TURKISH REPUBLIC OF NORTH CYPRUS
NEAR EAST UNIVERSITY
INSTITUTE OF GRADUATE STUDIES

EXAMINATION OF THE RELATIONSHIP BETWEEN NURSING STUDENTS E-HEALTH LITERACY LEVEL AND THEIR KNOWLEDGE AND ATTITUDES TOWARDS COVID-19 HEALTH POLICIES

DANZIL T. CHIMOMBE

Master Thesis

PUBLIC HEALTH NURSING DEPARTMENT

SUPERVISOR

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THESIS APPROVAL CERTIFICATE

The thesis study of Nursing Department graduate student Danzıl T. Chımombe with student number 20194118 titled **Examination Of The Relationshıp Between Nursing Students E- Health Lıteracy Level And Their Knowledge And Attitudes Towards Covit19 Health Policies** has been approved with unanimity / majority of votes by the jury and has been acceptedas a Master of Nursing

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STATEMENT (DECLARATION)

I hereby make a declaration that this study was carried out by me. There was no display of unethical behaviour throughout all the stages involved. Academic and ethical rules were observed in the process of obtaining the necessary information. I provided reference to all information obtained by this study and there was no breach of copyright during the study and writing of the thesis.

…../…./2021

Danzil T. Chimombe

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DANZIL T. CHIMOMBE

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Examination of the relationship between nursing students E-Health literacy level and their Knowledge and Attitudes towards Covid-19 Health Policies

ABSTRACT

Objective: The study was conducted among international and Turkish nursing students in North Cyprus. Some demographic information and the E-Health scale was used to determine the relationship between the nursing students E-Health literacy levels and their knowledge and attitudes towards Covid 19 health policies.

Material and methods: Convenient sample selection methods was used and the method was applied in accordance to the global Covid 19 pandemic rules and regulations. The total population of study participants (n=423).

Data collection: Socio demographic data- questionnaire (questions 1to 9), Covid 19 disease history (questions 10 to 13), knowledge in government health policy (questions 14 to 18), knowledge on nurses role in Covid 19 policies (questions 19 to 28), perception on government prevention policy in communities (questions 29 to 36), perceptions on government health financial policy (questions 37 to 41), perceptions on individual Covid 19 prevention (questions 42 to 50), perceptions on internet use for e-health purposes (questions 51 to 52) and the E-Health literacy scale (8 questions) were used to collect data.

Statistical analysis: The relationship between socio demographic characteristics and the E-Health scale were analysed using paired sample test to determine the level of knowledge in Covid 19 policies in relation to the E-Health scale. Results were analysed at 95% level of confidence interval which is $p \leq 0.05$ significant level using Statistical Package for Social Science (SPSS) 26.

Results and Discussion: Most of the measurements in this study have shown have shown a $p=0.001$ value in relation to the E-Health scale, which is less than the critical value $p \leq 0.05$. Therefore, there exists a relationship between knowledge in Covid 19 policies and the E-Health scale.

Conclusion and Recommendation: Knowledge in Covid 19 health policies and E-health are linked and this study has shown that there exists a positive corelation between the two. However, policy education and engagement are recommended not only among nursing students but also all health professional in general. Bearing in mind to take advantage of social media platforms to communicate and update e-health material to individuals and communities.

Keywords*: health policy, Covid 19, knowledge, education, E-Health, E-Health scale*

Hemşirelik Öğrencileri E-Sağlık Okuryazarlık Düzeyi ile Covid-19 Sağlık Politikalarına Yönelik Bilgi Ve Tutumları Arasındaki İlişkinin İncelenmesi

ÖZET

Amaç: Çalışma Kuzey Kıbrıs'taki uluslararası ve Türk hemşirelik öğrencileri arasında gerçeklenmiştir. Hemşirelik öğrencileri E-Sağlık okuryazarlık düzeyleri ile Covid 19 sağlık politikalarına yönelik bilgi ve tutumları arasındaki ilişkiyi belirlemek için bazı demografik bilgiler ve E-Sağlık ölçeği kullanılmıştır.
Gereç ve yöntemler: Uygun numune seçim yöntemleri kullanılmış ve yöntem küresel Covid 19 pandemisi kural ve yönetmeliklerine uygun olarak uygulanmıştır. Çalışma katılımcılarının toplam nüfusu (n=423).
Veri toplama: Sosyo demografik veri anketi (soru 1'den 9'a), Covid 19 hastalık öyküsü (soru 10 ila 13), hükümet sağlık politikası bilgisi (sorular 14 ila 18), Hemşirelerin Covid 19 politikalarındaki rolü hakkında bilgi (soru 19 ila 28), topluluklarda hükümetin önleme politikasına ilişkin algı (soru 29 için 36), devlet sağlık mali politikasına ilişkin algılar (37 ile 41 arası sorular), bireysel Covid 19 önleme konusundaki algılar (soru 42 ila 50), e-sağlık amaçlı internet kullanımına ilişkin algılar (soru 51 ila 52) ve E-Sağlık okuryazarlığı ölçeği (8 soru) veri toplamak için kullanılmıştır.
İstatistiksel analiz: E-Sağlık ölçeği ile ilgili olarak Covid 19 politikalarındaki bilgi düzeyini belirlemek için eşleştirilmiş örnek test kullanılarak sosyo demografik özellikler ile E-Sağlık ölçeği arasındaki ilişki analiz edilmiştir. Sonuçlar, Sosyal Bilimler için İstatistik Paketi (SPSS) 26 kullanılarak $p \leq 0.05$ anlamlı düzey olan %95 güven aralığında analiz edildi.
Bulgular ve Tartışma: Bu çalışmadaki ölçümlerin çoğu E-Sağlık ölçeği ile ilgili olarak $p=0.001$ değerini göstermiştir ve bu değer kritik değer olan $p \leq 0.05$'ten azdır. Bu nedenle, Covid 19 politikalarında bilgi ile E-Sağlık ölçeği arasında bir ilişki vardır.
Sonuç ve Öneri: Covid 19 sağlık politikaları ve E-sağlık konusundaki bilgiler bağlantılıdır ve bu çalışma ikisi arasında olumlu bir temel var olduğunu göstermiştir. Bununla birlikte, politika eğitimi ve katılımı sadece hemşirelik öğrencileri arasında değil, genel olarak tüm sağlık profesyonelleri arasında önerilmektedir. Bireylere ve topluluklara e-sağlık materyallerini iletmek ve güncellemek için sosyal medya platformlarından yararlanmayı unutmayın.

Anahtar Kelimeler*: sağlık politikası, Covid 19, bilgi, eğitim, E-Sağlık, E-Sağlık ölçeği*

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ABBREVIATIONS AND ACRONYMS

NEU	:	Near East University
N	:	Total population
n	:	Number of participants
TRNC	:	Turkish Republic of Northern Cyprus
WHO:	:	World Health Organization
CDC	:	Centres for Disease Control and Prevention
PCR	:	Polymerase Chain Reaction
SD	:	Standard deviation
p	:	p-value

DEFINITION OF TERMS

Covid 19: Coronavirus disease 2019 (Covid 19) defines as the disease caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2 formerly called 2019-nCoV). Which was first identified in the middle of an outbreak of respiratory illnesses in Wuhan, China (Medscape, 2021).

Health policy: defined as health goals at national, international and local level that specifies decisions, plans and actions to be undertaken to achieve these goals (World Health Organization, 2020).

Health literacy: The ability of an individual to obtain and understand knowledge and information in an effort to maintain and improve health in a way that is useful to the individual (Chenxi Liu, 2020).

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CHAPTER ONE

INTRODUCTION

Health policy education and engagement are regrettably uncommon in nursing, mainly because governments shape health and health public policies which in turn affect patients' outcomes and their ability to access health services. Hence not a great number of nurses participate in health issues and public policy decision making which helps to build most health care systems (Teresa Thomas, 2019).

The call for care that is focused on the patient, including outcomes, cost and quality continue to influence health care policy making with internationally recognized organizations such as the Institute of Healthcare Improvement advocating for strategies to improve quality care and patient satisfaction (Ferguson, 2014). However, designing, implementing, managing and evaluating these strategies calls for the effort of all health care workers at all levels and in all health arenas, including nursing students to scale up and start contributing to policy making.

Therefore, in order for this contribution to be successful, there is a requirement for leaders to provide the necessary education, training and mentorship. The main goal is to shift nurses from being the recipients of health policy decision making to becoming implementers and leaders in policy making. And thereby emphasise the need to become properly engaged in health redevelopment and advocacy. To achieve this, the first step is to educate nurses about policy, through providing them with the opportunity to be involved in policy education programmes with exposure beginning in undergraduate programmes all the way to more specialized graduate programmes (Turale, 2019).

Nurse regulatory bodies, nursing and organizations and associations are now tasked with the implementation of such training programmes in their respective countries. Curricula can be reviewed and policy included in most programmes, such as teaching an introduction to policy at undergraduate level to providing skills and knowledge about policy at master and PhD level (Sulvage, 2019). Content can vary from single courses or be included as part of an existing course.

The benefits of all level policy education training can help nursing professionals learn how policy and advocacy are crucial to patient care outcomes and ultimately improve

the lives of the same professionals and health systems (Turale, 2019). It is also important to learn from countries such as UK and USA, where there is an increase in engagement by nurses in issues to do with health policy. Interdisciplinary mentorship and exchange of knowledge can also benefit nurses learn more about policy making and how to implement best practice.

Active learning experience is indeed crucial when delivering education to nursing students because they have a greater chance to advocate the public's health and thereby being active in redesigning social and health policies. Therefore, it is important that nursing students be prepared through education, so as to become an influence to public policy (Mary E. Byrd, 2012). Nonetheless, the outcomes of these learning programmes will need to be identified and measured, so as to determine their success rates and those areas that need improvement.

Correspondingly, most health policies are generally developed without adequate research conducted by health professionals. Therefore, there is need to increase nurse researcher knowledge and understanding of how frequent research contributes to the overall process of policy design and implementation (Carol Hall Ellenbecker, 2016). An increase in nurse researcher knowledge will contribute to effective policies that will improve population health.

World Health Organization (WHO, 2007) defines health policy research as "how different actors interact in the policy and implementation and contribute to policy outcomes". More or less, it is research designed to develop constructive solutions to real life problems (Evelyne de Leeuw, 2014). Nurse intellectuals must therefore identify policy research as a separate division of research and use it as a means of shaping policy.

As the nursing profession is continuously advancing it is difficult to ignore the fact that information technology is among the major forces behind changing the face of nursing for the future. Social media represents a growing channel of communication that can be used to advertise and circulate health policy matters (Roland, 2018). By facilitating nurses to associate, participate and collaborate with senior leaders and law makers through social media, it can help develop the skills of the professional nurse and also the student nurse, including the importance of their roles in policy making (O'Connor, 2017).

Thus, the implementation of health policies relies heavily on nurses to close the gap between policy and practice and their ability to coordinate and deliver adequate, comprehensive, high quality care (Annesley, 2019). Therefore, it is paramount that policy education, especially among nursing students is initiated at an early stage so as to get their involvement as early as possible.

1.1 AIM OF THE STUDY

The aim of this study is to determine the relationship between nursing students e-health literacy, knowledge, attitudes and behaviours related to Covid 19 pandemic health policies.

1.2 STUDY QUESTIONS

In this study, the aim was to answer the following questions, when the students' knowledge and attitudes of Covid 19 health policies and their e-health scale scores were evaluated;

1. What is the e-health scale mean score of the students?
2. Do students' socio-demographic characteristics and Covid 19 affect their knowledge and attitudes about health policies?
3. There is a relationship between the socio-demographic characteristics of the students and their e-health literacy scores.
4. Is there a relationship between students' knowledge and attitudes about Covid 19 health policies and their e-health scale score?

CHAPTER TWO

2. GENERAL INFORMATION

2.1.1 Covid 19 Definition

A coronavirus is a common virus that causes and infection in your nose, sinuses and upper throat. Most coronaviruses are not dangerous. Early 2020, after the outbreak in China, the World Health Organization (WHO), identified SARS-CoV-2 as a new coronavirus. This is the disease that came to be known around the world as Covid 19 (WebMD, 2021). This illness can provoke what most health professionals call a respiratory tract infection.

2.1.2 Epidemiology

In December 2019, China reported an outbreak of pneumonia of unknown causes in Wuhan, Hubei province in China. Epidemiologically, most of these cases were linked to the Huanan sea food market where aquatic and live animals were being sold. Using next generation sequencing, the beta coronavirus was discovered in these patients (Sudipta Dhar Chowdhury, 2020). After further investigations and a series of tests, the World Health Organization named the illness coronavirus disease (Covid 19).

After an effective assessment of the situation across the world, on the 11th of March 2020, WHO announced Covid 19 a pandemic. Below is a timeline of the crucial events between the period between December 2019 to April 2020

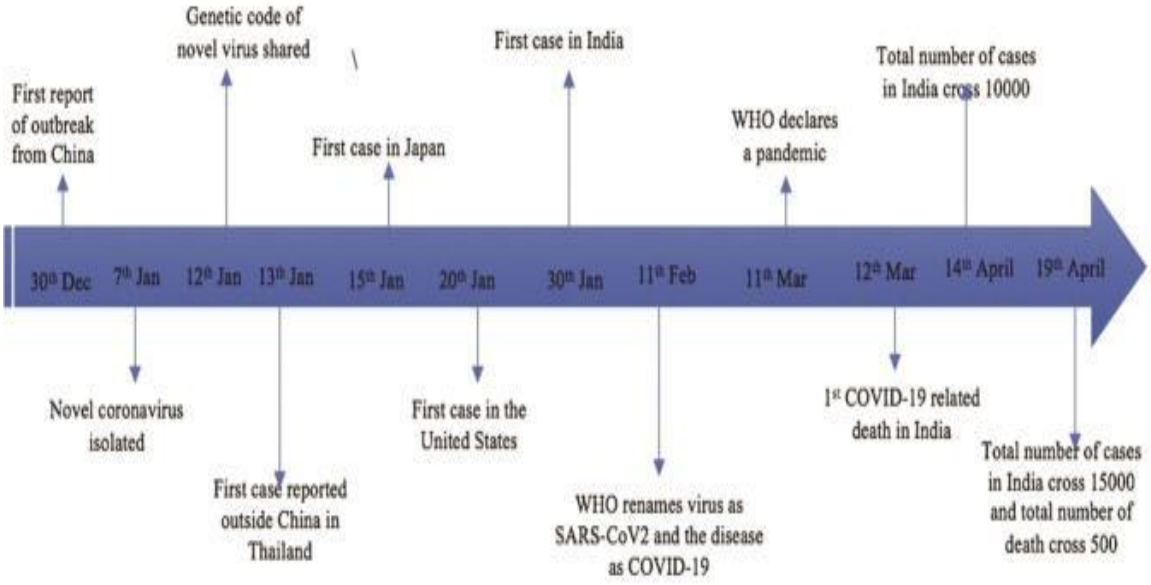

Figure 2. 1 Covid 19 epidemiology timeline between December 2019 and April 2020

2.1.2.3 Geographical distribution

January 11 2020, the first case was reported outside China, in Thailand and within short period of time the illness had spread to all continents except Antarctica. After that, a number of cases were reported in more than 37 countries such the USA, United Kingdom, Iran and a South Korea (Suliman Khan, 2021). In the period up to April 2020, the coronavirus outbreak had resulted in approximately 2 million confirmed cases globally (H.C Yashavantha Rao, 2020).

As far as mortality and morbidity rates are concerned, as of June 7 2021, worldwide, there has been over 170 million confirmed cases of the coronavirus, including approximately 3.7 million deaths reported to WHO. Almost 2 billion doses of vaccines have been administered as of 4 June 2021 (World Health Organization, 2021).

According to data from China, it is estimated that the fatality rate for people over 80 from coronavirus is almost 15% worldwide (Whiting, 2021). The elderly is more vulnerable because of compromised immune systems which makes them more

susceptible to infections and diseases. In developed countries they are most likely to be put in institutions such as nursing and retirement homes.

In an effort to combat the disease, countries around the world have applied different public health strategies in order to control the spread and to manage the health care needs of communities and populations (Shina C L Kamerlin, 2020). Countries such as, Turkey, USA, UK, India, Brazil and South Africa have had to implement strict Covid 19 health policies in an attempt to try and prevent the disease from spreading. These policies had to be revised from time to time due to the rise and fall in corona virus cases in each country.

2.1.3 Diagnosis

The coronavirus has different effects on different people. Some may not have the symptoms at all. Let alone even know if they have the virus, but they can transmit it to others. However, the following symptoms warrant further testing and investigations (Maragakis, 2020).

- Cough
- Fever or chills
- Shortness of breath or difficulty breathing
- Muscle aches
- Sore throat
- Diarrheal
- Headache
- New fatigue
- Nausea or vomiting
- Congestion or runny nose.

Some patients with coronavirus can develop pneumonia. This viral pneumonia cannot be treated with antibiotics. In serious cases, ventilator assistance may be required to ensure sufficient oxygen supply to the body (Johns Hopkins Medicine , 2021).

2.1.3.1 Current diagnostic tests for Covid 19

Though the symptoms manifested by the coronavirus are nonspecific and cannot be used for an actual diagnosis, nuclei acid testing through reverse transcription polymerase chain reaction (RT- PCR) kits and CT scans have been used for diagnosing and screening Covid 19. However, molecular techniques are a better fit and more effective than syndromic testing and CT scans (Udugama, 2020). Mainly because they can identify and target specific pathogens.

2.1.4.1 Primary prevention

This type of prevention is aimed at preventing a disease from occurring. Thus, these are measures taken by the individual or a susceptible population to prevent themselves from infections and diseases. The activities taken must limit risk exposure and increase immunity thereby protecting the individual from the illness. Immunization is a good example of primary prevention (Lisa A Kisling, 2021).

Primary prevention is important because its main focus is to stop diseases and infections from occurring. And this is possible through early detection and treatment to stop the progression of diseases, including management of existing health conditions, thereby reducing their consequences on individuals and populations (Khasnabis C, 2010). Primary interventions are also aimed at individuals, thus changing heath behaviours, nutrition and immunization.

Figure 2. 2 Control at source

2.1.4.1.1 Control at source

Source control refers to the use of well-fitting clot masks, face masks and respirators to cover a person's nose and mouth to prevent the spread of respiratory secretions when they are coughing, breathing, talking and sneezing. Also, besides proving source control, these apparatuses also offer different levels of protection for the user against exposure to infectious droplets and other particles from infected people. Source control measures are also recommended for everyone to prevent asymptomatic and pre-asymptomatic transmission, even if they do not have symptoms of coronavirus. For a healthcare facility, such measures include, both patients and visitors to wear well-fitting masks throughout their stay in the facility, health care professionals should also wear well-fitting source control at all times during their shifts in the health care facility ad always educate and practice hand hygiene before and after each patient contact (Centers for Disease Control and Prevention, 2021).

2.1.4.1.2 Individual protection measures

It is of paramount importance that personal protective equipment is implemented by every individual as a means to ease the spread of coronavirus (Masaki Machida, 2020). The World Health Organization recommends the following five main personal protective measures against Covid 19 (World Health Organisation, 2021).

- Hand hygiene, washing of hands frequently
- Maintaining social distancing and adhering to social distancing measures.
- Avoid touching the nose, eyes and mouth
- Practice respiratory hygiene
- Self-isolation (staying at home if unwell).

WHO also recommends that people should stay informed and follow advice given by their local healthcare professionals, including public health authorities and governments (WHO, 2021).

2.1.4.1.3 Environmental measures

Environmental measures are aimed at reducing transmission of the coronavirus infection to individuals through contact with infected persons, objects, contaminated environmental surfaces and equipment. Most coronaviruses are transmitted via

respiratory droplets through the mucosal or direct inhalation and therefore manifest as respiratory diseases. Nonetheless, these coronaviruses have shown environmental resistance which makes transmission via hands, water, waste and food possible (Sotiris Vardoulakis, 2020).

Improved indoor ventilation, including in public transport, healthcare centres and community places needs to be considered as a preventative measure because this will substantially reduce the airborne transmission of respiratory droplets infecting the next person (Matthew R Boyce, 2019).

Although there are no disinfectants registered specifically for the Covid 19 coronavirus, regular biochemical disinfectants commonly used in hospitals can still be used as cleaning agents. Accordingly, cleaning and sanitization procedures must be adopted using the appropriate disinfectants, especially removing any organic residues, with increasing frequency at which these activities are normally done (Luigi Cirrincione, 2020).

2.1.4.1.4 Patient isolation

Isolation precautions should be used for patients who are either suspected or known to have an infectious disease or are infected with a multi resistant organism. Source isolation aims to restrain the infectious agent so that it does not spread from one patient to the other. Protective isolation on the other has the purpose of protecting an immunocompromised who is at a higher risk of catching other harmful micro-organisms from the environment or from other patients or visitors (HSC Pubic Health Agency, 2021).

Individuals with asymptomatic positive SARS-CoV-2 infection, detected through normal PCR testing on admission to hospital for non Covid reasons can be advised on discharge to self-isolate for at least ten to fourteen days. After then they can take another PCR test. Those patients who remain inside the hospitals still require a fourteen-day isolation period (GOV.UK, 2021).

Also, according to SafeCare Healthcare standards, in their hospital preparedness guideline state that at the isolation area, all suspected cases should keep masks on during assessment, cover their mouth and nose when coughing and perform hand hygiene after contact with respiratory secretions (SafeCare, 2021).

2.1.4.1.5 Quarantine

Quarantine is a public health practice that splits and restricts the movement of individuals who were exposed to a contagious agent, mainly to determine if they are sick (Aditya Patel, August 2020). These are people who may have been exposed to the agent but are unaware of it, or they may actually have the disease but don't know they have it. Whereas, isolation is the act of separating people who are actually suffering from an infectious disease from those who are not (HHS.gov, 2021).

Because coronavirus is fast spreading among people who are in close together (about 6 feet apart), it is recommended to self-quarantine if you suspect infection. For example, if a person is infected and does not leave the house, Covid 19 cannot spread outside the house. This action spares friends, family and even neighbours from getting the virus. Not to mention, this slows down the virus itself which means fewer people in hospitals and less strain on healthcare workers and first responders (Patients Emergency Room, 2021).

However, large scale quarantine measures can impose a high risk on health care systems and their workers. This is true for those countries such as India, with very little medical resources and few health care centres (Aditya Patel, August 2020). Such countries are obviously understaffed to deal with pressures of the pandemic. This poses as a risk to healthcare workers as they are now more susceptible to the coronavirus infection.

2.1.4.1.6 Filiation

From a medical perspective, filiation refers to the connection of things resulting from one another, or simply put, contact tracing (Demitaş T, 2020). The main idea behind filiation as a precaution against epidemics is to prevent the disease by disturbing the transmission chain with systematical tracing and isolation of infected individuals.

As soon as the first Covid 19 case was discovered in Turkey on 11 March 2020, the index case and all its contacts were also identified. Immediately, the procedure of filiation was then launched by the Turkish Ministry of Health with impromptu medical teams being set up around the country (Demitaş T, 2020). In Northern Cyprus however, the first index case was on 9 March 2020 and the government quickly took control of the situation by imposing a partial lockdown (Nedime Serakinci, 2020). All

schools including day care were closed and public workers were urged to work from home.

The main benefit of contact tracing is that it can single out those individuals who may be potentially infected before the onset and severity of symptoms. Also, if it is conducted swiftly with good speed it can prevent further transmission from secondary cases (Matt J Keeling, 2020).

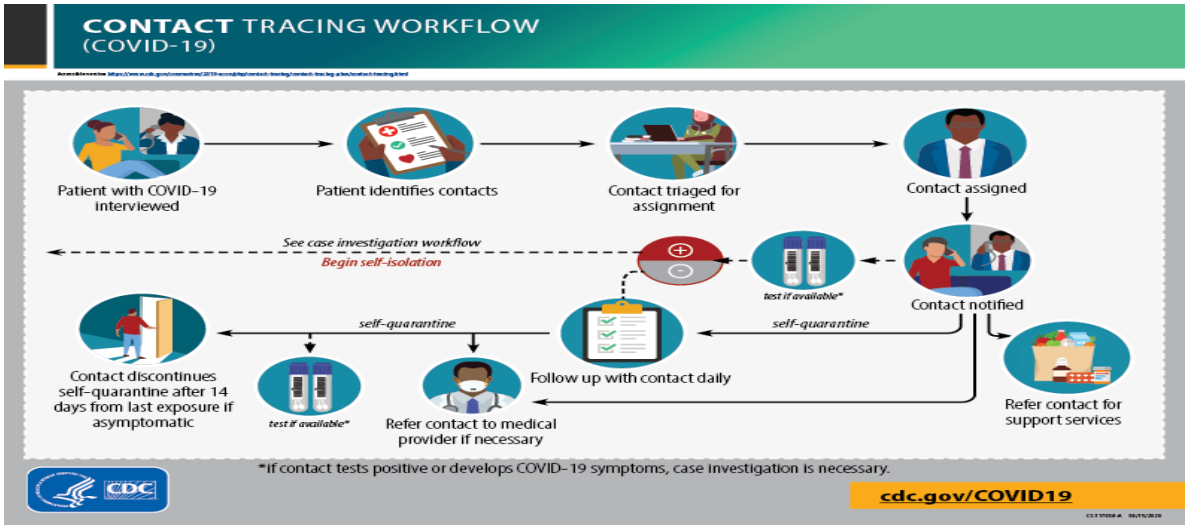

Figure 2. 3 Contact tracing workflow

2.1.4.1.7 Surveillance

Oxford textbook of Public health defines surveillance as the "close monitoring of the occurrence of selected health conditions in the population" (Ruth L Berkelman, 2009). Being the epidemiological foundation of today's public health, surveillance may also include the monitoring of risk factors associated with adverse health conditions.

An effective surveillance system should be designed to fulfil the needs of a prevention and control programme. This programme must include characterization of disease occurrence and descriptions of geographical trends of a health problem in a specific population. Data collected through these surveillance programmes should be convenient for determining patterns of both epidemic and endemic diseases (Jamison DT B. J., 2006).

The two main types if surveillance is passive and active surveillance. Passive surveillance starts with those who are responsible for providing health care beginning the reporting process to local officials. Normally reporting is done on a case by case

basis (Local Public Health Institute of Massachusetts, 2021). In contrast, active disease surveillance is when the state officials actively search for information by contacting health care providers such as schools and nursing homes.

According to the World Health Organization (WHO), the main goal of national surveillance for Covid 19 is to help public health institutions to lessen the transmission of the coronavirus which will ultimately reduce associated morbidity and mortality (World Health Organization, 2021). It went further to suggest the following surveillance strategies

i. Strengthen laboratory and testing capacities
ii. Include Covid 19 as a mandatory notifiable disease
iii. Implement immediate reporting
iv. Set up systems to monitor contact tracing
v. Strengthening of existing surveillance systems
vi. Use of public health workforce to carry out testing and contact tracing.

2.1.4.2 Secondary prevention

Secondary prevention mainly focuses on early detection and it targets those individuals that appear healthy but with diseases that cannot be clinically detected (Lisa A Kisling, 2021). This type of prevention usually happens in the form of screening, for instance, a Pap smear to diagnose cervical cancer before its progression.

In relation to Covid 19, secondary prevention measures include early detection of the disease in asymptomatic patients with proper screening and diagnostic testing (Harrison Chimuka, 2020). This can be done through border controls in and out of countries, where all travellers coming into a specific country are screened. However, this prevention level can be quite costly as it tends to use up resources and diagnostic equipment.

2.1.4.2.1 Early diagnosis

Early diagnosis provides an opportunity to plan future care and treatment. Important decisions about care and support can be made if an early diagnosis is made (Social care institute for excellence. , 2021). Not only can an early diagnosis provide access to the right services and programmes, it can also help families receive practical information and advice as they face new challenges. It is important to note that early

diagnosis requires a combination of epidemiology, etiology, clinical manifestations and imaging, with much emphasis being placed on epidemiology history and CT scans. (Yang Zhou, 2020).

Early and fast diagnosis for Covid 19 will aid with early management of the disease. Reverse transcriptase polymerase chain reaction (RT-PCR) test is the one available now that will give a comprehensive diagnosis of Covid 19 (Katikar, 2020). Between January and February 2020, 4 patients from the Wuhan province in China were admitted and treated of Covid 19. They had similar epidemiological and their clinical manifestations included, sore throat, fever, and cough. By combining epidemiological history, clinical manifestations, etiology and imaging a mis diagnosis was prevented (Yang Zhou, 2020).

2.1.4.2.2 Early treatment

Although a number of therapies such as, remdesivir and dexamethasone are either available or in development for serious coronavirus cases, there is need for longer term interventions that can be administered quite early to prevent disease progression (National Institute of Health, 2021). Such early treatments would speed patient recovery, minimize hospital stay times and lessen the burden on healthcare systems.

The food and drug administration (FDA) has authorized treatments that may be used by those people who have been hospitalized with Covid 19 to try and restrain the progression to those who have not been hospitalized but are at risk of developing the disease (Harvard Health Publishing, 2021). Emergency use has been granted to a mix of casirivimab and imdevimab produced by Regeneron, and a combination of bamlanivimab and etesevimab manufactured by Eli Lilly (Saey, 2020).

Both treatments are intravenous and the following measures have been recommended to help reduce symptoms while recovering at home.

- Staying well hydrated
- To relieve aches, fever and pains, it is advised to take acetaminophen. Remembering to keep track of all medications taken
- No need to stay in bed, but sufficient rest is recommended.

2.1.4.2.3 Potential early treatments for Covid 19

Drug name	Also used to treat	How it works	How it is taken
Camostat mesylate	Pancreatitis and post-operative acid reflux	Blocks virus entry by interfering with an enzyme	Pill
Remdesivir	Coronavirus in hospitalized patients	Mimics an RNA building block to shut down viral replication	Inhaled
Favipiravir	Influenza	Mimics an RNA building block to shut down viral replication	Pill
EIDD-2801	Experimental	Mimics an RNA building block to shut down viral replication	Pill

Table 2. 1 Potential early treatments of Covid 19

2.1.4.4 Tertiary prevention

Tertiary prevention has two targets, stage of disease and clinical outcome. It is enforced in symptomatic patients and its main goal is to reduce the severity of the illness and also any of its previously related illnesses (Lisa A Kisling, 2021). Meaning tertiary prevention focuses on reducing the effects of the disease once established in the individual.

For Covid 19 patients, tertiary prevention aims to improve their quality of life after the disease. For instance, this could involve the use of antiretroviral therapies to curb the multiplication of the virus, which is likely to affect the lungs in the case of Covid 19 (Harrison Chimuka, 2020). Mechanical ventilation could also be needed for those clients with Covid 19 associated pneumonia. Again, this is a very expensive preventative measure, especially for developing nations.

2.1.5 The role of Public Health Nurses in Covid 19 patients

Today, nurses represent one of the biggest groups in health care profession, but are normally seen as having the least influence in health care related decision making and ultimately health policy. Therefore, it is imperative to understand the role that the

public health nurse is expected to play, particularly in a pandemic (Ani Bilazarian, 2019).

Public health nurses are at the centre of the world crisis, Covid 19 pandemic and are expected to be on the frontlines by serving on mobile strike teams that are tasked with investigating case contacts, to deliver health education on self-isolation and quarantine, to carry out home visits and interpret guidance information from the CDC (Centre for disease control and prevention). Public health nurses are responsible for safe, adequate, non-biased care to the communities in which they serve (Joyce K Edmonds, 2020).

Furthermore, public health nurses who work in local health departments must be actively involved in planning, detecting, controlling and must have a readily response to outbreaks. Nurses in public health acquainted to handling such outbreaks of communicable diseases so must therefore coordinate with other health care workers in hospital settings (Rosemarie Rowney, 2020).

Moreover, the Association of Public Health Nurses, working with other health care organizations has come with an endless list of other public health professionals responsibilities such as, providing information on Covid 19 and non-pharmaceutical interventions, reassuring communities that fears are valid, but they should avoid panic, working with local governments to improve emergency operations plans, engaging key stakeholders to help support Covid 19 preparation efforts and developing plans to support homeless individuals which is a highly vulnerable group in the population (Walden University , 2021).

Through their effortless work in clinics, non-profit organizations, government organizations and schools, public health nurses are part of the frontline defences in the coronavirus occupying roles such as, community centre coordinator, director of health education programmes, school of nursing director, public health nurse manager, outpatient clinic manager and director of disaster management and preparedness programmes. To name but just a few (Joyce K Edmonds, 2020).

In addition, it must not be forgotten that prevention is the ultimate response to a global pandemic such as the Covid 19 the world is currently facing. And the mor key to prevention is early detection. This is where nurses who are positioned in communities come in. their main goal is to recognize symptoms of new and emerging infectious

diseases (Advent Health University, 2020). Not only that, but nurse leaders can develop early reporting strategies that are aimed at keeping public health officials and organizations for example, local and state health departments informed in order for them to communicate effectively with the public and take early preventative measures.

In Aril 2020, Singapore government took unprecedented measures to contain the spread of Covid 19 which they termed the "circuit breaker". To complement safe distance measures, community public health services such as home personal care, adult intensive care needs and centre based services were scaled back to serve only those patients that were in critical condition. Other services that community nurses provided in Singapore included, early interventions for pre frail older persons, chronic disease management for those conditions not well managed and palliative care for those at the end of life (Xu Yi, 2020).

In addition, from a public health perspective, access to clean water, effective sanitation systems, adequate nutrition and robust health systems could also contribute to how populations fight against public health emergencies. Subsequently, perhaps the most distinguishable role of community health workers in pandemic preparedness is increasing access to health interventions and improving services within communities. Ultimately, these attempts can reduce the risk of morbidities overall mortality and thereby improving population health (Matthew R Boyce, 2019).

2.2 Health Literacy

Defined as the extent to which individuals have the ability to obtain, understand and process basic health information necessary to make appropriate health decisions (Health Resources& Service Administration., 2021). The following groups have lower levels of health literacy,

- Older adults
- Minority populations
- Medically underserved people
- Those belonging to a low socio-economic status.

Poor health literacy is usually associated with limited knowledge of diseases, low medical consistency, difficulties in understanding health related information (Chenxi Liu, 2020). This lack in literacy normally leads to poor health, not making use of the right health services, high mortality and health disparities (Nielsen-Bohlman L, 2004).

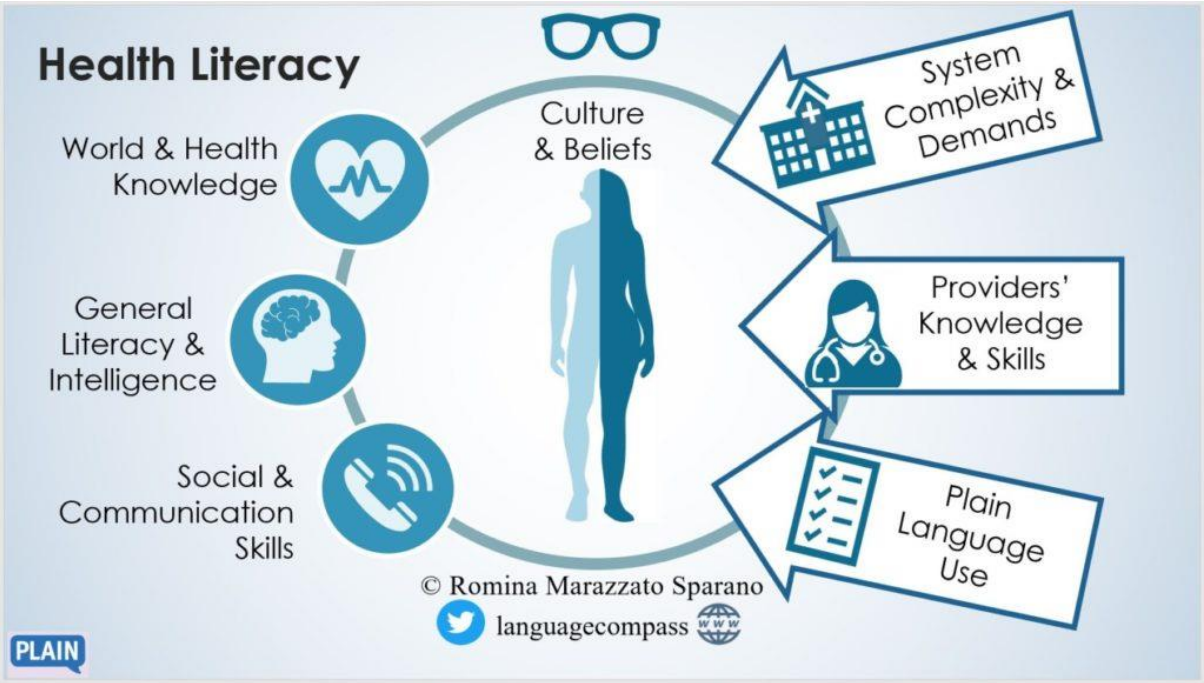

Figure 2. 4 Health literacy

2.2.1 History of health literacy

The first use of the term health policy was in 1974, and was used to outline how information about health impacts the health system, the educational system and communication at large (Ann, 2014). The whole concept if health literacy was later introduced into health care literature around the 1990s.

Over the years, health literacy as a concept has developed from only defining the literacy skills of the older population to understanding that satisfactory literacy skills are necessary to work through and understand health care systems of today (Christina Zarcadoolas, 2005).

Earlier definitions of health literacy mainly focused on how an individual was able to apply basic reading and writing skills to a health concept. With time, a panel of experts have made new suggestions to the definition (Office of Disease Prevention and Health Promotion., 2021).

The main modifications to the definition was changing from “the capacity to”, to “can”. The idea behind this was to try and differentiate health literacy and health intelligence (Ann, 2014). Another addition was “communicate about”, which was to highlight the importance of oral communication skills.

Further expansion of the definition was done by the World Health Organization, to state that health literacy represents the cognitive and social skills that motivate the individual to access, understand and use health information to promote and maintain health (WHO, 2021).

Because of the growing interest in health literacy, it continues to be a growing concept, with numerous definitions which are constantly being revised to reflect the changes across health systems. One definition is simply not enough (Christina Zarcadoolas, 2005).

2.2.2 Health literacy epidemiology

To fully describe the epidemiology, one would require an understanding of what has commonly been measured in previous studies (DeWalt, 2007). Most researchers have measured reading ability as a proxy for health literacy.

By measuring the reading ability of an individual, it would affirm their understanding of written health information and would ultimately classify them as having high health literacy (Musa, 2015).

However, only measuring reading ability does not do enough justice to health literacy, but an understanding of problems associated with failing to read well can help us identify other important principles for addressing health literacy (DeWalt, 2007).

2.2.2.1 Interventions to mitigate the effects of low Health literacy

The interventions to mitigate low health literacy usually fall into four sections (General, Health Literacy, 2021).

Improve health literacy skills in the population

Improve communication in the area of writing and multi media

Improving client-provider communication during hospital visits

An all-round change in care systems.

2.2.3 Importance of health literacy

It is of fundamental importance for all nurses to embrace health literacy because nurses are the primary providers of care, therefore, they must enhance effective communication and be both culturally and linguistically respectful of each patient (Lynch, 2021).

Health literacy skills are most importantly beneficial to patients because it allows them to be in control of their wellbeing by making informed medical decisions (Rasmussen University, 2021). Therefore, improving their communication skills with health professionals is a must.

Also, health literacy skills are important because such skills can open avenues to proper care, which will eventually reduce and even better prevent certain health conditions (Speros, 2011).

A low health literacy level can also impact populations at large which will become costly for nations because when people don’t understand basic health instructions and information, there will be adverse health outcomes and flooding of emergency rooms (Rasmussen University, 2021).

Furthermore, an education in health literacy can aide nurses in identifying those factors that hinder communication and comprehension of health literature to patients thereby giving them an opportunity to be sensitive to the needs of patients (Cally Graniero, 2019).

2.2.4 Health literacy assessment methods

There are two main health literacy assessment tools, the Newest Vital Sign (NVS) and a single item literacy screener (SILS). The NVS is a fast and conclusive functional health literacy assessment tool which comprises of a nutritional label with 6 questions (Kelly R Ylitalo, 2018). It has a high sensitivity to detect limited health literacy. Administration time ranges from 2 to 6 minutes.

The single item literacy screener (SILS) is an instrument designed to identify those patients who need help in reading health related questions (University of North Carolina, 2021). The instrument asks one question, “How often do you need to have someone help you when you read instructions, pamphlets or other written material from your doctor or pharmacy?”. Possible answers are in a range, from “1” (never) to “5” (always) (Sibel Vildan Altin, 2014).

The Centres for Disease Control and Prevention has also outlined the following health literacy assessment methods

National adult literacy and Numeracy Surveys such as, the Programme for the International Assessment of Adult competences (PIAAC) and National Assessment of Adult Literacy (NAAL).

K-12 Literacy, Numeracy and Science Skills for instance, the National Assessment of Educational Progress (NAEP).

Patient Experience for example, Consumer Assessment of Healthcare Providers and Systems (CAHPS) questionnaire

Measures of individuals health literacy such as, Agency for Healthcare Research and Quality (AHRQ) health literacy measurement tools and am online database of health literacy measures called Health literacy too shed (Centers for Disease Control and Prevention, 2021).

2.2.5 E-health literacy

Ehealth literacy, sometimes referred to as digital health literacy is the ability to seek, find, understand and assess health information from electronic sources and then apply the knowledge obtained to solving a health problem (Cameron D Norman, 2006).

The process of acquiring knowledge in itself is a complex task, because individuals go from a place of being unfamiliar with a subject to developing competence within that subject area (Gilstad, 2014). Which leaves people being good in one area and not in the other.

The process of e-health literacy practice has a number of competences built in it. Norman and Skinner, in their Lily model suggest six categories of e-health literacy (Cameron D Norman, 2006), namely

Traditional literacy and numeracy

Computer literacy

Information literacy

Health literacy

Media literacy

Science literacy.

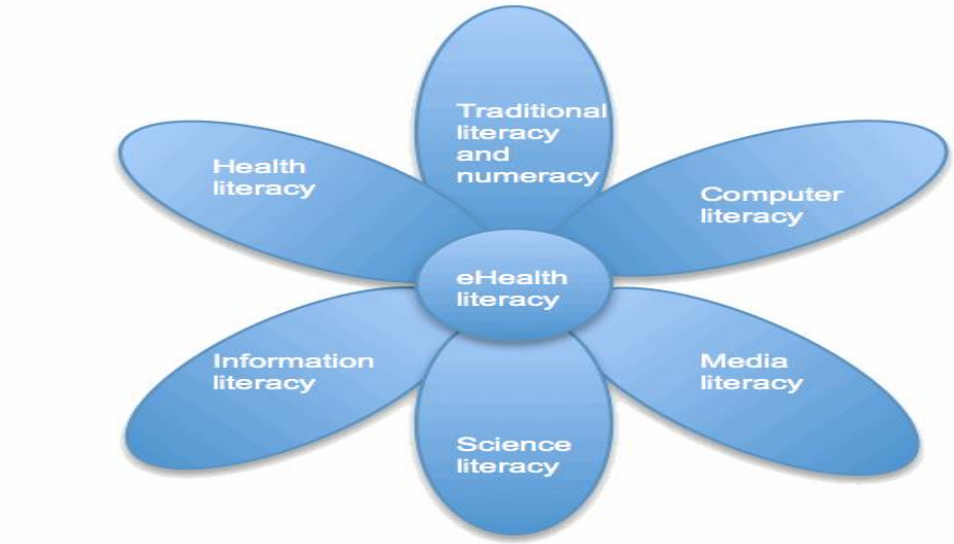

Figure 2. 5 E-Health literacy

2.2.6 Health literacy and public health nursing in the context of Covid 19 disease

The fast development of the coronavirus illness into a pandemic has demanded that people gain and apply health information and quickly change their health behaviours (Leena Paakkari, COVID-19: health literacy is an underestimated problem, 2020). With technologies advancing on a daily basis, most information intended to educate people about Covid 19 has become widely available and for most, easy to access (Zakar, 2021).

Public health nurses are practically gate keepers of community health and therefore have the sole responsibility for communicating complicated information concerning

health to the communities they serve (Aya Goto, 2014). Therefore, it is important to train nurses on health literacy so that they can enhance their communication skills to patients.

During this global treat of Covid 19, community, population and individual health literacy are more important than ever. Because we are not only in a "pandemic" but also an "infodemic." Which means the rapid spread of misinformation. (Sentell, 2020).

(Sunday Oluwafemi Oyeyemi, 2014)mean that all the efforts by governments and health institutions to control and manage Covid19 (Yuen Yu Chong, 2020). Hence, the World Health Organization (WHO) and health authorities across the globe are now working with social media platforms such as, Twitter, Facebook, Google and YouTube so that they can be able to provide evidence based information to the general public (Zarocostas, 2020).

However, since e health literacy involves the coming together of two parts, that is health literacy and media literacy, which means the individual ought to possess the required skills to access and understand health information from electronic resources and be able to make proper health informed decisions in their everyday lives (Cameron D Norman, 2006).

Today's world of smartphones has opened more than enough opportunities to retrieve instant health information and sometimes misinformation. This is what the infodemic has done in the case of Covid 19 (Yuen Yu Chong, 2020). Reason being that there are large amounts of information about Covid 19 being passed around on social media platforms.

A good example is the 2014 Ebola epidemic in which adverse social media rumours created an environment of hatred towards health care workers, not to mention the posts against vaccination which ended up supporting debates about vaccine safety (Sunday Oluwafemi Oyeyemi, 2014). This is the same with the conspiracy theories that state that 5G mobile networks have detrimental effects on the immune system and will eventually cause Covid 19 Spread (Adam S, 2020).

Therefore, an understanding of what the role of ehealth literacy in the management of Covid 19 pandemic is very crucial. And pre-approved tools must be used to appraise e health literacy especially in the context of infectious diseases and the link between e

health literacy and the publics misinformation in their decisions to reduce the spread of Covid 19 (Susie Sykes, 2013).

2.3.1 Health Policy Definition

The World Health Organization defines health policy as health goals at an international, national and local level and specifies the decisions, plans and actions to be taken to achieve these goals (World Health Organization, 2021). A definitive health policy can set a futuristic view which will help to priorities and achieve set goals, both for the long and short term.

Effective policy making plays an important role in the application of actions related to health. Therefore, it is important to analyse the definition and parameters of health policy. The major points to remember are that, policy is not an intervention, but sets the procedure for the advancement and application of effective health systems and that public health education and health promotion should all openly accommodate the health political science (Evelyne de Leeuw, 2014).

2.3.2 Importance of health policy

Health care policy is crucially important mainly because it sets a general plan of action, and provides general guidance to desired outcomes and decision making (policymedical, 2021). Especially in the healthcare, policy should set the standard for effective and less costly medical care.

Policies and procedures are the glue that hold health care organizations together, giving organizations standards for daily operations which result in the healthcare facility running effectively. Without such policies, organizations would struggle to handle issues to do with legal liabilities, patient safety and regulatory requirements (RLDatix, 2021).

In relation to healthcare personnel, health polices help them understand their responsibilities and roles which sets the foundation for safe delivery of quality cost effective care, not to mention how also policies help to direct the cost of delivering health care services. With proper guidance, the cost the cost of services will also help prevent barriers to accessibility of health care (policymedical, 2021).

To the public, policies are beneficial in a number of different ways such as, they help prevent the spread of infectious diseases, they provide health education, securing health safety and finally, ensuring that the quality of lives of the population is improved. (Regis College, 2021).

The current Covid 19 pandemic has come as a wakeup call for most people, with the realization that medical emergencies can happen any time. Therefore, in order to be protected in such circumstances, health insurance is important (Kaur, 2021). With emphasis being placed on acquiring health insurance for the whole family and not only for one person.

2.3.3 Health policy concepts

The best way to understand health policy and its concepts is to break into numerous principles on how care can be accessed and dictated, all from a national level to state level and finally to the clinical setting (World Health Organization, 2021).

i. Public health policies- enacted on a national and state level to prevent the spread of infectious diseases and promote healthy lifestyles.
ii. Global health policies- the bigger picture of health care in populations across the globe.
iii. Mental health- a core component in creating health policies to provide objectives and guidelines to promote mental wellbeing.
iv. Financing- good policies will determine how care is financed and a plan to cater for all
v. Health equity- means that care is distributed in a fair manner across all demographics and communities.
vi. Health care services- policies designed to directly affect the kind of health care available in a particular area.
vii. Pharmaceuticals- policies to include the availability, regulation and affordability of pharmaceutical products.

2.3.4 Health policy community requirements

Most communities are governed by state policies that affect either in a good or bad way government decisions that are relevant to health. Those policies can give crucial opportunities or encompass obstacles to promoting health equity (James N. Weinstein, 2017).

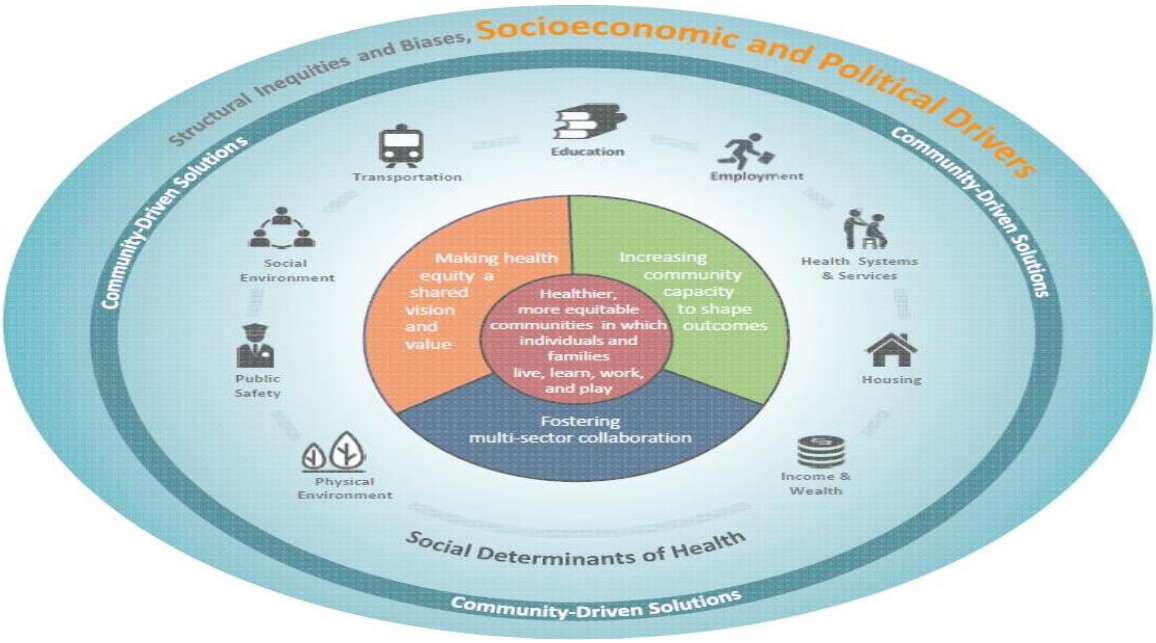

Figure 2. 6 Socioeconomic and political drivers

The above is a conceptual model for community solutions to promoting health equity.

2.3.5 The role of the state in creating health policy

An all-inclusive health legislation is an important tool for implementation of health policy and the provision of administrative and managerial grounds for improving health systems. With that in mind, the responsibility to achieve and implement health policies does not only lie with governments but also with the help of private organizations (Nataraju, 2013).

Because public health is population based, the goal of a population-based approach falls on states and local governments to formulate approaches that are aimed at addressing the needs of individuals and communities (Minesota Department of Health, 2021). Minnesota department of Health has come up with the following responsibilities for governments in creating health policies,

i. Assuring a fair and acceptable local Public Health Infrastructure

ii. Promoting healthy communities and Healthy behaviours.
iii. Avoiding the spread of communicable diseases
iv. Protecting against environmental health hazards
v. Preparing and responding to emergencies as quickly as possible
vi. Assuring safe delivery of health services.

2.3.6 Effectiveness of international and national health policy organizations

Global health challenges pose a serious threat to nations worldwide, that's why countries or agencies cannot work alone to manage some of these issues. This is where international and multinational organizations come into play to help these health organizations work to improve public health (University AT Albany, 2021).

Basically, these organizations are divided into three groups, multilateral organizations such as the World Health Organization (WHO), and United Nations Children's Fund (UNICEF), bilateral organizations like the Centres for Disease Control and Prevention (CDC) and non-governmental organizations like Doctors Without Borders and Care International (University of Southern Carlifornia, 2021).

Non-governmental organizations (NGOs) have become an important part of global health and have since attained a strong position globally. They have mostly become influential and participated in international negotiations, especially in issues of global diplomacy (Raphael Lencucha, 2011).

International and national policy organizations can be effective at all phases in the development and implantation of primary health care programmes by,

i. Promoting dialogue within governments and health institutions
ii. Providing information and establishing methods of conveying primary health care to the public.
iii. Strengthening communication links to accomplish set goals
iv. Can offer help in national policy formation in the areas of health care
v. Creating means for higher levels of coordination and collaboration of health care activities.
vi. Providing assistance to local health care organizations (Suguna Anbazhagan, 2016).

2.3.7 Covid 19 health policies

When the World Health organization declared covid 19 a pandemic on March 11, 2020, most countries implemented similar strict closure and containment policies to try and control the Covid 19 outbreak (Morgan Pincombe, 2021).

When strict movement, isolation and quarantine policies proved to be successful in China and Europe, most countries quicky followed through with the same policies in trying to reduce transmission and lessen the burden on health care systems (Moritz U G Kraemer, 2020).

Domestic and international travel restrictions were also imposed by countries, including closure of schools, workplaces and cancelations of all religious and public events. Without taking socio economic differences of countries into consideration, most countries displayed “herd behaviour” in implementing these Covid 19 policies (Hale T, 2020).

2.3.8 Covid 19 Health Policies: publications by countries North Cyprus

The initial case of Covid 19 was identified to be a German tourist on March 9 2020 and as a result, all those who were found to have been in contact with her, including tourists who were on the same plane were quarantined in three different hotels. Immediately after that, precautions were taken in North Cyprus, which to this date continue to be amended to protect the health of the public (Nazife Sultanoglu, 2020). The decisions of the council of ministers announced the following,

1. All civil workers in the public sector except for police, fire brigade, finance and health workers are considered on administrative leave.
2. In the private sector, all entertainment places, nigh clubs, casinos and betting offices shall be closed, except for businesses providing essential services such as markets, bakeries, pharmacies and gas stations.
3. Gathering in associations, unions, locales and performing collective worship is prohibited.
4. Citizens to remain in their homes, curfew imposed from 2100 hrs to 0600hrs.
5. Mandatory use of face masks in public areas has been implemented by the government since 24 April 2020.

6. Only Northern Cyprus citizens and persons who have legal permission to reside in the country can enter Northern Cyprus through sea, air and land border gates; entries to Northern Cyprus by all other country citizens are banned.
7. Regardless of which country they come from, Northern Cyprus citizens and legal residents who enter the country through sea, air and land gates will be monitored and quarantined at home for 14 days. For those who do not comply with this requirement, legal action will be initiated under the Communicable Diseases Law No. 45/2018.
8. As soon as the first case of the first SARS-CoV-2 was identified in Karpasia, 3 villages in Karpasia were quarantined (full curfew) and only controlled entry and exit are allowed in these villages.

Turkish Republic of Northern Cyprus restrictions

1. All demonstrations, rallies and gatherings indoor or outdoor will not be held
2. Mandatory quarantine for 14 days for all travellers from Brazil, India, Netherlands, Ukraine, Serbia and Africa.
3. Activities planned for Bayram such as festivals, amusement parks etc have been cancelled.
4. Visitors from the UK and Denmark have been removed from 14-day quarantine. They can only be quarantined for 10 days.
5. TRNC citizen students studying abroad have been added to the list of people eligible for home quarantine with a wristband.
6. The number of charter flights for 3-night closed hotel tourism with wristband monitoring has been increased to 6 (TRNC-Rules, 2021).
7. Turkey has supplied North Cyprus with at least 100 000 vaccines to date and over 3000 cases have made recoveries (Gencturk, 2021).

Zimbabwe

1. Mandatory curfew is in place, effect from 1030pm to 0500am.
2. International air travel is subject to testing requirements.
3. Health screening procedures in place at airports and other ports of entry.
4. Interstate travel is permitted.
5. Face masks to be worn at all times in public places and social distancing must be observed, (defined as keeping at least one metre from any individual.

6. Businesses, restaurants and schools are open, supermarkets to close by 8pm (Ministry of Health and Child Care, 2021).

February 2021, Zimbabwe launched its national covid19 vaccination programme using BBIBP-CorV/ Sinopharm vaccine. As of 4 May 2021, approximately 450 000 people have received their first doses and over 100 000 have received their second doses.

Turkey

1. On March 1, 2021 the Government of Turkey announced a four-tier system on local COVID-19 related restrictions. Provinces are now divided into 4 different risk groups: low (blue), medium (yellow), high (orange), and very high (red) based on infection and vaccination rates.
2. On April 26, 2021, the Government of Turkey announced additional restrictions and closures to stop the spread of COVID-19, including a full-time curfew throughout all of Turkey, starting at 19:00 on Thursday, April 29, 2021, and ending at 05:00 on Monday, May 17, 2021, encompassing weekdays and weekends.
3. Foreign travellers who are in the country for short trips and tourism are exempt from the curfews.
4. During the curfew supermarkets, green grocers, bakeries, and butchers will be open from 10:00 until 17:00
5. Until the end of Ramadan, Thursday, May 13, 2021 dining establishments such as restaurants, patisseries, cafes, and cafeterias will be available for 24/7 delivery services only (Republic of Turkey Ministry of Health, 2021).
6. Direct flights from Brazil, Denmark, South Africa, and the UK remain cancelled.
7. All passengers traveling through another country who have been in Brazil and South Africa in the last 10 days will continue to be quarantined in places determined by the government for a period of 14 days following their entry into the country.
8. Intercity travel permits are required for everyone during the full-time curfew (U.S Embassy & Consulates in Turkey, 2021).
9. According to the ministry of health, the prioritized groups for vaccination are frontline health and social care settings and people over 65 years.

10. Vaccination is free and available in two doses (Republic of Turkey Ministry of Health, 2021).

Brazil

Brazil has approximately 14 659 011 confirmed cases to date with over 400 000 deaths (World Health Organisation, 2021). Being one of the countries with the highest infections rates, the following are the restrictions that have been put in pace.

1. Night curfew remains in place through all states in the country, effective from 2300 to 0500.
2. Most businesses to operate at 50% capacity outside of curfew hours.
3. Mandatory masks and social distancing rules to be maintained across the country.
4. Travel ban on travellers entering from South Africa and UK.
5. Two-week quarantine for citizens coming from abroad and must present a negative pcr test.
6. Tourists should avoid all travel to Brazil.
7. Because of the seriousness of the current situation in Brazil, fully vaccinated travellers may be at risk of spreading and acquiring covid 19, therefore should avoid all travel to Brazil (Centers for Disease Control and Prevention, 2021).

First doses of Covid 19 vaccines were received in March 2021 through the Covax mechanism and as to date over 44 million doses have been given. The vaccine is to be received in two doses (unicef, 2021).

2.3.9. Public Health Nurse Core Functions

Public health core functions comprise of health-related strategies that are aimed at population groups, individuals, families and communities (Centers for Disease Control and Prevention, 2021). There are three main core functions which include, assessment, policy development and assurance.

i. Assessment- Determining the causes, investigating health problems and health hazards in the community for example, epidemiological surveillance systems (County of Los Angeles Public Health, 2021).
ii. Policy development

The context of public health policy development involves the improvement and implementation of public health regulations, laws and free services that are influential in developing systems and improving individual health.

These policies can be carried out within the health sector, for example, using health insurance conditions of participation and reimbursement to influence health care delivery or rather using a tax code to encourage employer provided health insurance (Public Health Ontario, 2021).

iii. Assurance

- Evaluate the effectiveness and how easily accessible personal and population- based health services are to the public.
- Invoke rules and regulations that protect environmental health and ensure safety (Centers for Disease Control and Prevention, 2021).

Figure 2. 7 Public health nurse core functions

2.4 Health literacy Coved 19 health policies

Covid 19 pandemic has since presented the need for people to access and make use of health information in an attempt to avoid acquiring or spreading the virus. There is however, plenty of information about coronavirus circulating around the internet platforms with some contradictory and false information (Keisha Prem, 2020).

Most of this information has been developed in a way that makes it easy to understand, for example quick fixes like hand washing and physical distance and it is not also

difficult to find. However, the infodemic has indicated that the levels of poor health literacy among populations is a huge underestimated problem world-wide (Zarocostas, 2020).

Moreover, the outbreak has certainly outlined the need for making changes to health care structures and preparedness measures for the pandemic situation. Because it has become evident that these outbreaks go beyond boarders and can affect every individual at any given time. It has also been reported that there has been an underestimation of health literacy in this Covid 19 crisis (Latif, 2020).

Health care professionals are now tasked with the responsibility of countering the current infodemic and must therefore strengthen their commitment to health literacy. The ongoing crisis is also an opportunity for all those professionals on public health to continue building on collaboration and cooperation strategies by joining forces to combat the misinfordemic that has threatened individuals and populations (Damian A J, 2020).

CHAPTER THREE

3. MATERIALS AND SAMPLING METHODS

3.1 The study design

The study is to be carried out as descriptive and cross-sectional study design, with the distribution of a questionnaire to participants between June and July 2021.

3.2 The study site and characteristics

The students who are participating in this study are both international and local nursing students in North Cyprus, who are either in an undergraduate or a master's programme. Convenience sampling method is used. In this method, data will be collected from a conveniently available pool of participants in line with local Covid 19 rules and regulations.

3.3 Participants and sampling

This study will use a convenience sampling method, which is also known as availability sampling technique. This is a type of non-probability sampling in which people are sampled simply because they are convenient sources of data at the time of research. The study population are nursing students (N=423).

3.3.1 Inclusion criteria

- 18 years and above
- Agreed to participate
- North Cyprus nursing students

3.3.2 Exclusion criteria

- Inaccurate/ incomplete data

3.4 Data Collection

3.4.1. The study Instrument

The material used in this study comprises a questionnaire with the following sections, socio demographic information (age, gender, class, income status), and the section that

will gather information on knowledge, awareness and perspectives on Covid 19 health policy.

3.4.2 The E-Health literacy scale

The E-Health scale is an 8-item measure of E-health literacy developed by Norman Skinner to measure users combined knowledge, comfort and perceived skills at finding, evaluating and making use of electronic health information to actual health problems. Individuals can evaluate their agreement/disagreement through a Likert scale that has five points that range from “strongly disagree” to “strongly agree” with a score of 1 to 5 for each of the 8 items on the e-health scale. Thus, the scores could range from a minimum of 8 to a maximum of 40, with higher scores representing a high level of E-Health literacy.

3.5 Study application

Due to the ongoing Covid 19 pandemic, this study was carried out in accordance with local Covid 19 rules and regulations.

3.6 Method of data analysis

The data used in this analysis and the test of hypothesis were got from the responses obtained from the participants in line with Covid 19 rules and regulations. The distribution of the socio-demographic characteristics of the research data was analysed using a frequency counts and descriptive statistics while the relationship between the socio-demographic characteristics and E-Health scale were analysed using Paired Sample test to try and figure out the relationship between health policy knowledge and the health literacy. The results were analysed at a 95% level of confidence which is p-value 0.05 significant level on Statistical Package for Social Science (SPSS) 26.

3.7 Limitations of the study

The major limitation for this study is confined in geographical reasons as this research is restricted to nursing students in class 1 and 4 only who consented to take part in this research. Likewise, the time frame for the period was constraint due to Covid 19 restrictions.

3.8 Research Ethics

The Near East Institutional Reviews Board (IRB) of Near East University obtained ethical approval **(YDU/2021/91-1354 p).** In addition, the students' informed consent and the approval of the deans were obtained.

CHAPTER FOUR

4. FINDINGS

Table 4. 1 Socio demographic characteristic of the participants (n=423)

		Turkish students (n=239)		International students (n=184)	
		n	**%**	**n**	**%**
NATİONALTY	All participant (N=423)	239	56.5	184	43.5
AGE	20 under	34	14.2	50	27.2
	21-25	190	79.5	94	51.1
	26 upper	15	15	40	21.7
GENDER	Female	143	59.8	138	75.0
	Male	96	40.2	46	25.0
CLASS	1	72	30.1	110	59.8
	4	167	69.9	74	40.2
İNCOME	Less than expenses	73	30.5	122	66.3
	Equal to expenses	148	61.9	50	27.2
	Higher than	18	7.5	12	6.5
MARİTAL STATUS	Single	235	98.3	170	92.4
	Married	4	1.7	14	7.6

Table 4.1 shows the distribution of some of the social demographic data of all the participants in the study. From the table, participants age shows that the majority was 21-25 years and for the Turkish group, 79.5% (n=190) were in this age group, while for the international students it was 51.1% (n=94). Also, in both groups shows that the majority gender is female. For Turkish students, 59.8%, (n=143) and for international students 75% (n=138). Males are less at 40.2% (n=96) for the Turkish students and 25% (n=46) for the international students. A greater number of students in both groups are single, Turkish students 98.3% (n=235), and international students 92.4% (n=170), with only a few that are married. For Turkish students, 1,7% (n=4) and for international students 7.6% (n=14). Respondents income for Turkish students is mostly equal to expenses 61.9% (n=148) but it is less than expenses for international students 66.3% (n=122).

Table 4. 2 Covid 19 disease history characteristics of respondents. (n=423).

		Turkish students		**International students**	
		n	**%**	**n**	**%**
Has anyone in your family ever been infected with Covid-19?	Yes	101	42.3	36	19.6
	No	138	57.7	148	80.4
Has anyone in your immediate family(mother, father, sister or brother) died due to Covid-19 so far?	Yes	23	9.6	14	7.6
	No	216	90.4	170	92.4
Have you caught Covid-19?	Yes	35	14.6	8	4.3
	No	204	85.4	176	95.7
My knowledge about Covid-19 health policies;	Yes	158	66.1	138	75
	No	81	33.9	46	25

The above table shows Covid 19 disease characteristics of the participants. There are more Covid 19 infections in the families of Turkish students 42.3% (n=101) than in international students' immediate families (mother, father, sister or brother) 19.6% (n=36). The same also goes for deaths resulting from Covid 19 infection. Turkish students have more deaths in their immediate family members 9.6% (n=23) than international students 7.6% (n=14). The number of infections among the participants is more in Turkish students 14.6% (n=35) than in international students 4.3% (n=8).

Table 4. 3 Distribution of participants knowledge in government health policy (n=423)

		Turkish students				International students			
		Yes		No		Yes		No	
		n	%	n	%	n	%	n	%
Decision maker about the health policy	Ministry of Health	239	100	0	0	184	100	0	0
Not the basic principles of the health system	Aim to Profit	57	23.8	182	76.2	66	35.9	118	64.1
The 'equity in health' in health policy	Equal access and use of health services by all	60	25.1	179	74.9	60	32.6	124	67.4
Public health in community level	to promote healthy lifestyles to prevent the spread of infectious	47	19.7	179	74.9	28	25.2	156	84.8

Table 4.3 illustrates how much knowledge the two groups of participants have in relation to government health policies. Both groups have indicated that the decision maker in health policy is the Ministry of Health with Turkish students 100% (n=239) and international students 100% (n=184). In terms of knowledge of the basic principle of the health system in relation to Covid 19, of the two groups, the Turkish students had the highest indication of "no", 76.2% (n=182) and the international students had 64.1% (n=118). However, when defining health policy, a higher number in international students indicated "no", 84.8% (n=156) than in Turkish students 74.9% (n=179) on their knowledge of the meaning of health policy.

Table 4. 4 Participant perception about the most important Covid-19 health policies

	Turkish		International	
	n	**%**	**n**	**%**
Regulatory policies regarding treatment-quarantine-isolation of Covid-19 patients	**66**	**27.6**	**52**	**28.3**
Policies regarding work-leave-retirement, etc. of health workers	**12**	**5.0**	**10**	**5.4**
Community-oriented support policies such as free masks, drugs, and vaccines	57	23.8	50	27.2
Support policies for scientists on subjects such as developing vaccines and finding treatment	43	18.0	14	7.6
Information and awareness policies of the public on the Covid-19 pandemic	61	25.5	58	31.5

Table 4.4 shows the level to which participants in the study regarded certain policies related to Covid 19. The Turkish students determined that regulatory policies regarding

treatment, quarantine and isolation are the most important, at 27.6% (66). The international students however, decided that information and awareness policies for the public on Covid 19 pandemic are of most importance, at 31.5% (n=58). The least important Covid 19 policy for the both groups was policies regarding work, leave and retirement, for the Turkish group it was 5.0% (n=12) and for the international group it was 5.4% (n= 10).

Table 4. 5 Distribution of international nursing student's knowledge on nursing role on Covid 19 health policies (n=184)

	yes		no	
	n	%	n	%
Nurses who know Covid 19 health policies, nurse advocate their client more effectively	174	94.6	10	5.4
Nurses can use Covid 19 health policies can also help fight other diseases	166	90.2	18	9.8
Nurses Teamwork is important to develop Covid 19 health policies	168	91.3	16	8.7
'Junior nurses' are also influential in developing Covid 19 health policies *	176	95.7	8	4.3
'Senior nurses' are also instrumental in developing Covid 19 health policies	144	78.3	40	21.7
Nurses should participate in research for the development of Covid 19 health policies	154	83.7	30	16.3
Nurses should learn the policies of their countries and institutions for the development of Covid 19 health policies	172	93.5	12	6.5
For the development of Covid 19 health policies, nurses should make decisions based on research results and evidence-based practices	180	97.8	4	2.2

Table 4.5 above shows the relationship between nursing and Covid 19 policies, including how much the international students agree to the statements. In the data, we can determine that most international students have indicated "yes", 97.8% (n=180) to the idea that nurses should make decisions about Covid 19 policies based on research, with only 2.2% (n=4) indicating "no". international students also agree that both junior and senior nurses are instrumental in developing Covid 19 health policies, 95.7% (n=176) and 78.3% (n=144) respectively, though about 21.7% (n=40) have indicated that senior nurses are not instrumental in Covid 19 policy development.

Also, from the table, we can determine that 94.6% (n=174) of the international students agree that nurses who know Covid 19 health policies can be better advocates for their

clients and that nurses, 93.5% n=172), should also learn policies from their countries to properly develop Covid 19 health policies.

Table 4. 6 Distribution of Turkish students' knowledge on nursing role on Covid 19 health policies (n=239)

	Yes		No	
	n	%	n	%
Nurses who know Covid 19 health policies, nurse advocate their client more effectively	225	94.1	14	5.9
Nurses can use Covid 19 health policies can also help fight other diseases	201	84.1	38	15.9
Nurses Teamwork is important to develop Covid 19 health policies	228	95.4	11	4.6
'Junior nurses' are also influential in developing Covid 19 health policies *	167	69.9	72	30.1
'Senior nurses' are also instrumental in developing Covid 19 health policies	201	84.1	38	15.9
Nurses should participate in research for the development of Covid 19 health policies	225	94.1	14	5.9
Nurses should learn the policies of their countries and institutions for the development of Covid 19 health policies	213	89.1	26	10.9
For the development of Covid 19 health policies, nurses should make decisions based on research results and evidence-based practices	219	91.6	20	8.4

Table 4.6 above represents the connection between nursing and Covid 19 health policies. The Turkish students have agreed to most of the statements, with the highest "yes", 95.4% (n=228) in nurses' teamwork being important to developing Covid 19 policies. They have also indicated "yes", 94.1% (n=225) to nurses who know about Covid 19 can be better advocated for their clients. And also "yes", 91.6% (n=219) to agreeing that for the development ofCovid 19 policies, nurses should make decisions based on research.

In terms of nurses' contribution to Covid 19 policy development, Turkish students fairly agree that both junior and seniors' nurses are influential in policy development, about 69.9% (n=167) and 84.1% (n=201) respectively. But, about 30.1% (n=72) of the group have indicated that junior nurses are not influential in the development of Covid 19 policies.

Table 4. 7 International students' perception about Covid 19 government health policy prevention in communities' level (n=184)

To prevent the spread of Covid-19;	**No**		**Yes**	
	n	**%**	**n**	**%**
Closure of educational institutions	4	2.2	180	**97.8**
Close the workplace	10	5.4	174	94.6
Cancellation of public events	12	6.5	172	93.5
Stopping public transport	10	5.4	174	94.6
Organizing campaigns such as stay at home	14	7.6	170	92.4
Restriction of domestic transportation	10	5.4	174	94.6
Restriction of international transport	20	10.9	164	**89.1**
People who needs help the financial / food etc.	12	6.5	172	93.5
To help for businesses/investors during	20	10.9	164	**89.1**

Table 4.7 shows the effectiveness of Covid 19 government prevention policies in communities and how much the international nursing students agreed to these policies. About, 97.8% (n=180) of the participants highlighted that the closure of educational institutions proved to be a more practical policy in preventing the spread of Covid 19. Also, closure of workplaces and stopping public transport had also high numbers of responses in its effectiveness to prevent the spread of Covid 19 at 94.6% (n=174) and 94.6% (n=174) respectively. Approximately 93.5% (n=172) international students also believed that cancellation of all mass gatherings and organizing stay at home campaigns were useful strategies to avoid the spread of Covid 19. The least effective areas were restriction of international flights and taking monetary measures to businesses at 89.1 % (n=164) for both prevention policies.

Table 4. 8 Turkish students' perception about Covid 19 government health policy prevention in communities' level (n=239)

to prevent the spread of Covid-19;	**No**		**Yes**	
	N	**%**	**n**	**%**
Closure of educational institutions	20	8.4	219	**91.6**
Close the workplace	82	34.3	157	65.7
Cancellation of public events	48	20.1	191	79.9
Stopping public transport	45	18.8	194	81.2
Organizing campaigns related to Covid 19 such as stay at home	40	16.7	199	83.3
Restriction of domestic transportation	54	22.6	185	77.4
Restriction of international transport	31	13.0	208	87.0
People who needs help the financial / food etc.	41	17.2	198	82.8
To help for businesses/investors during	67	28.0	172	**72.0**

Table 4.8 illustrates how much Turkish students agree and the extent of effectiveness to government Covid 19 prevention policies in the community. Approximately 91.6% (n=219) participants agreed that closure of educational institutions was an effective strategy in the prevention of Covid 19 spreading. With only about 8.4% (n=20) disagreeing. However, some respondents, 34.3% (n=82) did not believe that the closure of work places was an effective method to control the spread of Covid 19. 87.0% (n=208) understood that restriction of international travel was a useful prevention strategy, with only about 13% (n=31) indicating that it was not an effective method.

Table 4. 9 Turkish students' perception about government health financial policy on Covid 19 prevention (n=239)

to prevent the spread of Covid-19	**Yes**		**No**	
	n	**%**	**n**	**%**
Spending money for emergency health services (such as a pandemic hospital)	210	87.9	29	12.1
Spending money on vaccine development	181	75.7	58	24.3
Covid-19 PCR testing policies (such as airplanes-health workers-patients before surgery)	218	91.2	21	8.8

Table 4.9 above shows how the governments financial resources have been utilized in relation to Covid 19 policies and their effectiveness. For the Turkish students, 91.2% (n=218) agreed that Cvid 19 PCR testing at ports of entry and in teachers and health workers is useful in combating the spread of Covid 19. 75.7% (n=181) decided that spending money on vaccine development is also an effective strategy in preventing the spread of the disease. However, only about 12.1 % (n=29) participants did not think that spending money on health services such as a pandemic hospital would be an appropriate measure to prevent the spread of Covid 19.

Table 4. 10 International students' perception about government health financial policy on Covid 19 prevention (n=184)

to prevent the spread of Covid-19;	Yes		No	
	n	%	n	%
Spending money for emergency health services (such as a pandemic hospital)	124	67.4	60	32.6
Spending money on vaccine development	148	80.4	36	19.6
Covid-19 PCR testing policies (such as airplanes-health workers-patients before surgery)	154	83.7	30	16.3

Table 4.10 determines whether government spending on Covid 19 prevention is a useful strategy in relation to international students' opinion. It shows that, about 83.7% (n=154) believe that governments should spend on PCR testing on travellers and civil servants, mainly teachers and health workers. Accordingly, around 80.4% (n=148) participants also indicated that spending money on vaccine development is an appropriate approach to prevent the spread of Covid 19. Contrarily, 32.6% (n=60) international students indicated that it is ineffective to spend money on emergency health services such as opening a pandemic hospital. Though 67.4% (n=124) determined that it was a useful prevention strategy.

Table 4. 11 Distribution of Turkish students' perception' about the individual Covid 19 prevention strategies (n=239)

to prevent the spread of Covid-19;	Yes		No	
	n	%	n	%
'Maintaining social or physical distancing' in preventing the spread of Covid-19;	217	90.8	22	9.2
'Wearing a mask' in preventing the spread of Covid-19;	226	94.6	13	5.4
'using gloves' to prevent the spread of Covid-19;	199	83.3	40	16.7
'Frequent hand washing' in preventing the spread of Covid-19;	232	97.1	7	2.9
'Using disinfectant' to inhibit the spread of Covid-19;	229	95.8	10	4.2
Cleaning hot areas to prevent spread of Covid 19	230	96.2	9	3.8
'Using vitamins and herbal therapy' in the prevention of the spread of Covid-19;	187	78.2	52	21.8
'Getting Vaccinated' in preventing the spread of Covid-19;	178	74.5	61	25.5
'Not touching face to eye, mouth to mouth' in preventing the spread of Covid-19;	220	92.1	19	7.9

Table 4.11 represents Turkish students' perceptions on individual strategies in Covid 19 prevention. The highest number of respondents, 97.1% (n=232) indicated that frequent hand washing is an efficient way to prevent the spread of Covid 19, whereas

getting vaccinated and using vitamins and herbal therapies were the least answered "yes" in terms of prevention, at 74.5% (n=178) and 78.2% (n=187) respectively. 94.6% (n=226) participants agreed that wearing masks is helpful in decreasing the spread of Covid 19. Other strategies such as, using gloves to prevent the spread of Covid 19 had about 16.7% (n=40) respondents indicating "no", with about 21.8% (n=52) also responding with "no", meaning they find these strategies having a lesser effect in preventing the spread of Covid 19.

Table 4. 12 Distribution of International students' perception' about the individual Covid 19 prevention strategies (n=184)

to prevent the spread of Covid-19;	**Yes**		**No**	
	n	**%**	**n**	**%**
'Maintaining social or physical distancing' in preventing the spread of Covid-19;	156	84.8	28	15.2
'Wearing a mask' in preventing the spread of Covid-19;	182	98.9	2	1.1
'using gloves' to limit the spread of Covid-19;	178	96.7	6	3.3
'Frequent hand washing' to curb the spread of Covid-19;	172	93.5	12	6.5
'Using disinfectant' to inhibit the spread of Covid-19;	178	96.7	6	3.3
Cleaning hot areas to prevent the spread of Covid 19	180	97.8	4	2.2
'Using vitamins and herbal therapy' to prevention of the spread of Covid-19;	178	96.7	6	3.3
'Getting Vaccinated' as a means to prevent the spread of Covid-19;	152	82.6	32	17.4
'Not touching face to eye, mouth to mouth' in preventing the spread of Covid-19;	130	70.7	54	29.3

Table 4.12 above shows how international students responded to individual Covid 19 health policy prevention strategies. For this particular group of participants, 98.9% (n=182) indicated that wearing masks is the most effective measure in preventing the spread of Covid 19. Together with using gloves, disinfectants and using vitamins and herbal therapies are also effective methods of preventing spread of Covid illness, at 96.7% (n=178) for all three prevention measures. However, 29.3% (n=54) indicated that not touching face to eye is not an effective way to spread Covid 19 and 17.4% (n=32) also determined that getting vaccinated is not adequate in preventing the spread of the disease.

Table 4. 13 Distribution of students' perceptions about the internet according to the e-health scale.

Internet		Turkish student (yes)		International student (yes)	
		n	%	n	%
1	How useful do you think the internet is in helping you make decisions about your health?	140	58.6	166	90.2
2	How important is it to you to have access to health resources on the Internet?	177	74.1	152	82.6

Table 4.13 represents the distribution of the respondents view point about internet use according to the e-health scale. The international students determined that the internet was most useful to them in making decisions about their health, 90.2% (n=166), while only 58.6% (n=140) Turkish students believed this to be true. In relation to how important it is to be able to access health resources on the internet, 82.6% (n=152) international students indicated this importance and 74.1% (n=177) Turkish students also indicated “yes”.

Table 4. 14 Distribution of e-health scale scores of Turkish and international students

		Turkish student		Internation al student	
		n	%	n	%
1	I know how to find helpful health resources on the Internet	161	67.4	164	89.1
2	I know how to use the Internet to answer my health questions	178	74.5	124	67.4
3	I know what health resources are available on the Internet	175	73.2	128	69.6
4	I know where to find helpful health resources on the Internet	179	74.9	138	75.0
5	I know how to use the health information I find on the Internet to help me	171	71.5	132	71.7
6	I have the skills I need to evaluate the health resources I find on the Internet	181	75.7	156	84.8
7	I can tell high quality from low quality health resources on the Internet	160	66.9	144	78.3
8	I feel confident in using information from the Internet to make health decisions	71	29.7	118	64.1

Table 4.14 highlights the distribution of e-health scores of Turkish and international students. For the Turkish students, most of the participants, 75.7% (n=181) outlined that they possess the necessary skills required to assess the health resources they find in internet sources, while 89.1% (n=164) international students determined that they are able

to find to find helpful health resources on the internet. The Turkish and international students had almost similar outcomes in their e-health score on where to find helpful health resources on the internet, at 74.9% (n=179) for the Turkish group and 75% (n=138) for the international group. Only 29.7% (n=71) of the Turkish students felt confident in using information from the internet to make health decisions, while for the international group it was slightly higher at 64.1% (n=118). Also, both the Turkish and international students fairly determined that they have the knowledge to put to use the health information they find on the internet, at 71.5% (n=171) and 71.7% (n=132) respectively.

Table 4. 15 Distribution of students' e-health scale scores

Scale score	**Min**	**max**	**mean**	**Sd**
Turkish students e health scale score	8	40	26.0	8.4
International students e-health scale score	11	39	27.9	7.1
Total e health scale score	8	40	26.8	7.9

Table 4.15 shows descriptive statistics on both Turkish and international students' e-health scale score. Turkish students have point (min=8 max=40) and international students have (min=11, max=39). e-health scale score has for Turkish (mean±sd 26.01±8.4) and for international (mean±sd; 27.9±7.9), Total e health score is a mean±sd=26.8±7.9(min=8, max=40).

Table 4. 16 Social Demographic characteristics for e-health literacy scale

		International		**Turkish**		**TOTAL**	
		n	**mean±sd**	**n**	**mean±sd**	**n**	**mean±sd**
Class	1	110	27.00±6.60			182	25.99±8.02
	4	74	29.35±7.81			241	27.50±7.91
		t=2.198, p=0.29				t=1.936, p=0.050	
Covi19 policy knowledge	no	46	25.04	81	24.41±8.35	127	24.64±7.88
	yes	138	28.91	158	26.83±8.43	196	27.80±7.85
		t=3.243, p=0.001		t=2.108, p=0.036		t=3.793, p=0.001	

Table 4.16 shows the socio demographic characteristics score in class 1 and class 4 students according to the e-health literacy scale. For international students' class 1 and 4, the score was, 27.00±6.60 and 29.35 ±7.81 respectively (t=2.198, p= 0.29). Total scores for both groups was for class 1 was 25.99±8.02 and for class 4 it was 27.50±7.91 (t=1.936, p= 0.050). In terms of Covid 19 policy knowledge for the Turkish group for option "no" it was 24.41±8.35 and for option "yes" it was 26.83±8.43 (t=2.108, p=0.036). And for the international group the score was, for "no", 25.04 and for "yes" it was 28.91 (t=3.243, p= 0.001). total score for both groups in terms of Covid 19 policy knowledge was for "no", 24.64±7.88 and for "yes" the score was 27.80±7.85 (t=3.793, p=0.001).

Table 4. 17 E-health literacy scale and Nurses Covid 19 policy

Development of Covid policy		**International**		**Turkish**		**TOTAL**	
can use other for disease	no	18	22.22±8.08	38	21.68±7.40	56	21.86±7.55
	yes	166	28.57±6.82	201	26.83±8.42	367	27.61±7.78
		t=3.367, p=0.001		t=3.514, p=0.001		t=5.176, p=0.001	
Advocate client right	no	28	25.43±6.93	22	21.64±8.63	50	23.76±7.88
	yes	156	28.40±7.16	217	26.45±8.34	373	27.27±7.91
		t=2.020, p=0.044		t=2.572, p=0.011		t=2.941, p=0.003	
Team work	no	16	21.75±6.48	11	17.27±9.56	27	19.93±8.02
	yes	168	28.54±6.98	228	26.43±8.20	396	27.32±7.77
		t=3.733, p=0.001		t=3.590, p=0.001		t=4.777, p=0.001	
Junior nurse	no	8	21.75±3.73			80	24.99±7.56
	yes	176	28.23±7.18			343	27.29±8.07
		t= 2.539, p=0.012			-	t=2.330, p=0.002	
Other country policy	no	12	23.00±7.18	26	22.19±7.56	38	22.45±7.36
	yes	172	23.29±7.08	213	26.47±8.46	385	27.29±7.92
		t=2.500, p=0.13		t=2.460, p=0.015		t=3.614, p=0.001	
Use Research and evidence results	no			20	22.15±8.81	24	23.29±8.51
	yes			219	26.36±8.36	399	27.07±7.91
				t=2.370, p=0.033		t=2.259, p=0.024	
	no			14	19.64±8.89		

Participate research and evidence	yes			225	26.40±8.29		
				t=2.946, p=0.004			

Table 4.17 represents nurses and Covid 19 policy education in relation to the e-health score. The international group score for "no" in using Covid 19 policy information for other diseases was 22.22±8.08 and for "yes" it was 28.57±6.82 (t=3,367, p=0.001). For the Turkish group it was, for "no", 21.68±7.40 and for "yes" 26.83±8.42 (t=3.514, p=0.001). And the totality for the two groups was, for "no", 21.86±7.55 and 27.61±7.78 for "yes" (t=5.176, p=0.001). In terms of nurses having teamwork, the total scores for the two groups was for those who picked "no", 19.93±8.02 and 27.32±7.77 for those that opted "yes" (t=4.777, p=0.001. For the use of evidence-based research in Covid 19 policy development, the total scores from the participants was 23.29±8.51 for "no" and 27.07±7.91 (t=2.259, p=0.024). And for the assumption that nurses should participate in research and evidence, for the Turkish group the scores were 19.64±8.89 for "no" and 26.40±8.29 for "yes" (t=2.946, p=0.004).

Table 4. 18 Covid 19 government policies and e-health literacy scale

		International (n=184)		Turkish (n=239)		Total	
		n	Mean± sd	n	Mean± sd	n	Mean± sd
Close workplace	No	10	23.40±7.84			9	25.24±8.53
	Yes	174	28.21±7.08			331	27.30±27.78
		T=2.075, P=0.039				T=2.199, P=0.028	
Public event	No					60	24.13±9.33
	Yes					363	27.30±7.66
						T=2.870, P=0.004	
Stopping public transport	No	10	**23.60**±9.20			55	24.89±9.07
	Yes	174	28.20±7.00			368	27.14±7.78
		T=1.981, P=0.049				T=1.958, P=0.050	
To help investors	No	20	24.90±8.14				
	Yes	164	28.32±7.00				
		T=2.024, P=0.044					
Close educational	No			20	22.15±8.81	24	23.29±8.51
	Yes			219	26.38±8.36	399	27.07±7.91

				T=2.145, P=0.033		T=2.259, P=0.024	
Person who need food	No			41	23.39±9.11	53	24.21±8.54
	Yes			198	26.55±8.24	370	27.23±7.84
				T=2.193, P=0.29		T=2.594, P=0.010	

Table 4.18 illustrates the scores of Covid 19 government policies in relation to the e-health scale. For closing workplaces, the international students score for "no" was 23.40±7.84 and for "yes" it was 28.21±7.08 (t=2.075, p=0.039). And the total for the Turkish and international groups was 25.24±8.53 for "no" and 27.30±27.78 for "yes" (t=2.199, p=0.028). Also, the totality for the policy to cancel public events was, for both groups, 24.13±9.33 for "no" and 27.30±7.66 for "yes" (t=2.870, p=0.004). For the policy to help businesses and investors the scores for the international group for "no" and "yes" were 24.90±8.14 and 28.32±7.00 (t=2.024, p=0.044) respectively. Closure of educational institutions had the following total scores for "no" 23.29±8.51 and for "yes" the score was, 27.07±7.91 (t=2.259, p=0.024). For food assistance policy, the Turkish group score for "no" was 23.39±9.11 and for "yes" it was 26.55±8.24 (t=2.193, p=0.29). The summation for both groups was, for "no" 24.21±8.54 and 27.23±7.84 for "yes" (t=2.594, p=0.010).

Table 4. 19 Covid 19 government financial health policy and e-health scale

		International		Turkish		Total	
		n	Mean± sd	n	Mean± sd	n	Mean± sd
Urgent help services	No	60	25.80±6.57	29	22.55±8.91	89	24.74±7.52
	Yes	124	28.98±7.26	210	26.49±8.31	334	27.41±8.02
			t=2.871, p=0.005	t=2.368, p=0.019		t=2.828, p=0.05	
To vaccine	No	36	24.44±6.43	58	23.91±8.50	94	24.05±7.74
	Yes	148	28.80±7.12	181	26.71±8.35	329	27.65±7.88
			t=3.348, p=0.001	t=2.292, p=0.023		t=3.917, p=0.001	
To filiation and surveillance	No	14	24.43±6.29	28	21.11±9.32	42	22.21±8.50
	Yes	170	28.24±7.19	211	26.66±8.15	381	27.36±7.76
		t=2.149, p=0.047		t=3.329 p=0.001		t=4.037, p=0.001	

Table 4.19 shows the scores from the relationship between government financial health policy allocation and the e-health scale. For urgent help services, the international students score for option “no” was 25.80±6.57 and for “yes” it was 28.98±7.26 (t=2.871, p=0.005). For the Turkish group the scores for “no” were 22.55±8.91 and for “yes” they were 26.49±8.31 (t=2.368, p=0.019). The total for the two groups was, 24.74±7.52 for “no” and 27.41±8.02 for “yes” (t=2.828, p=0.05). The total scores for allocation of funding to vaccine development was for “no” 24.05±7.74 and for “yes” it was 27.65±7.88 (t=3.917, p=0.001). To allocate financial resources to filiation and surveillance, the score for “no” for the international group was 24.43±6.29 and it was 28.24±7.19 for “yes” (t=2.149, p=0.047). For the Turkish group it was 21.11±9.32 for “no” and 26.66±8.15 for “yes” (t= 3.329, p=0.001). The summation for the group was 22.21±8.50 for “no” and 27.36±7.76 for “yes” (t=4.037, p=0.001).

Table 4. 20 Individual Covid 19 prevention strategies and e-health literacy scale.

		International (n=184)		Turkish (n=239)		Total	
		n	Mean± sd	n	Mean± sd	n	Mean± sd
Physical distance	No	28	21.14±6.12			50	22.32±8.39
	Yes	156	29.17±6.68			373	27.46±7.74
		T=5.923, P=0.001				T=4.363, P=0.001	
Waring mask	No	2	11.00±0.00			15	21.87±10.57
	Yes	182	28.13±7.00			408	27.03±7.83
		T=3.450, P=0.001				T=2.477, P=0.014	
Disinfectant use	No	6	**21.00**±5.44				
	Yes	178	28.18±7.13				
		T=2.438, P=0.016					
Vitamin and herbal therapies	No	6	19.33±4.92				
	Yes	178	28.24±7.08				
		T=3.051, P=0.003					
No touching	No	54	26.11±6.30	19	21.11±10.08	73	24.81±7.71
	Yes	130	28.71±7.41	220	26.43±8.20	350	27.28±7.98
		T=2.256, P=0.025		T=2.665, P=0.008		T=2.417, P=0.016	

Table 4.20 shows scores from individual Covid 19 prevention measures and e-health literacy scale. The international students score for maintaining physical distance was 21.14±6.12 for “no” and 29.17±6.68 (t=5.923, p=0.001), and the total for the groups was 22.32±8.39 for “no” and 27.46±7.74 for “yes” (t=4.363, p=0.001). For face masks use, the international students score for “no” was 11.00±0.00 and for “yes” it was 28.13±7.00 (t=3.450, p=0.001). The total scores for the two groups was for “no”, 21.87±10.57 and 27.03±7.83 for “yes” (t=2.477, p=0.014). In terms of disinfectant use, the international group scores for “no” and “yes” were, 21.00±5.44 and 28.18±7.13 (t=2.438, p=0.016) respectively. Face to mouth touching had 26.11±6.30 for “no” and 28.71±7.41 (t=2.256, p=0.025) for “yes” from the international group. The Turkish group scores were 21.11±10.08 for “no” and 26.43±8.20 (t=2.665, p=0.008) for “yes”. The summation for the two groups was, for “no”, 24.81±7.71 and for “yes” it was 27.28±7.98 (t=2.417, p=0.016).

CHAPTER FIVE

DISCUSSION

5.1 Findings from the socio demographic distribution of the respondents (table 4.1).

Public health policy can be defined as regulations, decisions and laws implemented within communities so as a means of promoting health and well ness while meeting the specific health needs of members of the community (Columbia Mailman School of Public health, 2021). These public health policies play multiple roles in societies that range from health care to insurance to education. The current global Covid 19 pandemic has required that all nurses including student nurses be knowledgeable in shaping health policies both locally and around the world. Therefore, nurses must develop a higher knowledge of how such policies affect patients and their families (Pamela B. de Cordova, 2019).

The Covid 19 outbreak changed the educational path for the average nursing student. Some students were included in the fore front of the pandemic and therefore faced the consequences of the pandemic and some had their clinical experiences cut off. Both of these cases have produced cases of uncertainty and anxiety for the future (Karen Fowler, 2020). Most participants in this study are between the ages of 21-25 years, therefore it is critical to understand the role of age in disease transmission and consequence especially when determining the outcome of Covid 19 policies such as social distancing interventions in preventing its transmission (Nicholas G Davies, 2020). Young adults in their 20s, 30s, and 40s, can be infected with the coronavirus and because of their age they might develop long lasting symptoms, especially if they are living with other underlying conditions such as, diabetes and hypertension (Johns Hopkins Medicine , 2021). Data from one particular study has shown that more than 3000 adults, ages between 18 and 34 who have contracted Covid 19 have been hospitalized. About 20,8% were in critical care, approximately, 10% were on ventilators and around 2.5% died (Jonathan W Cunningham, 2020). The same study also reviewed that young Hispanic and black men and women are at more risk than their white counterparts mainly due to racial inequalities and social determinants of health that makes them more vulnerable.

This study has also shown that there are more female participants than males and according to the World Health Organization (WHO), pandemics such as the current Covid 19 outbreak have different effects on women and men. These differences range from risk of exposure and biological susceptibility to infection and social and economic implications. Also, individual implications are also likely to be different in accordance to their biological and gender characteristics and their association with other social determinants (World Health Organization, 2021). Therefore, national and global Covid 19 policies must be established in strong gender analysis and must also have the participation of affected groups, including women and girls in making and implementing decisions about their health. Because considering gender and equity in policy development improves the overall health outcomes of all communities (globalhealth5050, 2021).

The coronavirus disease 2019 has had several effects on student's health and financial stability. And understanding these effects in crucial in establishing interventions to mitigate these effects. A New York City study on public universities discovered that scholars have experienced high rates of depression and anxiety from financial instability due to the pandemic. The majority, about 80 % reported loss of household income and almost half, 49% were worried about losing their accommodation (Heidi E Jones, 2021). Because the coronavirus pandemic posed a big challenge to all educational systems worldwide causing the disruption of learning activities, therefore, it is essential that students needs at universities, which require a holistic approach be addressed and measures implemented to decrease the impact of Covid 19 (Wen Li, 2021).

5.2 Findings from Covid 19 disease history characteristics (table 4.2)

The closure of schools due to the Covid 19 pandemic means that most students from different backgrounds are less likely to receive the support and services they need. The groups that suffer most are adolescents and young adults from impoverished families, ethnic minorities, immigrant, refugee and those with special needs (OECD, 2021). Findings from a number of studies have shown that SARS-CoV-2 transmission among students is comparatively rare. A study conducted in Australia of 39 Covid cases among students, traced contacts across 28 schools and found only 44 secondary positive cases (Kristine Macartney, 2020).

Managing the spread of Covid 19 within universities can be challenging, especially if students are coming from different geographical locations. This study has shown that there is a higher number of infections among Turkish students than in International students. This is probably because students have a number of groups that they socialize with than the general population and that some of them could be living in university provided accommodation (Hannah Christensen, 2020).

5.3 Findings from distribution of participants knowledge in government health policy (table 4.3).

Governments affect public policy and are also responsible for shaping how care can be accessed by patients. Nurses lack health policy involvement and most nurses are not willing to be involved in health policy decision making which will help to better shape health systems (Teresa Thomas, 2019). This lack of involvement creates a gap in health policy education and limits student's knowledge and involvement in health policy.

This study has provided an idea as to student's perception to government health policy, including being able to define it, which from the data collected, most students demonstrated an inability to define health policy. This is particularly important because health workers have the responsibility to promote the public's health through social and health policies therefore, preparing nursing students to influence public policy should be a critical factor of nursing education (Mary E. Byrd, 2012).

According to the Centres for Disease Control and Prevention (CDC), health equity is when each individual has an opportunity to reach his or her full health potential without facing challenges from socially determined circumstances (Centers for Disease Control and Prevention, 2021). Health equity mainly involves fair access to health professionals, healthy food, safe environments and the ability to freely access health services (Oxenreiter, 2020). Therefore, it can be acceptable to assume the participants in this study have a fair understanding of the concept of health equity.

5.4 Findings on participant perception about the most important Covid-19 health policies (table 4.4).

As the Coved 19 pandemic deepens, regulatory policies such as quarantine, testing, contact tracing and surveillance protocols are being developed so as to avoid increased infections and prolonged stay at home orders (Chad R Wells, 2020). Because of limited resources and economic constraints, public health has faced many challenges and the main goal is to try and shorten the recommended 14-day quarantine and try and avoid the many challenges that quarantine brings (Billy J Quilty, 2020).

Although the participants in this study determined that quarantine and isolation policies are most important of regulatory policies, there is some evidence that suggests that isolation upon onset of symptoms is inadequate to control the Coved 19 pandemic (Sah, 2020). However, the chances of high transmission can be greatly reduced through quarantine and testing.

In a pandemic of this size, timely access to factual and accurate information on prevention methods is one of the most beneficial health interventions together with identifying the level of public awareness is crucial in mitigating the outbreak (Wolka E, 2020). But it is not always the case, especially in developing African countries such as Ethiopia, where the majority of the population cannot access information due to illiteracy and lack of provisions to connect to the internet (Federal Democratic Republic of Ethiopia, Ministry of Health. , 2021). The participants in this study did indicate that information and awareness policies on are important in a pandemic of this nature.

5.5 Findings on distribution of participants knowledge on nursing role on Coved 19 health policies (table 4.5 and 4.6).

Nurses have the capacity as professionals to control current and future health care delivery systems. The profession itself is based on the science of human health and the art of care. Nurses can therefore prove this influence through policy work because health professionals who help influence policy, design the care that will be provided now and, in the future, (Burke, 2016).

One of the major roles of nurses in a pandemic situation is advocacy. Defined as protecting human dignity through patient quality care and providing freedom from suffering through ensuring that patients have the right to make decisions about their

own health (Loyola University, 2021). During a health dilemma like the Covid 19 pandemic, advocacy is even more important because nurses are at the front lines of all health care services, that is, preparedness, response and recovery (Anders, 2020). Thus, nurses are obligated to execute their advocacy responsibilities through the development of clinical competency and safe delivery of optimal, safe patient care (Gerber, 2018). It is however evident in this study that the majority of participants believe that fair knowledge in health Covid 19 health polices can help nurses become better advocates.

Another important role of nurses that has been highlighted in this study is that of research. During this pandemic, research is fundamental. It is the only evidence-based way of whether a new treatment plan or health policy is better than the existing standard (NHS, 2021). The role can be complex, but also exciting. Nurses today are at the forefront because of the current public health crisis therefore they are also pioneering for the developments of new treatments for their patients (Andrew Pick, 2011).

5.6 Findings on students' perception about Covid 19 government health policy prevention at communities' level (table 4.7 and 4.8).

The pandemic has threatened the people's wellbeing, safety and has brought disruptions to communities through business closures, stay at home policies, workers losing their jobs and health care systems being overburdened (Urban.org, 2021). These measures were all enacted by governments across the world in an effort to try and prevent the spread of Covid 19. And some of them have been successful. Both groups in this study indicated that closure of educational institutions has been an effective strategy in preventing the spread of the virus. This has been true for the case of Northern Cyprus, where the rapid implementation of Covid 19 policies such as school closures have been successful in trying to curb the spread of the virus (Nazife Sultanoglu B. B., 2020).

The emergence of new variants of Covid 19 has convinced many governments to tighten restrictions on travel, with complete closure to tourists, mainly those travelling from Asia and Europe (UNWTO, 2021). Such a measures have potentially large consequences on the economic and social aspects of nations, which raises the questions whether such strategies are actually effective (Karen Ann Grepin, 2021). Though

participants in this study have highlighted that travel restriction measures have been effective, there are studies from previous infectious diseases that suggest that certain travel restrictions have only limited effectiveness in containing outbreaks (Sukhyun Ryu, 2020).

5.7 Findings on students' perception about government health financial policy on Covid 19 prevention (table 4.10).

The pandemic has caused budget constraints for many governments, which in turn has caused a dramatic increase for prices for Covid PCR tests. Research conducted in the UK has found that the average price for a single PCR test was £120 (US $166) (hospitalitynet, 2021). Although the participants in this study agree to a greater extent that PCR testing for travellers and front line workers is an effective Covid 19 prevention policy, it is however, most disadvantageous to travellers since having to take two tests during trips can be costly and ultimately serve as a deterrent to traveling (Sukhyun Ryu, 2020).

Vaccines have been in use for many years now and millions of people have received them safely every year. However, every vaccine must pass through intensive testing to ensure its safety before its introduction to populations. This testing does not come cheap and often requires large investment capital to ensure its success (World Health Organization, 2021).

A greater proportion of participants in this study have also determined that it is important for governments to spend money on vaccine development as a preventative measure against Covid 19. But a recent study has shown that collectively, states have spent at least €90 billion on Covid 19 vaccines since the start of the outbreak (Hoecklin, 2021), and the majority of public funds designated towards Covid 19 vaccines originated from high income countries, US, 32%, EU, 24% and 13% from Japan and South Korea.

5.8 Findings on distribution of students perception' about the individual Covid 19 prevention strategies (table 4.11 and 4.12).

Covid 19 is extremely communicable and is spread primarily through respiratory droplets from face-to-face contact and possibly through contaminated surfaces. Several vaccines have since been made available but it is not clear the duration of

protection and efficacy. Hence, personal protective health behaviours against Covid 19 are still being widely recommended (Chon Fu Lio, 2021).

As evidenced from this study, the participants mostly agreed that individual hygiene practices, such as, hand washing, using a face mask, the use of disinfectants and social distancing are effective methods in preventing the spread of Covid 19, there is still very little evidence of their effectiveness in stopping the spread of the virus (The Lancet Publication, 2020). It has however been determined that some of the number one causes of mortality and morbidity could be linked to health determinants that are associated with individual health behaviours such as washing of hands and use of masks in the case of Covid 19 (Norman P, 2017).

Some behavioural scientists have made suggestions on the of behavioural interventions in decreasing the impacts of disease outbreaks. They have made claims that the current Covid 19 pandemic can only be managed better by a radical change in behaviour, as after all, it is human behaviour that determined how quickly the virus spreads and the resultant mortality rates (Betsch, 2020).

Furthermore, the novel infectious Covid 19 outbreak has presented unique challenges and each challenge has required a different set of protective behaviour. Behaviour will mostly vary in accordance with changes in capability, opportunity and motivation. These three influences are the key to understanding the development of effective strategies to facilitate change in behaviour (Michie, 2020).

5.9 Findings on the distribution of students' perceptions about the internet according to the e-health scale (table 4.13).

Internet use and its resources are fundamental for health information and advice but their role in decision making is still to be studied. The accessibility of internet and use of social media has given its users the opportunity to share knowledge about health and wellbeing (Lucy Yan, 2018). This then means that clients are able to information about different health decisions which can be used to prepare or complement health care services (Maria Caiata Zufferey, 2010).

Because of this ability to access health information using internet sources, clients are able to ask more questions and are in a better position to work with health professionals

when it involves their health (Anne Townsend, 2015). Studies have shown that roughly 70% of US users and about 74.8% of UK users are searching online for disease treatment and medical advice. The main reason being that the internet provides a certain degree of privacy which provides a platform for users to talk about sensitive topics and participate more in health talks (Fox, 2014).

5.10 Findings on the distribution of e-health scale scores of Turkish and international students (table 4.14 and 4.15).

The main idea behind the development of the e-health scale was to assess the need to address e-health literacy for various communities. The scale is a self-report tool that can be administrated by a health professional and is mostly based on the individual's perception of his or her knowledge and skill within the measured criteria (Cameron Norman, 2006). The instrument has been constructed in a manner to measure consumer e-health related skills that can be used to make health decisions and to promote planning in individuals and certain populations.

The participants in this study have shown that they have a fair understanding of the e-health scale and feel confident in their ability to search, find and use e-health information in making individual related health decisions. Furthermore, the e-health scale has demonstrated continuous validity when being used in high quality websites, although this ability to use high quality websites has been found to be significantly lower in clients with low e-health literacy. However, further investigation is still required to improve the scale to be better suited to its users in searching for and using electronically sourced health information (Saffarzadeh, 2015).

5.11 Findings on social demographic characteristics for e-health literacy scale (table 4.16).

The e-health scale is mostly used to determine e-health literacy. The scale is used to gather data on an individual's perception of their capabilities in relation to using electronically sourced health information and to determine whether an e-health approach is suited to that particular individual (Cameron D Norman, 2006). It comprises of 8 items and scoring is done on a 5-point Likert scale. The total across the 8 equally weighted elements is given as a score, total being 40 (Sarah S Richtering, 2017). However, there is no limiting point to differentiate high from low e-health

literacy but generally, the higher the score, the higher the levels of e-health literacy (Alice M Noblin, 2012).

The e-health scale was applied to both groups in this study and for the Turkish group, the minimum score was 8 with maximum 40 and for the international group. Minimum was 11 with maximum 39. Convincingly, this suggests that the e-health literacy score in both groups is high.

5.12 Findings on e-health literacy scale and Nurses Covid 19 policy (table 4.17)

A global pandemic such as the size of Covid 19 pandemic requires for strong nursing staff engagement in awareness, public safety and clinical management (Mirna Fawaz, 2020). Nurses are therefore responsible for planning for anticipated Covid 19 emergencies, becoming nurse advocates to their clients, maintaining supply and usage of personal protective equipment (PPE), collaborate with other members of healthcare staff and conduct researches and gather evidence on policy development (Debra Jackson, 2020).

Because nurses are one of the distinguished members belonging to the health team, they play an important role in delivering public awareness, especially in times like these, of Covid 19 crisis. They must therefore be actively involved in Covid 19 preventive interventions, guiding clients to appropriate health services and providing evidence-based patient management (World Health Organization, 2020).

From this study, we can determine that the participants do have some knowledge as to what the nurse's responsibility is in times of an outbreak like the current Covid 19 pandemic, though there leaves room for more education.

5.13 Findings on Covid19 government policies and e-health literacy scale (table 4.18).

Because of the pandemic most public health policies in both developed and developing nations have failed. Therefore, governments have had to dedicate and redesign their public health policies to fight the outbreak (Ashutosh Pandey, 2020). Consequently, for these policies to be a success, they require adequate implementation and how ready the general public is to accept it. McConnell suggested that, for public health policies to succeed, 3 domains must be fulfilled, that is, process, programmes and politics. And

if the plan is to be fully accomplished, the public ought to be aware of the it. (McConnell, 2010).

Furthermore, public policy that is implemented with an understanding of population needs and behaviours has a higher chance of a positive outcome. For example, India, a constitutional state which is full of diversity, with the people's behaviours defined by social norms, religious values and cultural aspects, can be changed by familiarizing the nation with the principle of behavioural economics. (Ashutosh Pandey, 2020).

So, countries worldwide are now implementing lockdowns and closures of educational and financial institutions as means to curb the spread of Covid 19. Countries like China had to implement strict movement restrictions because normally the Chinese New Year holiday resulted in mass movements across the country which was seen as an opportunity to allow the continuous spread of Covid 19 (Simiao Chen, 2020).

Thus, from this study and the questions the participants responded to in term of government enacted Covid 19 policies, we can determine that the participants have fair knowledge and understanding as to their importance in preventing the spread of Covid 19.

5.14 Findings on Covid 19 government financial health policy and e-health scale (table 4.19).

As healthcare costs are continuously rising, clinicians, clients and policy developers have become more concerned whether it will be possible to keep costs low while providing quality care (Douglas K Owens, 2011). Using information technology in e-health is expected to be a useful tool to improving one's access to health information and enhancing care quality. Hence, several benefits of e-health have been noted, such as, reduction in diagnosis time, improvement of patient satisfaction and improvements in access by clients in remote areas (Suzannah McLean, 2013).

Besides e-health being useful to patients, it can also be beneficial to health professionals in the sense that, remote consultations and monitoring can help to deal with some of the less urgent inquiries thereby reducing hospital visits, thus making the health provider efficient (Josip Car, 2004). Also, investing in e-health services by governments could prove to be cost saving, because there are studies that suggest that

monitoring clients at home avoids referrals and frequent hospitalizations (Guy Pare, 2007).

Furthermore, government financial policies should also focus on surveillance and filiation programmes. Surveillance is described as the continuous systematic collection, interpretation and analysis of data for preventing and controlling illnesses and injuries (S.B Thacker, 1988). The most important aspects of surveillance are that it is useful in measuring the need for interventions and the empowerment of decision makers in policy to manage and lead more efficiently by providing up to date evidence (Jamison DT B. J., 2006).

Therefore, ministries of health and finance in all countries must realize that data from surveillance systems is helpful for targeting resources and the evaluation of programmes. In 2005, China set the example by increasing its surveillance and response capacity through its Field Epidemiology Training Programme (FETP) (Jamison DT B. J., 2006).

Consequently, from this study, the participants also seem to believe that governments should channel financial resources into such surveillance programmes, establishment of emergency health centres and vaccine development as means of preventing the spread of Covid 19.

5.15 Findings on Individual Covid 19 prevention strategies and e-health literacy (table 4.20).

Amid a global pandemic of this nature, it is important that the public is able to quickly obtain new and health information (Eysenbach, 2020). This information must be about the causative agent, transmission and the course of the illness, including prevention and treatment methods. E-health literacy is characterised by an individual's ability to access, weigh and effectively use health knowledge from internet sources (Cameron Norman, 2006).

In this period, e-health literacy is most important because of preventive strategies such social distancing which can prevent person to person contact and reduce conveyance of key information through certain channels. Some authors have suggested considering e-health literacy as a response to the current Covid 19 outbreak (Sentell, 2020). Also, a previous study has established an affiliation between higher receipt of health data on

Covid 19 that is available on web pages and an increase in engagement in personal protective behaviours such as, use of masks, washing of hands and avoiding crowded places (Siyue Li, 2020).

Social media can also provide insights for sound communication among the public, researchers and public health authorities, although it can also spread panic and increase anxiety among the public (Araz Ramazan Ahmad, 2020). Misinformation has been raised as a matter of great concern for the public. Health literacy now has to play an important function in evaluating health information gathered online together with health professionals whose role is supporting the public in fighting misinformation (Alaa Abd Alrazaq, 2020). Ongoing training and education have been recognized as effective methods to improving both the publics and health care workers health literacy which will also improve service delivery, patient outcomes, communication and decision making (Pete Yunyongying, 2019). Given that the respondents in this study are university students, it is obvious that they are technologically knowledgeable to be able to access health information from internet sources. They also have determined that most of the personal protective behaviours questioned in this study are of high importance in controlling the spread of Covid 19. Though further education might be necessary as to the use and evaluation of e-health information.

CHAPTER SIX

6. CONCLUSION AND RECOMMENDATION

Here the study is concluded and recommendations are suggested for future further study.

6.1 CONCLUSION

This study has examined the relationship between nursing students e-health literacy levels and their knowledge and attitudes towards Covid 19 health policies together with the concept of health policy in general.

Coronavirus disease (Covid 19) is a highly contagious disease that is caused by the recently detected coronavirus. The disease started as an epidemic in main land China with the first case being reported in the city of Wuhan. Sometime in March 2020, the World Health Organization declared it a pandemic. And because it is highly contagious, it spreads quickly and continuously evolves in human populations.

Socio demographic factors such as age have been linked to its transmission and it is imperative to note that young adults can contract and transmit Covid 19 easily through social circles and because of their age they can develop symptoms that can last for longer periods. Other factors such as racial inequalities can even make them more vulnerable and in turn make them more susceptible to Covid 19.

Considerably, governments are responsible for public policy and ultimately determine how health care should be accessed. Studies have shown that nurses in general lack health policy involvement and their level of willingness to be involved in policy decision making is below expected levels.

This situation creates a gap in health policy education which to some extent, limits the knowledge on health policy to those who are still in nursing school. Policy education is important because it prepares students for the future, giving them more career options thereby increasing their involvement and influence in policy decision making.

Accordingly, because of the pandemic, governmental states around the world have had to implement strict regulatory measures with a view to prevent continuous spread of the virus. Quarantine, isolation, testing, movement restrictions, filiation and

surveillance protocols are some of the measures that have been put in place, with some success in some geographical locations.

Personal protective behaviours that include, social distancing, hand washing and use of face masks have also been encouraged among individuals with other countries imposing heavy fines for non-compliance.

Internet use and health information accessibility has given its users the opportunity to obtain and communicate vital health information especially in these times of an outbreak. Levels of e-health literacy among populations vary according to a number of factors such as, age, geographical location and socio-cultural factors.

Although there have been warnings on misinformation and the spread of fake information, the ability to access online health resources has proven to be beneficial as users have been given control over decisions about their health which has resulted in them working collaboratively with health professionals through quick diagnoses and reduction in hospital stays.

The e-health scale has also been a useful tool in determining levels of e-health literacy among the participants in this study because it is a tool that is hinged on the individual's awareness on their knowledge and skill pertaining a particular domain, in this case the individual's level of e-health literacy in connection with Covid 19 health policies.

This study has concluded that the participants in this research have high levels of E-Health literacy.

Statistically, most of the measurements in this study have shown a $p=0.001$ value which is less than the critical value $p\leq0.05$. This suggests that there exists a relationship between knowledge in Covid 19 policies and the e-health scale.

It can therefore be concluded that there exists a positive relationship between Covid 19 health policy knowledge and e-health literacy. However, because the future of the pandemic is unclear, there is need for further research.

6.2 RECOMMENDATIONS

The implementation of health policy heavily relies on health care professionals particularly nurses to bridge the gap between policy and practice through ongoing education. The idea is for nurses to have the ability to lead, manage and influence development of health and social policies with the goal of healthier futures for all populations. This study has determined that nursing students possess reasonable knowledge and values necessary to be engaged in health policy matters through the life span of their careers.And because nurses who are knowledgeable in health policy at any level have the capability to shape future health policies, nurse educators must therefore have a committed interest in making sure their students are able to engage in and understand matters involving health policies.

Thus, it is suggested that educational institutions provide more educational opportunities and programmes whose main focus is health policy participation and engagement. Furthermore, the current Covid 19 pandemic environment has provided avenues for healthcare professionals and graduate nurses to play a more active role and become more involved in health policy, because as more nurses get involved, nursing faculty aspects, health policy and advocacy will also continue to evolve.

Social media has proven to be one of those avenues and by reason of its popularity as a communication tool that reaches many in a short space of time, health care professionals, particularly nurse leaders could take advantage of the benefits this channel of communication provides to come up with important discussions which could better educate on health policy development thereby ensuring the delivery of high quality health care services in future periods. Finally, nurses have various roles that they take up in their mission to provide quality care and one of those roles is that of research. Their role includes providing evidence through vigorous research that will increase knowledge in different nursing disciplines, in this case, health policy advancement.By increasing nurse researchers' understanding of the policy process and how their research is critical at every stage of the process, they will become more effective in their contribution to policy development that will improve overall health of many nations.

Hence, it can be recommended that nurses become more involved in research processes and methodologies and what is a better time to start than this period of the coronavirus (Covid 19) disease pandemic.

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APPENDIX

Appendix A: The study questionnaire

Examination of the Relationship Between Nursing Students E-Health Literacy Level and their Knowledge and Attitudes towards Covid-19 Health Policies

This survey is designed to gather information about your knowledge, awareness and perspective regarding Covid-19 health policy(s). Please note that your participation is voluntary and the information provided will be treated confidentially and anonymously.

1. Age
2. Gender *
    a. Woman
    b. Male
3. Class
4. 1
5. 2
6. 3
7. 4
8. Income status *
    a. Income less than expenses
    b. Income equals expense
    c. Income higher than expenses
9. Marital status *
    a. Married
    b. Single
10. Has anyone in your family ever been infected with Covid-19? *
    a. Yes
    b. No
11. Has anyone in your family died due to Covid-19 so far? *
    a. Yes
    b. No
12. Have you caught Covid-19? *
    a. Yes
    b. No
13. My knowledge about Covid-19 health policies; *

a. Enough
b. Insufficient
c. I'm undecided

14. Who is the “decision maker” in health policy? *
    a. Investors
    b. Ministry of Health
    c. Private health insurance
    d. Professional organizations
    e. patient associations
15. Which is not one of the basic principles of the health system regarding Covid-19? *
    a. Activity
    b. Productivity
    c. Productivity
    d. Fairness
    e. Humanity
16. Which of the following expresses the 'equity in health' policy regarding Covid-19? *
    a. Equal access and use of health services by all
    b. Access and use of healthcare services appropriate for everyone's needs
    c. Access and use of quality health care for all
    d. Providing a humane health service to all
    e. Providing an efficient health service to all
17. “It is the name given to all the policies implemented by the state to ensure that people participate in society as free individuals with equal rights” Which definition belongs to?
    a. public policy
    b. social policy
    c. health policy
    d. economic policy
    e. fiscal policy
18. Which of the following Covid-19 health policies do you think is the most important? *

a. Regulatory policies regarding treatment-quarantine-isolation of Covid-19 patients
b. Policies regarding work-leave-retirement, etc. of health workers
c. Community-oriented support policies such as free masks, drugs, and vaccines
d. Support policies for scientists on subjects such as developing vaccines and finding treatment
e. Information and awareness policies of the public on the Covid-19 pandemic

Which of the following statements expresses the situation between Nursing and Covit-19 health policies, you can choose the appropriate option for you?

19. "Covid 19 health policies affect nursing services" *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
20. Nurses who know Covid 19 health policies, nurse more effectively *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
21. Covid 19 health policies can also help fight other diseases *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
22. Nurses who know the covid 19 health policy protect the rights of their patients. *
    a. I totally agree
    b. I somewhat agree

c. No idea
d. I disagree a little
e. I never agree

23. Teamwork is important to develop Covid 19 health policies *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
24. 'Junior nurses' are also influential in the development of Covid 19 health policies *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
25. 'Senior nurses' are also instrumental in the development of Covid 19 health policies *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
26. Nurses should participate in research for the development of Covid 19 health policies *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
27. Nurses should learn the policies of their countries and institutions for the development of Covid 19 health policies *
    a. I totally agree
    b. I somewhat agree

c. No idea
d. I disagree a little
e. I never agree

28. For the development of Covid 19 health policies, nurses should make decisions based on research results and evidence-based practices *
    a. I totally agree
    b. I somewhat agree
    c. No idea
    d. I disagree a little
    e. I never agree
29. Closure of educational institutions to prevent the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
30. Closure of workplaces to prevent the spread of Covid-19 *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
31. Cancellation of public events *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
32. Stopping public transport *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all

33. Organizing campaigns related to Covid-19 (such as stay at home) *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
34. Restriction of domestic transportation *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
35. Restriction of international transport *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
36. Financial / food etc. to those in need during the covid-19 process. assistance, for these people; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
37. Taking monetary measures to businesses/investors during the Covid-19 process, on business owners; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all

38. Spending money for emergency health services during the covid-19 process (pandemic hospital Spending money for emergency health services (such as a pandemic hospital) in the Covid-19 process, on public health; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
39. Spending money on vaccine development *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
40. Covid-19 PCR testing policies (such as airplane travel-teachers-health workers-patients before surgery) are used to detect and prevent the spread of the disease *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
41. 'Applying contact tracing policies' in preventing the spread of Covid-19 *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
42. 'Maintaining social or physical distancing' in preventing the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective

e. Not effective at all

43. 'Wearing a mask' in preventing the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
44. 'using gloves' to prevent the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
45. 'Frequent hand washing' in preventing the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
46. 'Using disinfectant' to prevent the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
47. 'Cleaning hot areas' to prevent the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
48. 'Using vitamins and herbal therapy' in the prevention of the spread of Covid-19; *
    a. It was very effective

b. It was somewhat effective.
c. I do not know
d. Not very effective
e. Not effective at all

49. 'Getting Vaccinated' in preventing the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
50. 'Not touching face to eye, mouth to mouth' in preventing the spread of Covid-19; *
    a. It was very effective
    b. It was somewhat effective.
    c. I do not know
    d. Not very effective
    e. Not effective at all
51. How useful do you think the internet is for you to make decisions about your health? *
    a. No useful change
    b. not helpful
    c. No idea
    d. Helpful
    e. Very helpful
52. How important is it to you to have access to health resources on the Internet? *
    a. No useful change
    b. not helpful
    c. No idea
    d. Helpful
    e. Very helpful
53. I know what kind of health resources to access online. *
    a. I never agree
    b. I do not agree

c. I'm undecided
d. I agree
e. I totally agree

54. I know where to find useful health resources on the Internet (search engines, health sites) *
    a. I never agree
    b. I do not agree
    c. I'm undecided
    d. I agree
    e. I totally agree
55. I know how to find useful health resources on the Internet (using appropriate keywords). *
    a. I never agree
    b. I do not agree
    c. I'm undecided
    d. I agree
    e. I totally agree
56. I know how to use the internet (e-journal, e-book, forum, etc.) to find answers to my health-related questions. *
    a. I never agree
    b. I do not agree
    c. I'm undecided
    d. I agree
    e. I totally agree
57. I know how to use health information I find on the Internet to help me. *
    a. I never agree
    b. I do not agree
    c. I'm undecided
    d. I agree
    e. I totally agree
58. I have the skills to evaluate whether the information I find on the Internet is beneficial to my health. *
    a. I never agree
    b. I do not agree

c. I'm undecided
d. I agree
e. I totally agree

59. I can distinguish high-quality health resources on the Internet from low-quality health resources. *
    a. I never agree
    b. I do not agree
    c. I'm undecided
    d. I agree
    e. I totally agree
60. I feel safe when I use the information I get from the internet in my decisions about my health. *
    a. I never agree
    b. I do not agree
    c. I'm undecided
    d. I agree
    e. I totally agree

Appendix B:

HEMŞİRELİK ÖĞRENCİLERİN e- SAĞLIK OKURYAZARLIĞI DÜZEYİ İLE KOVİT 19 SAĞLIK POLİTİKALARI YÖNELİK BİLGİ VE TUTUMLARI ARASINDAKİ İLİŞKİNİN İNCELENMESİ

Bu anket, Covid 19 sağlık politikası / politikaları ile ilgili bilginiz, farkındalığınız ve bakış açınız ile ilgili bilgileri elde etmek için tasarlanmıştır. Lütfen katılımınızın isteğe bağlı olduğunu ve verilen bilgilerin gizli ve anonim olarak ele alınacağını unutmayın.

1. BÖLÜM: SOSYODEMOGRAFİK ÖZELLİKLER

1) Doğum yılı:

2) Cinsiyet: Kadın ( ) Erkek ( )

3) Sınıfı:

a) 1
b) 2
c) 3
d) **4**

4) Gelir durumu:

( ) Gelir giderden az

( ) Gelir gider ile denk

( ) Gelir giderden yüksek

5) Medeni durum:

Evli ( ) Bekar ( )

6) Ailenizde şu ana kadar Covid-19'a yakalanan oldu mu?

( )Evet. Yakınlık Dereceniz:……. ( )Hayır

7) Ailenizde şu ana kadar Covid-19 nedeniyle hayatını kaybeden oldu mu?

( )Evet. Yakınlık Dereceniz:……. ( )Hayır

8) Siz Covid-19'a yakalandınız mı?

( )Evet ( )Hayır

9) Kovit19 ile ilgili sağlık politikalarını/bilgilerini en çok nereden ediniyorsunuz?
( ) TV haber ve tartışma programları
( ) Twither haberleri/ İnternet blogları
( ) Okul dersleri
( ) Bilimsel makaleler
( ) Sağlık Bakanlığı kaynakları

10. Covid 19 sağlık politikaları hakkında bilgim;
a) Yeterli
b) Yetersiz
c) kararsızım

2. BÖLÜM: COVİT 19 BİLGİ TUTUM SORULARI

11) **Sağlık politikasında "karar verici" hangisidir?**
( ) Yatırımcılar
( ) Sağlık Bakanlığı
( ) Özel Sağlık Sigortaları
( ) Meslek Örgütleri
( ) Hasta Dernekleri

12) Hangisi sağlık sisteminin temel ilkelerinden değildir?
a) Etkililik
b) Üretkenlik
c) Verimlilik
d) Hakkaniyet
e) İnsaniyet

12) Sağlıkta hakkaniyet politikasını aşağıdakilerden hangisi ifade eder?
( ) Herkesin eşit bir şekilde sağlık hizmetine erişmesi ve kullanması
( ) Herkesin ihtiyacına uygun sağlık hizmetine erişmesi ve kullanması
( ) Herkesin kaliteli sağlık hizmetine erişmesi ve kullanması
( ) Herkese insancıl bir sağlık hizmeti sunmak
( ) Herkese verimli bir sağlık hizmeti sunmak

13) Aşağıdaki tanım hangisine aittir?

"Devletin insanların eşit haklara sahip özgür bireyler olarak topluma katılmalarını sağlamak amacıyla uyguladığı politikaların tümüne verilen isimdir"
( ) Kamu politikası
( ) Sosyal politika
( ) Sağlık politikası
( ) Ekonomi politikası
( ) Maliye politikası

14. Sokağa çıkmak yasağı hafta içi günlerde, hafta sonu (Cuma-Pazartesi) hangi saatleri arasında devam etmektedir?
a) 21.00-05.00
b) 22.00-05.00
c) 21.00.06.00
d) 22.00-06.00
e) 05.00-17.00

15. Sokağa çıkma kısıtlamasından muaf tutulan işyeri/fabrika/imalathane gibi yerlerde çalışan kişiler HANGİ e-Devlet platformundan çalışma izni görev belgesi ALIR.
a) Sağlık Bakanlığı e-Başvuru sistemi
b) İçişleri Bakanlığı e-Başvuru sistemi
c) Dışileri Bakanlığı e-Başvuru sistemi
d) Maliye Bakanlığı e-Başvuru sistemi
e) Emniyet Müdürlüğü e-Başvuru sistemi

16. Yabancılara yönelik sokağa çıkma kısıtlamasına aşağıdakilerden hangisi muaftır?
a) Turistik faaliyettekiler
b) İkamet izini olanlar,
c) Geçici koruma statüsündekiler
d) Uluslararası koruma başvuru ve statünde olanlar
e) Ticaret, tanıtım yapanlar, şirket kuranlar

17. Tam kapanma sürecinde kendi ihtiyaçlarını karşılayamayacak durumdaki ileri yaş gruplarındaki veya ağır hastalığı olanlar ihtiyaçları hang numara kullanılmaz?
a) 112,
b) 155
c) 156
d) 177
e) Hepsi

18. Tam kapanma sürecinde kendi ihtiyaçlarını karşılayamayacak durumdaki ileri yaş gruplarındaki veya ağır hastalığı olanlar bildirdikleri ihtiyaçlarını hangi Sosyal Destek Grupları karşılar?
a) GETİR
b) YETİŞ
c) VEFA
d) SEFA
e) Hiçbiri

19. Hangi grup hafta sonu tam gün sokağa çıkmazken, yalnızca, hafta içi günlerde 10.00-14.00 saatleri arasında sokağa çıkabilir?
a) Aşı hakkı bulunan ve iki doz aşını olmuş 65 yaş üzeri bireyler
b) Aşı hakkı bulunmasına rağmen aşı olmayan 65 yaş üzeri kişiler
c) 18 yaş altı gençler
d) Çocuklar
e) Hepsi

20. Aşağıdaki Covit 19 sağlık politikalarından sizce en önemlisi hangisidir?
a. Covit 19 hastalarının tedavi-karantina- izolasyon ile ilgili düzenleme politikaları

b. Sağlık çalışanların çalışma-izin-emeklilik vs ile ilgili politikalar
c. Ücretsiz maske, ilaç, aşı gibi topluma yönelik destek politikalar
d. Blim insanlarına aşı geliştirme- tedavi bulma gibi konularda yapılan destek politikaları
e. Halkın Covit 19 pandemisi konusunda bilgi ve bilinçlendirme politikaları

Hangi İfade Hemşirelerilik ve Covit 19 sağlık politikaları arasında durumu ifade eder?

		Tamamen katılıyorum	Biraz katılıyorum	Fikrim yok	Biraz katılmıyorum	Hiç katılmıyorum
1	Covid 19 sağlık politikaları, hemşirelik hizmetlerini etkiler					
2	Covid 19 sağlık politikalarını bilen hemşireler, daha etkili hemşirelik yapar					
3	Covid 19 sağlık politikaları diğer hastalıklarla mücadelede yardımcı olabilir					
4	Covid 19 sağlık politikası bilen hemşireler hastalarının hakkını korur					
5	Covid 19 sağlık politikalarını geliştirmek için ekip çalışması önemlidir					
6	Kıdemsiz pozisyonlardaki hemşireler Covid 19 sağlık politikaların geliştirilmesi etkilidir					
7	Kıdemli pozisyonlardaki hemşireler Covid 19 sağlık politikaların geliştirilmesi etkilidir					
8	Hemşireler Covid 19 sağlık politikaların geliştirilmesi için araştırmalara katılmalıdır					
9	Hemşireler Covid 19 sağlık politikaların geliştirilmesi için ülke ve kurumlarının politikalarını öğrenmelidir					
10	Hemşireler Covid 19 sağlık politikaların geliştirilmesi için araştırma sonuçlarını ve kanıta dayalı uygulamalara göre bakım vermelidir					

Covit 19 Pandemisi ile ilgili oluşturulan Sağlık Politikaların etkisi hakkında düşüncenizi nedir?

		Çok etkili oldu	Biraz etkili oldu	bilmiyorum	Çok az etkili oldu	Hiç etkili olmadı
1	Eğitim kurumlarının kapatılması					
2	İş yerlerinin kapatılması					
3	Kamuya açık etkinliklerin iptal edilmesi					
4	Toplu taşımanın durdurulması					
5	Covit 19 ile ilgi kampanyanların (evde kal gibi) düzenlenmesi					
6	Ülke içi ulaşımın kısıtlanması					
7	Uluslarası ulaşımın kısıtlanması					
6	İhtiyaç sahiplerine mali/yiyecek vs. yardım					
7	İşyerlerine/yatırımcılara parasal tedbirler					
8	Acil sağlık hizmetleri para harcaması					
9	Aşı geliştirme çalışmalarına para harcaması					
10	Covit 19 test politikaları (uçak seyahat-öğretmenler-sağlık çalışanları-hastaların amaliya öncesi)					

11	Temaslıların izleme politikası					
12	Sosyal veya fiziksel mesafeye uyma					
13	Maske takmak					
14	Eldiven kullanmak					
15	Ellerini sık sık yıkamak					
16	Dezenfaktan kullanmak					
17	Sık kullanılan alanları temizlemek					
18	Vitamin ve bitkisel tedavi kullanmak					
19	Aşılanmak					
20	Yüze göze ağıza dokunmamak					

3. BÖLÜM: e-SAĞLIK OKURYAZARLIĞI

1. Sağlığınız hakkında karar vermenize, internetin ne kadar yararlı olduğunu düşünüyorsunuz?

( )Hiç yararlı değil ( )Yararlı değil ( ) Fikrim yok ( ) Yararlı ( )Çok Yararlı

2. İnternetteki sağlık kaynaklarına erişebilmek sizin için ne kadar önemli?

( ) Hiç Önemli değil ( )Önemli değil ( )Fikrim yok ( )Önemli ( ) Çok Önemli

		Hiç Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Tamamen Katılıyorum
1.	İnternetten ne tür sağlık kaynaklarına ulaşacağımı biliyorum.					
2.	İnternetteki yararlı sağlık kaynaklarını nereden (arama motorları, sağlık siteleri) bulacağımı biliyorum					
3.	İnternetteki yararlı sağlık kaynaklarını nasıl (uygun anahtar kelimeler kullanarak) bulacağımı biliyorum.					
4.	Sağlığımla ilgili sorularıma cevap bulmak için interneti nasıl kullanacağımı (e-dergi, e-kitap, forum vs.) biliyorum.					
5.	İnternette bana yardımcı olması için bulduğum sağlık bilgisini nasıl kullanacağımı biliyorum.					
6.	İnternetten bulduğum bilgilerin sağlığıma yararlı olup olmadığını değerlendirecek becerilere sahibim.					
7.	İnternetteki yüksek kaliteli sağlık kaynaklarını, düşük kaliteli sağlık kaynaklarından ayırabilirim.					
8.	Sağlığımla ilgili kararlarımda internetten elde etiğim bilgileri kullandığımda, kendimi güvende hissederim.					

Appendix C: Curriculum Vitae

PERSONAL INFORMATION

Name:	Danzil Tatenda Chimombe
Address: Eser Apartment Sokak 19 Door 8 Marmara Lefkosa, KKTC Email: chimombedanzil@gmail.com	

EDUCATION

Years	Degree	University	Field of Study
2015 – 2019	Bachelor	Near East University, Faculty of Nursing	Nursing
2019 – 2021	Masters	Near East University, Faculty of Nursing	Public Health Nursing

Appendix D:

ETHICS COMMITTEE PERMISSION

YAKIN DOĞU ÜNİVERSİTESİ
BİLİMSEL ARAŞTIRMALAR ETİK KURULU

ARAŞTIRMA PROJESİ DEĞERLENDİRME RAPORU

Toplantı Tarihi : 27.05.2021

Toplantı No : 2021/91

Proje No :1354

Yakın Doğu Üniversitesi Hemşirelik Fakültesi öğretim üyelerinden Prof. Dr. Hatice Bebiş'in sorumlu araştırmacısı olduğu, YDU/2021/91-1354 proje numaralı ve **"Hemşirelik Öğrencilerin E-Sağlık Okuryazarlığı Düzeyi İle Kovit 19 Sağlık Politikaları Yönelik Bilgi Ve Tutumları Arasındaki İlişkinin İncelenmesi."** başlıklı proje önerisi kurulumuzca online toplantıda değerlendirilmiş olup, etik olarak uygun bulunmuştur.

Prof. Dr. Rüştü Onur

Yakın Doğu Üniversitesi

Bilimsel Araştırmalar Etik Kurulu Başkanı

Appendix E:

13.11.2020

Yakın Doğu Üniversitesi

Bilimsel Araştırmalar Değerlendirme Etik Kurulu Başkanlığı'na,

Anabilim Dalı'mızda görevli Profesör Doktor Hatice Bebiş'in sorumlu araştırmacı olduğu Yüksek Lisans öğrencimiz 20194118 Danzil Chimombe 'nin" Hemşirelik Öğrencilerin E-Sağlık Okuryazarlığı Düzeyi İle Kovit 19 Sağlık Politikaları Yönelik Bilgi Ve Tutumları Arasındaki İlişkinin İncelenmesi "İsimli tez çalışmasının okulumuz öğrencileri ile yapılması uygundur arz ederim.

Saygılarımla,

Prof. Dr. Ümit Seviğ
Halk Sağlığı Hemşireliği
Anabilim Dalı Başkanı

Appendix F:

TURNITTEN PAGE

policy

ORIGINALITY REPORT

18%	15%	11%	7%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	tr.usembassy.gov Internet Source	1%
2	www.scielo.br Internet Source	1%
3	www.preprints.org Internet Source	1%
4	journals.sagepub.com Internet Source	1%
5	Nazife Sultanoglu, Buket Baddal, Kaya Suer, Tamer Sanlidag. "Current situation of COVID-19 in northern Cyprus", Eastern Mediterranean Health Journal, 2020 Publication	1%
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