



“A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE OF RESIDENTS REGARDING DENGUE FEVER IN SELECTED COMMUNITY AREA OF THE DANG’S DISTRICT, GUJARAT”

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ABSTRACT

Introduction; Dengue fever is a vector-borne viral infection that endangers an estimated 2.5 billion people. Disease caused by mosquito-borne virus. Health care team are continuously involving in different types of health care activities and involved with the challenges of identify needs in order to solving community health problems and vector born disease one effective methods of identifying the community problems by conducting survey study in the various community area. **Aim:** Assess the level of knowledge and practice among community residents **Methodology:** Quantitative research approach and Descriptive survey research design were adopted in this study. Non-probability convenience sampling technique was used to select the sample. Total sample size was 320. setting for the study was community residents of The Dang’s district. The tool consisted of selected socio-demographic variables along with structured interview schedule for knowledge and inventory check list for practice. **Result:** The findings show level of knowledge of the sample were 37(11.5%) average knowledge and 283(88.2%) good knowledge. Level of practice of the sample were 1(0.3 %) having average level of practice, and majority 319(99.7%) good level of practice moderately positive correlation found between knowledge and practice. Findings of the study depicted that there was significant

association found in the knowledge with their socio- demographic variables such as Age, educational status, occupation, and significant association found in the practice with their socio demographic variables such as Experience of dengue fever, sources of information. **Conclusion:** Majority of people having good knowledge and practice regarding dengue fever it conclude health care team was performed effective work performed by the health centre.

KEY WORDS: Knowledge, Practice, Residents, Dengue fever, Community

INTRODUCTION

Dengue fever is a vector-borne viral infection that endangers an estimated 2.5 billion people. Disease caused by mosquito-born virus disease . Symptoms typically begin three to fourteen days after infection these may include a high fever, headache, vomiting, muscle and joint pains and a characteristics skin rash. Recovery generally takes two to seven days. Dengue has become a major public health problem in tropical and subtropical regions in recent year in spite of a poor or no of dengue surveillance system in developing countries, the number of cases recording and reported has increased markedly. Dengue out breaks often is not recognized until hundreds of people are affected.

STATEMENT OF THE PROBLEM

“A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE OF RESIDENTS REGARDING DENGUE FEVER IN SELECTED COMMUNITY AREA OF THE DANG’S DISTRICT, GUJARAT”

OBJECTIVES OF THE STUDY

- 1)To assess the knowledge of residents regarding dengue fever in selected areas of community.
- 2)To assess the practice of residents regarding dengue fever in selected areas of community.
- 3)To correlate the knowledge and practice of residents regarding dengue fever in selected areas of community.
- 4)To find out the association between knowledge and practice with their selected socio-demographic variables.

ASSUMPTIONS

1. Residentials may have some knowledge about dengue fever.
2. Residentials may be practices preventive measures for dengue fever.
3. Knowledge and practice vary from individual to individual.

HYPOTHESIS

- **H₁** : There will be a significant correlation between the mean knowledge score and practice scores of residents of selected community areas regarding dengue fever disease.
- **H₂** :- There will be a significant association between the levels of knowledge regarding dengue fever among residents of selected areas of community.
- **H₃**: There will be a significant association between the levels of practice regarding dengue fever among residents of selected areas of community.

DELIMITATION:

1.This study is delimited to the knowledge and practices residents regarding Dengue fever in selected community area of The Dang's district, Gujarat

OPERATIONAL DEFINITION

1. Assess: In this study assess refers to identify the knowledge and practice of residents regarding dengue fever in selected community area of The Dang's, district.

2. Knowledge: In this study knowledge means correct responses of residents regarding dengue fever which will be selected using structured knowledge interview schedule.

3.Practice: In this study the term practice refers to action taken to preventive measures using an inventory check list on practices include preventive measures on mosquito-man contact, water management , environmental management use of home remedies.

4.Resident: In this study resident means a person who lives in community area of The Dang's, district with age up to 20year to 50 year permanent or on long term basis.

5. Community: In this study resident means a person who lives in community area of The Dang's, district with age up to 20year to 50 year permanent or on long term basis.

RESEARCH METHODOLOGY

1. **Research approach-** Quantitative approach
2. **Research design-** Descriptive survey research design
3. **Variables-** research variable: knowledge and practice of residential regarding Dengue Fever
4. **Setting** – Selected Community areas of The Dang's district.
5. **Population-** People living in The Dang's district.
6. **Sample-** Residents of selected areas who will fulfill the inclusion criteria
7. **Sample size-** 320 residents of selected residential community areas after power analysis(95% confidence level $Z=1.96$) .
8. **Sampling technique-** Non-probability Convenience sampling

9. Inclusion criteria:

- 1.Those residents are present at data collection time
- 2.Residents who are willing to participate.

10. Exclusion criteria

- 1.Those are not willing to participate
- 2.Those are physically and mentally challenged

DESCRIPTION OF TOOL:

Final tool consisted of three parts:

SECTION- A: SOCIO- DEMOGRAPHIC DATA**Section 1:** Socio demographic data

It contains Age, Gender, Education, Marital status, Occupation, Income of Family, Experience of dengue fever, sources of information about dengue fever, Types of house, Surrounding environment of house, Ventilation facilities, Lighting Facilities, Disposal of human excreta, Types of water supply, Methods using water purification, Types of Drainage, Methods of waste Disposal, Transport's facilities, Time period of

SECTION- B STRUCTURED KNOWLEDGE QUESTIONNAIRES

It consisted of 35 questions on knowledge regarding Clinical features, Transmission of disease, Prevention, Breeding sites of mosquitos in Dengue fever.

SECTION 3: INVENTORY CHECK LIST ON PREVENTIVE PRACTICES TO WARD OFF DENGUE FEVER

Inventory checklist consisted of 26 questions on practices regarding preventive measures to ward off dengue fever that question including mosquito man contact, environmental preventive measures, water management practices to prevent dengue fever, home remedies use in preventive measures to ward off dengue fever.

RESULTS**SECTION A: DESCRIPTION OF SELECTED SOCIO DEMOGRAPHIC VARIABLES**

SAMPLES CHARACTERISTICS	Frequency F	Percentage %
1. Age		
a. 21-30 yrs	137	42.8
b. 31-40 yrs	83	25.9
c. 41-50 yrs	100	31.2
2. Gender		
a. Male	172	53.8
b. Female	148	46.2
c. Other	00	00

3. Educational status		
a. Primary	59	18.4
b. Secondary	112	35
d. High school	86	26.9
d. Graduate or post graduate	50	15.6
e. No formal education	13	4.1
4. Marital status		
a. Married	244	76.5
b. Unmarried	50	15.7
d. Divorced	7	2.2
d. Widow	19	5.9
5. Occupation		
a. None	79	24.7
b. Self employed	170	53.1
c. Govt. employed	30	9.4
d. Labour work	41	12.8
6. Income of family		
a. Below 10000	82	25.6
b. 10001-20000	148	46.2
c. 20001-30000	55	17.2
d. More than 30000	34	10.6
7. Experience of dengue fever		
a. Your self	92	28.8
b. Family members	110	34.4
c. Work colleague	69	21.6
d. Closed friend	33	10.3
e. Social acquaintance	16	5
8. Source of information		
a. Radio/television	167	52.2
b. Health worker	99	30.9
c. News paper/magazine	28	8.8
d. Relatives	19	5.9
e. Friends	7	2.2
9. Types of house		
a. Kutchha	150	46.9
b. Pucca	101	31.6
c. Kutchha Pucca	69	21.6
10. Surrounding environment of house		
a. Clean		
b. Dirty	240	74.8
	80	24.8
11. Ventilation facilities		
a. Adequate	228	71.2
b. Inadequate	92	28.8
12. Lightning facilities		
a. Electricity	273	85.3
b. Solar plant	40	12.5
c. Not available	7	2.2

13. Disposal of human excreta		
a. Private latrine	62	19.4
b. Government latrine	217	67.8
c. Semi government	41	12.8
14. Types of water supply		
a. Tap water	73	22.8
b. Well water	54	16.9
c. Supply by panchayat	161	50.3
d. Borewell water	32	10
15. Method of using water purification		
a. Boiling		
b. Filtration	68	21.2
c. Chlorine	163	50.9
d. Purification tablets	41	12.8
	48	15
16. Types of drainage		
a. Open	180	56.2
b. Closed	140	43.8
17. Methods of disposal		
a. Burial	40	12.5
b. Composting	189	59.1
c. Dumping	75	23.4
d. Incineration	16	5
18. Hospital facilities		
a. Private	87	27.2
b. Government	207	64.7
c. Semi Government	26	8.1
19. Transport facilities		
a. Private	198	61.9
b. Government	89	27.8
c. Semi Government	33	10.3
20. Time period of visit of any health worker		
a. Weakly	198	61.9
b. Monthly	84	26.2
c. Yearly	38	11.9

SECTION-B Description of findings related to level of knowledge

Knowledge aspect	Mean	Median	Mode	Standard deviation	Range
Clinical features	16.07	17	17	2.53	10-20
Transmission	13.80	13	13	2.72	6-20
Prevention	10.42	11	12	1.77	5-12
Breeding sites	14.87	15	17	2.23	8-18
Total knowledge	55.17	57	61	6.18	39-69

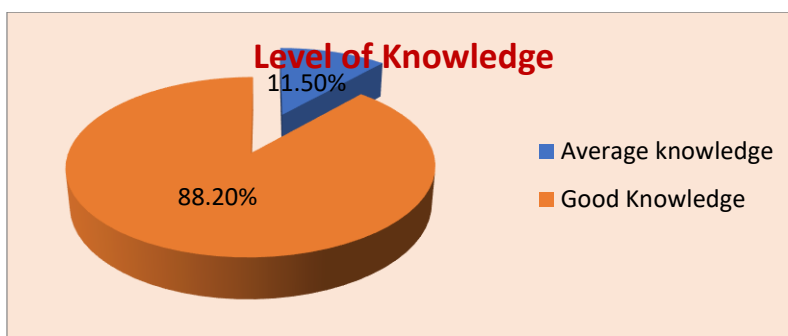


Figure 1. Frequency and percentage distribution of respondents according to their level of knowledge

SECTION-C Description of mean, median, mode, standard deviation and range practice scores regarding dengue fever

Practice Aspect	Mean	Median	Mode	Standard deviation	Range
Mosquito man contact	19.30	20	21	2.24	12-22
Environmental preventive measures	9.31	10	10	1.10	4-10
Water management practices to prevent dengue fever	8.93	9	9	0.82	5-10
Home remedies use in preventive measures	8.50	9	9	1.13	5-10
Total practice	46.05	47	47	3.21	30-52

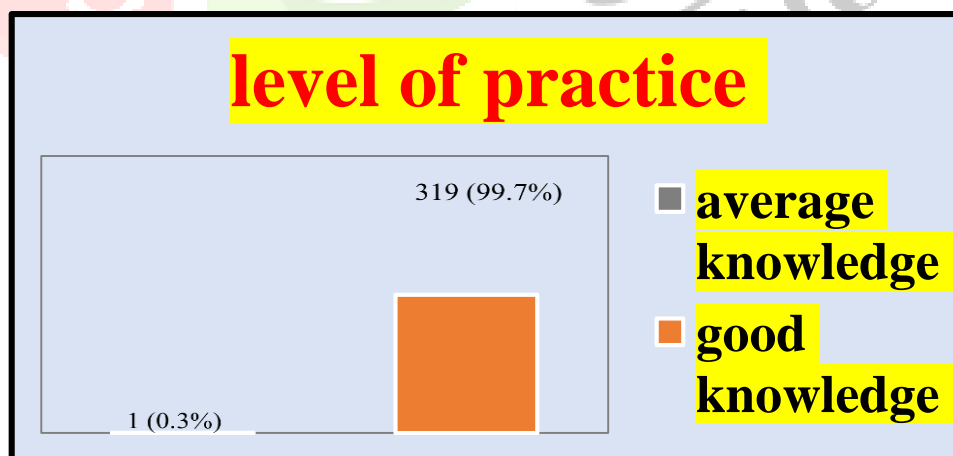


Figure 2. Frequency and percentage distribution of respondents according to their level of practice

SECTION-D Correlation coefficient of knowledge and practice scores of participants regarding dengue fever **N =320**

SCORE	GROUPS	
	Mean score	Correlation coefficient
Knowledge score	55.17	0.090(Moderately positive)
Practice score	46.05	

$r(318) = 0.11, P < 0.05$

SECTION -E Association of Knowledge with socio demographic variables

Socio-demographic variable	Level of Knowledge		df	Chi square value	Level of significance
	Below median	Median & Above Median			
1. Age					
a. 21-30 yrs	65	72	2	11.76	S
b. 31-40 yrs	25	58			
c. 41-50 yrs	55	44			
2. Gender					
a. Male	78	94	1	0.86	NS
b. Female	67	81			
3. Educational status					
a. Primary	35	24	8	15.57	S
b. Secondary	42	70			
d. High school	32	54			
d. Graduate or post graduate	31	19			
e. No formal education	5	8			
4. Marital status					
a. Married	104	140	3	11.70	S
b. Unmarried	21	29			
d. Divorced	4	3			
d. Widow	15	3			
5. Occupation					
a. None	27	52	3	10.2	S
b. Self employed	75	95			
c. Govt. employed	18	12			
d. Labour work	25	16			
6. Experience of dengue fever					
a. Your self			4	6.10	NS
b. Family members	47	45			
c. Work colleague	40	70			
d. Closed friend	32	37			
e. Social acquaintance	17	16			

	9	7			
7.Sources of information					
a. Radio/television	75	92			
b. Health worker	43	56	4	0.82	NS
c. News paper/magazine	14	14			
d. Relatives	9	9			
e. Friends	4	3			
8. Types of house					
a. Kutcha	68	82	2	4.48	NS
b. Pucca	39	62			
c. Kutcha Pucca	38	31			
9.Surrounding environment of house					
a. Clean	106	135	1	0.69	NS
b. Dirty	39	40			
10.Ventilation facilities					
a. Adequate	101	127			
b. Inadequate	44	48	1	0.32	NS
11. Types of water supply					
a. Tap water					
b. Well water	36	37			
c. Supply by panchayat	16	38	3	7.48	NS
d. Borewell water	75	86			
	18	14			
12. Method of using water purification					
a. Boiling	29	39			
b. Filtration	79	84	3	7.82	S
c. Chlorine	23	18			
d. Purification tablets	14	34			
13. Types of drainage					
a. Open	83	98	1	0.01	NS
b. Closed	63	77			
14. Transport facilities					
a. Private	79	119	2	6.91	S
b. Government	46	43			
c. Semi Government	20	13			
15. Time period of visit of any health worker					
a. Weakly	80	118			
b. Monthly	46	38	2	5.28	NS
c. Yearly	19	19			

SECTION -F Association of Practice with socio demographic variables

Socio-demographic variable	Level of practice		df	Chi square value	Level of significance
	Below median	Median & Above Median			
1. Age					
a. 21-30 yrs	63	74	2	2.02	NS
b. 31-40 yrs	46	37			
c. 41-50 yrs	47	53			
2. Gender					
a. Male	82	90	1	0.17	NS
b. Female	74	74			
3. Educational status					
a. Primary	22	37	4	9.06	NS
b. Secondary	60	52			
d. High school	49	37			
d. Graduate or post graduate	21	29			
e. No formal education	4	9			
4.Experience of dengue fever					
a. Your self			4	13.31	S
b. Family members	54	38			
c. Work colleague	46	64			
d. Closed friend	38	31			
e. Social acquaintance	9	24			
	9	7			
5.Source of information					
a. Radio/television	73	94	4	17.22	S
b. Health worker	60	39			
c. News paper/magazine	15	13			
d. Relatives	3	16			
e. Friends	5	2			
6. Types of house					
a. Kutchha	78	72	2	3.31	NS
b. Pucca	51	50			
c. Kutchha Pucca	27	42			
7.Surrounding environment of house					
a. Clean	119	122	1	0.54	NS
b. Dirty	37	42			
8.Ventilation facilities					
a. Adequate			1	0.32	NS
b. Inadequate	103	125			
	53	39			
9.Types of water supply					
a. Tap water					

b. Well water	38	35			
c. Supply by panchayat	20	34	3	5.18	NS
d. Borewell water	85	76			
	13	19			
10.Types of drainage					
a. Open	89	91	1	0.07	NS
b. Closed	67	73			
11. Methods of disposal					
a. Burial					
b. Composting	21	19			
c. Dumping	97	92	3	4.68	NS
d. Incineration	34	41			
	4	12			
12. Hospital facilities					
a. Private	49	38			
b. Government	92	115	2	4.36	NS
c. Semi Government	15	11			
13. Time period of visit of any health worker					
a. Weakly	102	96			
b. Monthly	33	51	2	4.26	NS
c. Yearly	21	17			

DISCUSSION

The first objectives present study is to assess the knowledge among the 220 samples where Male 172, Female 148 .in present study in male 53.8 percentage and female 46.2 percentage of the respondents were having majority 283(88.2%) respondents were having good knowledge and remaining 37(11.5%) of respondents were having average level of knowledge.

In assessing the level of practice with using of inventory check list them 1(0.3 %) having average knowledge ,and majority 319(99.7%) them having good knowledge more people have good knowledge about dengue fever to wards of preventive practice on dengue fever.

Correlation of knowledge and practice score by using of Karl Pearson's correlation coefficient formula. Here, for correlation between knowledge and practice r was 0.09. Because of $0 < r < 1$ moderately positive correlation was found in study Hence, correlation between knowledge and practice scores of respondents regarding dengue fever is found not significant at $p < 0.05$ levels. Thus the null hypothesis H_{02} is supported and the research hypothesis is rejected, indicating no correlation between knowledge and practice scores

Association of knowledge score with their selected socio- demographic variables in p knowledge score was found significant with their socio- demographic variables such as, age, educational status ,marital status, occupation, methods of using water purification, and transport facilities and there will be no significant association between knowledge with socio demographic such as gender, income of family, experience of dengue fever, sources of information, types of house, surrounding environment of house, ventilation facilities, lightning facilities, disposal of human excreta, types of water supply , types of drainage, time period of visit

of any health worker . At 0.05 level of significance p value is greater than χ^2 value. Therefore, socio-demographic variables didnot influence the knowledge in community residents.

Association between levels of practice regarding dengue fever among respondents with their selected socio demographic variables is found significant for experience of dengue fever and sources of information regarding dengue fever and not found statistically significant for other selected socio demographic variables. Therefore, the findings partially support the null hypothesis H₀₂ and the research hypothesis H₀₂ is partially accepted, inferring that, there will be significant association between the level of practice regarding dengue fever and some of the selected socio demographic variables.

CONCLUSION

The conclusion drawn based on the findings of the study. The present study was concluded on the assessment of knowledge and practice regarding dengue fever among selected community residents of The Dang's district, residents had good knowledge and they used good preventive measures for dengue fever. That Showed Primary Health Centre Sakarpatal, was performed good job and they took regular health visit and that help in improve the level of knowledge And preventive practices to wards of Dengue fever.

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