

# A STUDY TO ASSESS THE KNOWLEDGE AND PRACTICE ABOUT PREVENTION OF DENGUE FEVER AMONG WOMEN

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## **ABSTRACT:**

**Introduction:** A descriptive study was conducted on knowledge and prevention about dengue fever among women in semi urban area koyana vasahat, karad.

**Objectives** of study were to assess the knowledge about Dengue fever in women, to assess the practice about prevention of Dengue fever & to find out the association between knowledge about Dengue fever with selected socio demographic variables. **Methodology:** Research design used for the proposed study was non-experimental descriptive design; Sample size of study was 266. probability sampling technique was applied to select the subjects for the study. All the area of koyana vasahat is visited and required information collected such as from homes & colonies. The schedule was prepared, data collected with the help of structured questionnaire.

**Results:** Overall Mean knowledge regarding dengue among the women (20.67%) had not satisfactory knowledge, (20.30%) had satisfactory knowledge, (33.83%) good knowledge, (17.29 %) had very good knowledge, while (7.89 %) had excellent knowledge. Total knowledge of women 62.28%, It was the evident that maximum of women had average knowledge about dengue fever. In prevention practice 69.54% women knew about breeding, 87.21% women knew about transmission of mosquito, 36.46% knew about use mosquito net, 9.39% repellent creams, women's having average knowledge about prevention of DF. There is significant association between Education, monthly income & not significance association between water drainage and rest of the socio demographic variables.

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**Conclusion:** *According to the study findings, women have average knowledge about prevention of dengue fever*

**Key words:** *Assess Knowledge, Practice, Prevention, and Dengue Fever.*

## I. INTRODUCTION

In the world of continuous change of new concept are bound to emerge based on new patterns of thought. Health has evolved over the century as a concept from individual concern to a worldwide social goal and encompasses the whole quality of life. Health can mean different things to different people. To some it may mean freedom from any sickness or disease while it may mean harmonious functioning of all body system. It may be constructed as a feeling wholeness and a happy frame of mind.<sup>1</sup> Long ago Florence Nightingale, The founder of modern nursing pointed out that the destiny of nursing lies none in the care of the sick but in the prevention of disease and promotion of health. These concepts have been rediscovered in recent times.

Today health is recognized as a fundamental right of human being.<sup>2</sup> Rapid transportation, industrialization, movement of infected human population, mosquitoes and the changing ecology have facilitated its spread to newer areas. The WHO says some 2.5 billion people, two fifth of the world population, are now at risk from dengue and estimated that there may be 50 million cases of dengue infection every year. The disease is now epidemic in more than 100 countries.<sup>4</sup> Unlike most mosquitoes, dengue causing mosquitoes bites during the day.

These mosquitoes breed in warm, humid weather and in stagnant water. This is why the number of cases of dengue goes up high during monsoon season.<sup>5,6</sup> The English version of this term Dandy Fever was applied to an 1827-28 Caribbean outbreak, and in the Spanish Caribbean colonies, the term was altered to dengue<sup>7</sup>

It is important to take control measures to eliminate the mosquitoes and their breeding place. However, the efforts should be intensified before the transmission season (during and after the rainy season) and at the time of the epidemic.<sup>8</sup> Dengue mosquitoes bite during the daytime. Protect yourself from the bite by wearing full sleeve clothes, use of repellent, mosquito coils, nets, protection of people sick with dengue.<sup>9</sup> The only method of controlling and preventing dengue and dengue hemorrhagic fever is to combat the vector mosquitoes.<sup>10, 11</sup> The World Health Organization estimates that around 2.5 billion people are at a risk for dengue infection. It has become a leading cause of death among children. Karnataka has the second highest number of cases of dengue in 2010, higher than Delhi, but lower than Kerala<sup>12</sup>

## II. RESEARCH METHODOLOGY

A descriptive approach was felt to be appropriate and thus used for the study. Research design used for the proposed study was non-experimental descriptive design. The study was conducted in all the area coming

under koyana vasahat, karad. The study is focused on assess the knowledge and practice about prevention of dengue fever among women, the target population for present study were women living in koyana vasahat, karad. **Sample Size was 266.** Probability sampling technique was applied to select the subjects for the study. **Inclusion Criteria were** Women living in the area of koyana vasahat, karad who are available and willing to participate in the study. **Exclusion Criteria were** Women who are not willing and away from the home due to any kind of job or out of town or any other reason at the time of data collection. All the area of koyana vasahat are visited and required information collected such as number of homes & colonies. The schedule was prepared, data collected with the help of structured questionnaire. A structured questionnaire schedule is given to each women by maintaining privacy & confidentiality after obtaining consent.

#### **Development & Description of the Tool-**

Considering the setting of the study and characteristic of the subjects, a structured questionnaire was prepared after an extensive review of literature, observation in the field and discussion with the experts.

#### **The tool was organized into three sections as**

**Section A:** This section elicited the socio-demographic information of the women like age, religion, education, marital status, family, occupation, income, house ownership, and water drainage & water source.

**Section B :** Dealt with knowledge of women about dengue fever on Meaning of dengue fever, Sign and symptoms of dengue fever Causes of disease Incidence of disease Investigation of disease Prevention of disease.

**Section C:** Dealt with practices of women towards prevention of dengue fever. The tool had 30 items in which all of the items were multiple choice questions. The scoring pattern adopted was 1mark for correct answer and 0 for wrong answer for section B.

#### **Plan for Data Analysis:-**

Statistical analysis is the method of rendering quantitative information meaningfully and intelligently. Further statistical procedures enables investigator to reduce, summarize, evaluate, interpret and communicate numeric information in meaningful way.

#### **Statistical treatment applied:-**

Descriptive and inferential statistics was used to describe the data Frequency and percentage were used to summarized the data Mean, standard deviation was used to describe the knowledge score Inferential statistics with chi-square test was applied to find the association between the knowledge and socio demographic variables.

### **III. Results**

**Table no 1 Distribution of socio demographic variables of women (N= 266)**

Socio demographic variables	Frequency	Percentage

Age	20-30	91	34.21%
	31-40	79	29.69%
	41-50	58	21.8%
	51-60	25	9.39%
	61-70	10	3.75%
	71-80	3	1.12%
Religion	Hindu	250	93.98%
	Muslim	13	7.83%
	Christian	3	1.12%
Education	Illiterate	31	11.65%
	Primary	122	45.86%
	Graduate	98	36.84%
	Post Graduate	15	5.63%
Marital status	Married	233	87.59%
	Unmarried	15	5.63%
	Widow	17	6.39%
	Divorced	1	0.37%
Family Status	Nuclear	123	46.24%
	Joint	143	53.75%
Occupation	House wife	213	80.07%
	Employed	46	17.29%
	Skilled worker	7	2.63%
	Unskilled worker	0	0%

Monthly Income	< 10,000/-	152	57.14%
	10,000-20,000/-	68	25.56%
	20,000-30,000/-	28	10.52%
	> 30,000/-	18	6.76%
Ownership of House	Own	172	64.66%
	Rented	94	35.33%
Water drainage	Open	137	51.5%
	Closed	129	48.49%
Water sources	Tap water	178	66.91%
	own bore water	24	9.02%
	water purification plant	64	24.06%

Table no 1. Shows 91(34.21%) women are in 20-23 age group, majority of women 250(93.98%) Hindu, 122(45.86%) women education is primary level, 213(80.07%) women are housewives, 137(51.5%) women having open water drainage, 178(66.91%) women using tap water as a water source.

**Table no. 2: Distribution of subjects according to correct answers (N= 266)**

Knowledge about dengue fever	Frequency	Percentage
Do you know about DF?	232	87.21%
DF is transmitted through?	232	87.21%
Which mosquito causes Dengue Fever?	88	33.08%
Where the Dengue mosquitoes are Breeding?	185	69.54%

In which time Dengue mosquitoes are biting?	54	20.30%
Which are the complications of Dengue Fever?	42	15.78%
Dengue fever is treatable?	222	83.45%
Who should responsible for Dengue Mosquito control?	202	75.93%
In which age dengue fever is affected?	234	87.96%
Distribution of subjects according to over all knowledge	1491	62.28%

Table no 2. Shows 87.96% women having knowledge about affected age group and 15.78% women having knowledge about complication of DF.

**Table no .5. Chi square Association between Knowledge and Demographic variables (N=266)**

Variable	Chi sq	P value	Result
Age(yrs)	18.819	0.093	Not significant
Religion	2.723	0.6052	Not significant
Education	40.261	< 0.0001	Not significant
Marital status	5.661	0.226	Not significant
Family status	6.642	0.1561	Not significant
Occupation	8.007	0.0913	Not significant
Monthly income	17.166	0.0018	Not significant
Ownership of house	3.45	0.4842	Not significant
Water drainage	15.703	0.0034	Not significant
Water source	3.536	0.4724	Not significant

Table no 5.shows that education, monthly income & water drainage are significantly associated and rest of the socio demographic variables are not significantly associated.

#### **IV. DISCUSSION**

The result shows that more than half of the parents (54%) had good knowledge about signs, symptoms, and modes of transmission of dengue. While in our study total knowledge of women 62.28%, it was the evident that maximum of women had average knowledge about dengue fever. These Results were supported by Khun.S, Mandererson.L<sup>13</sup> Hammod.N.S, Balmesede.A, et al( 2001)<sup>14</sup>. While in our study overall 69.54% women knew about breeding, 87.21% knew about transmitted by mosquito and 1.12% transmitted by flies. These Results were supported by Narayanan.M, (2002)<sup>15</sup> Vijayakumar.T.S, (2005)<sup>16</sup> Kabar.S.K, ( 2009)<sup>17</sup> While in our study total knowledge of women 62.28%, it was the evident that maximum of women had average knowledge about dengue fever. While in our study overall 36.46% knew about mosquito net, 25.56% knew about mosquito coil, 9.39% knew about repellent creams, 28.57% electric repellent. These Results were supported by Cecilia D, (2009)<sup>18</sup> Gupta E 2006<sup>19</sup> Chakravarti A, 2012<sup>20</sup>. While in our study there is significant association between education, monthly income & no significance association between water drainage and rest of the socio demographic variables, this was proved by Cecila D (2011)<sup>21</sup> Biswas H.H, (2012)<sup>22</sup> Dana Todd,et al, (2010).<sup>23</sup> Gabriel Antonio ( 2009)<sup>24</sup> Basurko (2009)<sup>25</sup> Paso SD, (2009)<sup>26</sup>.

#### **V. Conclusion:**

According to the study findings, women have average knowledge about prevention of dengue fever. 20-30 age group women have more knowledge than other age groups about dengue fever and prevention. Overall Mean knowledge regarding dengue among the women, (20.67%) women had not satisfactory knowledge, (20.30%) had satisfactory knowledge, (33.83%) good knowledge, (17.29 %) had very good knowledge,, while ( 7.89 %) had excellent knowledge. Total knowledge of women 62.28%, It was the evident that maximum of women had average knowledge about dengue fever. In prevention practice 69.54% women knew about breeding, 87.21% women knew about transmission of mosquito, 36.46% knew about use mosquito net, 9.39% repellent creams, women having average knowledge about prevention of DF.

To find out association between knowledge and socio demographic variables, chi-square test was and the findings revealed that –There was no association between the knowledge and following socio demographic variables Age ,religion, marital status, family status, occupation, ownership of house, water source, There was association between the knowledge and socio demographic variables like education, monthly income, water drainage .Overall study shows that women in koyana vasahat have average knowledge about prevention of Dengue Fever.

## VI. Implication of the Study

The finding of the study has following implication in the areas of nursing practice, nursing administration, nursing education and nursing research.

**Nursing implications:-**The findings of the study have following implications in the areas of nursing practice, nursing administration, nursing education and nursing research.

**Nursing Administration:-**Nurses are in the central role of the health care delivery system and have many responsibilities to do planning, organizing, supervision and health education. The women are supervised by community health nurse the results of the study will help the community health nurse administrator to plan and organize suitable programme to the socio demography of each women.

**Nursing Practices:-**Community health nurse are the link between community and health care system. She is a direct care provider, a change agent in the community, and is also a health team member works in close association with the women of community and plays an important role in implementation of care.

**Nursing education:-**In the nursing curriculum, emphasis needs to be placed the responsibilities of nurses in Dengue prevention & control programme. Community health nurse educator plays an important role in educating women at time of home visits. Nurse should provide health education to women regarding dengue fever control and prevention.

**Nursing Research:-**Based on the findings, the professional and student nurses can conduct further studies on knowledge and practice about prevention of dengue fever. The research study will motivate the beginning researchers to conduct the similar study in large scale.

## VII. RECOMMENDATIONS

On the basis of findings of the study, recommendations made for further research are, similar study can be replicated on college students & other community people, similar study can be conducted on attitude, control, treatment and investigations of Dengue Fever on various groups of community and A similar study can be done in Rural & Urban area.

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