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A Descriptive Study to Assess the Level of Knowledge and Practice of People on Preventive Measures of Malaria Among the Selected Population at Bramnagar, Chaubepur in Kanpur

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***Abstract*: Despite being preventable and treatable, malaria continues to have a devastating impact on people's health and livelihoods around the world. According to the latest available data, about 3.2 billion people were at risk of the disease in 106 countries, territories and areas in 2015, and an estimated 214 million cases occurred (range: 149-303 million). Over the past 15 years, malaria mortality has reduced by approximately 50%. However, malaria still causes more than 400,000 deaths annually, most of which occur in African children under 5 years of age. Significant advances in understanding the pathogenesis of the disease provide a basis for future work to prevent severe malaria and its complications. Herein, we provide an overview of advances in our understanding of severe malaria in African children over the past 15 years, highlighting key complications and identifying priorities to further reduce malaria-associated mortality. The samples were population in the Chaubepur, Kanpur. The sample consist of 40 people who fulfill the criteria for sample selection and who were available at the Chaubepur community at time of data collection. Written consent was taken from the people who were selected as sample. Self- structured knowledge questionnaire containing 30 questions and checklist containing 10 questions was used to evaluate the knowledge and practice of people regarding prevention of malaria. Finding reveal that according to age, sex, marital status, income, education, type of family, type of house, occupation and source of information was statistically nonsignificant difference in the frequencies at p<0.06.**

***Keywords*: People, knowledge, practice.**

1. Introduction

Malaria is one of the most common infectious diseases and a great public health problem worldwide, particularly in Africa and south Asia. About three billion people are at risk of infection in 109 countries. Each year, there are an estimated 250 million cases of malaria leading to approximately one million deaths, mostly in children under five years of age. The organism that causes the most dangerous form of malaria is a microscopic parasite called Plasmodium falciparum. This parasite is transmitted by mosquito species belonging to the Anopheles genus and only by females of those species. There is growing international agreement on how best to use prevention and treatment methods that are available. The most effective prevention measures include the use of mosquito bed nets treated with long-lasting insecticides – to avoid the mosquito bites and to kill the mosquitoes – and spraying the inside walls of houses with similar insecticides to kill malaria-carrying mosquitoes. The most effective treatment for malaria consists in using a combination of several anti-malarial drugs, one of which is a derivative of artemisinin. Preventive treatment of pregnant women with anti-malarial drugs can also reduce the harmful effects of malaria both on the mother and on the unborn child. Several international organisations have set up ambitious objectives for large-scale malaria control. The target set by the World Health Organization (WHO) in 2005 is to offer malaria prevention and treatment services by 2010 to at least 80% of the people who need them. By doing so, it aims to reduce at least by half the proportion of people who become ill or die from malaria by 2010 and at least by three quarters by 2015 compared to 2005. It is vital to monitor malaria trends to see if malaria control campaigns are being effective, and to make improvements. The WHO World Malaria Report 2008 estimates the number of malaria cases and deaths for the period 2001-2006 in affected countries and investigates whether or not WHO recommendations are being implemented. It evaluates progress made against the disease it also describes the sources of funding and reviews the impact of malaria control programmes. The aim of the report is to support the development of effective national malaria control programmes.

Malaria is a disease caused by plasmodium parasite, transmitted by the bite of infected mosquitos. The severity of malaria varies based on the species of plasmodium .it is a vector borne disease which is transmitted disease which is bites from infected mosquitos. world health organization, people living in the poorest countries are the most vulnerable. The disease caused a no. of non-specific symptoms including fever, headache, and vomiting left untreated the disease can cause

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severe complication Cerebral malaria, Acute Respiratory Distress syndrome (ARDS),Convulsions, Hemolysis, Low sugar levels, Fluid imbalance, Blackwater fever, Splenic rupture. Despite being preventable and treatable, malaria continues to have a devastating impact on people's health and livelihoods around the world. According to the latest available data, about 3.2 billion people were at risk of the disease in 106 countries, territories and areas in 2015, and an estimated 214 million cases occurred (range: 149-303 million). In the same year, the disease killed about 438000 people (range: 236000-635000) from these 306000 children aged under 5 years in globally with the bulk of this in sub-Saharan Africa. In most countries where malaria is endemic, the disease disproportionately affects poor and disadvantaged people, who have limited access to health facilities and can barely afford the recommended treatment. Between 2000 and 2015, a substantial expansion of malaria interventions contributed to a 48% decline in malaria mortality rates globally, averting an estimated 4.38 million deaths. In the WHO African Region, the malaria mortality rate in children under 5 years of age was reduced by 60%. During the same period, the global incidence of malaria was reduced by 37%. Malaria is seasonal in most parts of Ethiopia, with unstable transmission that lends itself to the outbreak of epidemics. The transmission patterns and intensity vary greatly due to the large diversity in altitude, rainfall, and population movement [3]. Areas lying below 2000-meter altitude are malarias. Those areas are home to approximately 68% of the Ethiopian population and cover almost 75% of the country's landmass. In 2010, the Federal Ministry of Health (FMOH) reported 4,068,764 clinical and confirmed malaria cases to the World Health Organization (WHO) as recorded in the 2011 World Malaria Report [5]. Malaria is ranked as the leading communicable disease in Ethiopia, accounting for about 30% of the overall Disability Adjusted Life Years lost. Approximately 57.3 million (68%) of the 84.3 million population of Ethiopia live in areas at risk of malaria. According to the FMOH, malaria was the leading cause of outpatient visits and health facility admissions in 2010/2011, accounting for 15% of reported outpatient visits and nearly 15% of admissions.

2. Research Method

Research methodology indicates the generalized pattern of organizing the procedure for gathering valid and reliable data for investigation. It includes the strategies to be used to collect and analyze the data to accomplish the research objective and to test research hypothesis. Methodology of research indicates the general pattern of organizing the procedures of answering the research question. Research design is defined as a framework of methods and techniques chosen by a researcher to combine various components of research in a reasonably logical manner so that the research problem is efficiently handled. It provides insights about "how" to conduct research using a particular methodology. Every researcher has a list of research questions which need to be assessed – this can be done with research design. A descriptive design was considered appropriate for the study to assess the knowledge regarding malaria and its prevention among the population in Chaubepur, Kanpur. Description of the study environment including the location and experimental setup. For studies of web usage, this includes the browsing environment as well as any visible data collection methods. The study was conducted at community Chaubepur, Kanpur. The rational for selecting this setting for the study was the researcher's familiarity with the setting, geographical proximity and easy availability of the samples. sample is a subset of population selected to in a research study. 40The samples were population in the Chaubepur, Kanpur. The sample consist of 40 people who fulfill the criteria for sample selection and who were available at the Chaubepur community at time of data collection.

3. Literature Review

A literature review surveys scholarly articles, books, dissertations, conference proceedings and other resources which are relevant to a particular issue, area of research, or theory and provides context for a dissertation by identifying past research. Research tells a story and the existing literature helps us identify where we are in the story currently. It is up to those writing a dissertation to continue that story with new research and new perspectives but they must first be familiar with the story before they can move forward.

Literature review on malaria in global statistics of mortality and morbidity:

Anne Kessler, Anna malaria van Eijk and Sandra Albert (2016) Meghalaya one of the eight state in the north Eastern region of India, has been reported to carry a high malaria burden. However, malaria surveillance, epidemiology and better study are sparse and number review combining these topics with malaria prevention and control strategies have been published in recent years in (2016). A hybrid approach was used to the described the status of malaria in Meghalaya. A literature search was performed using the terms 'malaria' and Meghalaya second data were obtained from Meghalaya state malaria control programme for 2016-2017 analysis. According Johnna P. Daily' (2017) Malaria is a prevalent disease in the prevalence to residents of malaria endemic region. Health care to and residence of malaria endemic and non-endemic sating should be familiar with the latest evidence for the diagnosis management.

Literature review on malaria and causes:

Christine Manyando-2017, Malaria is caused in humans by five species of single-celled eukaryotic Plasmodium parasites (mainly Plasmodium falciparum and Plasmodium vivax) that are transmitted by the bite of Anopheles spp. mosquitoes. Malaria remains one of the most serious infectious diseases; it threatens nearly half of the world's population and led to hundreds of thousands of deaths in 2015, predominantly among children in Africa. Malaria is managed through a combination of vector control approaches (such as insecticide spraying and the use of insecticide-treated bed nets) and drugs for both treatment and prevention. The widespread use of artemisinin-based combination therapies has contributed to substantial declines in the number of malaria-related deaths; however, the emergence of drug resistance threatens to reverse this progress.

Advances in our understanding of the underlying molecular basis of pathogenesis have fuelled the development of new diagnostics, drugs and insecticides. Several new combination therapies are in clinical development that have efficacy against drug-resistant parasites and the potential to be used in single-dose regimens to improve compliance. This ambitious programme to eliminate malaria also includes new approaches that could yield malaria vaccines or novel vector control strategies. However, despite these achievements, a well-coordinated global effort on multiple fronts is needed if malaria elimination is to be achieved.

Literature review on malaria clinical features and complications:

Alessandro Bartoloni-2012 Abstract The first symptoms of malaria, common to all the different malaria species, are nonspecific and mimic a flu-like syndrome. Although fever represents the cardinal feature, clinical findings in malaria are extremely diverse and may range in severity from mild headache to serious complications leading to death, particularly in falciparum malaria. As the progression to these complications can be rapid, any malaria patient must be assessed and treated rapidly, and frequent observations are needed to look for early signs of systemic complications. In fact, severe malaria is a life threatening but treatable disease. The protean and nonspecific clinical findings occurring in malaria (fever, malaise, headache, myalgias, jaundice and sometimes gastrointestinal symptoms of nausea, vomiting and diarrhoea) may lead physicians who see malaria infrequently to a wrong diagnosis, such as influenza (particularly during the seasonal epidemic flu), dengue, gastroenteritis, typhoid fever, viral hepatitis, encephalitis. Physicians should be aware that malaria is not a clinical diagnosis but must be diagnosed, or excluded, by performing microscopic examination of blood films. Prompt diagnosis and appropriate treatment are then crucial to prevent morbidity and fatal outcomes. Although Plasmodium falciparum malaria is the major cause of severe malaria and death, increasing evidence has recently emerged that Plasmodium vivax and Plasmodium knowlesi can also be severe and even fatal.

Literature review on malaria management:

S. C. McCombie-2012 Abstract A review of literature on treatment seeking for malaria was undertaken to identify patterns of care seeking, and to assess what is known about the adequacy of the treatments used. There is considerable variation in treatment seeking patterns, with use of the official sector ranging from 10-99% and self-purchase of drugs ranging from 4-87%. The majority of malaria cases receive some type of treatment, and multiple treatments are common. The response to most episodes begins with self-treatment, and close to half of cases rely exclusively on self-treatment, usually with antimalarials. A little more than half use the official health sector or village health workers at some point, with delays averaging three or more days. Exclusive reliance on traditional methods is extremely rare, although traditional remedies are often combined with modern medicines.

4. Result and Discussion

Analysis of the data regarding 1st objective of the study i.e., to assess the knowledge of population regarding prevention of malaria shows that mean knowledge score regarding prevention of malaria was 20.17 and 26 (65%) people had average knowledge regarding prevention of malaria. These findings were supported by the study conducted by Gaurav Dhawan (2014) study was conducted to assess the knowledge of people regarding prevention of malaria, that the people had a moderate level of knowledge regarding prevention of malaria.

- Analysis of the 2nd objective of the study i.e., to assess the practice of population regarding prevention of malaria shows that mean practice score regarding prevention of malaria was 7.1 and 36 (90%) peoples had been practicing favorable regarding prevention of malaria. These finding were supported by the study conducted by Gaurav Dhawan (2014) study was conducted to assess the practice of people regarding prevention of malaria, that the people had a low level of practice regarding prevention of malaria.
- Analysis of the 3rd objective of the study i.e., to assess the association of knowledge and practice of population regarding prevention of malaria with selected demographic variables according to age, sex, marital status, income, education, type of family, type of house, occupation, and source of information regarding prevention of malaria.
- Finding reveal that according to age, sex, marital status, income, education, type of family, type of house, occupation and source of information was statistically nonsignificant difference in the frequencies at p.

5. Conclusion

On the basis of knowledge regarding prevention of malaria the mean score of people in residing area in Bhramnagar Chaubepur, Kanpur 20.17. On the basis of practice regarding prevention of malaria the mean score of people in residing area in Bhramnagar Chaubepur, Kanpur 7.1. There was non-significant association of the knowledge and practice of people regarding prevention of malaria with selected demographic variables such as age, sex etc. The following conclusion were drawn on the basis of the result of the present study topic a descriptive study to assess the level of knowledge and practice of people on preventive measure of malaria among the selected population at Brahmnagar Chaubepur in Kanpur. There is a felt need for bridging the gap between knowledge and practice in residing areas of Bhramnagar Chaubepur about prevention of malaria. It is a challenge for all the health personnel in the community like community health nurse, school health nurse and other health workers especially in rural area.

1) Nursing practice

The most important role of the nurse is to provide awareness to the public regarding prevention of tuberculosis. The nurse plays an important role in disease prevention and health promotion. Several implications can be drawn from the present

study for nursing practice. The health personnel have added responsibility in educating the public regarding disease prevention and help in maintenance of health by modification of life styles. Health education conducted by the health personnel in the hospital and community helps in wider coverage of public in preventing tuberculosis. If nursing personnel provide the necessary information regarding tuberculosis and its prevention by using information booklet, they are the correct persons to educate peoples there by peoples can understand and they can educate their family members, from family members to the neighbors, from them to the community. Nurses can motivate the public in prevention of the disease.

2) Nursing education

The nursing curriculum should emphasize on imparting health information to community using different teaching methods. Nursing student should be educated on health promotion, disease prevention and early detection of the disease. The information booklet can be used as an illustrative informational mode to the students as well as clients and their family members and the community for which they have to be prepared properly.

3) Nursing administration

Nursing administration should take an initiative creating policies and plans in providing education to the people. In-service education to be provided to the nursing personnel at various levels to make them aware to tuberculosis and its prevention by nursing administrators. Knowledge and practices regarding prevention of tuberculosis should be update by utilizing various communication facilities. Health education program 54 should be included as a part of job – description of various categories of health personnel. The nurse as an administrator also should plan the out-reach activities in collaboration with the other agencies in imparting the knowledge to the community. Programme to be planned to away from tuberculosis patient. Always cover your mouth with a tissue when you cough or sneeze. Tuberculosis patient should not visit other people and don't invite to others to visit the patient unnecessary rather than treatment.

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