

tasks 1 influenza

by Saloua Salim

Submission date: 02-Mar-2023 07:45PM (UTC+0000)

Submission ID: 198347825

File name: 40448_Saloua_Salim_tasks_1_influenza_480253_380866326.docx (30.77K)

Word count: 2379

Character count: 14005

Running Head: Assignment

Lecture: Kennedy Obohwenmu

[Introduction to Public Health]
[LCHS4004]
[Saloua salim]
[2212860]

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Introduction

Influenza is an infectious disease caused by the influenza virus, which affects the lungs, nose, and throat. It can cause mild to severe illness and sometimes lead to death. The major way influenza is transmitted through droplets created when sick people cough or sneeze. People may inhale the droplets through their mouths or nostrils. In addition, 3000 people died in Wales and England due to influenza in December 2022, which is expected to be the worst flu session in a decade. It has been reported that influenza is the leading cause of excess death in England and Wales, with different death rates. Moreover, it has been reported by the World Health Organisation (WHO) that about 3 to 5 million cases of influenza and about 290 000 to 650 000 respiratory deaths are reported worldwide (WHO, 2023).

Main Body

Public Health Measures to Manage and Reduce Influenza Disease

To effectively tackle and address the prevalence of influenza, government has adapted and implemented several public health strategies for preventing, monitoring, and controlling this disease as discussed;

Seasonal Influenza Vaccine

Studies have highlighted that the most important line of defence against influenza and its complications is annual immunisation (Wiggins, Smith, and Schultz-Cherry, 2021). The vaccine often contains strains of influenza A and B which protect against the illness and infection caused by the influenza virus (WHO, 2023). These vaccines have been designed to protect individuals against the flu viruses which are predicted to spread in the upcoming season of flu. It has been reported that this public health strategy is effective in reducing influenza risk by 40-60% by managing and preventing the spread of virus, leading to short hospital stay, less ICU admission risk, and decreasing mortality rate from flu (NHS.UK 2023).

Administrative Practices and Policies

A variety of public health administrative practises and policies have been employed to monitor and reduce influenza exposure both before arrival and during visits to healthcare settings. These policies involve implementation of effective respiratory hygiene practices such as hand washing and alcohol-based hand sanitisers, increasing awareness and knowledge on cough etiquette, and proper management of ill HealthCare Professional (HCP) in the healthcare setting (Trucchi et al, 2019). In addition, by taking the required precautions, it has become possible to lower the number of patients who visit for elective surgery when influenza is suspected or confirmed (Chotpitayasunondh et al, 2021). These practices and policies have

been successful in health and care settings in screening, monitoring, and managing the spread of influenza disease.

Treatment Interventions

Another important and common public health treatment interventions which are available for managing influenza disease are antiviral medications (Maldonado et al., 2019). Early antiviral medication use has been shown to reduce the severity of influenza's severe symptoms and, on average, decrease the illness's duration in health and care setting by one day (Chotpitayasunondh et al., 2021). zanamivir (Relenza®), Oseltamivir (Tamiflu®), and peramivir are antiviral medications that are currently suggested for the treatment of influenza. By interfering with the neuraminidase activity on the surface of the virus, these medications restrict the discharge of viral particles from infected host cells. These medications have used to manage and treat both influenza A and influenza B, and they work best when taken within 48 hours after the onset of flu symptoms (Kalligeros et al., 2020).

Risk Factors of Influenza Disease

Factors that increase the risk of getting influenza disease or its complications include:

Age

Children under age 2 and older adults over 65 are most often affected by seasonal influenza. Moreover, people 65 are at the highest risk of getting influenza infection (Kalligeros et al., 2020). The Centers for Disease Control and Prevention estimate that 70 to 85% of flu-related deaths and up to 70% of flu-related hospitalisations occur in older adults and children (NHS.uk, 2023). Children and the elderly are the populations most often affected by the influenza virus due to their weakened immune systems.

Living Or Working Conditions

People are more likely to get influenza than other residents in nursing homes, military barracks, working areas, etc.; moreover, hospital patients are at a higher risk of getting influenza infections (Dhakal and Klein, 2019).

Weakened Immune System

The weakened immune system is another risk factor that causes influenza infection. Anti-rejection drugs, chronic steroid usage, organ transplant, HIV/AIDS, blood cancer, and cancer treatment can weaken the immune system (Korkmaz et al., 2019). As a result, there is more risk of developing influenza and complications for people with weak immune system.

Chronic Illnesses.

Chronic conditions have increased the risk of influenza complications. For example, Asthma and other respiratory diseases, diabetes and heart disease can increase the risk of influenza (Wiggins, Smith, and Schultz-Cherry, 2021). Moreover, a history of heart illness has increased the probability of a sudden cardiac problem where influenza triggers an Inflammatory response in the body, which in turn can create dangerous clotting in blood vessels.

Aspirin Use Under Age 19

Teenagers who receive long-term aspirin therapy are at a high risk of developing Reye's syndrome caused by influenza (Long et al., 2019).

Pregnancy

Another risk factor for infection by influenza is pregnancy. In this regard, people are more susceptible to influenza complications, particularly in the second and third trimesters, and this risk might last for two weeks after delivery (Trucchi et al., 2019).

Obesity

Individuals with heavy body mass are at a high risk of getting influenza complications in people. Moreover, it has been found that obesity can cause a weakening of the immune response to the vaccination compared to the normal weight (Long et al., 2019).

Short Term Public Health Consequences of Influenza

Influenza, commonly known as the flu, is a highly contagious respiratory illness caused by influenza viruses. It spreads easily and quickly, particularly in health and care settings where people are in close contact. The short-term consequences of influenza in these settings can be significant. Influenza can cause fever, cough, sore throat, fatigue, body aches, and chills (Trucchi et al., 2019). These symptoms can lead to reduced productivity, absenteeism, and disrupted care services.

Moreover, for elderly patients, infants, and those with underlying health conditions, influenza can be severe and even life-threatening. In health and care settings, where the individuals are already ill, the consequences of influenza can be even more severe. Infected patients may have compromised immune systems, making them more susceptible to infections and diseases (Chotpitayasunondh et al., 2021). Additionally, staff contracting the flu can spread it to other patients and staff members, increasing the risk of an outbreak. The short-term consequences of an influenza outbreak in a health or care setting can be overwhelming, leading to an increased demand for health services, staffing shortages, and reduced quality of care. Preventing the spread of influenza in health and care settings is crucial to reducing the short-term consequences of the illness. Influenza vaccination is the most effective measure to prevent

infection and reduce the spread of the flu in health and care settings (Kalligeros et al., 2020). Additionally, infection control practices such as frequent hand hygiene, wearing personal protective equipment, and isolating infected patients can also help reduce the spread of the flu.

The short-term consequences of influenza can be significant in health and care settings, leading to reduced productivity, absenteeism, and disrupted care services. The elderly, infants and those with underlying health conditions are at a higher risk of severe illness and even death (Korkmaz et al., 2019). It is, therefore, essential to take preventative measures, such as influenza vaccination and infection control practices, to reduce the spread of the flu and minimise its impact on patients, staff, and health services.

Long Term Public Health Consequences of Influenza

Influenza, also known as the flu, is a highly infectious respiratory illness that affects people of all ages worldwide. In health and care settings, influenza can lead to severe consequences for patients and healthcare workers. The long-term consequences of influenza in health and care settings can be severe and sometimes even fatal (Wiggins, Smith, and Schultz-Cherry, 2021). For patients, influenza can cause various complications, especially in vulnerable people, such as the elderly, infants, and people with pre-existing medical conditions. The most common complications of influenza include pneumonia, bronchitis, sinus and ear infections, and exacerbation of pre-existing conditions such as asthma and heart disease. These complications can cause long-term effects on the patient's health, leading to hospitalisation and even death (Chotpitayasunondh et al., 2021). Influenza can also impact mental health, leading to depression, anxiety, and other psychological disorders.

Influenza can also have a significant impact on healthcare workers. Healthcare workers are at an increased risk of contracting the flu due to their close contact with infected patients. The long-term consequences of influenza in healthcare workers include absenteeism from work, which can affect the quality of patient care and the overall functioning of the healthcare system (Kallinger's et al., 2020). Moreover, healthcare workers who contract the flu can also experience severe complications, such as pneumonia and bronchitis, potentially spreading the infection to other vulnerable patients, further exacerbating the situation.

Influenza can have severe long-term consequences for patients and healthcare workers in health and care settings. Complications of the flu can lead to hospitalisation, exacerbation of pre-existing conditions, and death in vulnerable patients (Korkmaz et al., 2019). Healthcare workers are at an increased risk of contracting the flu and can experience severe complications and absenteeism from work. Prevention and control strategies, such as vaccination and hand

hygiene practices, are crucial in minimising the long-term consequences of influenza in health and care settings.

Factors Influencing The Health And Well-being Of Influenza Patients

Vaccination

The best way to prevent influenza in a healthcare setting is through the staff and patients' vaccination. The vaccination of healthcare workers has been associated with a decrease in influenza sickness and patient mortality in long-term care facilities, where influenza outbreaks are common (Long et al., 2019). The risk of outbreaks, hospitalisation, and death among nursing care patients has been demonstrated to be decreased by vaccination

Isolation Precautions

Various infection-control strategies are used in healthcare settings to lower the risk of infectious agent transmission. When a disease has more than one method of transmission, combined precautions may be used to determine the main infection route (Dhakal and Klein, 2019). In this regard, isolation precautions may be an important part of efforts to reduce influenza virus transmission.

Infection Control Strategies

To avoid the spread of infectious illnesses in all healthcare settings, it is essential that all healthcare staff adhere to the appropriate protocols while caring for any patient (Long et al., 2019). Standard safety precautions provide for the potential that anybody may be ill or colonised with a disease that might be disseminated in a medical environment. Healthcare professionals with respiratory disorders must take modest measures, especially if they are caused by influenza. Healthcare facilities should support the availability of items to promote hand hygiene. Those with influenza should observe droplet precautions for seven days from the onset of their illness, or until their fever and respiratory symptoms subside, whichever is longer (Trucchi et al, 2019).

Conclusion

Influenza is a highly contagious viral disease that can be spread in various ways. The influenza virus can spread through the bodily fluids released while sneezing, coughing, or through body contact with the fluids. Therefore, the report has analysed the key risk factors of influenza disease. In addition, the public health measures necessary to manage and reduce the spread of influenza infection also be determined. Moreover, the report has included the short- and long-term consequences of influenza in health and social settings. From the findings, it can be demonstrated that influenza is a serious public health which should be effectively managed,

monitored and controlled to prevent its prevalence in communities and healthcare settings. There are effective public health measures available adapted in the health and care settings for preventing the spread of disease. However, government should identify and implement adequate practices in health and care settings for managing and reducing the prevalence of influenza.

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GRADEMARK REPORT

FINAL GRADE

28/50

GENERAL COMMENTS

Instructor

Hello Saloua,

Thanks for submitting your report on time.

You were required to write a structured report to describe and explain the main approaches and strategies used to measure, monitor, and control the incidence of disease that you have discussed in your groups. In your report you were required to include: introduction; strategies used in the UK to measure the incidence of the disease in your case study and critically evaluate it; strategies used in the UK to monitor the incidence of the disease in your case study and critically evaluate it; strategies used in the UK to control the incidence of the disease in your case study and critically evaluate it; and conclusion.

Engagement with Literature Skills

Your work was informed and supported by scholarly material that is relevant to and focused on the task set. You provided the required minimum of four academic sources. The sources were credible, current, and up to date. There was evidence of your own research and reading throughout the work, using a suitable referencing system, and a reference list at the end of the work. However, the referencing could have been done better. Note that the publication years should be in bracket and *et al* should be used for articles with more than three authors.

Cognitive and intellectual skills

You attempted to evaluate the strategies of the UK government to measure, monitor, and control the incidence of disease in communities using literature and policies. Only the last aspect of this assessment is apparent in your report. The areas related to measuring and monitoring were unclear. Nonetheless, you attempted to provide justification for your arguments and judgements using evidence that you have reflected upon the ideas of others within the subject area and that you are able to make sound judgements and arguments using data and concepts. It was also good to see how you examined and broke information down into parts and used appropriate paragraphs to delineate your work. This made the pattern of thinking more apparent.

Practical skills

You attempted to include points that were relevant to real-life strategies used to control the incidence of disease in communities. Again, strategies to measure and monitor the disease of interest were not clearly visible.

Transferable skills for life and professional practice

Your work provided some evidence of the qualities and transferable skills necessary for employment requiring the exercise of some personal responsibility. You demonstrated that you could communicate the results of your work accurately and reliably, and with structured and coherent arguments. You also demonstrated that you could initiate and complete tasks and procedures, whether individually and/or collaboratively. The text was readable, and clarity was provided. The work was also coherent but would have benefited from better structure and organisation.

Overall, it was a good attempt.

Best wishes.

Dr. Kennedy O. Obohwemu

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