



THE WARMER ENVIRONMENT, INTENSE RAINFALL AND INCREASE OF SWINE FLU AND DENGUE PATIENTS IN KOLHAPUR: NEED OF SOCIAL AWARENESS

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Abstract

Last five months health department report of **Kolhapur** declared 72 deaths due to dengue & swine flu. This century recognized by majorly due to Climate change and it represents an issue of Health Problem so it specifies by action oriented Social Responsibility. Present situation of Swine Flu & Dengue fever is rapidly expanding since last five month in **Kolhapur**. Increase in Population, fluctuation of Temperature, varied rainfall and increase in frequency of natural disasters, as well as non-climatic trends involving tourists, increase in solid waste, Hospital waste thrown on roadside, corrode foundry material, industrial waste thrown in Panchganga river which pollutes natural sources of water and it becomes the home of mosquitoes, migration of rural peoples towards urban areas, demand of urbanization, and international trade and travel etc are expected to increase the prevalence of mosquito breeding sites, where survival mosquito increases, and it increases the speed of mosquito reproduction, the speed of viral incubation which distributes Swine Flu & dengue virus and its vectors, human migration patterns towards urban areas, and displacement after natural disasters. The burden of dengue disproportionately affects the poorer and slum area, due to increased environmental risk and decreased health care. Mobilization of social institutions is needed to improve the structural inequalities of poverty that predispose the poor to increased dengue & Swine Flu fever infection and worse outcomes. In this paper it explains factors of the climate change affects increase patients of Swine Flu & dengue and the issues of social responsibility.

Keywords:- warm environment, increase of Swine Flu & Dengue Patients In Kolhapur, Social Awareness.

INTRODUCTION:-

In Kolhapur Dengue fever is the fastest emerging arboviral infection spore [1]. The dengue virus is the Cause of dengue fever. Dengue has become the most important arboviral infection worldwide with more than 30million of dengue fever estimated to occur each year. Dengue viruses are arthropod born viruses (arboviruses) in the genus *Flavivirus* (family *flaviviridae*) with positive polarity. Single stranded RNA. They utilize *Aedes (stegomyia) spp* primarily [1]. *Albopictus* as vector for domestic and peridomasti transmission. *Andarboreal Aedes* vector for enzootic transmission the flavivirus is genus include others important pathogens has such as yellow fever, dengue viruses are the causative agents of dengue fever and dengue hemorrhagic fever Its genome is about 11000 bases that codes for three structural proteins (capsid protein C, Membran protein M, envelop protein E) and seven nonstructural proteins (NS1, NS2a, NS2b, NS3, NS4b, NS5) it also includes short non-coding regions on both the 5 and 3 ends [2]. The dengue virus genome is 11644 nucleotides in length, and is composed of three structural protein genes encoding the nucleocapsid or core protein (C), a membrane-associated protein (M), an envelope protein (E), and seven non-structural protein (NS) genes. Among non-structural proteins, envelope glycoprotein, NS1, is of diagnostic and pathological importance. It is 45 kDa in size and associated with viral

haemagglutination and neutralization activity [3]. According to Health Department of Kolhapur since last three years Temperature becomes warmer and due to it, the swine flu and dengue patients increases.

HISTORY:- Dengue virus was isolated in Japan in 1943 by inoculation of serum of patients in suckling mice and at Calcutta in 1944 from serum samples of US soldiers. The first epidemic of clinical dengue-like illness was recorded in Madras (now Chennai) in 1780 and the first virologically proved epidemic of dengue fever in India occurred in Calcutta and Eastern Coast of India. The first major epidemic of the dengue hemorrhagic fever occurred in 1953-1954 in Philippines followed by a quick global spread of epidemics of dengue fever / dengue hemorrhagic fever. Dengue hemorrhagic fever was occurring in the adjoining countries but it was absent in India for unknown reasons as all the risk factors were present. The first major wide spread epidemics of Dengue hemorrhagic fever occurred in India in 1996 involving areas around Delhi and Lucknow and then it spread to all over the country. Subsequently, the awareness of variable responses to the infection presenting a complex epidemiology and demanding specific solutions necessitated the publication of the Comprehensive Guidelines for the Prevention and Control of

Dengue/DHF with specific focus on the WHO South-East Asia Region in 1999 [1].

METHOD: Students have collected the data of Swine flu & Dengue from Z. P. Health department, Kolhapur. Within one year October 2016 to October 2017, Deaths are occurred due to swine flu are 72 & Dengue are 23. Rainfall was irregular throughout the year. Temperature was fluctuated. Air Pollution increased by 17%. Food grains and vegetables don't get proper time to grow & get nutritional values. By ANALYSING IT FROM EXPERTIES OPINIONS .we found following symptoms ...

DENGUE FEVER:- Dengue fever (DF) and its severe forms—dengue hemorrhagic fevers (DHF) and dengue shock syndromes (DSS)—have become major international public health concerns. Over the past three decades, there has been a dramatic global increase in the frequency of dengue fever (DF), DHF and DSS and their epidemics, with a concomitant increase in disease incidence. Dengue is the most prevalent arthropod-borne viral illness in humans, with half of the world's population at risk for infection and up to 50 million cases of dengue estimated each year [4]. Dengue fever, also known as "break-bone fever" ("Haddi Tod Bukhar") because of severe body and joint pains produced which is a mosquito borne tropical disease caused by the dengue viruses the dengue is transmitted by several species of mosquito within the genus *Aedes*, .The virus has five different types usually gives lifelong immunity to that type but only short-term immunity to the other subsequent infection with a different type increase the risk of severe complication Dengue fever is a common communicable disease characterized by occurrence of high fever, severe body aches and intense headache. It is a very common disease that occurs in epidemic form from time to time. The first symptom of the disease appears in about 5-7 days after the infected mosquito bites a healthy person. It is possible to become infected by dengue multiple times because the virus has four different serotypes. Dengue fever occurs in the KOLHAPUR. Death rate varies from 5 per 100 cases to 30 per 100 cases. The global spread of dengue virus, however, has followed its emergence from sylvatic cycles and the primary life cycle now exclusively involves transmission between humans and *Aedes* mosquitoes[3].

Symptoms : • Sudden onset of high fever with feeling of chills ("Thandi Lagna"); • Severe Headache, Pains in muscles and joints; • Pain behind the eyeballs especially on pressing the eyes or on moving the eyeballs; • Extreme

weakness, loss of appetite, feeling of nausea; • Change in taste sensations in mouth; • Pain in abdomen by itself or on touching; • Mild pain in throat; • Patient feels generally depressed and very sick • Rash on the skin: Pinkish red rash appears on the skin in the form of diffuse flushing, mottling or pinhead eruptions on the face, neck and chest. Later on, the rash may become more prominent.

Herbal and home remedies :- Neem: Its common name is Margosa, Neem leaves, Neem oil are a great purifying agent and should be applied on a damp warm cloth in dosages of between 15 to 60 gm 2-3 times daily. It should be noted that usage should be restricted in both males and females seeking pregnancy. Drink as much water as you can in order to replace fluid loss. It will also help to bring down body temperature. **Coriander:-** The common name is coriander fruits. It is obtained from the fully dried ripe fruits of the plant *Coriandrum sativum* Linn. Belonging to family Umbelliferae. It is mainly found in European country principally in Russia, Hungary, Holland, In India Andhra Pradesh, and Maharashtra [4]. The leaves of the coriander can be taken in the form of a tonic to reduce the fevers in dengue. A cup twice daily is the recommended dosage. Fruits rich in vitamin C like **Amla** (*Embellica officinalis*) belonging to family Euphorbiaceae are advised as vitamin C helps in better absorption of iron. Chyavanprash can be taken as it is an immunobooster, blood purifier and increases blood count. Hogweed is used to bring down temperatures. Hogweed produces plenty of perspiration which flushes the toxins and brings the fever down. The seeds of hermal are powdered and taken as either an infusion. **Tulsi :-** Its common name is Holy basil. It consists of fresh dried leaves of *Ocimum sanctum* Linn belonging to family Labiatae. This bitter and pungent herb has all the properties that strengthen the internal system against fever. Fifteen basil leaves should be chewed twice a day or these can be boiled in 200mL water on low heat. When half the quantity is left it can be taken 2-3 times a day. This strengthens the body's defense mechanism. Mix 360 mg of Shunthi Churna with 125 mg of Hinguleshwar and now take this mixture at least 4 times daily, you may take with tea or hot water. In case of the temperature of the patient rises beyond 104°F (40°C), then you may apply cold pad, on the forehead till the temperature subsides. **Papaya :** juice is a natural cure for dengue fever. The juice of Papaya leaf is a sure cure for platelets deficiency. The Carica papaya leaves extract in

water was given to the patient twice daily. The patient started vomiting as eating, so physicians recommended fruits and fruit juices. 25 ml of extract was given to the patient in the morning and evening. Two raw papaya leaves are pounded, and they are squeezed with a cloth to strain and filter the juice. Usually, one leaf gives one tablespoonful of juice and two tablespoonfuls of papaya juice are sufficient for a day. The powerful 'Pepsin' enzyme in the papaya leaf has the ability to dissolve proteins and is already used for indigestion and stomach inflammation while another enzyme from the papaya leaf, 'Chymopapain' is used successfully in spinal treatment. Tulsi leaf ten pieces and one black pepper. **Dhatura** is obtained from the flowering tops of the Dhatura metel var. It is belonging to family Solanaceae. Dhatura is the Ayurvedic version of the belladonna. Its leaves have potency in reducing the seriousness of the dengue fevers. However, the dosage must not exceed 2 decigrams, or it will lead to severe negative symptoms. An infusion of the Indian mallow is used as an efficacious treatment for reducing the dengue fevers. To increase the blood count pomegranate juice/ black grape juice should be given. The orange juice helps with digestion, increased urinary output, promotes antibodies for fast healing and recovery. Goat milk while goat milk is believed to help in increasing platelet counts, there is no scientific proof yet to back this evidence. Porridge, Remember to always give pureed and soft foods for people with dengue fever. Porridge is easily swallowed and digested, and has plenty of fluids. Ginger water, basically dengue patients need lots of fluids. Give warm ginger water as a reinforcement of the body and reduce the effects of nausea that often they experienced. Coconut water, the content of electrolytes and minerals present in coconut water is good for the body ion replacement for dengue patients. Vegetable juice. Carrot, cucumber, and green leafy vegetables juice well to provide the basic nutrients that the human body needs. Fruit juices such as watermelon, guava, kiwi, papaya, and other fruits rich in vitamin C are must for dengue patients. It helps the production of lymphocytes and strengthens the immune system of the body.

SWINE FLU SYMPTOMS:- are the sudden onset of fever, cough or shortness of breath. Other symptoms can include headache, sore throat, tiredness, aching muscles, chills, sneezing, runny nose or loss of appetite.

SWINE FLU & ORDINARY FLU:- Swine flu is a respiratory disease and has some elements of a virus found in pigs. The World Health

Organization (WHO) is closely monitoring cases of swine flu globally to see whether this virus develops into a pandemic. Because it's a new virus, no one will have immunity to it and everyone could be at risk of catching it. This includes healthy adults as well as older people, young children and those with existing medical conditions.

SWINE FLU SPREADS:- Flu viruses are made up of tiny particles that can be spread through the droplets that come out of your nose and mouth when you cough or sneeze. When you cough or sneeze without covering your nose and mouth with a tissue, those droplets can spread and others will be at risk of breathing them in. If you cough or sneeze into your hand, those droplets and the germs in them are then easily spread from your hand to any hard surfaces that you touch, and they can live on those surfaces for some time. Everyday items such as door handles, computer keyboards, mobile and ordinary phones and the TV remote control are all common surfaces where flu viruses can be found. That's how all cold and flu viruses, including swine flu, are passed on from person to person. Antiviral drugs (including Tamiflu and Relenza) – enough to treat more than 33 million people (half the UK population), and we are planning to increase this. Antiviral drugs are not a cure, but they help you to recover if taken within 48 hours of symptoms developing, by proper precaution.

Protection:- Follow good hygiene practices it will help to slow the spread of the virus and will be the single most effective thing you can do to protect yourself and others from infection, to prevent the spread of germs. Always carry tissues. Wash your hands with soap and hot water or a sanitiser gel often. There's a simple way to remember this: CATCH IT, BIN IT, KILL IT. Use Of Face Mask:- The available scientific evidence shows that these basic face masks don't protect people from becoming infected. The best way to protect yourself and stop the spread of flu viruses is by using and disposing of tissues and washing your hands, as explained on the previous page. Remember to CATCH IT, BIN IT, KILL IT. Set up a network of 'flu friends'. Flu friends are neighbours, friends and relatives who can help you if you get ill. It is important for us to make sure that you have up-to-date advice. This will include further information on how to access antiviral drugs, should the virus become more widespread in the Kolhapur.

CONCLUSION:-

Dengue & Swine flu virus is the big problem for the human life in Kolhapur. Dengue virus is causes the Dengue fever in human by the

mosquito bite 23 people died by dengue fever. Then the problem is generated how to control dengue fever. There are many home remedies for control of dengue & Swine flu fever which can be easily obtained and cheap and also free from side effects. Keeping update And taking Doctors advice is better to cure.

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