KNOWLEDGE AND PRACTICE OF STUDENTS IN PRIMARY SCHOOLS REGARDING SWINE FLU

Thesis

Submitted for Partial Fulfillment of Master Degree

In Pediatric Nursing

By

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Abstract

Background: Swine flu, a respiratory infection caused by an influenza virus was first recognized in spring 2009 and it became major public health problem**. The aim** of this study was to assess knowledge and practice of students in primary schools regarding swine flu. **Research design**: A descriptive design was utilized in this study. **Settings:** The study was conducted at nine governmental primary schools in Cairo Governorate. **Subject**s: 240 students were taken randomly by strata technique. **Tools of data collection:** 1)A questionnaire interview format. 2)An observation checklist for hand washing. **Results**: Two thirds of students had unsatisfactory knowledge about swine flu and the majority of them didn't wash hands correctly . There was no statistically significant difference between total knowledge of students and their age & sex and there was no statistically significant difference between Practice of hand washing and their age& sex. **Conclusion**: The current study concluded that students in primary schools had unsatisfactory knowledge and practice about swine flu . **Recommendations**: Based on the findings and conclusion of the current study the following recommendation can be suggested: Continuous educational programs and a simple illustrated booklet for instructions should be available in schools as reference for students.

Key words : Swine flu, hand washing, primary school students

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Fawzia Ramadan Saad

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List of Abbreviations

CDC	: Centers for Disease Control and Prevention
H	: Hemagglutinin
ICU……	: Intensive Care Unit
MOH.....	: Ministry of Health & Population
N Ms.....	: Nanometers
N.....	: Neuraminidase
PPE……..	: Personal Protective Equipment
RNA	: Ribonucleic Acid
RT.....	: Real Time
SARS.....	: Severe Acute Respiratory Syndrome
SIV	: Swine Influenza Virus
SPSS.....	: Statistical Package for Social Science
UK.....	: United Kingdom
WHO	: World Health Organization

INRODUCTION

Swine flu is known as H1N1 type A influenza, It is a respiratory infection caused by an influenza virus first recognized in spring 2009. The virus which is officially called swine influenza A (H1N1) contains genetic material from human and swine flu viruses ***(Centers for Disease Control and Prevention [CDC], 2009)***.

Swine flu virus is a major public health problem with pandemic outbreaks such as in 1918 -1920 The Spanish Flu, which killed 40 million people worldwide,there is much concern over the introduction of highly pathogenic swine flu viruses into the human population ***(World Health Organization [WHO], 2009).***

Influenza A (H1N1) attached almost all countries, which resulted in a sever global health care problem leading to the deterioration of the first phase 6 global influenza pandemic by WHO. Although the clinical manifestation remains mild to moderate for the initial 3-6 days, about 25% of patients experience rapid deterioration, leading to intensive care unit (ICU) admission within one day after hospitalization ***(Presanis, 2009).***

The term flu originally referred to epidemic of acute rapidly spreading catarrhal fever of humans caused by viruses,

orthoyxoviruses are recognized as the cause of significant numbers of natural infectious disease usually of upper respiratory tract in humans ***(Swayne & Halvorson, 2009).***The severity of the disease depends mainly on the strain of virus route of entry, age and environmental conditions ***(Chauhan & Sushoven, 2008)***.

The infection rate in Egypt in 2010 was lower than that of the same period in the previous year with the total number of confirmed cases from October 2009 to January 2010 being 14,846 patients ***(Shahin, 2010)***.

The mortality incidence mortality of the disease in the world reached approximately 10,000 worldwide, including 6,131 from the Americas, 1,242 in Europe and 814 death cases have been recorded in the Eastern Mediterranean and Africa**.** A(H1N1) infection total has risen to 2,172 in Egypt ***(WHO, 2009).***

Environmental experts revealed that Egypt is a fertile environment to attract all viruses, due to the severity of environmental pollution, warning that, in light of the severe pollution, it is expected to increase the number of deaths and infections of swine flu (***MOH, 2010).***

Students can get sick with flu and schools may act as a point of spread, where students can easily spread flu to other

students and their families. So far, with 2009 H1N1 flu, the largest number of cases has been in people between the ages of 5 and 24-years-old (***MOH, 2010).***

Swine flu viruses are spread mainly from person to person through coughing or sneezing of people with influenza. Sometimes people become infected by touching something contaminated with flu virus and then touching their mouth or nose. Symptoms of swine flu may look like any other flu: fever, cough, sneeze, sore throat, chills, headache, vomiting and diarrhea. Warning signs warranting immediate medical treatment: typical flu symptoms plus any of the following like shortness of breathing or difficulty breathing, blush coloration of lips, inability to keep fluid down, high or persisting fever, lack of responsiveness, fatigue and confusion **(Aledort, 2009)**

The incubation period of swine flu seems to range from 2 to 7 days. Adults should be considered contagious until at least 7 days after the start of symptoms but with children it may be 10 to 14 day ***(Clem, 2009)***.

Role of nurse: School's nurse should encourage vaccination against the flu, advise the sick to stay home, separate sick students and emphasize respiratory etiquette moreover promote hand hygiene, perform routine environmental cleaning, promote early treatment of students at

higher risk for flu complications and increase social distances within the school environment ***(Gardner, 2009).***

Significance of study

This study is concerned with students in primary schools because the swine flu virus affects young and school-age students. The children are especially vulnerable to infections and can receive greater exposure than adults due to a number of factors including their mixing patterns at school and lack of understanding about good infection control and methods of respiratory diseases transmission ***(WHO, 2009)***.

Majority of schools' buildings are no purpose built and deplorable conditions (non safe water, dirty bathrooms, over crowded in class) that increase spread of disease ***(MOH, 2009).***

AIM OF THE STUDY

The aim of the study was to assess knowledge and practice of students in primary schools regarding swine flu.

Research Questions:

1- What are the sources of student's knowledge about swine flu?

2- Are there relationship between sociodemographic characteristics of students and their knowledge?