

Commitment to healthy behaviors of children due to the Corona pandemic

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Abstract

Childhood is an important stage in an individual's life, in which the personality is established and its features are determined, as for values, customs, beliefs and others are acquired, The child as an individual in society is affected by events and changes affecting this last, and perhaps the Corona pandemic that stroke the world in the last year created many changes in them that has influenced the behavior of individuals in any society, including children.

This study aimed to reveal the level of commitment to health behaviors among children as a result of the Corona pandemic, as the study was conducted in some primary schools in the Bir El-djir district in Oran, using the health behaviors questionnaire designed in this study, a high level of commitment to health behaviors was reached among children due to the Corona pandemic. It was also found that there are differences in the level of commitment to healthy behavior in favor of females, and there are differences in favor of children whose family member has been infected with the Corona virus.

Keywords: Health behaviors, The Commitment, Child, Corona pandemic.

1- Problematics of The Study:

Childhood is a significant phase within which individuals develop and form their personalities. During childhood, they acquire various life skills that potentially make undesired and substandard behaviours to behaviours that are acceptable. Moreover, life skills allow children to interact positively with their society, depending on the different situations they encounter, as they learn how to overcome calamities (on their estimation) and problems. One of the issues children experienced is the covid-19. It was significantly different from other issues given the nature of it; as such, it required dealing with it in a manner that allows rising with the occasion. The pace and scope of spread was unprecedented. Given that the cure has not been formulated, other measures ought to be taken such as guidelines and pieces of advice to limit the scope of spread. (Al-Madlom, 2021).

World Health Organisation and Media outlet revealed that children are not immune to the virus. They rather carry the virus without any symptoms apparent on them. Parents and media were concerned about measures that prevent the spread of the virus. However, the lack of discipline culture in the Algerian society impeded any preventive measures. Parents often complained about lack of discipline in their children in their day-to-day life; during covid-19 was no exception. (Kabrara, 2020).

It is prerequisite to study and understand behaviours that lead to infection and increase the scope of spread, as well as behaviours that are healthy and preventive to the virus. Such is the first step to find resources that protect and develop health care. In addition, identifying obstacles and behaviours that endanger safety of individuals allow remedial and adjustive measures to design and plan programmes that protect the safety of individuals and of health are in general (Redwan and rishka, 2009). Many researchers investigated the role health behaviours inasmuch as their effect are concerned during the pandemic. Christensen and Al (2009) concluded that health behaviours amongst children in India, Popal specifically, was average 57%. Kharbouch (2019) stated that adolescents in Setif (Algeria) had a high sense of responsibility inasmuch as health behaviours are concerned despite the psychological issues they experienced. Mr. Wsliman's study maintains that children in Sudan had average health behaviours to protect from corona virus.

We ask the following question, on the premise of what has been stated:

- To what extent do children adhere to health behaviours during COVID-19?
- Are there any significant differences in adherence to health behaviours concerning the variables: sex and infection of a family member?

2- Study Hypothesis:

- Question one does not require a hypothesis given that it is exploratory
- There are differences in adherence to health behaviours considering the variables sex and infection of a family member with COVID-19

3- Significance and Objective the Study:

The significance of this study lies in two main aspects. The first aspect relates to the age group of the study sample, which primarily consists of children in their childhood phase. This phase requires careful attention and care as it is crucial for the formation and establishment of an individual's personality in the future. The second aspect pertains to the importance of adherence to health behavior among children, particularly in the context of the COVID-19 pandemic. The compliance of children reflects the commitment of the family, in particular, and society as a whole.

Study objectives can be outlined as follows:

- Recognising the extent to which children adhere to health behaviours during the pandemic.
- Recognising the difference in adherence to health behaviours during COVID-19 considering the variables: sex and infection of a family member.

4- Conceptual Framework of The Study:

1- Health Behaviour:

Kasl and colleagues (1966) define health behavior as "a set of activities carried out by individuals for the purpose of promoting, protecting, or maintaining their health, preventing disease, or detecting and controlling symptoms of illness." Khachab (2011) considers health behaviour, as does Serafino (1994) as any activity that an individual takes to lead to protect, identify, or diagnose the disease at an early stage (Bahloul, 2019). Hubley (1993) describes health care as procedures that healthy individuals adopt to protect themselves and others from disease and the consequence of it to enhance their health condition (Mr. Wsliman 2020).

Health care involves three prerequisite aspects:

- Prevention:

It includes any healthy practices that protect individuals from disease, such as vaccination, seeing doctors regularly for routine check-ups. (Yakhlaf, 2001)

- Maintaining good health:

Healthy practices that protect the individual's health such as consuming healthy food. (Zaabta, 2011).

- Promoting Health Care:

Healthy practices that continuously develop the physical condition of the body as much as possible, such as practicing sports.

Procedural definition of health behaviour is the scale that the child scores in a questionnaire designed by researchers.

2- COVID-19 Pandemic:

COVID-19 (Coronavirus): It is a pandemic that primarily targets the cells of the respiratory system. It emerged in China in late 2019 and spread to the majority of countries, which were unable to control it. It has caused rapid infections and daily deaths, leading to a state of panic and anxiety worldwide. In March 2020, the World Health Organization declared Coronavirus Disease 2019 as a pandemic. The severity of the disease lies primarily in its rapid transmission, as it can be directly transmitted from person to person through contact, respiratory droplets emitted by the infected individual, sexual contact, blood transfusion, or placenta. It can also be indirectly transmitted through respiratory secretions that remain on surfaces. The symptoms of the disease include fever, cough, headache, fatigue, and shortness of breath (Suleiman & Mazouzi, 2020).

5- Methodology The Study:

1- **Method of Research:** Descriptive method has been selected because it suits the study.

2- **Research Instrument:**

1- Questionnaire for the Health Behaviours amongst children:

A health behaviour questionnaire for children was designed which counted on a questionnaire designed by Ahmad Abdelmajid Sammadi and Mohammed Abdelghafour (Sammadi 2011). The questionnaire consists of 45 items distributed across four dimensions: Personal Care dimension (8 items), Public Health dimension

(12 items), Medication Management dimension (9 items), and Psychosocial dimension (16 items). The Likert five-point scale (Al-Harathi, 2014) is used to respond to these items.

We removed items and dimensions that are not suitable for the sample (children), and added items related to the health behaviours imposed by the COVID-19 pandemic, the Children's Health Behaviour Questionnaire consists of 22 items distributed across 3 dimensions: Personal Care dimension (6 items), Public Health dimension (8 items), and Preventive dimension (8 items). The responses to these items are based on a five-point Likert scale (Never/Rarely/Sometimes/Often/Always), where a score of 1 is given for the response "Never" and a score of 5 for the response "Always." The scores range from 22 to 110.

2- Psychometric characteristics:

In this study, the psychometric properties of the questionnaire were confirmed by administering it to a pilot sample of 30 children from the Omar Mahnawi Elementary School in Bir El djir. The results were as follows:

Validity: The validity was ensured through the method of discriminant validity, and the results were as follows:

Variables		Arithmetic mean	Standard deviation	Degree of freedom	Value of T	Significance level
Healthy behaviour	Top Group	105.20	11.16	28	6.36	0.01
	Lower Group	25.50	5.16			

From the table, we observe statistically significant differences in the level of health behavior between children with high scores (the upper group) and those with low scores (the lower group). Therefore, we can conclude that the questionnaire is valid.

Reliability: Reliability was ensured through the method of split-half reliability, and the reliability coefficient for the overall questionnaire was found to be 0.79. As for the dimensions, they ranged from 0.83 to 0.89, which are considered appropriate values.

3- Study Sample:

The study sample consists of 120 children from some primary schools in the Bir El Jir district of Oran (specifically, fifth-grade students from the following primary schools: Amir Abdelkader, Al-Jadidaustou, Al-Hajj Ben Ali, Jasmine 4, and Jasmine Al-Jadida 5). They were selected using a random sampling method. The sample comprises 35% males and 65% females.

4- Statistical Method:

The statistical methods used in the study include the following: mean, standard deviation, independent samples t-test. The statistical analysis of the data was conducted using the SPSS 23 software.

6- Data Analysis and Interpretation:

- 1- Results of the First Question: To what extent do children adhere to health behaviours during COVID-19? To answer this question, the mean, median, and standard deviation were calculated, and the results were as follows:

Table (02): Level of health behaviour among children due to the Corona pandemic

Variables	Arithmetic mean	Theoretical average	Standard deviation
Body care	20.12	18	2.48
Public Health	26.17	24	2.25
Protective dimension	31.65	24	2.84
Health behavior	78.08	66	8.24

Reading the table suggests that children have a level of health behaviour that exceeds the average, both overall and in dimensions. It is evident that the order of the dimensions is as follows: Preventive dimension, Public Health dimension, and finally, Personal Care dimension. Therefore, it can be concluded that the level of adherence to health behavior is high among children.

The researchers interpret these results based on several reasons, including the age of the children (middle childhood), which allows them to take care of themselves, their health, and have some awareness of the surrounding risks and how to cope with them to some extent. Additionally, the role of media in raising awareness about the risks of the coronavirus and preventive measures has led parents to take all necessary

precautions to limit the spread of the virus. Over time, these preventive measures have become health habits that have been passed on to their children through practice and continuity.

In this context, families, educational institutions, media, and authorities all share responsibility as institutions for regulating behaviour as a societal aspect. Any dereliction in regulation hinders the transformation of discipline into a daily habit ingrained in individuals (Khabrara, 2020).

2. Results of The Second Question: are there any significant differences in adherence to health behaviours concerning the variables: sex and infection of a family member?

1- Are there any significant differences in adherence to health behaviours concerning sex?

To answer this question, a test was calculated for the differences between two independent groups, and the results were as follows:

Table (03): Differences in the level of health behavior by sex.

Variables		Arithmetic mean	Standard deviation	Degree of freedom	Value T	Significance level
Body care	Males	20.48	2.12	118	2.21	Function at 0.01
	Females	25.76	2.87			
Health care	Males	25.71	1.54	118	1.33	Function at 0.01
	Females	34.36	3.21			
Preventive dimension	Males	25.45	2.64	118	3.23	Function at 0.01
	Females	38.79	2.31			
Health Behaviour	Males	71.65	5.74	118	5.54	Function at 0.01
	Females	98.92	8.21			

The table shows statistically significant differences in the level of health behaviour based on the sex of the child, favoring females, both for the overall questionnaire and its three dimensions (personal care, public health, preventive dimension).

The researchers interpret these results in light of the nature of both males and females. Females tend to adhere to healthy habits more often due to their concern for their health, considering their physiological structure. In comparison, males tend to take more risks, exhibit impulsivity, and show less commitment to healthy habits, especially preventive ones. The act of boasting about not adhering to staying at home among males is considered a rejection of assuming household roles that have been ingrained in them within societal norms and masculine culture. These roles are often perceived as feminine tasks. The traditional and stereotypical division of gender roles often portrays home as a woman's domain, while anything outside the home is associated with men. Therefore, the lockdown that brought men back into the household space disrupted this perception, and many men considered it a significant insult. This led them to break the rules of quarantine and boast about it, as a demonstration of their selfishness and male chauvinism (Khabrara, 2020).

2- Are there any significant differences in adherence to health behaviours concerning sex?

To answer this question, an independent samples t-test was conducted to assess the differences between two independent groups. The results were as follows:

Table (4) shows difference in health behaviour regarding infection of family members.

Variables		Arithmetic mean	Standard deviation	Degree of freedom	Value T	Significance level
Body care	Infection of family member	23.45	1.22	118	2.25	Not significant
	No infection	22.33	2.31			
Health care	Infection of family member	27.52	1.71	118	3.62	Not significant
	No infection	28.39	2.82			
Preventive dimension	Infection of family	47.82	2.71	118	3.87	Function at 0.01

	member					
	No infection	18.31	1.11			
Health Behaviour	Infection of family member	98.79	5.24	118	5.73	Function at 0.01
	No infection	69.04	6.51			

Through the table, we observe statistically significant differences in the level of health behaviour based on an individual's infection within the family, favoring the presence of infection within the family. Regarding the dimensions, we notice non-significant differences in the level of personal care and public health based on an individual's infection within the family. However, we observe statistically significant differences in the level of the preventive dimension based on an individual's infection with the coronavirus in a family. The researchers interpret these results based on the reported death rates, both nationally and globally. Experiencing an infection or death of a family member due to the coronavirus cautions the entire family, urging them to take all necessary treatment and preventive measures to avoid further spread of the infection among family members.

Prevention refers to any planned action taken in anticipation of a specific problem or the occurrence of complications related to an existing problem, with the aim of completely or partially impeding the emergence of the problem or its complications, or both. According to the World Health Organization (WHO), preventive measures are classified into three levels. Primary prevention focuses on preventing the occurrence of an infection or minimizing infection rates to a minimum. Efforts are directed towards confronting and disabling the underlying causes. Secondary prevention aims to detect and prevent the escalation and crises of a pandemic at an early stage. Tertiary prevention focuses on minimizing the long-term consequences of a pandemic. Al-Sayyed, M., & Suleiman, A. (2020).

Conclusion:

Indeed, the issue of promoting and developing health behaviours has gained increasing importance, especially during the current global emergency caused by the COVID-19 pandemic. Therefore, it is crucial to focus on the childhood phase due to its significance in establishing health habits and behaviours. This study found that children's adherence to health behaviours is high. Additionally, statistically significant differences were found in the level of adherence to health behaviours among children based on gender, favoring females. Furthermore, statistically significant differences were observed in the level of preventive behaviour among children based on the presence of a family member infected with the coronavirus.

Recommendations: Based on the study results, several recommendations can be proposed, including:

Intensifying educational programmes and awareness campaigns to raise awareness about the seriousness of the COVID-19 pandemic and the appropriate health measures to handle it.

Providing sports centers and clubs with preventive measures in order to prioritize the recreational and sports aspects for children.

Involving children in awareness campaigns to raise awareness about the seriousness of the COVID-19 pandemic and the appropriate health measures to handle it through school exhibitions and cultural competitions.

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