Research Article

The Effectiveness Of A Health Program To Protect Preschool Children From Communicable Infectious Diseases

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Research Summary: The current research aims to identify the effectiveness of a health program to protect pre-school children from communicable infectious diseases, and from this goal several null hypotheses were derived at a significance level of (0.05). The research sample may be from (63) children and their children divided into two groups, one experimental and the other controlling. Preparing a program commensurate with pre-school children based on activities and events commensurate with this age stage. The validity and consistency of the scale were extracted. Then the program was implemented, the post-test was applied and the results were extracted showing the effectiveness of the health program and the result was in favor of the experimental group. The research came out with a set of recommendations, the most important of which is the application of the program on Elementary school students and its application in other kindergartens.

Research Summary

This current research is to identify the effectiveness of a health program for preschool children's fees from transformative diseases, and from this goal several null hypotheses were derived at a significance level of (0.05). It is suitable for pre-school children based on the activities and events that are commensurate with the stage and age .The validity and reliability of the scale was extracted .Then the experimental program treated you with the primary stage in another kindergarten.

Research problem

Over the past few decades ,the world has witnessed an increase in the number of widespread diseases that have been controlled in optimal ways, and among these diseases are pulmonary tuberculosis and the emergence of new diseases such as "SARS", "bird flu" and "Corona 19" disease ,according to the records of the Iraqi Ministry of Health. Typhoid, viral hepatitis, cholera and malaria are communicable diseases such as , Acquired immunodeficiency disease (HIV) and viral hepatitis type B and C, which are discriminator diseases in the country.

The spread of life-threatening infectious diseases and the emergence of new viruses and epidemics called for the necessity of creating scientific programs and activities aimed at controlling these diseases or limiting their spread and protecting individuals from contracting them, because the absence of health awareness and the violation of health habits facilitates the process of disease and contributes greatly to Its spread among individuals, families and friends, and that many of these diseases spread at the beginning of each semester, and despite all the instructions and advice that parents and educational departments do for children and students, especially for children who are in the early stages of the educational stage, but many diseases appear periodically With the beginning of the school year and the integration into the classroom, Riyadh and schools are not an incubating environment for diseases, only, but rather an increase in infections by merging into the classroom and a natural result due to the presence of children in large groups in which they are exposed to many pathogens such as germs and other elements of infection. Training children on some means of prevention is one of the most important tools that limit infection with some of these diseases that are spread among young people. Vttnoa injuries between the skin injury, eyes, body and ear, nose and throat and other small members of the body, which does not bear many of these diseases, and through field visits and through direct access to Riyad Al - Ahli and government, we find that most of the attention of the parents of the Alamo t and teachers is acquisition child reading skills, writing and arithmetic, without any attention to them in the acquisition of their children's health habits or develop habits and health behaviors sound health education or to choose of sound the environment health for their children or all affect the health habits do not Tvalhm understand unaware that health education in the early stages of human life is One of the most important foundations and standards that must be taken into account because of its great impact on the quality of the child's life and its adoption of healthy behaviors, and thus the effect on his health, immunity, physical growth, concentration and future academic achievement", since the misconception of prevention programs is to isolate the child from the places that are In it there is the possibility of a disease or disease, and this is a wrong

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thinking because viruses and diseases surround us from every direction and are present even in our homes, kitchens and in our family So you must train the children on ways of preventing the risk of them and protect ourselves and others from the transfer of an enemy injury so there must be that a comprehensive health curriculum and means a variety of health education for children in stages early of his life must include several areas and topics, the most important personal hygiene and cleanliness of the house and the place The people sit in it, get rid of waste and garbage, eat healthy foods, take appropriate treatment and consult a specialist doctor in case of disease and other important topics .

Research importance

Paying attention to health education and education for children from their earliest years and starting from the basic stages in Riyadh, helps build knowledge, skills, attitudes and positive health behaviors. Health education includes everything related to the health of the body, mind, emotions, and community health. Children are encouraged to improve and enhance their health and avoid unhealthy habits and behaviors, and thus protect them from diseases, and everything that may harm their health and quality of life (Ministry of Health, 2020, Net).

And that the construction of various programs to provide Altaatdreb and Acquisition skills and health in children helps to learn new skills facilitate m in adopting healthy behaviors throughout their lives, and reduce the followers of any habits or behaviors that may be harmful to them and their health, such as :infections the interim quick spread and promote mental health and emotional They have, and it will improve their habits regarding nutrition and physical activity, and protect them from infectious diseases .

In a study conducted on kindergartens in the United States of America looking at the differences between children who were trained in a guardian program and an educational program based on health education, it was found that these children had higher rates of arithmetic and reading than their peers who did not include health education and programs in their education!

In other studies, it has been found that there is a direct relationship between the increase in interest in and promotion of child health, the increase in school rates and grades in various subjects, his progress over other students, his permanent attendance and the decrease in his absences, and the increase in his mental and mental abilities. This is a clear indication and indication of the importance of health awareness in the early stages of a child's life, because the child in his early stages of life is unable to realize the danger of diseases and viruses in the environment that spread more in educational institutions such as Riyadh and schools due to the presence of a large number of individuals and because of the absence of awareness health among children and the constant absence of supervisors for them, so this study was the main goal of which was to provide children with health awareness to prevent the risk of contracting infectious diseases in pre-primary school stages

Research goal

The current research aims to identify the effectiveness of a health program to prevent pre-school children from communicable infectious diseases. From the above goal, the following null hypotheses were derived:

- 1- There is no statistically significant difference at the level (0.05) between the mean scores of the children of the experimental and control group in the pre-application of the scale of Health Awareness of Communicable Infectious Diseases.
- 2- There is no statistically significant difference at the level (0.05) between the mean scores of the children of the experimental and control group in the post application of the Scale of Health Awareness of Communicable Infectious Diseases.
- 3- There is no statistically significant difference at the level (0.05) between the mean scores of the children of the experimental group in the pre and post application of the Scale of Health Awareness of Communicable Infectious Diseases.

Research limits

The current research determined children of the pre-school grade (males and females) of (5-6) years old who are in government Riyadh in the city of Baqubah of the General Directorate of Diyala Governorate Education for the academic year 2019/2020 AD

Research terms

The program

Abu Umayrah and Shehata knew it: It is a group of various knowledge, concepts, activities and experiences that an institution provides to a group of learners with the intention of contacting them in a way that leads to their learning, i.e. modification of their behavior, the educational goals that it seeks from behind that in a comprehensive way (Abu Amira and Shehata, 1995: 193).

The health program, the researcher knew in theory

It is an educational unit prepared in a coherent way, including a set of goals, experiences, activities, methods, methods, and a variety of assessments aimed at protecting children from communicable infectious diseases.

In this study, the health program is intended to provide children with the health skills that protect them from the communicable infectious diseases that come between them due to mixing in educational institutions such as kindergarten.

Procedural definition of the health program: It is a program prepared by the researcher that aims to provide children with health skills that protect them from communicable diseases.

Preschool children

They are pre-primary school children who are four years old and no older than six (Ministry of Education, 2005, 3-5)

Communicable infectious diseases : They are disorders that are caused by small organisms - such as bacteria, viruses, fungi, or parasites. These microorganisms live in or on our bodies, and are usually harmful or beneficial. However, under certain conditions, some small organisms may cause diseases.(https://www.mayoclinic.org)

Chapter two

Theoretical framework and previous studies

Diseases the interim infectious disorders are occurring because of small objects - such as bacteria or viruses, or fungi, or parasites. Many microorganisms live in or on our bodies .These organisms are usually harmful or beneficial. But under certain circumstances, some small objects may cause diseases j enabled some infectious diseases transmitted from one person to another person .Some diseases are transmitted by insects or other animals. You may become infected with other diseases from eating contaminated food or drinking water, or from exposure to small organisms in the environment.

Signs and symptoms may vary depending on the small organism causing the infection, but include fever and fatigue. Minor infections may respond to rest and home remedies, while life-threatening infections may require a trip to the hospital.

Some infectious diseases, such as measles and chickenpox, can be prevented with immunization. Frequent and thorough hand washing also helps protect you from most infectious diseases.

Symptoms

Every infectious disease has its own signs and symptoms. General signs and symptoms common to a number of infectious diseases include the following:

Fever, diarrhea, fatigue, muscle aches

Cough, decreased appetite, drowsiness and need for sleep

When to visit the doctor?

Suffering from difficulty breathing, coughing for more than a week, severe headache with fever

You suffer from a rash or swelling, you have a fever or you have a high temperature

Suffering from loss of appetite, you feel a great need for a long sleep

How do we get infectious diseases?

A / from the transmission of bacteria and viruses to us, and how is that?

Bacteria: These single-celled organisms are responsible for diseases such as strep throat, urinary tract infections, and tuberculosis.

Viruses: Viruses, which are smaller than bacteria, cause many diseases ranging from colds ,corona and viral hepatitis.

Fungi: Many skin diseases, such as ringworm and athlete's foot, are caused by fungi. Other types of fungi can cause infections in the lungs or nervous system .

Parasites: Malaria is caused by exposure to a very small parasite that is transmitted through a mosquito bite. While some other parasites may be transmitted to humans through animal waste (World Health Association: 2006)

Communicable diseases are among the important challenges facing the whole world, including Iraq. It is possible to reduce injury or infection by following different strategies, the most important of which is training children to:

- Wash hands and use sterilizers and disinfectants on an ongoing basis.
- Eat healthy foods that strengthen the immune system.
- Stay away from crowded places and unclean areas.
- Attention to the cleanliness of the body and the cleanliness of the environment around us.
- Wearing masks and staying away from crowded places.
- Avoid going out of the house if the individual is infected to avoid spreading the virus among healthy individuals.

Chapter three

Research Methodology

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The researcher adopted the quasi-experimental approach, as a pre-test was applied for the two groups)Control and experimental), and then provide the training program on the experimental group alone, after which the post application of both groups was performed. (Control and experimental)

research community

It is all the elements that have a relationship to the research problem and that the results can be generalized to and here are all children of the pre-school class in the governmental kindergartens affiliated to the General Directorate in Diyala Governorate, at the age of (5-6) years, and their number are (911)* a child distributed among (11) Rawda within the district of Diyala province.

Table (1) shows that the research community of children is divided into (11) kindergartens, according to the child's gender variable

	Kindergarten name	Males	Females	Total	
1	Buhriz Kindergarten	59	48	107	
2	Kindergarten children Raheeq	49	38	87	
3	Kindergarten children Gaddah	28	15	43	
4	Al-Raghad Children	63	55	118	
	Kindergarten				
5	Kindergarten two tribes	64	66	130	
6	Al-Areej Kindergarten	78	63	141	
7	Kindergarten children of the	51	31	82	
	blessed tree				
8	Paradise Children	31	19	50	
	Kindergarten				
9	Kindergarten New Testament	20	20	40	
	children				
10	Al-Riahin Kindergarten	30	34	64	
11	Kindergarten	26	23	49	
	children carnations				
T		499	412	911	

^{*}The data were obtained from the Statistics Department in the Diyala Education Directorate

The research sample

One of the riads was chosen to represent the research sample, so it was the kindergarten of Al-Raheeq children, which consisted of 3 classes for the pre-school class . Table (2) shows that

П	റം	h	e	(2)

The division	The groups	variable	The number of male children	Number of female children	Total
The flowers	Experiment	training program	19	14	33
The two winds	The officer	The usual way	13	17	30

Equalization of groups

The members of the sample from the experimental and control groups were equal in order to control all the variables that could affect the program and its results. Equality was achieved in the age of the children, in the educational achievement of the parents, and in the arrangement of the child among his brothers and in the gender of the child.

Search tool

Due to the lack of a tool to measure how to protect pre-school children from communicable infectious diseases, the researcher built the tool after the concept of communicable infectious diseases was defined in children and then identified the areas that represent the program, where the number of paragraphs of the scale was for three areas, which are(35) paragraphs, so the first area was It represented (8) paragraphs, while the second field represented (9) paragraphs, while the third field was of (18) paragraphs. As for the alternatives for the scale, it was (a lot, sometimes, no).

Scale correction

The scale was corrected on the basis of the weights of the paragraphs, which are (1.2.3) if a grade (3) was given for the first alternative, a grade (2) for the second alternative, and a grade (1) for the third alternative, so the highest grade the child gets is (105) and the lowest score is(35).

The validity and reliability of the scale Honestv

The validity of the scale was verified through the validity of the content, which includes the apparent validity and the validity of the logical. The scale was presented to experts and specialists in the aspect of childhood to identify the extent of the integrity of the scale paragraphs and the clarity of its paragraphs. Then the chi square was adopted to verify the compatibility between its paragraphs, and the result was that all experts agreed on its safety Paragraphs of the scale appendix (1).

As for the logical validity, it includes studying the vocabulary of the scale, its contents and its material, i.e. the extent to which the scale represents the material to be studied. This was achieved by defining the concepts of the research, defining the areas of the scale, then building its paragraphs and submitting them to the experts and arbitrators.

Persistence

The reliability of the scale was calculated by the method of the Fakronbach, and it is used to calculate the stability of the measures whose paragraphs are objective or subjective, and it is based on calculating the correlation between all the scale paragraphs on the basis that each paragraph is a stand-alone measure and by using the Alpha Cronbach equation on his sample, the consistency of which is (30) children And his child changed the original research sample, the result was (0.73).

training program

For the purpose of achieving the goals of the current research, a health training program was built that includes many lessons that offer activities and activities commensurate with the age stage of the current research sample. The needs for the pre-school health program for pre-school children were identified to prevent communicable diseases. Then the goals were set for the health program, which is defining general goals and behavioral goals. For the program, it was as follows:

The general objective of the health program: is to train children to prevent infectious diseases in the preschool stage ,ie, at the age of (5-6) years, through activities and activities.

The behavioral goals of the program include cognitive goals, skill goals, and emotional goals

Sample of one of the lessons of the health program (the concept of health and disease)

Behavioral goals that the child knows the concept of disease

That the child knows the concept of health

The techniques used: a short story about a child who neglected hygiene and healthy food and exposed to the disease, and the teacher narrates it and with pictures expressing the story

Type of Activity: Collective

Application place: Inside the classroom

Presentation style: The teacher narrates the story to the children and uses the illustrations to be more clear and interesting to the children, and then the story is represented by a group of children

Program calendar

The preliminary evaluation of the program was applied by applying the scale to the sample before applying the program in the pre-test, then applying the program, then the post-test to represent the final evaluation.

Program implementation

The program was implemented in the academic year 2019/2020 in the first semester, the program lasted for a period of two months, November and December, and the classroom teacher applied in kindergarten after agreement was reached between the researcher and the teacher on the details of the program's implementation and after the researcher prepared and prepared it for the application.

Statistical means

The researcher adopted the statistical bag (spss) In processing current search data.

the fourth chapter

View and discuss search results

This chapter includes a presentation of the research results according to its hypotheses, as follows

The first hypothesis - : There is no statistically significant difference at the level (0.05) between the mean scores of the children of the experimental and control group in the pre-application of the Scale of Health Awareness of Communicable Infectious Diseases.

To verify the first zero hypothesis, the T-test was used for two independent samples, so the arithmetic mean of the experimental group was (59.09) and the standard deviation (8.97). As for the control group the

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arithmetic mean was (58.7). As for the standard deviation (5.41), by comparing these arithmetic means it was found that the calculated T value The amount (0.207) is less than the tabular value, which means that it is a non-significant result in the freedom degree (61) and the level of significance (0.05), as shown in the following table.

Table (3)

The T-test for the significance of the difference between the scores of the experimental group and the control group in the pretest

Groups	the number	Arithmetic mean	standard deviation	Degree of freedom	The level of significance	T Calculated	t Tabular
Experimental	33	59.09	8.97	61	0.05	0.207	1.99
The officer	30	58.7	5.41]			

The result indicates acceptance of the null hypothesis, which indicates that there is no difference between members of the two groups in the pretest test regarding their awareness of communicable infectious diseases, and this indicates that children of the two groups possess the same information and the same experiences regarding these diseases.

1- There is no statistically significant difference at the level of (0.05) between the mean scores of the children of the experimental and control group in the post application of the scale of health awareness of communicable infectious diseases.

To verify the second zero hypothesis, the T-test was used for two independent samples, so the arithmetic mean of the experimental group was (89.24) and the standard deviation (7.11). As for the control group, the arithmetic mean was (57.83). As for the standard deviation (10.14), by comparing these arithmetic means it was found that the calculated final value The amount (14.34) is less than the tabular value, which means that it is a non-significant result in the freedom degree (61) and the level of significance (0.05), as shown in the following table.

Table (4)

The T-test for the significance of the difference between the scores of the experimental group and the control group in the pretest

Groups	the number	Arithmetic mean	standard deviation	Degree of freedom	The level of significance	T Calculated	t Tabular
Experimental	33	89.24	7.11	61	0.05	14.34	1.99
The officer	30	57.83	10.14				

Through statistical analysis, it is found that its value t The calculated one is greater than the tabular, and this leads us to reject the null hypothesis, which indicates that there are no differences between the two groups, as the result was in favor of the experimental group that was exposed to the health program, and this indicates the effectiveness of the health program provided to children, which increased their knowledge of communicable diseases and methods of prevention from them.

2- There is no statistically significant difference at the level (0.05) between the mean scores of the children of the experimental group in the pre and post application of the scale of health awareness of communicable diseases

To verify the null hypothesis of the third was used Altaia test for one sample correlated was the arithmetic average of the test tribal (59.09) and standard deviation (8.97) The arithmetic average of the Aychtbar posttest is (89.24) Ba Nhrav standard (7.11) and comparing these two mediums Alhassabeyen Etbi n that the value of T calculated are (13.96) statistically significant at Mq Arndtha value spreadsheet adult (2.031), which means it is a result of a function of any that we reject the null hypothesis because the calculated value is greater than spreadsheet in the degree of freedom (61) and level (0.05) as shown in the following table:

Table (5)

The T-test for the significance of the difference between the scores of the experimental group in the pretest and the post test

Groups	the number	Arithmetic mean	standard deviation	Degree of freedom	The level of significance	T Calculated	t Tabular
Experimental	33	59.09	8.97	61	0.05	14.34	1.99
The officer	30	89.23	7.11				

Through statistical analysis, it is found that its value t The calculated one is greater than the tabular, and this leads us to reject the null hypothesis, which indicates that there are no differences between the two groups, as the result was in favor of the experimental group that was exposed to the health program, and this indicates the

effectiveness of the health program presented to children, which increased their knowledge of the matter of transitional and methods of prevention.

Discuss the results

Through the statistical application, it was found that the members of the two groups do not have knowledge about transmissible diseases, and this is what the first zero hypothesis revealed, and this shows that children in this age stage did not receive any information in Riyadh or in the family about the communicable diseases present in the environment that threaten human life and threaten health and because children are exposed to infections and possible transfer to others this health program to train children on how prevention e of Communicable diseases contagious of.

As for the application of the program to the children of the experimental group, who are (33), the result was in favor of the experimental group, the program has proven the effectiveness of the fact that children at this age stage are quick to learn and have the ability to acquire skills and information in an excellent manner, and this is what all studies and research on early childhood indicate. learning ability and training, especially as they are intended programs in Lito approved physical and mental abilities of.

Conclusions:

- 1- The interaction of the children of the experimental group with the health program.
- **2-** The lack of curricula for Riyadh children to such awareness programs that are very important to preserve the life of the child, family and society.
- 3- The existence of the effectiveness of the health program provided to pre-school children and this is what was indicated by the post-test that was applied to the children of the experimental group.

Recommendations:

- 1- The program re apply to kindergarten children other in different areas of the province.
- 2- Training Riyadh teachers on the areas of the program so that they can introduce it to the children.
- **3-** Developing the program by adding other areas other than those in the program.
- 4- Print the program in the form of small booklets to be distributed to Riyadh and primary schools.

The proposals

- 1- Conducting studies on health skills other than those offered by the program.
- 2- Conduct a study similar to primary school children.
- 3- Conducting studies for Al-Ahly children in the governorate.
- 5- Building tools and standards that measure the health culture of kindergarten children.

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