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# Role of Health Education through Media in Prevention of Covid-19 Pandemic (Saida and Tyr Provinces)

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### **Abstract**

The main objective of this study is to examine the role of health education through the media prevention of (COVID-19) in the two designated cities (Saida and Tyr). The study's foundational data comes from a survey administered to residents of Saida and Tyr and was gathered using a quantitative methodology that combines cross-sectional and descriptive designs. 460 online surveys were submitted by residents of the two cities. The study hypotheses were further examined with the use of an Anova Test, an Independent T-test, and a Pearson correlation analysis. The results demonstrated a beneficial association between health education via the media and the avoidance of (COVID-19). The study reached also a set of conclusions, among which are: It is found out that the majority of the sample individuals prefer to use social media as main source of for prevention of COVID-19. It appears too that the majority of the sample individuals spend more than 2 hours in using media channels for to follow health information's and health programs. The respondents have also an agreement with most of the information required about their behavioral skills during the pandemic, and have an agreement with most of the information required about the trust of information's provided by media channels that help them to change the behavioral and cognitive prevention. This is the first study that examines the role of health education through media in prevention during COVID-19 pandemic across the two selected cities (saida and Tyr).

**Keywords:** Health education, Media, Covid-19 prevention.

#### Introduction

COVID-19 was declared by the World Health Organization (WHO) as a pandemic virus on March 11, 2020, and has spread among 210 countries worldwide (WHO, 2020). This virus generates several symptoms such as fever, cough, mild shortness of breath, and respiratory failure. However, in severe cases, it may lead to kidney failure in many patients. The virus is usually spread by droplets, airborne, or oral route of contact to spread. The virus has been confirmed to remain viable on surfaces from a few hours to several days (Maciel-Lima et al., 2015). Therefore, the interventions of the US Centers for Disease Control and Prevention (CDC) and (WHO) for rapid access to public health communications give reinforcement of health and hygiene practices around the world by adapting safe health practices such as increased hand washing, use of face covering and social distancing.

Consequently, the media has promoted health awareness that effectively influences healthy behaviour and changes people's attitudes. Besides, it was the main source of information that played a global role in tracking and updating Coronavirus disease through live updates dashboard and in educating the masses as well (Cinelli et al., 2020). Due to the massive spread of the Coronavirus, the Lebanese Ministry of Public Health (MHEH) has required people to adhere to the government lockdown and stay at home if they develop any symptoms of the COVID-19 virus. During the lockdown, the number of social media users increased by 87%. Thus, social media platforms, including Facebook, Twitter, YouTube, Instagram, Snapchat, WhatsApp and TikTok, are used to posting every aspect of people's lives. This may include their achievements, fears, and travel daily and hourly (Anwar et al., 2020). According to study conducted in China in 9th October 2020, Social media is an effective tool to promote behaviours to prevent COVID-19 among the public (Li and Liu, 2020). Moreover, educating the masses and increasing the health awareness

will enhance their knowledge in this pandemic in how to take their safety measures to protect themselves by washing their hands frequently with soap, using hand washing, wearing masks, avoid touching the surfaces, and avoid crowded areas (Li and Liu, 2020). Also, social media is widely used by Chinese authorities to inform the public about the latest news, disseminate public health knowledge, refute rumors, and facilitate effective coordination of medical, public, and pharmaceutical resources. And, the number of web-based news users in China has been reported to be 686 million, which accounts for 80.3% of Chinese citizens usually obtain news or information via mobile news channels (Costantino et al., 2018).

On the other hand, sharing scientific information, diagnostic, treatment and dissemination of information can positively or negatively influence health education. Forceful March 2020 rated the 100 most viewed videos on YouTube with the word "Coronavirus", and together they got more than 165 million views, 85% of them belonging to news channels (Basch et al., 2020). It was found that less than half of the videos mentioned the recommended prevention measures, and less than half mentioned the most common symptoms, however, almost 90% commented on the deaths, anxiety and quarantine status. That's why, before sharing with the media platform, its recommend learning more about government guidelines on how to spot fake videos and use official sites to avoid pandemic news. Moreover, the media can help reduce the psychological impact of Coronavirus by using social media platforms WhatsApp, WeChat, Instagram and Facebook to connect families and friends during quarantine and enhance emotional stability among them, which may positively affect their health education (Basch et al., 2020). According to some others previous studies that show through social media, people share lies much more than evidence based information. A two-day analysis of 1,000 tweets that were circulating on Twitter (posted on February 6 and 7, 2020) showed that the misinformation was tweeted more than scientific evidence or fact-checking tweets (Hua and Shaw, 2020; Vicario et al., 2016). Another study conducted in China, with an online survey of 1,210 responses, found that 53.8% of the respondents considered the psychological impact of the epidemic to be moderate or severe (Wang et al., 2020); A research group even created and validated a scale called the "COVID-19 Fear Scale" to assess the level of stress and anxiety in the population and put in place appropriate measures to prevent associated consequences, such as Post-traumatic stress disorder (PTSD) that The most prevalent psychological consequence was after the severe acute respiratory syndrome (SARS) epidemic in Asia in 2003, followed by depressive disorders (Mak et al., 2009; Ahorsu et al., 2020). Other more serious diseases or events such as suicide have already been reported in some parts of the world such as India, Britain, Germany and Italy (Thakur and Jain, 2020). So people should take into account that spreading of non-scientific information via social media may negatively affect their mental health and cause stress, depression, fear and anxiety. Moreover, the WHO responds directly by creating a section on its website designed for breach the myth of COVID-19 (United Nations, 2020).

Thus, Health education plays an essential role during the COVID-19 pandemic and controlling the spread of the virus through preventive measures given to people by using a media platform to transfer preventive information measures to the largest possible number. Hence, health education aims to control behaviour and change society's attitude towards the Coronavirus. For this reason, the Lebanese government, in coordination with the Ministry of Health (MoPH), is taking some preventive measures such as quarantine and general closures to take the utmost precautions in order to protect the masses from this dangerous epidemic. In addition, health education works to reduce the risks and threats of this epidemic by publishing many videos and health information, as well as the preventive measures that must be taken to confront COVID-19 such as social distancing, avoiding touching contaminated surfaces, wearing a mask, washing hands, and others. People should be up to date on the latest news of preventive information measures. Using networks channels in health education can minimize the severity of the virus and protect individual's health. Boosting health education via different media channels to improve public health awareness for infectious diseases is urgently needed (Li et al., 2020). The aim of this study is to determine the role health education through media plays in COVID-19 pandemic prevention at South Lebanon provinces (Saida and Tyr provinces).

#### **Literature Review**

# 1. Health education through media

#### a. Health education

Health is not just a role in decreasing poverty but also in contributing to general development, making it one of the most crucial duties of any government. Developing a healthy populace requires governments to invest in healthcare facilities and train qualified medical professionals. The prevention of illness, promotion of health, creation of programs, monitoring and evaluation of health systems, and the availability of a professional workforce are all crucially dependent on public health information, competence, and personnel. Epidemiology, statistics, health systems, disease prevention, health economics, and environmental health are all historically emphasized in public health curricula, and schools of public health (and affiliated institutions) across the world play a crucial role in producing such a workforce (Abdul Ghaffar et al, 2021). Since the early 1900s, there has not been a global epidemic like COVID-19, which has only served to amplify existing disparities and injustices all around the world. Incorporating a broader social sciences approach to health is essential to combating the pandemic, as is listening to and learning from existing diverse communities and health systems, being adaptable and able to work across sectors, and recognizing social justice, equity, and human rights as basic principles while carrying out public health actions in a variety of contexts. Lessons for public health education have also been prompted by this circumstance (Brownson et al, 2020). We think that a more robust public health system may emerge from these uncertain times, just as it did from previous socioeconomic, political, and epidemiological transitions.

The ongoing pandemic has made it abundantly clear to the global health community that there is a pressing need to further bolster capacity, competencies, and knowledge in certain areas of public health currently taught, such as the politics of public health, our approach to community engagement and building trust, and the promotion of interdisciplinary research. However, extra knowledge and skills are necessary to effectively respond to and control pandemics. As a result of the pandemic, public health institutions will need to allocate more resources to design and roll out the delivery of new curricula and approaches to acquiring the necessary skills. We suggest at least four more areas for schools of public health to examine as they create or enhance teaching strategies for a post-COVID environment.

### b. Media

The media has a vital role in bringing political, economic, and social concerns and themes to the attention of the public, as well as improving individuals' knowledge and cognitive development in all areas that affect their everyday lives. In any culture, the media is a vital source of direction and education. It has a huge impact on many people, all of whom have varied interests, orientations, intellectual, academic, and social levels.

Alongside, media has evolved, as have its capabilities and technologies, in terms of its reach, efficacy, and simplicity of use. As a result of this technical development in the capabilities of these means, it has become a vital and tangible role in the field of awareness and education due to its ability to reach multiple and diverse groups of society and to lead organized awareness programs by broadcasting them simultaneously and to millions of people, enabling them to link the community in a healthy way (Batrinca et al., 2015). In addition to acquiring knowledge and providing the recipient with health information obtained from health workers, the health media plays an important role in the transfer of global experiences and emphasizing health experiences and medical issues that benefit from it. One of most important roles that

# c. The role of the media in health education and awareness:

discovery of medical errors and monitoring those (Batrinca et al., 2015).

Communication channels such as newspapers, magazines, radio, movies, television, the internet, and online social networks are all examples of media. Despite television's dominance in the market since the 1980s

the health media can play is dealing transparently with the health reality in all its dimensions, including the

(Madrid-Morales, 2017), smart mobile devices are quickly overtaking it. These devices not only allow users to make phone calls, but also provide access to a wide variety of other services, such as television, radio, cameras, social networks, and geolocation. More than half the world's population is part of a billion-person network that communicates, entertains, and shares information freely thanks to the Internet (Capurro, 2019). In the event of a health emergency, cyber communication also facilitates the use of online social networks, which are now seen as the quickest and simplest method of disseminating information globally (Moreno-Montoya, 2020). There is no significant social truth that escapes the attention of the natural or legal person who disseminates it because of the vastness of their penetrating power. This has both positive and negative effects on the mass media's ability to serve as a tool for prevention, education, and context management, as many individuals have an idea of what they want to express but lack the skills necessary to effectively convey that idea. The current era's media is considered by its ability to influence different aspects of the society, and it has accomplished so. Through health media messages that educate community members and raise their health awareness, the ability to improve the behavior, viewpoint, and practice of members of society can be communicated through the media.

# 2. Prevention during COVID-19 pandemic

Promoting both physical and mental health measures and maintaining resilience among individuals of all ages and socioeconomic backgrounds are two of the media's most important tasks in the present epidemic. It is essential in COVID-19 that the following be well known:

- The significance of maintaining a comfortable distance of 6 feet (2 meters) from other people in social situations.
- The government should distribute face masks so that individuals aren't required to spend their own money on them, which would help to increase their use among the general population.
- Methods for Detection, Diagnosis, and Treatment: Inducing unwarranted anxiety, online symptom checkers should be avoided.
- The CDC or the WHO, for example, do extensive research before producing a complete set of guidelines that may then be accessed online. The next step is to take measures to make these standards obligatory everywhere in the world.
- Mental well-being must be given the same importance as physical health.
- All experts' credentials, including licenses and degrees, should be checked online before they are permitted to participate.
- During this pandemic, COVID-19-specific smartphone applications can be created to inform users of the availability of pharmacies, food shops, hospital beds, ER wait times, and urgent care clinics in their area.

# 3. Previous and related studies

Referring to previous studies is an initial and essential step in any scientific research, as it helps the researcher in determining the general theoretical framework for its subject and building theoretical backgrounds around it. We have tried to rely on some of these studies, such as studies similar to this study, and take them as backgrounds from which we can start because they involve some elements such as the method used and data collection tools. The following is a presentation of these studies:

In a Saudi study entitled "The extent to which Saudi youth depend on the media to achieve health knowledge" (2008), the researcher concluded that the study sample members follow media in general, but television comes at the forefront of the most used media, and as the researcher found, individuals The sample relied on the media to obtain health information and that the Internet was the most used means for obtaining health information (Saoud, 2014). In a Jordanian study entitled "The Role of Jordanian Television in Health Education" (Maayta, 2014), the researcher concluded that it became clear that (64.72%) of the Jordanian public follows the television program for the purposes of health education and because the program discusses the issues of Jordanian society. It was found that (73.93 percent) of the

study sample believed that there is an impact of the television program on education and the level of health awareness among members of the Jordanian society. It also became clear that (73.38 percent) of the study sample trust the level of credibility of health information presented in the program (Maayta, 2014). An article published in the Journal of Media Studies issued by the Arab Democratic Center in Berlin in 2018 show that most of the sample members spend three or more hours browsing internet site and most of the respondents believe that their use of Facebook has a space for familiarization and access to various health information and news, in addition to the social communication it provides with family and friends in different and geographically distant places (Sanjari, 2018). Another study achieved in 2015 about the role of social networks in health education and awareness about Ebola disease. Social networking, especially Facebook, which in turn was able to develop the rate of participation and interaction, is increasing among the sample members on the subject of Ebola, while the turnout of respondents to the Ebola page is constantly increasing. As for the reasons that motivate them to follow the Ebola page, it is the motive of health education, awareness, the danger and spread of the disease. The study conclude that the sample members have achieved a saturation level in providing education and health awareness, including the positive impact of the page on the sample members (Kassemi et al, 2015).

Recently, Al-Dmour et al. (2020) advocated looking into how social media may help Jordanians stay healthy during the COVID-19 epidemic by raising awareness and encouraging positive adjustments in behavior. In Jordan, 2555 social media users were randomly selected to complete online surveys using a quantitative methodology and many social media platforms. The main findings revealed that the use of social media platforms had a significant positive influence on public health protection against COVID-19 as a pandemic. Public health awareness and public health behavioral changes significantly acted as partial mediators in this relationship. Therefore, a better understanding of the effects of the use of social media interventions on public health protection against COVID-19 while taking public health awareness and behavioral changes into account as mediators should be helpful when developing any health promotion strategy plan. A research (Radwan, 2020) conducted in Palestine looked at the impact of social media on the dissemination of fear about COVID-19 among elementary and secondary school pupils in the Gaza Strip. The information was gathered using an online survey. Students between the ages of 6 and 18 from 56 different schools in the Gaza Strip, Palestine, were contacted using a convenience sample method. The findings demonstrated that high school students' mental health and psychological well-being may be negatively impacted by the worry that is communicated regarding COVID-19 on social media. In terms of gender, female students were more likely than male students to use Facebook to learn about COVID-19 (81.8 percent vs. 77.8 percent, respectively). Health news was the most commonly subject seen, read, or heard (n = 529, 56.2 percent) during the COVID-19 pandemic, when males were more inclined to follow health news than females. The influence of social media terror based on a student's age and gender. The study found a strong link between the use of social media and the dissemination of fear regarding COVID-19. In Pakistan, researchers (Ur Rehman, 2021) used a pre-post survey approach for a quantitative study with a total of 384 participants. The purpose of this research is to determine how effective public health awareness initiatives in the media have been in increasing the general people's familiarity with COVID-19 in Rawalpindi, Pakistan. The results of this study show that people's understanding of the signs and symptoms of COVID-19, as well as how to protect themselves against contracting it, has grown steadily over time. Health awareness efforts are crucial for increasing the public's understanding of COVID-19, as seen by the rise in the number of people who regularly consume media covering the disease. Karasneh et al. (2020) did a research to determine pharmacists' illness knowledge and risk perception. The researchers detect indicators of risk perception and perceived media roles. This research is a cross-sectional survey. The survey was built on an online platform, and calls for participation were broadcast to pharmacists across the country via social media. There were 486 pharmacists in total, with the majority being women (78.6 percent; n = 382). More than half of the pharmacists surveyed (n = 209) were able to correctly identify common vectors of illness, and 80.4% had a score of 4 or above on a 5-point scale testing their knowledge of common diseases. Participants' perceptions of risk were high and could be predicted by factors such as

gender, location, and the presence of children. Both risk perception and media roles were affected by how often and where people got their news.

Research by Liping Liu (2020) examined the relationship between four forms of digital media consumption (social media, mobile social networking applications, online news media, and social live streaming services) and preventative actions (through anxiety). The great majority (>90%) of respondents to an online survey (N= 511) have engaged in preventative behaviors against developing COVID-19, such as washing their hands with soap and water more frequently, avoiding crowded locations, and wearing face masks in public. Further, people's interest in preventing the spread of COVID-19 by direct or indirect preventative actions was significantly correlated with their use of all four digital media types for information gathering. There was a direct correlation between finding out information on COVID-19 on MSNs, SLSSs, and online news media and engaging in preventative actions. Whereas COVID-19 information consumption on social media, MSNs, and SLSSs during the infectious disease epidemic might provoke extreme fear and, in turn, boost preventative actions.

# 4. Health education through media in the prevention of COVID-19 in Lebanon

In Lebanon a national strategic communication campaign was launched 4 days after detecting the first case of COVID-19. The main strategy centered around flooding media outlets with information by health care professionals: talk shows hosted physicians and public health experts, and public service messages featuring physicians were streamed through social media and television outlets, in addition to governmental directives around "stay home" orders and prevention. This resulted in a high knowledge level on prevention and self-reported adherence with governmental recommendations including abiding by hand hygiene (96% adherence), avoiding crowds (90%), and abiding by stay-at-home orders (76%) (Melki, 2020).

When the first incidence of infection in Lebanon was verified in the third week of February, media coverage of COVID-19 exploded. At that time, the epidemic took center stage in Lebanese mainstream media, notably television, and has been there ever since. Concern and worry over the sickness swiftly reached a fever pitch, leading to a deluge of online posts that helped disseminate incorrect information about the disease, including urban legends, conspiracy theories, erroneous reassurances, and misleading medical advice for preventing and treating the disease. Using primarily Facebook and WhatsApp, the Lebanese spread false information about the spread of the disease, including dramatic fake videos of sick people collapsing in China (supposedly from COVID-19), inaccurate reports about transmission and prevention methods, and fake audio recordings exaggerating the number of infected people across Lebanon. On March 11, when the WHO designated COVID-19 a pandemic, the traditional media immediately began covering the outbreak with great vigor. It wasn't long until the "Stay Home" hashtag was all over our phones, our TVs, and our social media feeds.

Recycled news stories describing diagnostic criteria, illness phases, and potential treatments and vaccines. In recent years, medical professionals have been regular on both television and social media. There was intense competition among news outlets to interview the most well-known national and international figures in their fields.

Prior conflicting statistics regarding infection rates and casualties gave way to consistent and accurate reporting, in part due to the national COVID-19 committee's well-planned communication strategy. Public hospital in Beirut became the authoritative authority on the subject, publishing daily reports and statistics on the incidence of new illnesses and deaths. As was mentioned before, the Ministry of Information launched a special COVID-19 website where up-to-date information on cases, fatalities, diagnostics, and other relevant data could be found. The website also detailed the signs and symptoms of the virus, how to protect yourself from it, the most recent developments with COVID-19, PSAs, and some basic fact-checking studies that dispelled some of the more pervasive urban legends. During the COVID-19 epidemic,

this research will examine how Lebanese citizens make use of health-related media and information resources. The purpose of this research is to learn how different types of media and information sources affect people's willingness to take preventative actions during pandemics. This study examines the effect of health education via the media, demographics, and socioeconomic standing on people's propensity to follow recommended preventative care routines.

### **Materials & Methods**

### 1. Research Design

This study is primary in nature, taking a survey approach to data collection, with participants filling out their own questionnaires. Secondary data from the literature was used to fill in gaps in the study's understanding of the variables at play. This study is descriptive explanatory because it describes the phenomenon as it exists in the population and provides an explanation for the link between two variables (the dependent and independent ones). Health Education via Media Among Residents of Saida and Tyr Provinces (independent variable) and Preventing the COVID-19 Pandemic (dependent variable). Additionally, we were examined the health media exposure and respondents' degree of prevention across age, gender, marital status, and education levels.

Since quantitative data was collected by survey and processed via statistical tools, this study may be classified as quantitative. This is a cross-sectional research that looks at a certain point in time, namely the two weeks beginning on August 1, 2021. Finally, an inductive method was used to draw conclusions about the link between health education and people's awareness and preventative behavior. These theories were put to the test on the population at large, and were either be verified or refuted based on the results.

# 2. Research Questions

# i. Main Questions:

- 1- To what extend health education through media plays a role in COVID-19 related prevention in Saida and Tyr provinces?
- 2- Does the health education through media differ among different socio-demographic groups of respondents in Saida and Tyr provinces?
- 3- Does the prevention behavior about COVID-19 Pandemic differ among different sociodemographic group Respondents in Saida and Tyr provinces?

# ii. Sub-questions:

- 1- Does the construction of health information's through the media impact on the prevention of COVID-19 in Saida and Tyr provinces?
- 2- Does the behavioral skills of respondent's impact on the prevention of COVID-19 in Saida and Tyr provinces?
- 3- Does the media's confidence of respondent's impact on the prevention of COVID-19 in Saida and Tyr provinces?
- iii. Descriptive questions:
- 1. What are the major sources of media in health education for the Lebanese population?
- 2. What are the major types of COVID-19 related prevention measures and procedures acquired by the Lebanese through different media channels?

# 3. Hypotheses

# i. Main hypothesis

Ha1- There is a statistically significant impact of health education through the media on the prevention of COVID-19 in Saida and Tyr provinces.

Ha2- There is a significant difference in health education level through media among different sociodemographic groups of respondents in Saida and Tyr provinces.

Ha3- There are differences in prevention behavior about COVID-19 Pandemic among different socio-demographic groups of respondents in Saida and Tyr provinces.

# ii. Sub Hypothesis

Ha4- There is a statistically significant impact of construction of health information's through the media on the prevention of COVID-19 in Saida and Tyr provinces.

Ha5- There is a statistically significant of the motivation to follow the health programs and campaigns through media on the prevention of COVID-19 in Saida and Tyr provinces.

Ha6- There is a statistically significant impact behavioral skills on the prevention of COVID-19 in Saida and Tyr provinces.

Ha7- There is a statistically significant impact of media's confidence on the prevention of COVID-19 in Saida and Tyr provinces.

# 4. Population and Study Sample

This study was limited to respondents in Saida and Tyr provinces, and it was including respondents from Lebanese society and different demographic groups, as presented in the questionnaires. The study is a cross-sectional and convenient study done at one point of time (2-month period); hence the results of the study were restricted to the respondents and represent the time frame of the study with no possibility of generalization.

### 5. Sample Size and Selection of Sample

A convenient sample from respondent's in Saida and Tyr provinces, including non-Lebanese citizens, a sample between 300-400 were sufficient for this study.

The sample size was calculated using the survey monkey calculator and it seems that the number 280 are enough to gather data for a convenient sample from a very big population. The sample was selected from audiences of health programs and followers of health pages on social media on convenient basis.

### **6. Instrument for Data Collection**

The instrument of the study was a self-administered online Questionnaire written in two versions: Arabic and English. For the Arabic version, a back to back translation was done by a translator sworn and then showed to an expert to ensure the proper translation and meaning of the survey questions. These questioners were a Google forms link distributed via whats'app and Email from different database to respondents in Saida and Tyr provinces. All answers of this survey were mandatory to avoid any missing information. This method covers a large sample of respondents and was much safer in term of health during this crisis of COVID-19.

Participation in the study were voluntary. The questionnaires of the study were consisting of four sections, the first section contains the informed consent, which ensures the confidentiality of the responses and participation rights of the respondents. Moreover, the informed consent includes a screening question which determine if the participant is a follower for a health education programs through different media channels. The second section cover socio-demographic questions of the respondents, including age, gender, education level, marital status, and employment status. The third section includes Likert scale statements to assess the level of health education through media among respondents. Lastly, the Fourth section contains Likert scale statements to assess the COVID-19 prevention's measure among respondents.

#### **Result and Discussion**

# a. Demographic questions

The results of the study showed that 69.85% of the respondents were mostly female and 72.2% of the respondents ranged in age from 18 years to less than 35 years. Also 53.7% of the respondents are married and 74.3% of the respondents have Bachelor degree and beyond. The results showed too that 48.9 % of the respondents get their information's for prevention of COVID-19 from social media network and use social media pages as main media source and 71.7% of the respondents spend more than two hours in using

media channels on daily basis. Lastly the results of the study showed that 66.5 % of the respondents live in Saida city (see Table 1).

Table 1. Sociodemographic characteristics of respondents (n = 460).

Sociodemographic characteristics of respondents (n = 400).  Sociodemographic characteristics	n (%)
Gender	
Male	139(30.2)
Female	321(69.8)
Age group	
18 - 25	156(33.9)
26 - 35	176(38.3)
36 - 45	89(19.3)
46 - 55	2(0.4)
56 & above	37(8.0)
Marital status	
Single	200(43.5)
Married	247(53.7)
Divorced	10(2.2)
Widowed	3(0.7)
<b>Educational level</b>	
Baccalaureate and below	118(25.7)
Bachelor Degree	228(49.6)
Master Degree	108(23.5)
Doctor Degree	6(1.3)
How did you get your information's for prevention of COVID-19	
TV	57(12.4)
Social media	225(48.9)
Newspapers	3(0.7)
Internet Resources (websites, applications)	138(30)
Other sources	37(8.0)
How much time do you usually spend using media on daily basis?	
Less than 2 hours	130(28.3)
Between 2 hours and 4 hours	200(43.5)
Between 4 hours and 6 hours	85(18.5)
More than 6 hours	45(9.8)
In which province do you live?	
Saida	306(66.5)
Tyr	154(33.5)

### **Discussion**

With respect to differences of health education through media and the prevention level of Covid-19 pandemic among difference socio- demographic groups, simple T-Test and ANOVA tests were done to assess this difference at P value  $\alpha \le 0.05$ .

T-test measured the difference in health education through media and the prevention level of Covid-19 pandemic between gender, the 2 provinces and the question where do live. For all variables,  $\alpha > 0.05$ , this indicated no difference among the two groups with respect to health education through media and the prevention level. ANOVA-test measured the difference in health education through media and the

prevention level of COVID-19 pandemic for marital status, age group, education level, source of information and the main source of media. For all variables,  $\alpha > 0.05$ , this indicated no difference among the different groups of these variables with respect to health education through media and the prevention level. (see Table 2)

Table 2. Relationship between sociodemographic characteristics and the health education through media

and the prevention level of COVID-19 Pandemic.

	Health education through media	Prevention of COVID-19 Pandemic
	P value	P value
Gender	0.491	0.129
Province	0.944	0.180
Marital status	0.181	0.174
Age group	0.715	0.822
<b>Education level</b>	0.315	0.123
Source of information's	0.322	0.199
Time usually spend using	0.292	0.527
media		

These results were similar to other studies such as (Kassimi, 2015; Liping Liu, 2020; Al-Dmour, 2020; Rehman, 2021). For both variables,  $\alpha$  level showed no significant difference. Thus, it can be concluded that the health education through media and the prevention level of COVID-19 pandemic does not differ among different socio-demographic groups of respondents in Saida and Tyr provinces. These results were different from other results from other countries such as Palestine (Radwan, 2020) and Jordan (Karasneh, 2020). Thus, Alternative hypothesis number two (Ha2) and alternative hypothesis number three (Ha3) were rejected.

A Pearson correlation tests were done between the four dimensions of independent variable (health education through media) and the dependent variable (prevention of COVID-19). The results were similar to some other studies such as (Radwan, 2020; Rehman, 2021). The results of the Pearson correlation tests are given as follow (see Table 3 and Table 4):

Table 3. Correlations between the dimensions of Health education through media and the prevention level of COVID-19.

	Prevention of COVID-19 Pandemic	
	Correlation r	P Value
Constructs of information	0.291*	0.000
Motivation	0.415*	0.000
Behavioral skills	0.469*	0.000
Media Confidence	0.340*	0.000

Table 4. Correlations between the dimensions of prevention level of COVID-19 and the Health education through media.

	Health education through media	
	Correlation r	P Value
Behavioral Prevention	0.293*	0.000
Cognitive prevention	0.526*	0.000

- A Pearson correlation test was done for the variables constructs of information's from media and prevention measure of COVID-19 pandemic. A significant correlation was shown between these two

variables  $p=0.000 \ge 0.05$  at 95% significance level. The r=0.291 which is a weak positive correlation. Thus constructs of information's from media has statistically impact on prevention measure of COVID-19 pandemic among the sample respondents. The sub-hypothesis (Ha4) was accepted.

- A Pearson correlation test was done for the variables motivation to follow health programs and campaigns through media and prevention measure of COVID-19 pandemic. A significant correlation was shown between these two variables  $p=0.000 \ge 0.05$  at 95% significance level. The r=0.415 which is a moderate positive correlation. Thus motivation to follow health programs and campaigns through media has statistically impact on prevention measure of COVID-19 pandemic among the sample respondents. The sub-hypothesis (Ha5) was accepted.
- A Pearson correlation test was done for the variables behavioral skills of participants and prevention measure of COVID -19 pandemic. A significant correlation was shown between these two variables  $p=0.000 \ge 0.05$  at 95% significance level. The r=0.469 which is a moderate positive correlation. Thus behavioral skills of participants have statistically impact on prevention measure of COVID -19 pandemic among the sample respondents. The sub-hypothesis (Ha6) was accepted.
- A Pearson correlation test was done for the variables media confidence of participants and prevention measure of COVID -19 pandemic. A significant correlation was shown between these two variables p=0.000  $\geq$ 0.05 at 95% significance level. The r = 0.34 which is a moderate positive correlation. Thus media confidence of participants has statistically impact on prevention measure of COVID -19 pandemic among the sample respondents. The sub-hypothesis (Ha7) was accepted.
- A Pearson correlation test was done for the variables health education through media and prevention measure of COVID -19 pandemic. A significant correlation was shown between these two variables  $p=0.000 \ge 0.05$  at 95% significance level. The r=0.475 which is a moderate positive correlation. Thus the overall health education through media significantly impacts the prevention measure of COVID -19 pandemic among the sample respondents. The main alternative hypothesis (Ha1) was accepted (see Table 5).

**Table 5.** Correlations between Health education through media and the prevention level of COVID-19.

	Health education through media	
	Correlation r	P Value
Prevention level of COVID-19.	0.475*	0.000

#### Conclusion

During the COVID-19 health crisis, timely and adequate information will keep the public informed and help curb future outbreak of the disease. This study provided empirical evidence that the health education on different media channel could prompt preventive behaviours either directly or indirectly. For instance, seeking COVID-19-related information on media channels was associated with increased preventive practices. Whereas COVID-19 information seeking on media channel could elicit intense worry and, in turn, lead to engagement in the COVID-19 preventive actions. This study sheds some light on the previous findings that communicating health information through media channels is effective during a health crisis, and people's likelihood of engaging in precautionary behaviours is proportional to the exposure to COVID-19-related information on different media channel.

From this study we can conclude that there is no significant difference in the health education level through media and the prevention behaviour about COVID-19 pandemic among different socio-demographic groups of respondents in Saida and Tyr provinces. Also there is a moderate positive correlation between the health education through media and prevention measure of COVID -19 pandemic among respondents in Saida and Tyr provinces. Our findings suggest that the health education using the media platforms can positively influence the prevention behavioural of population and public protection against COVID-19.

Public health authorities may use media platforms as useful tools to increase public health prevention through the dissemination of brief messages to targeted populations. More research is needed to validate how media channels can be used to improve health prevention and adopt healthy behaviours in a cross-cultural context.

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