

KNOWLEDGE AND PRACTICE REGARDING VECTOR BORNE DISEASES AMONG URBAN SLUM DWELLERS OF GUNTUR DISTRICT, ANDHRA PRADESH.

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HOW TO CITE THIS ARTICLE:

B. Anil Kumar, K. V. Phani Madhavi. "Knowledge and practice regarding vector borne diseases among urban slum dwellers of Guntur district, Andhra Pradesh". Journal of Evolution of Medical and Dental Sciences 2013; Vol2, Issue 26, July 1; Page: 4756-4762.

ABSTRACT: Vector borne diseases (VBDs) form a major part of the communicable diseases. Of these, diseases spread by mosquitoes are more rampant due to relative Omni-presence of mosquitoes. This study is a small endeavour to bring out the knowledge of residents of Gundarao pet in Guntur regarding Vector borne diseases as well as simple and effective methods practiced at individual and family level.

AIMS AND OBJECTIVES

- To study the level of knowledge regarding vector borne diseases.
- To study the practices at house hold level regarding Vector borne diseases

MATERIALS AND METHODS: A cross sectional study was conducted in slum containing 198 families with a population of 948. Study was conducted from January 1st to January 31st 2013. One respondent more than 18 yrs from each family was interviewed using a pre-tested structured questionnaire regarding knowledge and practices about VBDs. **RESULTS:** Out of 198 families, 180 families were willing to participate in the study. Among the study participants (180), 128(71.1%) are males and 52(28.9%) are females. Almost 117(65%) of the study participants are literates. Only half of the study participants 84(46.7%) had good knowledge about malaria. None of the illiterates had knowledge about filaria, dengue, and chikungunya. Regarding anti mosquito measures practiced at home- 58.3% are using repellent coils, 20% liquid vapours, 11.6% are using mosquito nets, and 10% are using mats. More than half of the study participants (58%) were getting knowledge about VBD'S from Television. **CONCLUSIONS:** Intensified efforts are needed to create public awareness and community participation regarding the preventive measures.

ORIGINAL ARTICLE

KEY WORDS: *vector borne, Malaria, Filaria, Dengue, Chikungunya, Knowledge, socio-demographic, literacy.*

INTRODUCTION: The mosquito borne diseases of public health importance are complex and their occurrence depends on the interaction of various biological, ecological, social and economic factors. Though several measures for their prevention and control are followed, yet the problem density is too high

Malaria, dengue and other vector-borne conditions were estimated to account for 1.6% of India's total disease burden (WHO 1998)⁽¹⁾. The mosquito-borne diseases result in avoidable ill-health and death which also has been emphasized in National Health Policy ⁽²⁾ and Millennium Development Goals (MDGs). ⁽³⁾ National Vector Borne Disease Control Programme (NVBDCP)⁽⁴⁾ under the aegis of National Rural Health Mission (NRHM)⁽⁵⁾ is one of the most comprehensive and multifaceted public health activity in India including prevention and control of mosquito-borne diseases.

In spite of mass communication and educational approaches, community participation is far below expectation. Community participation in turn depends on peoples' awareness, knowledge and attitude towards the disease. However, taking socially acceptable measures by the local government, in collaboration with other relevant sectors and social mobilization for full involvement of the community is crucial. Thus, a need was felt to know the existing knowledge of the study population regarding mosquito-borne diseases which may be helpful in designing evidence-based effective prevention and control strategies as well as sustainable community participation.

MATERIALS AND METHODS: This was a cross sectional study conducted in a place called Gundarao pet in Guntur containing 198 families with a population of 948. Study was conducted from January 1st to January 31st 2013. The houses were visited in the study area by house to house visit and study purpose was explained. Adult above 18 years who was present at home was interviewed using a pre-tested structured questionnaire regarding knowledge and practices about VBDs.

Those who were willing to participate in the study were included in the study and those who are not present at the time of house visit & who are not willing to participate in the study were excluded. Informed verbal consent was obtained from household heads before inclusion as participants. Chi-square test was used to determine the statistical significance of differences of relative frequencies.

RESULTS: Out of 180 respondents, 71.1% were males and 28.9% were females. On asking about fever in last fifteen days in family, 78 fever cases were found. Majority of them (73.1%) went to government health system for taking treatment. Only 23.1% consulted private practitioner, 3.8% cases took drugs from medical stores. Literates had no edge over illiterates regarding knowledge about malaria. None of the illiterates had knowledge about Filaria, Dengue.

Majority of the respondents (58%) gained knowledge from Television. Knowledge gained from health personnel was meager (6%). About 65% were illiterates. Majority of the respondents (86.1%) were from nuclear family and 65% were living in pucca houses. Safe water supply was accessible to (95.5%) respondents. Majority of them (68.4%) reported practice of waste disposal in

sanitary manner. Whole slum had open drainage system. Majority of the houses (81.6%) are poorly ventilated and overcrowding is observed in 65% of the respondent's houses.

DISCUSSION: Majority of the people visited government hospital for treatment (73.1%) only 23.1% visited private hospital. while contrast finding has been given by K. Ravikumar et al & D. Amulpateleta. In our study it was observed that Illiterates had less knowledge regarding Filariasis, Dengue compared to literate ones. Similar results have been reported by A.V. Boratne et al from Pondicherry ⁽⁶⁾, and Rasanias *et al* ⁽⁷⁾ from Delhi while contrast finding has been given by Kaona *et al* ⁽⁸⁾ from Zambia. When asked about type of Personal Protection (PP) methods used, mosquito repellent coil (58.3%) and liquid vaporizers (20%) were the commonest in practice which was much higher than in Rajasthan ⁽¹⁰⁾ where it was only 6.27% and 3.73% respectively. Whereas use of repellent coils was 50.24% and liquid vaporizers (43.85%) in a study conducted by A.V. Boratne et al. ⁽⁶⁾ The current study shows, about half of the study population were aware about mosquito borne diseases through television (58%) followed by 26% through friends and newspapers (10%) and only 6% through health care personnel. In our study about 58 % were aware about mosquito borne diseases through television while contrast finding (12.3%) has been given by K. Ravikumar et al ⁽¹¹⁾ in Karnataka.

In our study about 26% were aware about mosquito borne diseases through friends while contrast finding (43.9%) has been given by Soodsada Nalongsacket al. ⁽⁹⁾ The present study revealed that health workers contributed in motivating only 6% respondents to use Personal protection methods, which was 6.9% in a study by K. RaviKumar et al in Karnataka ⁽¹¹⁾ and (7%) in a study conducted by Soodsada Nalongsacket al ⁽⁹⁾, whereas it was <5% in a study conducted in Rajasthan. ⁽¹⁰⁾ while contrast finding (16.43%) was found in a study conducted by Abhijit V Boratne et al ⁽⁶⁾ in coastal Pondicherry.

Thus, there is a need to initiate measures towards involvement of the government functionaries in motivating community on larger scale regarding prevention and control of Vector - borne diseases.

CONCLUSION: To conclude, as contribution of health workers (ANMs/MPWs) and AWW in motivating the study subjects to use PP methods against mosquito borne diseases is negligible, it is imperative to involve the health sector to provide active support and commitment to effectively meet the challenges of prevention and control of mosquito borne diseases through intersectoral coordination, community participation and use of all available modern communication strategies.

RECOMMENDATIONS: Measures must be initiated towards involvement of the government functionaries in motivating community on larger scale regarding prevention and control of Vector - borne diseases.

Health care personnel should be more sensitized and trained to play active role in implementation of effective IEC strategies.

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TABLE 1: Socio-demographic characteristics of respondents

	NO (%)
Sex	
Males	128(71.1%)
Females	52(28.9%)
Educational status	
Literate	117(65%)
Illiterate	63(35%)
Occupation	
Working	155(86.1%)
Not Working	25(13.9%)
Total family Income	
Rs >4000	122(67.70%)
Rs <4000	58(32.30%)
Family type	
Nuclear	155(86.1%)
Joint	25(13.9%)
Type of house	
kutcha	24(13%)
Semi pucca	39(22%)

ORIGINAL ARTICLE

pucca	117(65%)
Water supply	
Safe	172(95.5%)
unsafe	8(4.5%)
Waste disposal	
Sanitary	123 (68.4%)
In Sanitary (Throwing discriminately)	57 (31.6%)
Ventilation	
Good	33(18.4%)
poor	147(81.6%)
Over crowding	
present	117(65%)
absent	63(35%)

TABLE 2: Source of treatment

Source of treatment	Fever cases (n= 78) (%)
Government health system	57(73.1%)
Private practitioner	18(23.1%)
Over the counter	3(3.8%)

TABLE 3: Literacy Vs health care facility visited

Education	Govt.	Private	Total
literate(54)	39 (72.2%)	15 (27.8%)	54
illiterate (21)	18 (85.7%)	3 (14.3%)	21
total	57	18	75

P>0.10, Chi-square value=0.85, DF=1

Literacy has no significant role in visiting health care facility.

TABLE 4: LITERACY VS KNOWLEDGE REGARDING MALARIA

Education status	Good knowledge	Poor knowledge	Total
Literates 117(65%)	60 (51.28%)	57 (48.71%)	117
Illiterates 63(35%)	24 (38%)	39 (61.9%)	63
total	84(46.7%)	96(53.3%)	180

- P>0.05 , Chi square value=2.860 , DF=1
- Literates had no edge over illiterates regarding knowledge about malaria.

ORIGINAL ARTICLE

Table 5: LITERACY VS KNOWLEDGE REGARDING CHIKUNGUNYA

Education status	Good knowledge	Poor knowledge	Total
Literates 117(65%)	43 (36.7%)	74 (63.3%)	117
Illiterates 63(35%)	7 (11.1%)	56 (88.9%)	63
total	50(27.7%)	130(72.3%)	180

P<0.001, Chi square value: 13.420, DF=1

Significantly literates had more knowledge regarding spread & symptoms of chikungunya.

Table 6: LITERACY VS DISPOSAL OF WASTES

education	sanitary	insanitary	total
literates (117)	87(74.35%)	30(25.64%)	117
illiterates (63)	36(57.14%)	27(42.8%)	63
total	123	57	180

- P<0.02 , Chi square value=5.6090 , DF=1
- Literacy plays a significant role in disposal of wastes.

TABLE 7: ANTI MOSQUITO MEASURES PRACTISED AT HOME

Anti mosquito measures	No (%)
repellent mats	15(8.3%)
mosquito nets	21(11.6%)
mosquito coils	105(58.3%)
electric bats	3(1.6%)
repellent vapours	36(20%)
total	180(100%)

ORIGINAL ARTICLE

FIGURE 1: OVER ALL KNOWLEDGE ABOUT VBDs

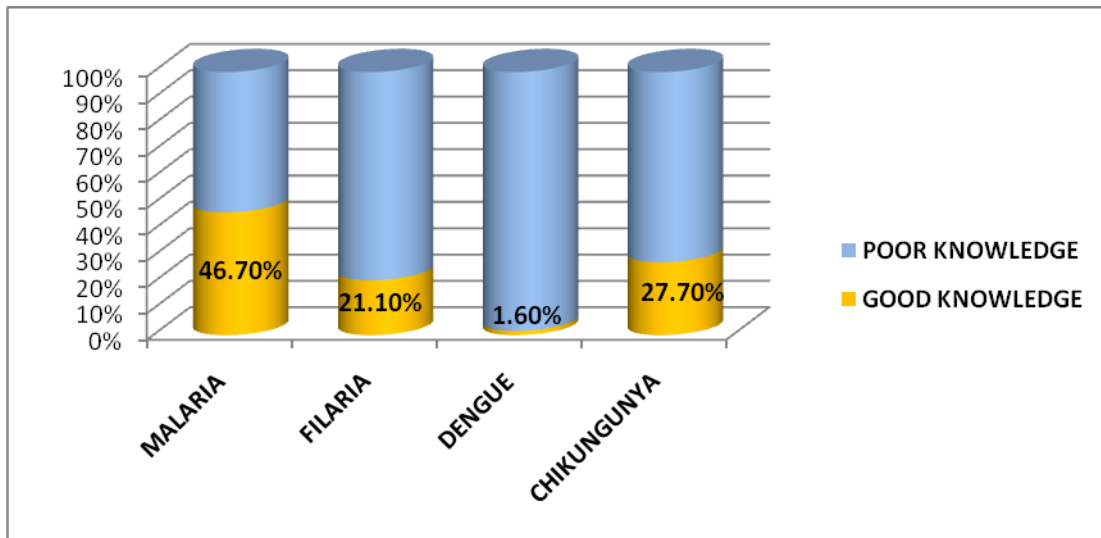


FIGURE: 2 SOURCE OF ACQUIRING KNOWLEDGE

