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Research Article

**TO ASSESS THE KNOWLEDGE, ATTITUDE AND PRACTICE  
OF GENERAL POPULATION OF PESHAWAR ABOUT  
VECTOR BORNE DISEASES**<sup>1</sup>Dr. Fatima-tuz-Zahra, <sup>2</sup>Dr. Shan-e-Zahra<sup>1</sup>Khyber Medical College, Peshawar<sup>2</sup>Peshawar Medical College, Peshawar**Abstract:**

**Aims and Objective:** The KAP Study of General Public about Vector Borne Diseases relating to the Common Health Problems. Correlating the level of knowledge with the demographics to analyze the attitude towards vector eradication programs currently running in the country. To determine the different practices in correlation with the common risk factors.

**Setting:** The study was conducted in the urban areas of Peshawar.

**Study Population:** It includes people from the urban areas of Peshawar which has been divided in to five different zones i.e. city area, Cantt area, University town, University of Peshawar and Hayatabad.

**Sample Size:** Sample size is 300, 60 from each of the above-mentioned zone.

**Methodology:** The study was conducted by selecting respondents randomly, including both male and females irrespective of their living conditions, monthly income and their marital status.

The samples were first selected randomly according to our required criteria, then the definition of VECTOR was briefly described to them because it is a scientific term and most of the people were not knowing about it. Then they were provided with the questionnaire to be filled.

The questionnaire had four parts. First part as basic information of the respondent, then questions regarding knowledge, then questions regarding attitude and then questions regarding practice to prevent vector borne diseases.

**Results:** After analyzing the data collected, it was concluded that about 88% of the people from urban areas of Peshawar had knowledge about vector borne diseases, 88% were having a serious attitude towards it and considered them serious and most of them were also taking preventive measures for protection, which included insect repellants, mosquito nets, sprays etc.

**Key Words:** vector borne diseases, knowledge, attitude, practice

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**INTRODUCTION:**

Vectors are living organisms that can transmit infectious diseases between humans or from animals to humans. Many of these vectors are bloodsucking insects, which ingest disease-producing microorganisms during a blood meal from an infected host (human or animal) and later inject it into a new host during their subsequent blood meal. Mosquitoes are the best known disease vector. Others include ticks, flies, sandflies, fleas, triatomine bugs and some freshwater aquatic snails.

Vector-borne diseases are illnesses caused by pathogens and parasites in human populations. Every year there are more than 1 billion cases and over 1 million deaths from vector-borne diseases globally.

Vector-borne diseases account for over 17% of all infectious diseases. Distribution of these diseases is determined by a complex dynamic of environmental and social factors. Globalization of travel and trade, unplanned urbanization and environmental challenges such as climate change are having a significant impact on disease transmission in recent years.

There is a long list of vector borne diseases but which seems to be the major health problem to the people of Peshawar are malaria, dengue, filariasis, congo fever and leshmaniasis which will be under discussion in our project.

**MATERIALS AND METHODS:**

It was an observational cross sectional study. It required collection of qualitative data, its analysis and interpretation regarding assessing knowledge,

attitude and practices relating to common vector borne diseases.

**Place of study:** Peshawar

**Study design:** Observational cross sectional study.

**Sampling technique:** Simple random sampling.

**Sample size:** 300 people

**Tool for Data Collection:** Questionnaire (verbal/written form) (language: English)

**Target Population:** People from urban areas of Peshawar.

**Operational Definitions:** Vector-borne diseases are illnesses caused by pathogens and parasites in human populations

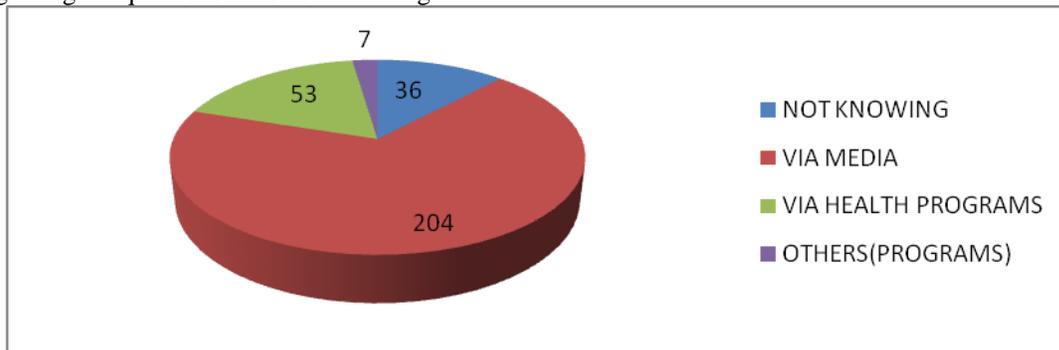
**Ethical Consideration:** Verbal consent from individual subject was taken after explaining them the purpose of study and Information about gender, age, district, marital status, income, occupation and education was collected.

**Analysis:** Analysis was done with the help of MS. Excel, pie charts and tables were drawn

**Limitation:** Sample size was very simple we cannot generalize it. Due to limited time and economic resources study was conducted only in urban areas of Peshawar. Due to limited human resources sufficient data about all vector borne diseases were not taken into consideration.

**RESULTS:**

Data regarding the questions to assess knowledge:

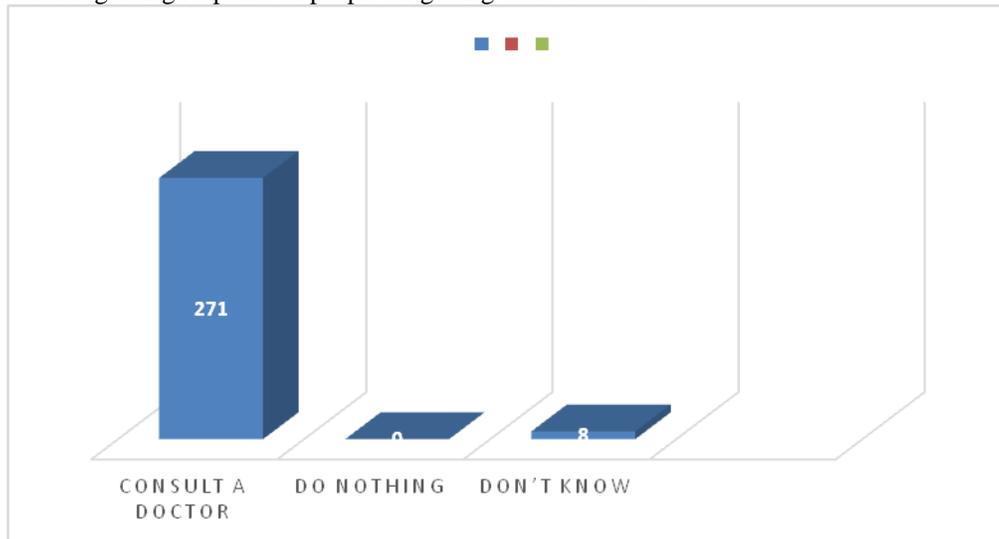


- Table made on basis of past outbreak of vector born disease, time, disease, government preventive measures and knowledge about the season of occurrence:

PAST OUTBREAK OCCURENCE		WHEN DID IT OCCUR		Which Disease Outbreak		Govt Preventive Measures Successful		Knowledge about Seasons in which such Diseases are Common			
NO	248										
		1 Month Ago	6	Malaria	28	Yes	27	Yes	161	Summer	125
		6 Months Ago	17	Dengue	22					Spring	32
		1 Year Ago	20	Filariasis	0					Winter	3
YES	52	2 Year Ago	09	Congo	0	No	25			Rainy Season	1
				Lashmaniases	0			No	103		
				Others (Cholera)	2						

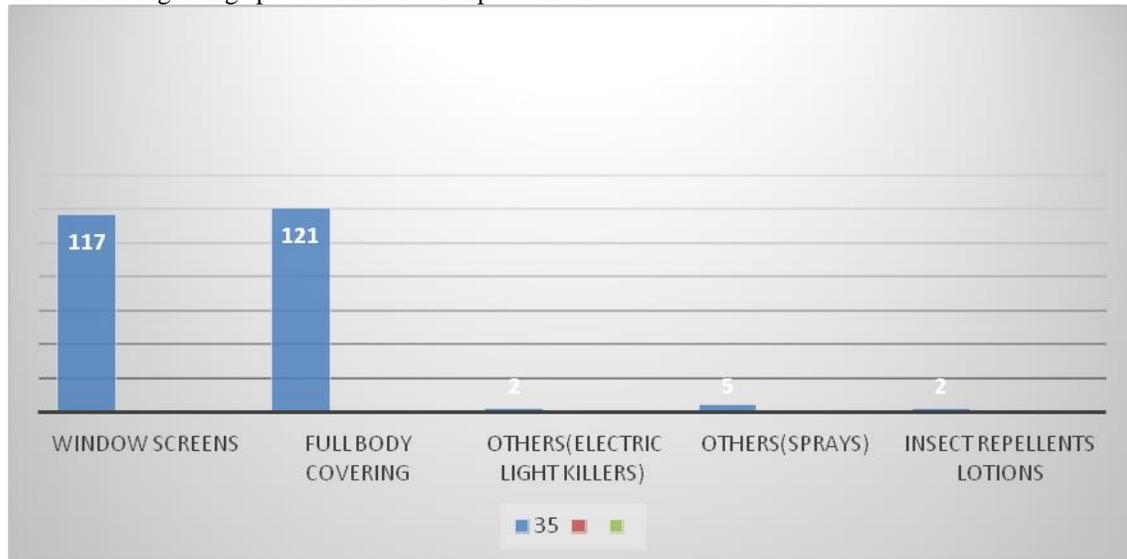
**QUESTIONS TO ASSESS ATTITUDE**

Data distribution regarding response of people on getting such diseases:



**DATA REGARDING PRACTICES FOR PREVENTING VECTOR BORN DISEASES**

Data distribution regarding specific measures for prevention

**DISCUSSION:**

In our study which was conducted in district, Peshawar k.pk (Pakistan) our goals and objectives were to "To evaluate the level of knowledge and correlating with the common risk factors, to analyze the attitude towards awareness and protection programs run by in the country and to determine the different practices performed in correlation with the demographics.

Regarding level of knowledge out of 300 sample 264 were at least knowing about vector borne diseases and out of the knowing population the source of 204 people was media and health programs only 53.226 of the knowing population said that malaria is the common disease in their area and 217 were also knowing about breeding sites of such vectors. Out of total 300 sample 52 said that there had occurred an outbreak of vector borne diseases out of which maximum i.e. 20 said it occurred a year ago and only 6 said that it has occurred recently i.e. month ago. Out of 52, 27 said that preventive measures taken by the government for its eradication were successful.

Regarding their attitude about vector borne diseases out of 89% were considering it hazardous to health, 67 % were considering dengue as the most hazardous .this may be due to the recent outbreak of dengue fever throughout the country especially Lahore where a lot of people suffered and died of it. 51% were knowing about the current activities going on in their areas for eradication for such diseases which shows their interest in such diseases, most of them i.e. 41% said it is sprays programme for the eradication purpose. 51% were satisfied with the

activities carried out by the government for the eradication of these diseases.

Regarding the practices they were using for their personal protection 50% were using insect repellants ,28% insecticides and 19% mosquito nets .85% of them were having a gutter system for their waste disposal which decreases the risk of such diseases by diminishing the breeding sites for the vectors as well as the agents.

This was the general outcome and information which we get through our questionnaire and it showed that most people of Peshawar are aware of vector borne diseases; they are taking it serious and also protecting themselves from such diseases.

**CONCLUSION:**

Vector borne diseases are common in developing countries, since Pakistan is still on its way of development certain outbreaks do occur. The results shows that most of the people do have the knowledge needed to protect themselves however people don't have a serious attitude towards these diseases and do not take the measures necessary to protect themselves. This leads to a variety of vector borne illnesses currently prevalent in this province. Media has played an important role in awareness of these people along with yearly based health programs devised by health facilities .One quarter of the people are still unaware about such diseases which can be covered by letting people know through invitation letters about the health programs with special emphasis on its importance.

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