

The Effect of Controlling Individual's Health Behavior on their Awareness Level to Limit the Spread of COVID-19 Pandemic

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This study aims to identify the effect of controlling people health behavior on their awareness level in order to limit the spread of Covid 19. This study is one of the descriptive studies that rely on questionnaire as a tool for collecting data from sample of 414. The target participants were students' families in certain Saudi universities. The study found participants have an increase health awareness level and there is a statistically significant relationship between participants health awareness level and controlling healthy behavior, which indicates that participants who have a higher health awareness level are following up the health behavior at a higher level according to the for personal variables, gender, marital status, and economic level. The study recommends the importance of raising the level of health awareness through education and training on the internal health behavior control to convert the health knowledge into behavioral practices that support the health aspect and contribute to its development.

Key words: *Health Behavior, Health Awareness, Covid 19 Pandemic*

Introduction

Medical sociology is concerned with studying the relationship between health, disease, and treatment, this highlights the relationship between the social and cultural aspects in identifying the types of diseases, their interpretation, treatment, and the nature of the relationship with health services and their treatment methods. Therefore, it can be said that the agreement point between physicians and sociologists is that the doctor's main concern is how to maintain health, control disease, and the ways in which human behavior effects on



treatment process. While the medical sociologists, search about the social aspects of health topics and problems in society, especially these problems are not known for their impact on human behavior in cases of health and disease, but rather through indicators that can reflect behavior in its response to the health and disease, and thus health and disease are related to the quality of life, its reproduction, preservation, and loss. So medical sociology interesting in how people perceive their world about health and disease, and the characteristics of human and social values.

Medical sociology represents an appropriate scientific approach to study controlling healthy behavior and its effect on health awareness, which requires an integrated approach in research and study that reconciles the intellectual schools of social sciences that provide a great quantity of scientific explanation and logical interpretation for the health behavior and its effects on the individual and society.

Health control is considered as a learned behavior that can influence on individuals and thus change their health awareness level by educating individuals and raising their awareness for the purpose of changing their behavioral habits, especially in the event of diseases spread in society, and then this will lead to enhancing healthy behavioral habits (Al-Zouk, 2017)

The problem of this study is summarized in the following main question: What is the effect of controlling health behavior on the level of awareness to limit Covid 19 spread?

Study Problem

Corona virus disease 2019 (COVID-19) is an infectious illness caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). corona virus spread has been defined as a pandemic by the WHO, its impact is being felt in all the world (Mogaji et al., 2020).

Corona virus pandemic has represented a comprehensive global event since its outbreak in China in late of 2019 and it is spread to the rest of the world during the first half of 2020, which led to many social, economic, and psychological effects. Coronavirus pandemic health consequences and its rapid spread affected all life aspects in the world and forming an unfamiliar unexpected social life whose future developments are difficult to predict accurately and clearly. Many unprecedented changes have been happened in the daily life due to the increase of the number of infection cases and deaths. the World Health Organization has put many precautionary measures to control the spread of the epidemic in the world (Xiang et al., 2020).

Corona virus is one of the second-generation acute respiratory syndromes (SARS-COV-2), and it was discovered by the DNA analysis which conducted for people with unknown pneumonia in Wuhan, China. The Corona virus infection have respiratory and digestive symptoms. The sources and routes of infection vary through those who are infected or the



infected people with no symptoms, or through sneezing or contact with hands (Olivera-La Rosa et al., 2020). Generally, there are groups that may be more susceptible to infection with the virus, such as the elderly and patients with chronic diseases (Sun et al., 2020).

Most of the countries have been compelled to take precautionary and preventive measures that directly affect social life. People are forced to isolate themselves in their homes, and all forms of gatherings have been strictly prohibited. Indeed, policies have been adopted to change the boundaries of social distancing, such as dealing with the outside world except through the Internet, considering that social contact and physical closeness are among the main causes of infection transmission (Fu et al., 2020). The spread of negative news about the epidemic has led to significantly increase the psychological burden, anxiety, depression, and insomnia on the quality of life and physical health of people living with the epidemic and the general population (Fu et al., 2020). WHO announced that people shall leave safe distances (not less than two meters) to interact with others outside their homes, reduce interactions, and avoid narrow spaces in institutions, companies, or markets? In addition, individuals begin to use prevention tools and disinfect their workplaces and presence, and companies reduced occupancy intensity in half (Sun & Zhai, 2020). As a result, most aspects of social, economic, and cultural life have ceased almost completely, accompanied by a change in daily behaviors and activities (Chen et al., 2020; Lewnard & Lo, 2020).

It also imposed the gradual return to normal life in June 2020, after a period of closure and prohibition, to adhere to a set of preventive measures and behaviors that maintained the principle of spacing, caution and restricting movement, procedures that may be applied and adhered to for a long time. This requires studying behaviors and knowing the extent of awareness and individual's ability to control their behavior, as the health control is an educated behavior that can contribute to influencing individuals and thus change their health awareness level by increasing individual's awareness for the purpose of changing their behavioral habits, especially in the event of diseases spread in society and then this leads to enhancing healthy behavioral habits. The problem of the current study is summarized in the following main question: What is the effect of controlling healthy behavior on the awareness level to reduce Covid 19 spread.

Study Objectives

The study aims to identify: The effect of controlling health behavior on awareness level to limit Covid 19 spread.

Study questions

The study aims to answer the following main question: What is the effect of controlling health behavior on awareness level to limit Covid 19 spread, and this question is divided into several sub-questions:

- 1- Knowing the participants health awareness level?
- 2- Are there statistically significant differences between the health awareness level of participants and their controlling the health behavior of according to the different variables which are age, gender, marital status, educational, and economic level?
- 3- Is there a relationship between the participants health awareness level and their health behavior controlling?

Literature reviews

The concept of control center is considered a relatively recent concept and the first credit for the emergence and prominence the concept of control center is given to Julian Rotter (1966) when he formulated the theory of social learning in the mid-fifties. Thus, they are divided into two types of individuals, individuals with an internal locus of control who believe in their ability to self-control and influence and control events, and individuals with an external control center believe that the process of controlling outcomes related to their behaviors is subject to external forces and factors such as luck. And the influence of those with power and influence (Rotter, 1975-1990).

According to the health control theory, there are two dimensions of the health control and health control center, an internal and an external dimension (Singh, 2006, p. 40). Where the owners of the internal health control center believe that protecting and promoting their health is a responsibility of them alone, in terms of preventive health behavioral practices that they do. Unlike the owners of the external control center who see that health is affected by external factors such as luck and that protecting and promoting the health of individuals is the responsibility of health workers, including officials and doctors (Page, 2001, p. 5576) on the other hand, individuals with an external control point (other than Health) They always feel that they are lacking in power and ability to control their success and failure, they have shown a higher level of professional dissatisfaction, and they feel continuously stressed and dissatisfied with their lives. While individuals with an internal control point exhibit positive behavior, their self-image is positive and good (Kulshrestha & Sen, 2006, p. 96; Schmit, 2001, p. 3922).

The control center is a dimension of personality as it affects many types of behavior. The individual's belief that he can control his private and public affairs allows him to adapt and enables him to be compatible with the environment in which he lives (Bar-On, 2006). The control center is considered one of the important variables in affecting mental health, as the external dimension of the control center is related to neuroticism, anxiety, and negativity in social interaction. While the level of psychosocial compatibility increases whenever the control center is internal (Yakhlef, 2001). There are several studies that emphasized the importance of the internal (health) control point in achieving psychological and social harmony for the human being, as it was found through them that poor psychological and



social compatibility, social avoidance, low social self-esteem, social anxiety, and depression are negatively related to the internal (health) control point (Meijer et al., 2002, p. 1453).

The results of research and studies that have adopted the theory of health control have shown that there is a significant relationship between the practice of health-related behaviors and the health control center. As these results indicated that the internal health control center raises the level of willingness and desire to practice preventive health behaviors, unlike the external control center (Seeman, 1991) and that the internal control center not only directs preventive health behavior, but also works to activate the confrontation method (Coping) or dealing with the condition of the disease (Holtenhof et al., 2000; Marks et al., 1986).

The theory of the health control center has proven its strength through its wide uses in explaining the relationship between health, behavior, prevention and dealing with disease situations. Therefore, the control center must be viewed as a communicator and one of its sides is control or internal and external control, and that individuals fall on points and places between them. That there are few of them, they are of a large internal or external orientation and are relatively constant (Hjell & Ziegler, 1992).

Scientists have indicated the existence of another type of tuning that includes a mixture between the internal and external types. People who have this combination of the two types of control center are often known as biculture, and they enjoy their ability to deal with stress and cope with their illnesses more efficiently by having a combination of an internal control center and an external control center. These people with this mixture of central controls can take personal responsibility for their actions as well as their consequences while remaining dependable and have faith in external resources. These characteristics correspond to both the internal control center and the external center, respectively (Jacobs, 2011).

We find that the point of control that the individual adopts is what makes him aware of the behavior and its consequences, and there are those who attribute the stressful life events and situations that face them in their lives to competence, merit, and personal ability. External controlling the course and outcome of events such as luck, chance, and opportunity. They adopt an external control point (Yates et al., 1994, p. 289).

Studies have shown a positive correlation between the internal (health) control point with the ability to assume responsibility (Deniz, Tras, & Aydogan, 2009, p. 630), and with psychological compatibility among university students (Stuart & Marcia, 2001, p. 3071), With high self-esteem (Salami, 2007, p. 59), life satisfaction, professional satisfaction, and positive life events (Kulshrestha & Sen, 2006, p. 96).



Previous studies

A study conducted by AlHosan et al. (2020), to detect the role of teachers in increasing university students' awareness, at Princess Nourah Bint Abdul Rahman University in Saudi Arabia indicated that there are high levels of teacher's perception of their skill, health, and ethical responsibilities to increase students' awareness about the COVID-19 pandemic (Al-Hosan et al., 2020).

Singh et al. (2020) assess the awareness, threat, symptoms, and its prevention among people of India about the COVID-19. The study found participants have adequate awareness for COVID-19 outbreak and its preventive measures. In addition, Peoples understand importance of social distancing and other preventive measures. Also. Peoples are following trusted sources for corona information (Singh et al., 2020).

Gul (2021) determine the level of public risk perception and collect the study data through questionnaires and interviews of populations sampling from five districts through researcher visits and via phone calls and online through internet. Theory of Health Belief Model (HBM) was utilized to explain public health risk perception. The study found the lack of public health risk perception has more in non-educated people than educated among people, and this was the reason of increasing Coronavirus infection. The findings have indicated that both health professionals and other educated people have different health behaviors than those who are non-educated about the Covid-19 pandemic (Gul, 2021).

Polychronis (2020) conduct a systematic review about how to enhance health workers knowledge and perception of the spread risk of COVID-19. Researcher found the health workers had a satisfactory perception of risk about the spread of COVID-19. But it is also noted that certain demographic characteristics (occupation, age, and years of experience) appear to affect health workers knowledge and perceptions. Researchers recommend application many educational programs to provide health workers with the required support and to increase their perception of the spread risk of COVID-19 (Polychronis et al., 2020).

A cross-sectional and analytical study was conducted on 2021 in Taiwan to study the disease prevention behavior During COVID-19 pandemic and the role of individuals self-esteem. A structured questionnaire and an online survey were used to collect data. the extended parallel process model (EPPM) was used to understand factors in COVID-19 prevention behaviors. The study found When developing healthcare policies and community interventions for improving COVID-19 prevention behaviors during an outbreak, healthcare administrators should carefully consider the main constructs of the EPPM, particularly personal characteristics (i.e., self-esteem) and demographic characteristics (i.e., age and gender) (Lin et al., 2021)

Internet may have variance effects, by both connecting individuals with resources, or support the constant checking of negative data and information. Locus of control is an important in the uncontrollable pandemic. Sigurvinsdottir et al. (2020) carried a study to investigate the internet use role and locus of control. Study results prove that the experience of using internet related to existence fewer depression symptoms at participants, but information searching process is associated with more symptoms. Having an external locus of control related to existence a greater depression symptom at participants. Researchers recommend that public health officials shall focus on the internet use and locus of control could be targets to improve mental health in the society (Sigurvinsdottir et al., 2020)

Human behavior is central to transmission of corona virus. Changing behavior is very important to preventing transmission in the absence of pharmaceutical interventions. A study conducted by West et al. (2020) found that the Isolation and social distancing could reduce virus transmission, but there is an urgent need for effective interventions to increase the commitment in behaviors that can protect individuals themselves and others (West et al., 2020).

Socially responsible behavior is very important for reducing the spread of infectious diseases in general. In an incentivized study carried by Campos-Mercade et al. (2021) found that most people are very reluctant to put others at risk for their personal benefit. Prosocial individuals mostly follow preventions measures. Study indicates that that the impact of policies on society individuals depend on prosociality degree (Campos-Mercade et al., 2021).

Social media have become commonly tool to find the medical information related to corona virus pandemics. During nowadays, individuals are forced to stay at home, so the social media were the most effective way for supporting awareness and providing pandemic updates. Saud et al. (2020) carried study aimed highlighting the situation of Indonesian society, researcher collects the data from social media users from March and April 2020. The total number of 348 participants collected through random sampling technique. Study results proved that the social media have been used to seek social supports from the participants online networks and offline friends, relatives, and colleagues. (Saud et al., 2020).

Study terms

Health awareness (Health Awareness)

The positive behavior that positively affects health and the ability to apply information in daily life continuously until it becomes behavioral habits that contribute to the preservation of health) (Abdelhak et al., 2012, p. 941). Health awareness is a term presented in the 1970s. Health awareness have a significant importance in public health. It is interesting with the capacities of individuals to meet the complex demands of health in a modern society (Simonds, 1974; Sørensen et al., 2012).



Locus of control

Locus of Control is a one component of social learning theory. The likelihood of a given behavior occurring varies according to (a) the expectancy that a particular reinforcement will occur because of the behavior, (b) the value of the expected reinforcement, and (c) the psychological situation (Rotter, 1982).

Health locus of control

The way in which the individual perceives the factors that cause the results of his behavior, whether these results are satisfactory, such as reward in all its forms, or unsatisfactory, such as punishment in all its forms, is it latent in himself or it arises from external circumstances and events that are beyond his ability, energy, and capabilities (Darwaza, 2007). Health Locus of Control defined by Wallston and colleagues, as the degree to which individuals believe that their health is controlled by internal versus external factors (Wallston et al., 1982).

Methodology

This study is one of the descriptive and analytical studies aimed to investigate the effect of controlling health behavior on individual's health awareness level to limit Covid 19. A random sample of (414) was taken from the student's families of the following Saudi universities: Princess Noura bint Abdul Rahman University, King Saud University, King Abdulaziz University, and King Faisal University was selected. Data were collected by using a questionnaire after the validity and reliability tests were performed. The study was conducted during the year 2020-2021.

Results

The reliability test was conducted using Cronbach's alpha at a degree of reliability of 95%. The percentage of reliability was 80.5%, which is indicate the validity of the 414 responses for statistical analysis on the 26 different questions included in three main axes.

The first question: What are the socio-economic and demographic characteristics of the participants

Table (1): Distribution of research sample according to some demographic variables (No. 414)

Variable	Sub-groups	Frequency	Percentage %
Gender	Male	126	30%
	Female	288	70%
Marital Status	Married	100	24%
	Single	308	74%
	Divorced	6	1%
Income level	Low	114	28%
	Medium	278	67%
	High	22	5%

According to table (1), most of the sample participants are female 70, regarding the marital status, the most of sample were “single” 74%, in addition to most of sample were earn middle-income earners 67%.

The second question: What is the health awareness level at participants?

Table (2): The results of the frequencies and the arithmetic means of the responses of the sample participants.

#	Item	Agree		I do not know		Not agree		Mean	Rank
		Freq.	%	Freq.	%	Freq.	%		
1	I Know prevention corona virus methods	392	95%	18	4%	4	1%	2.94	1
2	I know how the Corona virus is spreading	360	87%	50	12%	4	1%	2.86	2
3	I have knowledge of the Corona virus infection symptoms	352	85%	32	8%	30	7%	2.78	4
4	I know the procedures of isolating people who infected by Coronavirus	362	87%	42	10%	10	2%	2.85	3
All axis								2.86	

The first axis: (the level of health awareness among the participants)

It is evident from the previous table that there is a statistically significant difference between the frequency of the participants responses in favor of the response (agree) on all statements of the first axis related to (the participants health awareness level). And it became clear that the highest average for the phrase (Know ways to prevent corona virus) had an average of (2.94), while the lowest average for the expressions of this axis was (2.78) and the phrase (I have knowledge of symptoms of infection with Corona virus) as the general average of the axis reached (2.86), which is what It indicates that the study sample is very knowledgeable and at a high level of health awareness regarding methods of preventing Coronavirus, knowledge of how it spreads, symptoms of infection, and procedures for isolating the infected.

The third question: What are the sources of health information about Covid 19

Table (3): The second axis: (Sources of health information about Covid 19)

#	Item	Agree		I do not know		Not agree		Mean	Rank
		Freq.	%	Freq.	%	Freq.	%		
1	Official websites of the Ministry of Health or WHO	370	89%	22	5%	22	5%	2.84	1
2	Social media	294	71%	40	10%	80	19%	2.52	2
3	Others such as (friends and family) etc.	248	60%	66	16%	100	24%	2.36	3
All Axis								2.57	

Confidence level (95%), statistically significant at (0.05) level

It is evident from the previous table that there are statistically significant differences between the frequency of the responses of the participants in favor of the response (agree) on all statements of the second axis related to (sources of health information about Covid 19). Whereas, the highest average of phrases was for the phrase (official websites of the Ministry of Health or the World Health Organization with an average of (2.84), followed by social media with an average of (2.52), while the lowest average of phrases for this axis was (2.36) and the phrase (other such as (friends and family)) was And the like) that the general average for the axis was (2.57 out of 3), which indicates that the study sample agrees in general with the sources of health information.

The fourth question: What are the methods of controlling health behavior?

Table (4): The results of the frequencies and the arithmetic means of the responses of the sample participants.

#	Item	Agree		Neutral		Disagree		Aver.	Ranking
		Freq.	%	Freq.	%	Freq.	%		
1	Commitment to the application of social distancing between me and others	354	86%	38	9%	22	5%	2.8	13
2	You can catch Covid-19 infection from a person without symptoms of the disease	352	85%	48	12%	14	3%	2.82	11
3	Seek medical care if I have symptoms of coronavirus	372	90%	32	8%	10	2%	2.87	7
4	I communicate with my friends and relatives through social media	376	91%	14	3%	24	6%	2.85	8
5	I wear a muzzle when I get out of the house	382	92%	20	5%	12	3%	2.89	5
6	Wash my hands often and use soap and water or an alcohol solution to sterilize the hands	360	87%	30	7%	24	6%	2.81	12
7	Make sure to cover my nose and mouth with my elbows or a tissue when coughing or sneezing	370	89%	26	6%	18	4%	2.85	8
8	Masks help prevent transmission of the virus from the person who wears the muzzle to others	386	93%	16	4%	12	3%	2.9	4
9	The goal of self-isolation is to prevent spreading infection to others	384	93%	24	6%	6	1%	2.91	2
10	The virus spreads through direct contact with an infected person or touching an infected surface and then touching the mouth, nose, or eyes	388	94%	14	3%	12	3%	2.91	3
11	Ban means restricting activities and isolating people who are not sick, with the aim of preventing the spread of disease	380	92%	24	6%	10	2%	2.89	5
12	I dispose of the used muzzle immediately by throwing it in a closed trash bin	366	88%	30	7%	18	4%	2.84	10
13	Know the groups most vulnerable to infection with Coronavirus, such as the elderly and those with chronic diseases	390	94%	16	4%	8	2%	2.92	1
14	Use the muzzle more than once to save money *	86	21%	36	9%	292	71%	2.5	15
15	Going out with friends and relatives is more important than adhering to the precautionary measures *	64	15%	34	8%	316	76%	2.61	14
16	Purchasing sterilizers and masks is expensive *	170	41%	90	22%	154	37%	1.96	19
17	Staying home for fear of catching the virus interferes with my religious practices *	114	28%	66	16%	234	57%	2.29	16
18	Use popular prescriptions and medicines to prevent infection with Corona virus *	152	37%	90	22%	172	42%	2.05	17
19	Adhere to preventive measures for fear of financial penalties *	178	43%	64	15%	172	42%	1.99	18

#	Item	Agree		Neutral		Disagree		Aver.	Ranking
		Freq.	%	Freq.	%	Freq.	%		
	All Axis							2.67	

The third axis: (methods of controlling healthy behavior)

The level of confidence (95%), statistically significant at the level (0.05) * counter-questions whose values were reflected in the statistical analysis. It is evident from the previous table that there is a statistically significant difference between the occurrences of the responses of the participants in favor of the response (agree) on all the statements of the third axis related to (Methods of controlling healthy behavior) Except for the last four questions, it was in favor of the response (neutral). That is, the total study sample agrees, in statistical terms, with most methods of controlling healthy behavior. It is clear that the highest average of the phrases of the axis was the phrase (Know the groups most vulnerable to infection with Corona virus, such as the elderly and those with chronic diseases, with an average of (2.92 3), while the lowest average for the phrases of this axis It reached (1.96 out of 3) and the phrase (buying sterilizers and masks is financially costly), which is an average within the range of response (neutral), and the overall average for the axis reached (2.67), which indicates that the study sample generally agrees with methods of controlling healthy behavior to reduce Covid 19.

The Fifth question: Is there a relationship between the level of health awareness and controlling the healthy behavior of the participants?

It is evident through the correlation analysis, that there is a statistically significant relationship between the level of health awareness among the participants and the control of healthy behavior, which indicates that people who have a higher level of health awareness, are disciplined healthy behavior at a higher level.

Table (5): Results of the correlation analysis between the level of health awareness and controlling the healthy behavior of the participants (414)

	<i>Level of health awareness</i>	<i>Control health behavior</i>
<i>Level of health awareness</i>	1	
<i>Control health behavior</i>	0.462776	1

The fifth question: Are there statistically significant differences between the level of health awareness and controlling healthy behavior among the participants according to the variable of sex, marital status, and economic level?

To find out the effect of demographic characteristics on the results of the analysis of the association between the level of health awareness and controlling healthy behavior, the

arithmetic averages of the first two axes entitled (the level of health awareness among the participants) and the third axis (methods of controlling health behavior) were tested, and the results are as follows:

Table (6): The effect of demographic characteristics on the results of the correlation analysis between the level of health awareness and controlling the healthy behavior of the participants (n = 414)

Variable	Subgroup	Means of health awareness level	Means of controlling healthy behavior
Gender	Male	2.73	2.41
	Female	2.91	2.6
Marital status	Married	2.91	2.51
	Single	2.84	2.56
	Divorced	2.92	2.65
Income level	Low	2.77	2.46
	Medium	2.88	2.58
	High	2.95	2.58

It is evident from the previous table that there is a gender effect, as there are statistically significant differences between the level of health awareness and controlling healthy behavior among the participants according to the gender variable. As women are more aware compared to men regarding health awareness about COVID-19, they are therefore more disciplined in their health behavior compared to men.

As for the effect of marital status, it was found that there are statistically significant differences between the level of health awareness and controlling healthy behavior among the participants according to a variable of the marital status. Where the participants with a marital status "divorced" are more aware compared to the participants with "single" and "married" status, and they are also more disciplined in their health behavior.

Regarding the economic level, there are statistically significant differences between the level of health awareness and controlling healthy behavior among the participants according to the variable of the economic level. Where participants with a "high" economic level are more aware compared to participants with a "low" and "medium" economic level, however, both "high" and "middle" income participants enjoy equal levels of discipline in their health behavior

Discussion

Study sample is well educated and at a high level of health awareness regarding methods of preventing Coronavirus, knowledge of how it spreads, symptoms of infection, and procedures

for isolating the infected. This may be due to benefiting from the educational information published by the media and social media. Where we find that the study sample benefited in general from health information sources. Social media have become commonly used to search about the medical information to collect information regarding corona virus pandemics (Saud et al., 2020).

It was evident that there is a statistically significant relationship between the participants level of health awareness and controlling health behavior, which indicates that people who have a higher level of health awareness are disciplined by health behavior at a higher level.

It is evident that there are statistically significant differences between the level of health awareness and controlling health behavior among the participants according to the gender variable. As women are more aware compared to men regarding health awareness about COVID-19, they are therefore more disciplined in their health behavior compared to men.

It appears that there are statistically significant differences between the level of health awareness and controlling health behavior among the participants, depending on the variable of the marital status. Where the participants with a marital status "divorced" are more aware than the participants with "single" and "married" status, and they are also more disciplined in their health behavior.

It is also evident that there are statistically significant differences between the level of health awareness and controlling health behavior among the participants depending on the variable of the economic level. Where participants with a "high" economic level are more aware compared to participants with a "low" and "medium" economic level, however, both "high" and "middle" income participants enjoy equal levels of discipline in their health behavior.

Recommendations

1. Promoting raising health awareness level through training on the internal health control, through health education, and from use of the various social media means to spread the preventive health information.
2. Controlling health behavior is a learned behavior and can affect individuals and thus change their level of health awareness, given that awareness means educating individuals and raising their awareness for the purpose of changing their behavioral habits, especially in the case of spreading diseases in society. This requires teaching and enhancing positive health habits that will support and develop the health aspect through school curricula, family, and all available means to.
3. Despite the high health awareness level at the sample participants, the actual and practical of the health reality is different because health information has not been used to in the

form of behavioral practices. Health awareness is an application for health knowledge and information through behavioral patterns that can be applied with any positive behavioral pattern influences health and the ability to apply them in whole or in part.

4. Despite talking about the source of external and internal control, we find another type of tuning that includes a mixture of internal and external types. People who have this mixture are often known as dicenters. And those persons who enjoy this mixture of central controls can assume personal responsibility for their actions in addition to their consequences, and this is clear in the study sample.
5. Conducting more comparative scientific studies at the international level to know the relationship between degrees of awareness and controlling healthy behavior among community members and to analyze the internal and environmental factors affecting adherence to health behaviors.

Conclusion

The study recommends the importance of raising the level of health awareness through education and training on the internal health behavior control to convert the health knowledge into behavioral practices that support the health aspect and contribute to its development. Controlling health behavior is a learned behavior and can affect individuals and thus change their level of health awareness. This requires teaching and enhancing positive health habits that will support and develop the health aspect through school curricula, family, and all available means.

Finally, researcher recommend conducting more comparative scientific studies at the international level to know the relationship between degrees of awareness and controlling healthy behavior among community members and to analyze the internal and environmental factors affecting adherence to health behaviors.

Data availability statement

The questionnaire that used in this research is available at:

https://docs.google.com/spreadsheets/d/19_jWnA1NOOOK6xcNU2Wk1MetJfLflfaJGWUEorinDDw/edit#gid=1584419687

IRB statement

This research obtained on ethical approval. The approval copy is attached in separate file.

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