

Corelation Between people living with HIV/AIDS and Transportation development in Pune administrative division (Maharashtra)

* Dr. R. S. Shikalgar.



ABSTRACT

The world has responded to the great challenge of the HIV/AIDS epidemic. The aim and objective is to study the correlation between people living with HIV/AIDS and transportation development in Pune Administrative Division, Maharashtra." The spatial distribution of PLWH/A is unequal and the transportation development plays an important role on the spread of HIV / AIDS.

Key Words: Hiv, Aids, Transport.

Introduction:

The world has responded to the great challenge of the Human Immune deficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS) epidemic. Today, HIV/AIDS prevalence rate is very high in the world. In the world 2009, the people living with HIV/AIDS were 33.3 million in the world out of which adult people living with HIV and AIDS (PLWH/A) were 30.8 million and children (Below 15 years) were 2.5 million (World Trade Organization (WHO), 2009). HIV epidemic in India in 2008 was 22.7 lakh with an estimated adult prevalence of 0.29 % (National AIDS control Organization (NACO), 2009-10). In August 2010, the total number of patients alive on anti retroviral therapy (ART) were 3,57,808 in India and 84,413 in Maharashtra. (NACO, 2010). Maharashtra is one of the highest HIV prevalence states and has also experienced a rapid increase in the number of cases since 1986. The districts of Mumbai, Sangli, Kolhapur, Pune, Satara, Latur, Raigad, Akola and Chandrapur are suffering relatively from a higher prevalence of HIV/AIDS in Maharashtra. Transport or transportation is the movement of people, animals and goods from one location to another. Transport plays an important part in economic growth and globalization. The bad habits and uncivilized facts spread from one place to another place due to development of transport.

Aims And Objectives: The aim of this study is the correlation between HIV/AIDS and transportation development in Pune Administrative Division, Maharashtra." This research will provide relevant data and insight to reinforce the planning process. 1. To study the spatial distribution of HIV/AIDS. 2. To study the correlation between transportation development and HIV/AIDS. **Methodology:** The secondary data was collected from Government Organization, Hospitals, non government organizations, literature, research articles and books etc. Statistical and Cartographic techniques (Maps,

Diagrams, and Graphs) are used for the analysis of data.

The following research methods are followed:

1. Spatial distribution of population (Location Quotient Method)

$$\frac{\text{PLWH/A in 'i' taluka}}{\text{PLWH/A in Pune Division}} \div \frac{\text{Total population in 'i' taluka}}{\text{Total Population in Pune Division}}$$

2. Transportation Development:

Density of network = Road length (km.) / area (sq.km.) * 100.

Study Region:

The division of Pune, which is one of the six divisions of Maharashtra lying between 15° 43' and 19° 24' north latitude and 72° 19' and 76° 41' east longitude and has area of 57,770 sq. km. and population density is 349 per sq. km. according to 2001 census. In the Pune administrative division there are 5 districts and 57 tahsils. (Miraj, Kavate Mahankal, Jath, Khanapur, Atapadi, Palus, Kadegaon, Walwa, Shirala, and Tasgaon (Sangli District), Junnar, Ambegaon, Shirur, Khed, Maval, Mulshi, Haveli, Pune, Daund, Purandar, Velhe, Bhor, Baramati, Indapur (Pune District), Mahabaleswar, Wai, Khandala, Phaltan, Man, Khatav, Koregaon, Satara, Jaoli, Patan, Karad, (Satara District), Karmala, Madha, Barshi, north Solapur, Mohol, Pandharpur, Malshiras, Sangole, Mangalwedhe, South Solapur, Akkalkot (Solapur District), Shahuwadi, Panhala, Hatkangale, Shirol, Karveer, Bavada, Radhanagari, Kagal, Bhudargarh, Ajara, Gadhingalaj, Chandgarh (Kolhapur District)).

Spatial Distribution of Plwh/A:

PLWH/A is 44.21 per one lakh population in the Pune Administrative division between September 2005 to October 2007 period. PLWH/A is the highest (78.69 per lakh population) in sangli district, and the lowest (20.64 per lakh population) in Pune District. Location Quotient Method is used to represent the

spatial distribution of HIV/ AIDS population in Pune Administrative Division.

1. High Concentration: (L.Q. Above 1.50): In 11 talukas (Walwa (L.Q. 4.54), North Solapur (L.Q. 3.58), Kavate-Mahankal, Palus, Padharur, Wai, Karveer, Shirala, Khanapur, Satara and Mangalwedhe) the HIV/ AIDS population is the highest. Only in 11 taluka, PLWH/A is 56.29 %.

2. Medium Concentration: (L.Q. 1.00 to 1.50): The HIV/ AIDS population is medium in Karad, Tasgaon, Karmala, Barshi and Koregaon. In this taluka, PLWH/A is 9.79 percent.

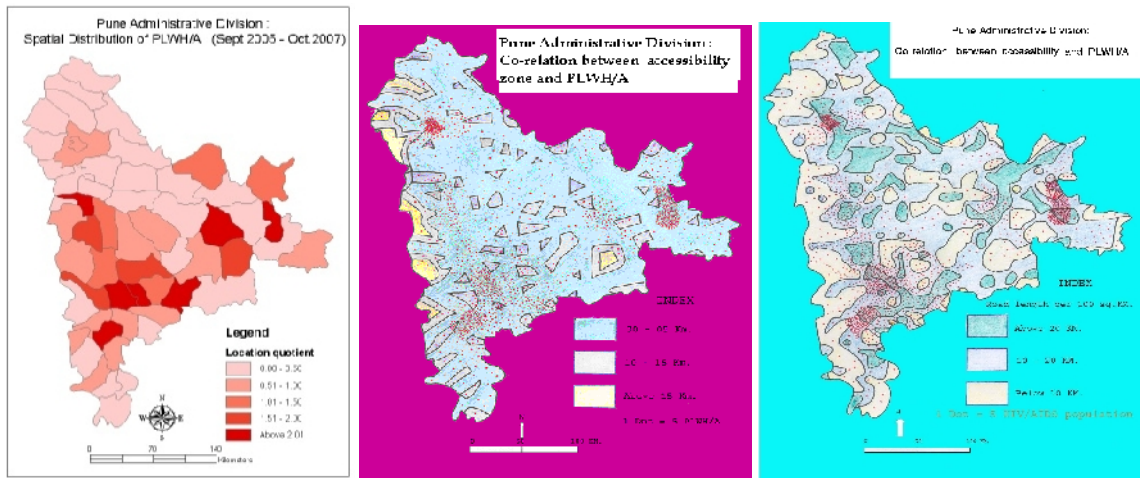
3. Low Concentration: (L.Q. 0.00-1.00): The HIV/ AIDS population is less in Kagal, Miraj, Panhala, Patan, Khatav, Jaoli, Bavada, Haveli, Pune City, Hatkanagale, Akkalkot, Man, Sangol, Bhudargarh, Mulshi, Ambegaon, Velhe, Chandgarh, Radhanagari, Khandala, Ajara, Phlatan, Maval, Shirur, South Solapur, Shahuwadi, Mahabaleshwar, Bhor, Baramati, Purandar, Junna, Gadhinglaj, Malshiras, Khed, Daund and Indapur tahsil.

Co-relation Between Plwh/A And Transportation Development: Accessibility method / density or a network method has used for the Correlation between PLWHA and Transportation Development. In the 0-10,

10-20 and above 20 km road density region (per 100 square km), the percentages of PLWH/A are 14.30, 54.41 and 31.27 respectively. 5, 10 and above 10 km away from road, the percentages of PLWH/A are 96.75, 2.60 respectively.

Conclusion And Suggestion:

It is observed that The spatial distribution of PLWH/A is unequal in Pune Administrative Division. The PLWH/A concentration in Walwa, Kavate-Mahankal, Palus (Sangli District), North Solapur, Pandharpur (Solapur District) and Karveer (Kolhapur District) is the highest. In the Pune Administrative Division, 47.33 percent PLWH/A are residing in the above stated tahsils. The transportation development in Pune Administrative Division is very high and it plays an important role on spread of HIV / AIDS. For the HIV prevention and control, the promotion of HIV education is must. Awareness programme and development of health facilities are essential at high risk infection areas such as Walwa, North Solapur, Kavathe-Mhankal, Palus, Padharpur, Wai, Karveer, Shirala, Khanapur, Satara and Mangalwedhe tahsil and for those people who are residing in the area very close to national and state highway and its vicinity.



* Asst. Prof. & Head, Dept. of Geography, Elphinstone College, Mumbai

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