

NATIONAL UNIVERSITY OF LESOTHO
FACULTY OF HUMANITIES
COMMUNICATION AND STUDY SKILLS UNIT
ELG 1307: COMMUNICATION AND ACADEMIC LITERACY FOR HEALTH
SCIENCES (E, H, J &N)

JANUARY 2024

MARKS: 100

TIME: 3 HOURS

INSTRUCTIONS:

- **ANSWER ALL QUESTIONS**
- **PLEASE NOTE THAT THE PAPER HAS TWO SECTIONS:**
 - A – ESSAY WRITING**
 - B – READING COMPREHENSION**
- **BEGIN EACH QUESTION ON A FRESH PAGE**
- **WRITE YOUR STUDENT NUMBER AND GROUP CLEARLY**
- **WRITE LEGIBLY**

SECTION A- ESSAY WRITING

QUESTION 1

Read the passages below and write a **Descriptive Essay** of between one and half to two pages (**1½ to 2**) pages (excluding the Bibliography) on the topic: *The Benefits of Vaccines*

Note:

- Select relevant material from the given passages.
- Include **one direct** and **more than one indirect** quotation in your essay.
- Marks will be awarded for the following:
 - Appropriate content
 - Effective paragraphs
 - Relevant quotations
 - Correct grammar and spellings
 - Academic literacy style
 - Complete bibliographic entries

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PASSAGE 1-Benefits and Risks of Vaccines

All medications and vaccines have potential risks that must be carefully weighed against the benefits that medications and vaccines offer to prevent illness. Vaccination is one of the most successful public health interventions in reducing disease spread, preventing complications and even deaths from vaccine preventable diseases. The success of vaccines in reducing disease should not suggest that vaccine preventable diseases are no longer a threat.

Even though immunizations have significantly reduced vaccine preventable diseases, there were nearly 7,800 reports of vaccine preventable diseases in South Carolina in 2016. Of the 238 disease outbreak investigations that DHEC conducted, 29% of them were outbreaks of influenza, many of which occurred in school and nursing home settings affecting populations of people who are vulnerable to complications from the flu. In fact, the age groups with the highest rates of hospitalisations from the flu include those 0 to 4 years of age and those older than 65. There have been 94 deaths from the flu reported in South Carolina during the current flu season.

No vaccine offers 100% protection and vaccine efficacy meaning how well a vaccine prevents illness among those vaccinated varies from one type of vaccine to the next and how well a vaccine works also depends on the health status of the person vaccinated. For example, the flu vaccine does not protect the elderly against catching the flu as well as it does in younger people. But very importantly, several studies suggest that elderly people vaccinated against the flu have less severe disease and are less likely to be hospitalized and are less likely to die.

Preventable illness, hospitalizations and unfortunately deaths in South Carolina from influenza, whooping cough, meningitis, hepatitis B, and other diseases were seen. Also, see travellers were seen importing diseases such as measles that are no longer common but that cause outbreaks in communities with low vaccination rates. Vaccines do have some risk for adverse reaction, the most common being redness and soreness at the injection site or fever and allergic reactions. More serious complications such as seizures and the neurologic condition Guillian-Barre are also reported but occur very rarely and far less commonly than the complications and deaths from vaccine preventable diseases.

Source: Alogo, David. *Benefits and Risks of Vaccines*. 2000. Third Edition. Cape Town, Republic of South Africa: CT Printing Press.

PASSAGE 2-Why Get Vaccinated?

Vaccine-preventable diseases have not gone away. The viruses and bacteria that cause illness and death still exist and can be passed on to those who are unvaccinated and not protected. While many diseases are no longer common in the US, global travel makes it easy for diseases to spread. Vaccines will keep one healthy. The Centre for Diseases Control and Prevention (CDC) recommends vaccinations throughout one's life to protect against many infections. When one skips vaccines, they leave themselves vulnerable to illnesses such as shingles, flu, and HPV and hepatitis B-both leading causes of cancer.

Vaccines are as important to your overall health as diet and exercise. Like eating healthy foods, exercising, and getting regular check-ups, vaccines can play a pivotal role in keeping one healthy. Vaccines are one of the safest preventative care measures available. Vaccination can mean the difference between life and death. Vaccine- preventable infections can be deadly. Prior to the COVID-19 pandemic, approximately 50,000 adults died from vaccine-preventable diseases in the US each year. Vaccines are safe. The US has a robust approval process in place to ensure that all licensed vaccines are safe. Potential side effects associated with vaccines are uncommon and much less severe than the diseases they prevent. Vaccines cannot cause the diseases they are designed to prevent. Vaccines contain either killed or weakened viruses, making it impossible to get the disease from the vaccine.

Young and healthy people can get very sick too. Infants and older adults are at increased risk for serious infections and complications, but vaccine-preventable diseases can strike anyone, at any time. If you are young and healthy, getting vaccinated can help you stay that way. Vaccine-preventable diseases are expensive. Diseases have a direct impact on individuals and their families, and also carry a high price tag for society as a whole, exceeding \$ 10 billion per year. An average flu illness can last up to 2 weeks, typically with 5 or 6 missed work or school days. Adults who get hepatitis lose an average of one month of work which directly leads to loss of income. Your family and co-workers need you. In the US, millions of adults get sick from vaccine-preventable diseases each year, causing them to miss work and leaving them unable to care for those who depend on them, including children and/or aging parents.

When you get sick, your children, grandchildren, and parents may also be at risk. Adults are the most common source of pertussis (whooping cough) infection in infants which can be deadly. When you get vaccinated, you help protect yourself and your family as well as those in your community who may not be able to be vaccinated.

Source: Centre for Disease Control and Prevention. New York. United States of America. Why Get Vaccinated? Vol. 1 issue no 2, page 5-10, the journal of medicine 1980.

PASSAGE 3- Why is Vaccination Important?

August is National Immunization Awareness Month, and a yearly reminder of the importance of vaccines. It can be difficult in the United States to fully understand how important vaccination is, because many diseases are becoming very rare largely because of vaccination. Take the measles for instance. Prior to the development and distribution of the measles vaccine in 1963, nearly all children got measles by the time they were 15 years of age. Today, most doctors have never seen a case of measles and the CDC declared that the measles were eliminated from the United States in 2000 due to increased measures to vaccinate all children. That being said, there have been recent outbreaks of measles in unvaccinated children, which highlights the need for continued vaccination.

But adults also need vaccines. Age alone increases the risk of potentially serious lung infections for more than 47 million Americans over the age of 65, because the body's immune system naturally weakens with age. Vaccines work by teaching the body's immune system to recognize and defend against harmful viruses or bacteria before getting an infection, and reduce the chance of getting certain infectious diseases.

But still, an estimated 40,000 to 50,000 adults in the United States die from vaccine-preventable infectious diseases or their complications each year. Influenza and pneumococcal pneumonia are potentially serious lung infections that are among those vaccine-preventable infectious diseases.

Most vaccine-preventable diseases are spread from person to person, which means that if one person in a community gets an infectious disease, they can spread it to others. According to the Centers for Disease Control and Prevention an individual can help stop the spread of certain diseases through vaccination. So if the general population is vaccinated, there are fewer opportunities for vaccine-preventable diseases to spread.

The U.S. Department of Health and Human Services' *Healthy People 2020* goal for influenza vaccination is 70 percent, but rates are currently at 43 percent. In addition, the *Healthy People* goal for any pneumococcal vaccination for adults 65 and older is 90 percent, but rates are only around 56 percent - well below the national goal. *Healthy People* provide science-based, 10-year national objectives for improving the health of all Americans.

One has to access the risk for pneumococcal pneumonia through online quiz, developed in partnership with Pfizer. Influenza and pneumococcal pneumonia are serious lung infections which should not be ignored. Older adults and those with weakened immune systems or certain chronic health conditions such as asthma or chronic obstructive pulmonary disease (COPD) are especially vulnerable to infectious disease. In fact, for adults 65 and older living with COPD, the risk for contracting pneumococcal

pneumonia is 7.7 times higher than their healthy counterparts, and those with asthma are at 5.9 times greater risk.

This August, people have to learn more about influenza and pneumococcal pneumonia, and talk to their doctor to see if they are up to date on their adult vaccinations. It is always better to help prevent a disease rather than treat it after it occurs.

Source: Pitso Elizabeth Thapelo. Williams Macdonald Modau. Why is vaccination important? 1999. The health benefits of vaccines. (www.lung.org.whyisvaccinationimportant.Blog...pdf). Editors.

SECTION B - Reading Comprehension

QUESTION 2 - Read the Passage Below and Answer Questions Which Follow.

Telemedicine – Meaning and Challenges

Source: www.smj.si.mahidol.ac.th

Telemedicine is the delivery of health care and the exchange of health-care information across distances. The prefix ‘tele’ **derives** from the Greek for ‘at a distance’; hence, more simply, telemedicine is medicine at a distance. As such, it **encompasses** the whole range of medical activities including diagnosis, treatment and prevention of disease, continuing education of health-care providers and consumers, and research and evaluation. Telecare is a related term and refers to the provision, at a distance, of nursing and community support to a patient. Similarly, telehealth refers to public health services delivered at a distance, to people who are not necessarily unwell, but who wish to remain well and independent.

In effect, however, despite repeated discussions about what constitutes telemedicine, telecare and telehealth and what their differences are, all involve the transfer of information about health-related issues between one or more sites, so that the health of individuals and their communities can be advanced. In other words, the information is moved, not the providers or the recipients of health care. Nowadays, the transfer of information is generally facilitated by the use of some kind of telecommunications network. An umbrella term encompassing all health-related activities carried out over a distance by such information and communication technologies is ‘health telematics’.

Advancement in digital technologies including hardware and software has been occurring and they are utilised for transformation in several domains in order to yield better solutions and competitive advantages. Developing tools and devices have been created and continuously improved to conform to the latest advancement. The system developers are always expected to properly select and use the tools and the devices in order to develop the next generation of telemedicine solutions which conform to the requirements. Moreover, obtaining precise requirements are challenging as they need proper communication and **collaboration** skills between groups of people with different **expertise** and background.

Telemedicine affects traditional medical care processes and several social concerns may arise. Key concerns including legal, regulatory, security and human resources issues together with successful implementation of the telemedicine services are addressed. Building a telemedicine service is therefore not only about completing the system implementation but also about the

impacts of system utilisation. Digital Literacy mostly affects the elderly as they were born before the “digital disruption” age where most systems or services are integrated with the digital technology. Unlike the following generations that digital technology has become one of the major parts of their lives, the elderly have to learn how to use some devices such as smartphone and interact with applications such as health technology-based applications. Results show that the users aged over 65 years old produce lower success rate and higher error on assigned computer-based tasks compared to the younger ones. Several studies on technology acceptance by the elderly including stakeholders’ perspectives, factors influencing technology and dynamics in technology have been conducted.

QUESTION 2

- a) What is the Telemedicine? (2)
- b) Where does the prefix ‘tele’ originate and what does it mean? (3)
- c) State the functions of Telehealth. (4)
- d) Discuss the main objectives of telemedicine, telecare and telehealth. (5)
- e) Currently, how is the transfer of information generally facilitated? (2)
- f) What are the advantages of advancement in digital technologies including hardware and software? (3)
- g) Outline the work which is performed by the system developers (5)
- h) List the key concerns that are addressed by telemedicine services? (5)
- i) Paraphrase the following statement:
Digital Literacy mostly affects the elderly as they were born before the age where most systems or services are integrated with the digital technology. (6)
- j) Give a synonym or phrase of **not more than 8 words** of each of the **bolded words** as used in the passage. (5)
 - Derives.
 - Encompasses.
 - Advancement.
 - Collaboration.
 - Expertise.

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