3
20	3	1.5	7.0	9.3
30	24	11.7	55.8	65.1
45	3	1.5	7.0	72.1
60	6	2.9	14.0	86.0
90	1	.5	2.3	88.4
120	4	2.0	9.3	97.7
180	1	.5	2.3	100.0
Total	43	21.0	100.0	
Missing	System Missing	162	79.0	
	Total	162	79.0	
Total		205	100.0	

Table-9

Listen to Radio: Timing

Timing	Frequency	Percent	Valid Percent	Cumulative Percent
Morning	37	18.0	86.0	86.0
Afternoon	2	1.0	4.7	90.7
Late Afternoon	3	1.5	7.0	97.7
Late Evening	1	.5	2.3	100.0
Total	43	21.0	100.0	
Missing	System Missing	162	79.0	
	Total	162	79.0	
Total	205	100.0		

Table-10
Rating of Radio Programs in getting health information

Radio Programs	No Information	Little Information	Some Information	Greater Information	Do Not Apply	
News Stories	Count	6	10	6	8	13
	%	14	23.3	14	18.6	30.2
Public Service Announcements	Count	1	25	10	3	4
	%	2.3	58.1	23.3	7	9.3
Talk Shows	Count	4	12	3	5	19
	%	9.3	27.9	7	11.6	44.2
Advertising	Count	2	23	6	3	9
	%	4.7	53.5	14	7	20.9
Special Programs	Count	2	4	6	6	25
	%	4.7	9.3	14	14	58.1

Use of Print Materials: Print materials such as articles in magazines – general and health, newspapers, medical books, publicity materials, yellow pages in telephone directories, encyclopedias, are important sources for health information. More than half of the people interviewed (58%) do not read (table-11), while 42% read print materials. Of them, more than 60% spent half an hour a day (table-12) while the other one-fourth spent one hour for reading print materials. More than half of those who read print materials (55.8%), read most often during mornings (table-13). It was followed by afternoons (34.9%); a few during early mornings (8.1%) and still a few during evenings (1.2%). Of the people who read print materials, majority have not used or read encyclopedias (93%), medical books (88.49%), health magazines (75.6%), articles in general magazines (62.8%), and yellow pages in telephone directories (60.5%). Publicity materials from health organizations provided health information to a little extent, and followed by advertisements, posters or pamphlets (40.7%) (table-14). Articles in newspapers provided much information on health topics for 40.7%. Majority did not use almost all the health magazines such as Health and Nutrition, Arogya Anuraga, Arogya Bahagya, Arogya Vani, Saundarya mattu Arogya

Bhagya and Health Care (table-15). Among the people who read print materials, nearly 70-90% does not read general magazines for getting health information. They neither read health magazines nor general magazines for getting health information (table-16). Nearly 70-80% of people were also not reading newspapers namely The Hindu, Deccan Herald, and New Indian Express. They prefer to read newspapers in Kannada than in English. Very few Kannada newspapers such as Kannada Prabha (53.5%), Prajavani (47.7%), Vijaya Karnataka (44.2%), and Samyukta Karnataka (36%) were useful in getting little information (table-17).

Table-11
Reading of Printed materials

Reading of Printed Materials	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	86	42.0	42.0	42.0
No	119	58.0	58.0	100.0
Total	205	100.0	100.0	

Table-12
Reading of Printed materials: Time Spent (in Minutes)

Reading of Printed materials: Time Spent (in Minutes)		Frequency	Percent	Valid Percent	Cumulative Percent
	10	1	.5	1.2	1.2
	15	2	1.0	2.3	3.5
	20	5	2.4	5.8	9.3
	30	53	25.9	61.6	70.9
	45	1	.5	1.2	72.1
	60	21	10.2	24.4	96.5
	90	1	.5	1.2	97.7
	120	1	.5	1.2	98.8
	180	1	.5	1.2	100.0
Total		86	42.0	100.0	
Missing	System Missing	119	58.0		
	Total	119	58.0		
Total		205	100.0		

Table-13
Reading of Printed Materials: Frequently

Reading of Printed Materials: Frequently		Percent	Valid Percent	Cumulative Percent
	Morning	23.4	55.8	55.8
	Afternoon	14.6	34.9	90.7
	Late Afternoon	3.4	8.1	98.8
	Late Evening	.5	1.2	100.0
	Total	42.0	100.0	
Missing	System Missing	58.0		
	Total	58.0		
Total		100.0		

Table- 14
Rating of Printed Materials in getting health information

Types of Printed Materials		No Information	Little Information	Some Information	Greater Information	Do Not Apply
Articles in General Magazines	Count	5	14	7	6	54
	%	5.8	16.3	8.1	7	62.8
Health Magazines	Count	1	2	7	11	65
	%	1.2	2.3	8.1	12.8	75.6
Articles in Newspapers	Count	2	24	12	35	13
	%	2.3	27.9	14	40.7	15.1
Medical Books	Count	1	4	1	4	76
	%	1.2	4.7	1.2	4.7	88.4
Publicity Materials from Health Organizations	Count	1	44	12	8	21
	%	1.2	51.2	14	9.3	24.4
Yellow pages in Telephone Directories	Count	8	15	4	7	52
	%	9.3	17.4	4.7	8.1	60.5
Encyclopedias	Count	1	4	0	1	80
	%	1.2	4.7	0	1.2	93
Advertisements: Posters/Pamphlets	Count	2	35	16	24	9
	%	2.3	40.7	18.6	27.9	10.5

Table-15
Rating of Health Magazines

Health Magazines		Little Information	Some Information	Greater Information	Do Not Apply
Health and Nutrition	Count	1	1	2	`
	%	1.2	1.2	2.3	95.3
Arogya Anuraga	Count	00	2	2	82
	%	00	2.3	2.3	95.3
Arogya Bhagya	Count	1	3	9	73
	%	1.2	3.5	10.5	84.9
Arogya Vani	Count	1	3	1	81
	%	1.2	3.5	1.2	94.2
Saundarya Mattu Arogya Bhagya	Count	00	2	2	82
	%	00	2.3	2.3	95.3
Health Care	Count	3	2	5	76
	%	3.5	2.3	5.8	88.4

Table-16
Rating of General Magazines

General Magazines		No Information	Little Information	Some Information	Greater Information	Do Not Apply
Hamsaraga	Count	00	1	2	00	83
	%	00	1.2	2.3	00	96.5
Navaraga Sangama	Count	00	2	2	00	82
	%	00	2.3	2.3	00	95.3
Gruha Shoba	Count	00	11	3	11	61
	%	00	12.8	3.5	12.8	70.9
Jeevanadi	Count	00	6	3	3	74
	%	00	7	3.5	3.5	86
Taranga	Count	1	12	4	4	65
	%	1.2	14	4.7	4.7	75.6
Sudha	Count	1	16	4	3	62
	%	1.2	18.6	4.7	3.5	72.1
Mayura	Count	1	15	1	1	68
	%	1.2	17.4	1.2	1.2	79.1
Karma Vira	Count	1	13	5	6	61
	%	1.2	15.1	5.8	7	70.9
Mallige	Count	1	7	00	00	78
	%	1.2	8.1	00	00	90.7
Kasturi	Count	1	5	1	00	79
	%	1.2	5.8	1.2	00	91.9
Tusara	Count	1	4	00	00	81
	%	1.2	4.7	00	00	94.2
Sputnik	Count	2	1	00	00	83
	%	2.3	1.2	00	00	96.5
Cosmopolitan	Count	2	1	00	00	83
	%	2.3	1.2	00	00	96.5
Family	Count	00	3	1	00	82
	%	00	3.5	1.2	00	95.3

Table-17
Rating of Newspapers

Newspapers		No Information	Little Information	Some Information	Greater Information	Do Not Apply
The Hindu	Count	1	7	3	14	61
	%	1.2	8.1	3.5	16.3	70.9
Deccan Herald	Count	2	16	00	3	65
	%	2.3	18.6	00	3.5	75.6
New Indian Express	Count	1	11	00	3	71
	%	1.2	12.8	00	3.5	82.6
Vijaya Karnataka	Count	1	38	5	21	21
	%	1.2	44.2	5.8	24.4	24.4
Prajavani	Count	00	41	4	21	20
	%	00	47.7	4.7	24.4	23.3
Kannada Prabha	Count	2	46	2	5	31
	%	2.3	53.5	2.3	5.8	36
Sayukta Karnataka	Count	00	31	8	32	15
	%	00	36	9.3	37.2	17.4

Use of Human Sources: Formal and informal channels are used to communicate health information. But, the flow of information is faster through informal channels. Whenever a person has any health problem or wants guidance on health or help, he or she prefers the discussion with the people around him or her. Most of the citizens' preferred doctors (93.7%) to librarians as a source of health information. Colleagues (67.3%) and medical representatives (66.3%) were also not preferred by majority. However, family, friends, relatives, and neighbors formed important sources of health information. Well-wishers (76.1%), relatives (68.3%), neighbors (49.8%), friends (46.8%), family (44.4%), and nurses as information sources provided little information. In addition, family (43.9%), neighbors (35.6%), friends (35.6%), and pharmacists (34.1%) as sources of information provided some information (See Table-18).

Use of Institutional Sources: Institutional sources play an important role in providing health information. But the majority did not use Internet and libraries. More than half of them were also not using government (55.1%) and nongovernmental organizations (55.6%). However, majority of citizens used hospitals, nursing homes, clinics, medical shops or shopping places, and health and social welfare departments as sources of health information (table-19).

Discussion: A large percentage of citizens' watch television than reading print materials or listening to the radio suggests that agencies or people spreading health information should target information increasingly through television, followed by print

materials and radio. Most watch television in the afternoons and late afternoons, but they read print materials and listen to the radio both in the mornings and afternoons. During these timings, they should target health programs through television and radio. On an average, they have spent more time to watch television than for reading print materials or listening to the radio. Television is the preferred medium when compared to other channels for targeting the programs on health during afternoons and late afternoons. Though, majority watched and spent more time in viewing television, but either most do not watch television programs on health or the health programs on TV rated as useful only in getting little information. Telecast health programs more often by making these more relevant - scope, content, and quality. Advance and frequent announcement of television programs on health through advertisements in newspapers, radio, and television, helps to create awareness and attract the attention of potential viewers of television. Most do not watch the special programs of television on health.

Radio programs on health either were not listened, or they were useful only in getting little to some information. Though, the importance of radio has lessened slowly with the coming in of television but still considered an important source of information on health. Therefore, the All India Radio has to make its programs on health more interesting, thought provoking, educational by arranging special talks on health topics, and discussions with health professionals on important topics. It can arrange for periodic relay of dramas based on health themes and arrange for storytelling on topics of importance to health.

Table-18
Rating of Human Sources

Human Sources		No Information	Little Information	Some Information	Greater Information	Do Not Apply
Doctors	Count	00	2	6	192	5
	%	00	1	2.9	93.7	2.4
Nurses	Count	21	90	17	4	73
	%	10.2	43.9	8.3	2	35.6
Pharmacists	Count	5	48	70	13	69
	%	2.4	23.4	34.1	6.3	33.7
Medical Representatives	Count	7	18	31	13	136
	%	3.4	8.8	15.1	6.3	66.3
Colleagues	Count	1	25	32	9	138
	%	0.5	12.2	15.6	4.4	67.3
Family	Count	4	91	90	15	5
	%	2	44.4	43.9	7.3	2.4
Friends	Count	5	96	73	15	16
	%	2.4	46.8	35.6	7.3	7.8
Relatives	Count	8	140	41	2	14
	%	3.9	68.3	20	1	6.8
Neighbors	Count	8	102	73	3	19
	%	3.9	49.8	35.6	1.5	9.3
Well Wishers	Count	4	156	16	2	27
	%	2	76.1	7.8	1	13.2
Librarians	Count	3	6	4	00	192
	%	1.5	2.9	2	00	93.7

Table-19
Rating of Institutional Sources

Institutional Sources		No Information	Little Information	Some Information	Greater Information	Do Not Apply
Government Organizations	Count	31	48	10	3	113
	%	15.1	23.4	4.9	1.5	55.1
Non-Government Organizations	Count	46	33	5	5	116
	%	22.4	16.1	2.4	2.4	56.6
Health and Social Welfare Depts.	Count	8	48	13	106	30
	%	3.9	23.4	6.3	51.7	14.6
Medical Shops/Shopping Places	Count	2	47	15	128	13
	%	1	22.9	7.3	62.4	6.3
Hospitals/Nursing Homes/Clinics	Count	00	24	8	167	6
	%	00	11.7	3.9	81.5	2.9
Libraries	Count	5	6	5	1	188
	%	2.4	2.9	2.4	0.5	91.7
Internet	Count	3	4	2	00	196
	%	1.5	2	1	00	95.6

Surprisingly, most do not use different types of print materials, health magazines, general magazines and newspapers for getting health information. Despite remarkable increase in health literature in print, the people have to read it to develop awareness and knowledge. They rated doctors, family, friends, relatives, neighbors, and well-wishers as important sources of health information compared with librarians, colleagues, medical representatives, nurses, and pharmacists. Though, rating

human sources was low, but rather more people used these in getting health information. Thus, the informal network needs strengthening and needs encouragement for its use in promoting health of people. Also most do not use libraries and Internet though they use hospitals, nursing homes, clinics, medical shops, and shopping places for getting health information. Libraries are temples of learning and storehouses of knowledge and their use for getting health information is scanty. The

agencies have to create awareness among people to use libraries for learning more on health related topics. Though, Internet is useful as sources of information on health care and health topics but its use was low. Thus, the agencies concerned with health care and education have to target more and more information on health through different channels on health – physical, mental, social and spiritual.

Conclusion

Public health awareness should be conducted to create awareness and educate the citizens in the use of information sources for making best use of health information. The government and nongovernmental organizations, agencies at the state and central level have to create public health awareness among citizens to keep good health. Citizens need orientation and education in the use of television, radio and print materials, human and institutional sources including Internet in using health information as "the wealth of a nation depends on the health of the people².

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