

## A CASE STUDY ON SWINE FLU- UNDERSTANDING RESPIRATORY INFECTIONS, SYMPTOMS, AND PREVENTION - A NURSE'S PERSPECTIVE

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### Abstract

A patient with 28 years old Male, presented in Emergency Department (Apollomedics hospitals Lucknow) presenting symptoms of fever from 4 days and cough with sputum, investigations like blood sample, Complete Blood Count (CBC), Renal Function Test (RFT) and H1N1 Influenza Virus sample send and CECET chest done, on the evidence of patient's report the patient was admitted in ward for further treatment and management to cure from the illness. There are other symptoms which include sore throat, chills, weakness, and body aches. Children may experience shortness of breath, dehydration and irritability in advance cases. Children, pregnant women, and the elderly are at risk of severe infection.

**Keywords:** Human respiratory infection, Swine flu, H1N1 virus, Nursing management of swine flu.

### INTRODUCTION

H1N1 Virus is a type of influenza A virus that can cause respiratory illness in humans. It's sometimes called "swine flu" because the virus strain that caused a global pandemic in 2009 originated from pigs. The virus is primarily transmitted from person to person through respiratory droplets when an infected person coughs or sneezes. H1N1, also known as swine flu, refers to a strain of the influenza A virus capable of causing respiratory illness in humans. The low acceptance of influenza immunization suggests that individuals do not see the benefit-cost equation in the same way that policymakers do<sup>(3)</sup>. It gained notoriety for sparking a global pandemic in 2009. While its impact has lessened, understanding H1N1 remains important due to its continued presence as a seasonal flu strain.

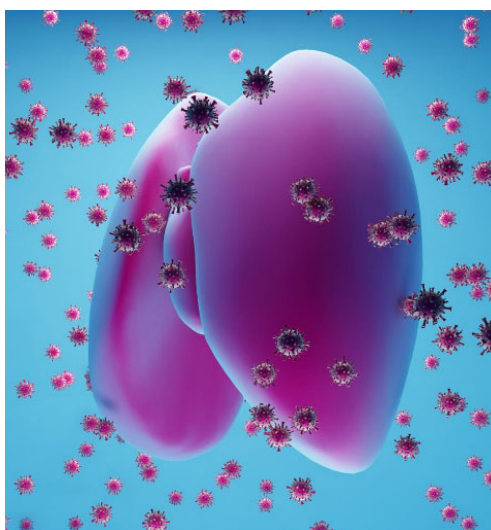


Figure -1

### CASE STUDY

Patient 28 years old Male, presented to Apollomedics hospital ER with complaints of fever from 4 days and cough with sputum. Patient's vitals on arrival- BP: 110/60 mmHg, PR: 80 bpm, Temp: 98.6 F, SPO2: 98 % on room air<sup>5</sup>. blood sample CBC, RFT and H1N1 Influenza Virus sample send and CECET CHEST DONE. Patient was shifted to ward. Lab reports revealed Hb- 11.4, TLC- 16600, S.creat.- 1.1<sup>5</sup>. The H1N1 test result was positive<sup>5</sup>. The patient was transferred to isolation, and an antiviral medication was administered<sup>5</sup>. CECT Thorax revealed patchy foci of ground glass attenuation in bilateral lung Patient was managed on IV fluids, antivirals and other conservative treatment. There are certain causes like- Spreads through respiratory droplets, coughing, sneezing, close contact with an infected person. There are Signs & Symptoms- Cough, Sore throat, Body aches, Headache, Chills, Fatigue. Fever, Headache, Muscle pain and Fatigue. Some people may also experience vomiting and diarrhea.



Figure 2.

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It is crucial to seek medical attention if you experience any of these symptoms. Complications of swine flu can include pneumonia, respiratory failure, and other respiratory illnesses. These complications may require additional treatment and close medical supervision. Although most people recover without complications, swine flu can be severe, especially in high-risk groups such as young children, pregnant women, and people with underlying health conditions. Severe cases of swine flu can lead to pneumonia, respiratory failure, and even death. Diagnostic Evaluation-Rapid Influenza Diagnostic Tests (RIDTs): These point-of-care tests provide a quick diagnosis by detecting influenza A or B antigens directly from respiratory samples like nasal swabs. However, they may not differentiate between H1N1 and other influenza A strains. Viral Culture: This takes longer but can identify the specific influenza strain, including H1N1.RT-PCR (Reverse Transcriptase Polymerase Chain Reaction): This highly sensitive test detects viral RNA, allowing for confirmation of H1N1 infection. Management. Symptom Management if you have swine flu, it is important to manage symptoms by resting, drinking plenty of fluids, and taking over-the-counter medications to relieve fever and other symptoms.

#### Treatment given in ward

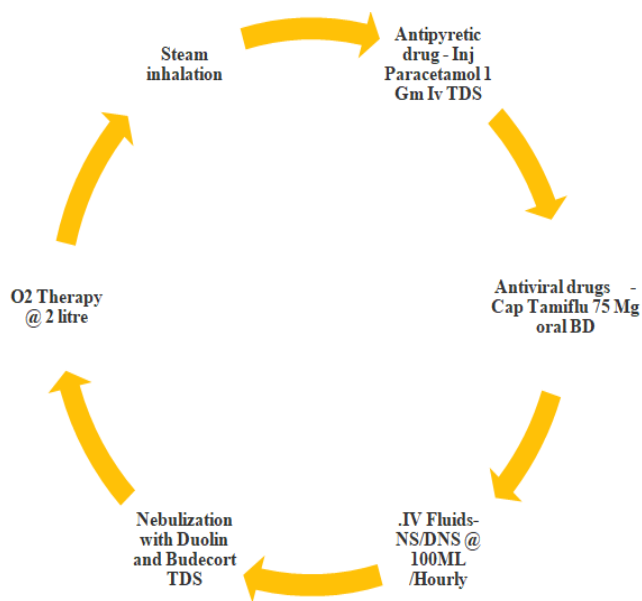


Figure 3.

- Cap Tamiflu 75 mg (Oseltamivir)-is a antiviral agent used to treat for Influenza A& B. It was administered to the patient with a frequency of twice a day PO<sup>6</sup>.
- TAB. NOCK-2-Tablet is a combination of two medicines - Nimesulide and Paracetamol. This medication helps in relieving the pain and inflammation. 1 TAB po twice daily for 3 days.
- TAB. PAN 40 - is used in the treatment of Heartburn, Gastro esophageal reflux disease, Peptic ulcer.mg once daily (before breakfast) for 5 days.
- RAPITUS SYRUP- is an antitussive medicine. It is used for the treatment of dry cough 2TSF thrice daily for 5 days-
- Nebulization with FORACORT 1-respules in twice daily for 5 days Nebulization with DUOLIN -1 Respule for THRICE DAILY FOR 5 DAYS
- Follow up in internal medicine outpatient department with Count Blood Cell, Liver Function Test reports after 5 days. In case of emergency please call- 08429

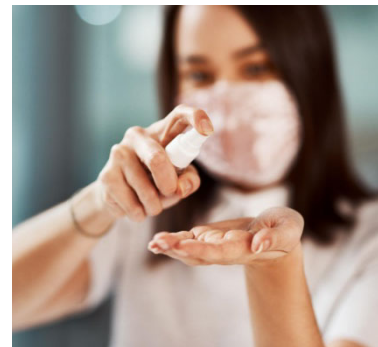


Figure 4.

Nursing Management-nursing plays a vital role in managing patients with H1N1 infection. Here's a breakdown of key strategies nurses can implement to promote patient well-being and prevent transmission: Assessment and Monitoring: Regularly assess patients for H1N1 symptoms like fever, cough, sore throat, runny/stuffy nose, muscle aches, headache, fatigue, and potentially vomiting and diarrhea. Vital Signs: Monitor vital signs closely, particularly temperature and respiratory rate, to assess for potential complications like pneumonia, assess hydration status by monitoring urine output and skin turgor. Dehydration can worsen symptoms, provide supportive care measures to alleviate symptoms and promote comfort. This includes administering antipyretics for fever, analgesics for pain, and cough suppressants if productive cough becomes bothersome, Encourage adequate fluid intake to prevent dehydration, Encourage adequate rest to facilitate recovery, Implement standard precautions for all patient care activities, including hand hygiene, use of personal protective equipment (PPE) like gloves and gowns, and proper disposal of contaminated waste, Educate patients on proper respiratory hygiene practices like coughing or sneezing into a tissue and disposing of it properly, followed by immediate hand washing, If possible, place H1N1 patients in single rooms with negative pressure ventilation to minimize the risk of transmission to other patients and staff.

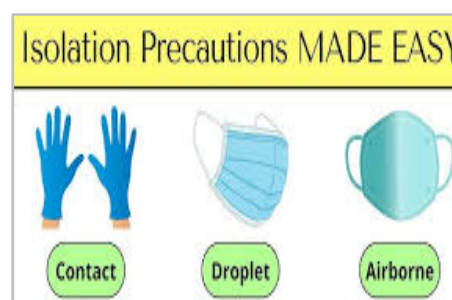


Figure 5.

Patient Education given to patients and their relatives- Educated the patients on self-care measures to manage their symptoms at home after discharge. This includes rest, hydration, over-the-counter medications as instructed, and when to seek further medical attention. Awareness of prescribed antiviral medications to be administered properly, potential side effects, and the importance of completing the full course of treatment has been given, Educate patients on preventive measures like frequent handwashing, avoiding close contact with sick individuals, and covering coughs and sneezes to prevent further spread of the virus, For high-risk patients like young children, pregnant women, older adults, and those with chronic health conditions, need to provide additional

monitoring and support, and ensure they receive appropriate medical interventions, Awareness on the importance of annual influenza vaccination, which can help to prevent infection or lessen the severity of H1N1 and other influenza strains.

### Tender, Love and Care Moment (TLC)

Nurses worked collaboratively with physicians and other healthcare professionals to ensure a comprehensive and coordinated approach towards patient care. This involvement of providing updates on patient status, administering medications as ordered, and assisting with treatment decisions. By implementing these nursing management strategies, nurses effectively manage the patient. Hence promoted faster recovery and minimize the risk of transmission within the healthcare facility and the community, regular follow up and various strategies implemented to cure the patient during as well as in house of the patient. By this courtesy and Compassionate Patient care, the family members as well as the patient was really went happily, tears ran out of eyes and blessed our nurses for taking care and motivated our nurses to keep doing it by saying these words “Beta for us you are here that’s the reason we are relaxed but for you GOD is there to take care of you as well as your family” the words really touched the nurses heart and all thanked the positive energy to set things on right way with all hard efforts.



Figure 6.

In Figure 6 a small token of love, tender and Care moment was captured in a camera by giving the patient a fond farewell. The patient wished at the time of discharge he wanted all his assigned nurse to come and visit him while leaving the hospital.

### DISCUSSION

This case illustrates the accurate diagnosis which lead the medical team to decide on appropriate and, prompt treatment as well as an effective nursing management of H1N1 flu, led by the nurses made it possible to make way for good progress.

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