Research Paper

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REVIEW ON CONTAGIOUS DEADLY DISEASES SPREADING IN INDIA INCLUDING SURVEY ON TUBERCULOSIS & AIDS

Zoology

KEYWORDS:

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ABSTRACT

India, considered as a world capital of so many deadly diseases. Regularly increasing cases of contagious diseases and poor management of adoption of health technologies in the country doubled the risk in a decade. HIV, Swine flu, Avian flu, Rabies, SARS, Typhoid, Hepatitis B, Common cold, Cholera, Tuberculosis, Syphilis etc. are the major cause of concern. Air borne diseases like Tuberculosis, Pneumonia, Diphtheria, Whooping cough, food and water borne diseases like Typhoid, Cholera etc.soil borne diseases like Tetanus and even sexually transmitted diseases like Gonorrhea, Syphilis and UTI are unmanageably increasing due to unsystematized health care facilities, poor health and hygienic conditions, sanitation and ineffective implementation of our health care facilities and techniques. Proper implementations of disease control programme including healthy environmental conditions are necessary to support the process of effective management of life threatening diseases.

Introduction:

We must retroinspect the ravages of deadly Chikunguniya, Bubonic plague, Seasonal flu, Dengue attack in previous years. All these cases are somehow indicates serious lapse in our national preparedness in tackling the disease in a concrete manner. We must be ready to handle Ebola scare in near future because despite utmost early information and safety precautionary measures including medicines available in our hospitals, we failed to save 42 lives in Telangana and 81 lives in Rajasthan from Swine flu. Due to H1N1 virulent waves in the country, nearly 50% deaths reported in Maharashtra alone. This deadly virus has also claimed lives in Punjab and Haryana. The seriousness and threats may enhance in those patients with having co-morbid conditions like diabetes, hypertension and other ailments of respiratory tracts. It is an apparent need in the country for effective implementation of health care technologies including the timely adoption of selected drugs and vaccines. Massive immunization programmes or free counseling and testing policies including drug distribution process must give to appropriate agencies having record of accomplishment in handling and caring practices. Time of adoption, policy framework, demand, distribution, and supply issues are also important in this discussion.

Material & Method:

During the course of study, two major diseases selected to find out cause of rapid increase of infectious disease in India and the efforts taken by the government and health care experts to control this deadly scourge. The material for study directly obtained from WOS (Web organized services) and from the annual reports and journals published time to time like NT Survey and NACO and News articles. The entire data is being analyzed and the conclusion made by thorough study of the disease prevalence in the country. The paper also describes the financial support by the government agencies or from NGO to control the disease. The efforts are also being taken into consideration to find out co-morbidity between TB and AIDS. The entire data presented in the form of survey report.

SURVEY ON TUBERCULOSIS:-

India, in a shocking disclosure by the World Health Organization (WHO) is the home to the highest number of Tuberculosis patient of the world and the disease has become resistant to the most effective drug available. As we know, the Tuberculosis is a serious air borne disease caused by bacterium Mycobacterium tuberculosis and regarded as the disease of crowded population, especially of lower socio-economic group. The ever-increasing demographic pressure and poor hygienic conditions of most of the cities in the country not only accelerates the spreading of this deadly disease but also hinder the possibility of preventing this from presently available broad-spectrum antibiotics. The country is gripping in the deadly strain of MDR-TB bacterium and this makes the country having largest number of estimated cases of MDR-TB. It is highly contagious and can spread through droplet infection. Our efforts in controlling the disease failed progressively due to ineffective management.

There are several strains of Tuberculosis viz.
A.MDR-TB (multi drug resistant TB)
B. EDR-TB (extremely drug resistant TB)
C. XXDR-TB (extensively drug resistant TB)
D.TDR-TB (total drug resistant TB)

FINANCIAL ALLOCATION TO CONTROL TB IN 12th PLAN

Due to severity of situation and effective fight against the deadly disease, the government of India increases financial allocation for Tuberculosis and other air borne diseases by over 400%. As against Rs. 1,440 crore budget for TB control in the 11 five year plan, the health ministry has prepared Rs.5, 825 crore programme for the 12thplan.

NATIONAL BURDEN OF TUBERCULOSIS:-

In a countrywide data of Tuberculosis patient available, it was amazing to find out that TB kills around 1,000 people a day in India. The data also indicates that India has the highest TB burden in the world with an estimated 1.8 million new cases every year. In 2010, the bacterium infected over 15 lakh people and mortality reported over three lakh. Reported deaths due to contagious diseases in India are around 17.6 percent in which 3.5% is TB related deaths. Untreated and uncompleted treatment regime of TB can infect an average 15 people every year. Every year 3% of new cases of MDR –TB have reported and 12-17% reported cases became MDR-TB because of patient's failure for not following the complete drug regime prescribed by the physician. The data highlight the increasing number of MDR-TB and the bacterium-attained resistance of the two powerful drugs of first line treatment. The data further indicates the danger of bacterium that develop resistance even for the second line treatment regime.XDR-TB is also resistant to three or more of the six classes of second line drugs. It also recorded that Tuberculosis generally infects the patient of age group of 15-49 year. The TDR-TB is also a new version or strain of Tuberculosis because for this kind of tuberculosis, no drug available at present to treat such patients. TDR-TB reported death of patient found in Hinduja hospital, Mumbai Total 12 patients having TDR-TB were reported in which one of the patients has died. In Uttar Pradesh Ratnagiri is also in the light having TDT-TB reported cases. Death reported due to none of the known TB drugs combination could save the patient's life. In 2012, WHO reported that the bacterium is also responsible for mortalities among women? The recorded data shows approximately three lakh deaths among HIV negative women and two lakh mortalities among HIV positive. Surprisingly in India, it has been found that around 15 lakhs new TB cases reported annually.

2. SURVEY ON AIDS (AQUIRED IMMUNO-DEFICIENCY SYNDROME):

AIDS is a severe immunodeficiency disease arises from HIV infection accompanied by several other symptoms including tuberculosis, cancers; enlarge lymph nodes and neurological disorders. HIV infection and AIDS have been reported in every country, and parts of Africa and Asia are especially high-risk zone because of ever-burgeoning population, increased demographic pressure and lack of education among high-risk communities. In this disease, the immunity of patient reduces gradually and the patient became susceptible to most opportunistic infections like Tuberculosis, Influenza, Cancer, Tumor etc. HIV (Human Immuno-Virus) transmitted through body fluids such as blood, lymph, vaginal fluid, breast milk. The reported increase in transmission of HIV through MSM is very high. However, it has been reported that it can also transmit through various other routes such as blood transfusion, contaminated hypodermic needles, and placental transmission or vertical transmission from mother to baby during pregnancy. The World Health Organization (WHO) declared HIV infection in human as pandemic. The severity of the disease can be measured by the data available during 1981-2012.AIDS killed more than 25 million people. In 2005, estimated toll were 2.4-3.3 million lives, in which more than 570,000 were children. (Arunkumar M.C., 2011pp. 1)

FINANCIAL ALLOCATION TO CONTROL AIDS:-

Financial allocation for fighting this deadly scourge, the government has allocated domestic budgetary support available to NACP. Approximately 1,115.62, pool fund (WB+DFID) 2,579.36, global fund 2, 401.24 USAID fund119.85 and UNDP. The total fund available to the NACP during 2007 to 2012 was 6, 237.48 crore. (Data available by NACP annual report published by NACO (National AIDS Control Organization) during 2007-2012 expenditure incurred during NACP-III.) The financial support provided by various sources to curb the disease and for effective management of this deadly disease.

NATIONAL BURDEN OF AIDS:-

The estimated number of people living with HIV/AIDS (PHLIV) in India was about 21 lakh and the number of adults with new HIV infection was 1.2 lakh in 2012 (Sinha K.2012), with the global burden of 42 million HIV cases worldwide. Since its inception in 1984, the epidemic continually spread in a serious proportion. The HIV/AIDS epidemic in India varies from state to state. Tamil Nadu, Andhra Pradesh, Maharashtra, Manipur and Goa are leading the rest of the country in terms of AIDS and HIV prevalence. (Gupta I., Trivedi M., Kandamuthan S.2009) The introduction of most effective regime of drug HAART in controlling AIDS proved to be highly beneficial in reducing the advancement of disease. HAART reduces viral load and improvement in immune function. It has also reduced the AIDS related deaths. In India, 4.48 lakh HIV positive patients are on the lifesaving anti-retroviral therapy (ART) at present. (Sinha K.2012). Currently, hundreds of potential HIV vaccines are on clinical trial. Several new strategies are being used to increase the safety of an HIV affected patients. Unfortunately, HIV remains an incredibly difficult target to immunize against vaccine. However, it has been found that from 2006-2011 new HIV cases fell by 57%. Similarly, in south and south East Asian countries, the reported decline of new cases is 40%.

A survey on AIDS reveals the shocking picture. Around 87% people are unaware the disease despite the fact that they were infected with the virus. The study also finds out that the progression of AIDS among children is very rapid in comparison to adult patients. Lungs infection is very common in AIDS patient and in most of the cases Pneumonia and TB is associated with HIV and hence TB-HIV co-infection is a major world health problem. Estimated 20, 88,683 HIV+ people reported in India while the number of affected children is around1, 45,446. The vertical transmission of the disease infected around 21,000 children in the country. 7,26,824 patients are getting first line anti-retroviral treatment from various ART centers.

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