



A STUDY ON THE CAUSES FOR THE SPREAD OF SWINE FLU AMONG THE PEOPLE LIVING IN THE SLUMS OF CHENNAI CITY

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ABSTRACT

Swine flu, also known as the H1N1 virus, is a relatively new strain of an influenza virus that causes symptoms similar to the regular flu. It originated in pigs but is spread primarily from person to person. It was first discovered in humans and became a pandemic. Pandemics are contagious diseases affecting people throughout the world or on multiple continents at the same time. People who have chills, fever, cough, sore throat, runny or stuffy nose may have fever or viral fever. People can't identify it is a swine flu but doctors can easily identify. Swine flu is three categories namely A, B, C. Slight fever, cough, cold and sore throat is A category. If continuously high fever, sore throat is B category and in the morning slight fever and evening it has suddenly increasing, high fatigue and stuffy nose symptoms is C category. In this A and B categories need not take throat swab test. C category of symptoms may be swine flu. The swine flu test will have been positive those who must have been taken Tamiflu tablets immediately for 5 days to control it and if children will have to be taken tablets for 5 more days. The environment and ill-health are very closely related, as environment plays a crucial role in our lives. The problem is that those who are living in the bad conditions do not understand the impact of it on their health. During the survey some of the slums could identify what was wrong with their environment and its consequences on their health and well-being. This study went further to explore in details the swine flu virus problems of the slum people. The respondents are uneducated, living unhygienic and difficult conditions, working in the informal service sector and comprising diet low in protein. Health concerns include a variety of acute and chronic conditions both in the slums and in their families. These are the factors leading to spread swine flu in the slum community.

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INTRODUCTION

Health is the level of functional or metabolic efficiency of a living being in humans, it is the general condition of a person's mind, body and spirit, usually meaning to be free from illness, injury or pain and in a broader sense, would refer to a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity as stated by WHO in 1946. Sustainable sanitation is the need of the hour and safe drinking water is getting scarce and also lack of preventive health screening and lack of suitable prenatal care is yet another cause for malnourishment and poor health of both mother and children and other human beings. Chennai being a city of canals and rivers, with almost all of them carrying stale water and sewage, a significant portion of the slum population of the city dwelling along the banks of these rivers and canals, requires special attention from the health point of view. Lack of toilet facilities are pointing towards the cultural, social and economic factors that affect the health.

Waterways in Chennai have been studied by the TNSCB and the Public Works Department (PWD) in a joint survey. As the statistics then showed, there were 33,313 families on the three riversides in Chennai. The internal breakup goes like this: Buckingham Canal, 18,423 families, Cooum 8,266 families and Adyar 6,624.12 as per census 2011. Overcrowded, substandard housing facilitates the spread of infectious diseases, such as swine flu and dengue fever. Poor sanitation and lack of access to safe food and water contribute to high prevalence of diarrhoea. Climate risks, Air pollution, Urban, Nutrition insecurity and unhealthy diets, Unmasking and overcoming health inequities within slums causes for swine flu. The World Health Organization (WHO) declared the H1N1 pandemic over in August 2010. Since then, the H1N1 virus has been known as a regular human flu virus. It continues to spread during flu season like other strains of the flu. The flu shot developed each year by the Centres for Disease Control and Prevention (CDC) usually includes a vaccination against a type of H1N1 virus. It is to spread quickly from person to person. A simple sneeze can cause thousands of germs to spread through the air. The virus can linger on tables and

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surface areas like door knobs, waiting to be picked up one person to another.

Symptoms of Swine Flu

The symptoms of swine flu are very much like those of regular influenza. They include, chills, fever, coughing, sore throat, runny or stuffy nose, body aches, fatigue, nausea and vomiting. When it first emerged, swine flu was most common in children 5 years and older and young adults. This was unusual because most flu virus infections are a higher risk for complications in older adults or the very young. Today, risk factors for getting swine flu are the same as for any other strain of the flu. You're most at risk if you spend time in an area with a large number of people who are infected with swine flu.

Where and How Swine Flu Throat Swab test will be undertaken

People who develop chills, fever, cough, sore throat, runny or stuffy nose may have fever or viral fever. People can't identify it is a swine flu but doctors can easily identify swine flu. Swine flu are three category namely A, B, C. Slightly fever, cough, gold and sore throat is A category. If continuously high fever, sore throat is B category and in the morning slight fever and evening it has suddenly increasing, high fatigue and stuffy nose symptoms is C category. In this A and B categories need not take throat swab test. C category of symptoms may be swine flu. The swine flu test will have been positive those who must have been taken Tamiflu tablets immediately for 5 days to stop it and if children will have to be taken tablets for 5 more days.

Swine Flu Throat Swab test Laboratory in Tamil Nadu

Throat Swab test laboratory in Tamil Nadu are as follows like, King Institute Gundy, Chennai, Kovai, Thirunelveli, Madurai, Theni, Salem Medical Colleges, K.A.P Vishwanathan Medical College Trichy and Hummer Hospital. Besides, Government recognised private hospitals are Chennai, kovai, Trichy, Nagarkovil, Vellore and Salem have laboratory. Rs. 3,750 will have to pay for the test in Government recognised private hospitals.

Table 1 People affected with Swine Flu and Dead in Tamil Nadu

S.No	Year	Number of people Affected	Dead
1	2011	34	4
2	2012	750	40
3	2013	37	6
4	2014	58	8
5	2015	898	29
6	2016	122	2
7	2017	3315	17
8	2018	260	17
	ToTal	5872	122

Source: The Thinakaran daily news October 7, 2018.

According to the report, at most of the people affected by swine flu in the year 2017 (3,315) followed by 2015 (898). It is a fluctuating trend during the last eight years. The death rate was more in number in the year 2012(40).The number of affected people in the current year, 2018 is 260 and death rate is only 17 in the news report (Thinakaran news paper daily November 10, 2018.

Table 2 People Affected and Deaths with Swine Flu in India (2018)

S.No	State	Number of people Affected	Dead
1	Delhi	111	1
2	Maharashtra	1,793	217
3	Rajasthan	1,912	191
4	Andhra Pradesh	256	12
5	Gujarat	1,478	45
6	Uttar Pradesh	58	7
7	Haryana	20	2
8	Madhya Pradesh	356	23
9	Tamil Nadu	260	17
10	Telangana	194	6
11	Karnataka	127	6
12	Kerala	229	14
13	Pondicherry	43	2
	Total	6803	546

Source: National Centre for Disease Control (NCDC).2018

The county has registered 6,803 swine flu cases so far this year as compared to 38,811 cases reported last year, 2,270 people had due to the H1N1 infections. The reports on cases and deaths of influenza A (H1N1) are based on the reports received from states/UTs to Central Surveillance Unit, Integrated Disease Surveillance Programme and National Centre for Disease Control (NCDC). According to the report, most of the people affected state is Rajasthan (1,912) and followed by Maharashtra (1,793). It is a fluctuating trend during the last years. The death rate was more in number in Maharashtra (217) and followed by Rajasthan (191).

Objective of the study

1. To find out causes leading to swine flu.
2. To explain the importance of sound health practices for them in the present scenario.
3. To enlighten the preventive measures undertaken for safety

Sample Design

The present study was conducted, monitored by the outreach students of Loyola College about the health conditions of slum dwellers and a health-related awareness programme was conducted in order to eradicate health hazards in the laze run.

Method of Analysis

The present study relates to the patterns of swine flu among slum people in Chennai. It was decided to collect the necessary information from the respondents. For collecting the data, the respondents were contacted individually and given a brief about the health issues. Data required for the study were collected through an interview schedule, which was administered zeroing on among the health issues in slum people.

Universe and Sampling

The study was conducted among the slum people in Chennai.. The researcher used convenience sampling techniques to use this study.

Research Design

The descriptive design was used for this study. In this study the researcher has attempted to find out the swine flu problems and suggests recommendations for making them aware and to improve their health status.

Need for the study

Slums are the portal for major communicable diseases due to unhygienic conditions. The various issues are in the slums like unhygienic food, unhygienic personal, poor household cleanliness, unhygienic environment, poor waste management system and lack of garbage disposable of waste. There is no proper drinking water, health centre, drainage, and sanitation and garbage cleanliness, stagnated water during the raining season, small houses with minimum space, almost of are huts and a polluted environment causes for swine flu. Therefore, the present study was needed to teach them to make them aware and also to improve their health status. The disposal of solid waste is a challenging task in urban slums. So, the researcher has been taken under the study of swine flu issues in Chennai slums.

Data processing and presentation

Causes for Swine Flu Spread in the Slums

Economic and social Factors

Slums people are quantitatively upon the general economic condition of a country, certain ubiquitous can be found, in the likes of lack of living space resulting in congestion, unhygienic conditions, lack of safe drinking water, narrow roads, bad lighting, lack of planning, water logging during raining seasons, most of the slums do not have drainage facilities, there is no proper public toilet facilities, open toilets are widely used. If these were to be the material defects, repercussions lie in the form of poor health often leading to slum epidemics, lack of education and job opportunities and the threat of robbery. Lack of facilities has an adverse effect on the performance of students in the less endowed schools.

Table 3 People Affected and dead with Swine Flu in Slums Chennai 2018

S.No.	Prone category	Number of people Affected	Number of People dead
1	Men	17	-
2	Women	12	1
3	Children	36	2
4	Pregnant women	07	1
5	Aged	28	1
6	Physically challenged	05	-
7	Transgender	02	-
	Total	107	5

Source: Data collected from the respondents.

The table shows that people affected with swine flu in the slums that the major swine flu affect the following category of the people: women and children, the aged and pregnant women. The above table states this fact that 36 children were affected with swine flu and out of this 2 were died followed by 28 elders also affected and one was death in the year 2018.

Table 4 Prevention Knowledge on Swine Flu

S.No.	Prevention knowledge on dengue	Number of Responses
1	Can be prevented	24
2	Cannot be prevented	18
3	Not known	58
	Total	100

Source: Data collected from the people.

The table shows that knowledge and awareness about swine was generally inadequate. It is more in other places as compared to the sub-standard settlement. Only 24% of the respondents have known swine flu can be prevented and answered that mosquito was responsible for the transmission of swine flu. They had insufficient knowledge that swine through one person to others. 18% of the respondents answered it cannot be prevented. It is evident that 58% of the respondents were not known the syndromes of swine flu.

Table 5 Distribution of Slum & Non-Slum Households in Chennai on the Basis of the Drainage System

No.	Drainage System	Percentage		
		Slum	Non-Slum	Total
1.	No Drainage	12.18	14.57	26.75
2.	Open Drainage	1.43	13.12	14.55
	Underground	1.67	57.03	58.70
3.	Total	15.28	84.72	100.00

Source: Handbook of Housing Statistics, NBO, 2016

Based on the statistics shown there is Drainage in slum (12.18 %), Open Drainage is (1.43 %), and Underground Drainage is (1.67 %) repetitive. Corporation is collecting the garbage from an appropriate dump site. An associated problem to garbage disposal is poor drainage. The uncollected garbage often accumulates and blocks any drainage that might exist in the slums.

Environmental Factors

Hazards

Housing being a key factor to the overall physical well-being of slum dwellers, I see the nature of houses as predominantly influencing other factors that affect health. According to the 2001 census, around 65% of the houses alone in slums are pucca houses while semi-permanent and temporary dwellings take an equal share of 17% each. The room had to be used for all domestic purposes like cooking, sleeping and cleaning vessels.

General environmental pollution

The respondents did not say about any other pollution as a problem and did not link it with swine flu. However this is the problem for the slums. Although the mothers understand the linkages between illness and the poor environment, their poverty status may hinder them from taking appropriate and effective remedial actions. The main determinants of health include the social and economic environment, the physical environment and the person's individual characteristics and behaviours.

Political Factors

Public sanitation demands next priority of slums had sanitation facilities (both urinals and toilet seats inclusive) were defecating in the open, causing health concerns. The sight of dry fish shops on the roads, the smell of fish in the air, rickshaws all around the places, cooking and sleeping on the road lead to causing health concerns.

Poor facilities of Anganwadi lead to health of Slums Kids in Chennai

Chennai anganwadi centres, which provide basic health services in several slums in Chennai have poor infrastructure and often. This has a direct impact on the health of children living in slums and resettlement sites in the city.

Water Supply

According to a TMWB estimate an individual requires a minimum of 100 litres of water per day to meet the daily requirements. Therefore there has been a serious gap in water production capability of TMWB other source they uses can water. However, there is an urgent need for regular and sufficient water supply. Slum residents experience bathing and washing problems due to insufficient water supply and lack of bathing facility. In both the study areas, slum dwellers collect water from the hand pumps for domestic purposes and municipality taps for drinking.

Solid waste management

The solid waste generation of the city was enormous with a generation of about 3200 MT per day, which worked out to about daily per capita waste generation of about 725g. The human waste disposal system is a mixture of several modes, including the common latrine. The existing sanitation of the urban slum area is a common latrine and open defecation. Therefore, swine flu virus is spread over there.

Garbage and Poor Drainage

Garbage is an eyesore in the slums and is a source of diseases. The accumulation of garbage is basically a consequence of lack of dumping sites in the slums and the inability of the City Corporation is to collecting the garbage from an appropriate dump site. An associated problem to garbage disposal is poor drainage. The uncollected garbage often accumulates and blocks any drainage that might exist in the slums. Though there are no industries near the slum dwellers are also exposed to various kinds of diseases like swine flu associated with the living conditions and the environment of the area

Major Finding of the study

- The number of affected people in the current year, 2018 is 658 and death rate is only 33 in the news report.
- According to the report, most of the people affected state is Rajasthan (1,912) and followed by Maharashtra (1,793). It is a fluctuating trend during the last years. The death rate was more in number in Maharashtra (217) and followed by Rajasthan (191).
- The study revealed that 36 children were affected with swine flu and out of this 2 were dead followed by 28 elders also affected and one in the year 2018.
- The study stated that 18% of the respondents answered it cannot be prevented. It is evident that 58% of the respondents were not known the syndromes of swine flu.
- Based on the statistics shown there is Drainage in slum (12.18 %), Open Drainage is (1.43 %), and Underground Drainage is (1.67 %) repetitive. Corporation is collecting the garbage from an appropriate dump site.
- Economic and social factors of Slum people are quantitatively upon the general economic condition of a country, certain ubiquitous can be found, in the likes of lack of living space resulting in congestion, unhygienic conditions, lack of safe drinking water, narrow roads, bad lighting, lack of planning and water logging during the raining seasons.
- Lack of education and job opportunities leads to the threat of robbery. Lack of facilities has an adverse effect on the performance of students in the less endowed schools.

- Political factors of slums are Public sanitation demands next priority of slums had sanitation facilities (both urinals and toilet seats inclusive) were defecating in the open, health concerns. Most of the slums do not have drainage facilities, there is no proper public toilet facilities, open toilets are widely used.
- Environmental factors of slum are lack of drinking water, poor drainage system, environment cleanliness and polluted environment.

Suggestions of the study

The is to best way to prevent swine flu get a yearly flu vaccination. Other easy ways to prevent swine flu include

1. Frequently washing hands with soap or hand sanitizer
2. Not touching your nose, mouth, or eyes (The virus can survive on surfaces like telephones and tabletops.)
3. Staying home away from work or school if you're ill
4. Avoiding large gatherings when swine flu is in season
5. it's important to follow any public health recommendations regarding school closures or avoiding crowds during the flu season. These recommendations may come from the CDC, WHO, National Institutes of Health, or other governmental public health institutions.
6. Flu season shifts from year to year, but in the United States it generally starts in October and runs until as late as May. It usually peaks in January, although it's possible to get the flu any time of year.
7. Get plenty of rest. This will help your immune system focus on fighting the infection.
8. Drink plenty of water and other liquids to prevent dehydration. Soup and clear juices will help replenish your body of lost nutrients.
9. Take over-the-counter pain relievers for symptoms such as headache and sore throat.
10. The best means of dealing with swine flu is to prevent it. Hand sanitization is important to stop the spread of the virus. Staying away from infected people will help stop person-to-person transmission.
11. Your doctor can make a diagnosis by sampling fluid from your body. To take a sample, your doctor or a nurse may swab your nose or throat.
12. The Government should be provided Kapsura drinking water through Department of Ayurvedha, Government health department and primart health centres.

CONCLUSION

The swab will be analyzed using various genetic and laboratory techniques to identify the specific type of virus. Most cases of swine flu don't require medication for treatment. You don't need to see a doctor unless you're at risk for developing medical complications from the flu. You should focus on relieving your symptoms and preventing the spread of the H1N1 to other people. Two antiviral drugs are recommended for treating swine flu: the oral drugs oseltamivir (Tamiflu) and zanamivir (Relenza). Because flu viruses can develop resistance to these drugs, they're often reserved for people who are at high risk for complications from the flu. People who are otherwise generally healthy and get swine flu will be able to fight the infection on their own.

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