Determination Of Knowledge, Thought And Attitudes Of Mothers For Childhood Immunization

Esra BAĞLI[1], Doç. Dr. Sibel KÜÇÜKOĞLU[2]

[1] Selcuk University Institute of Health Sciences, Department of Nursing, Konya, Turkey

[2] Selcuk University Faculty of Nursing, Department of Child Health and Diseases Nursing, Konya, Turkey

Aim:
This study was conducted to determine the knowledge, thoughts and attitudes of mothers about childhood immunization.
Methods: The universe of the descriptive type study was created by mothers with children between the ages of 0-2 who were admitted to the child for any reason in the children's services and neonatal intensive care unit of Selcuk University Medical Faculty Hospital. In the study, the sample size was determined as a result of the power analysis. The study was carried out with 176 mothers by random sampling method. The data were collected using the data collection form and the Vaccine-related Community Attitude-Health Belief Model Scale. Ethical principles were observed during the investigation.
Results:
It was determined that 12.3% of the mothers who participated in the study found vaccines harmful and 91.3% trusted vaccines. The scale lower size scores (except for the perceived obstacle subsize) of mothers who found vaccines harmful were found to be significantly lower. In addition, mothers who thought that vaccination should be mandatory and mothers who thought that vaccination should not be left to parental request, the social attitude-health belief model scale on the vaccine was determined to have significantly higher score averages. ($p<0.05$).
Conclusion:
As a result of the study, it was determined that the average health responsibility and perceived benefit score scoring was higher in the sub-dimensions of the Vaccine-related Community Attitude-Health Belief Model scale. Some thoughts about vaccines were found to affect attitudes about vaccines. In order to reduce the negative attitude towards vaccines, it is recommended that parents intensify awareness efforts.

Keywords: *Immunization, vaccination, vaccine rejection, pediatric nurse.*

INTRODUCTION

Every year, three million people, mostly children and infants, die from vaccine-preventable diseases. (1). 1.5 million deaths can be prevented each year by expanding the scope of global vaccination. (WHO 2018a). Vaccine-preventable diseases still present as important problems today and there are still a number of obstacles to immunization (3).
Communication and media tools, opinions of people and lobbies influential in the community, parents' educational status, number of children, past vaccination experiences, awareness and knowledge about vaccination, fear of the side effects of vaccination, health system experiences and access to vaccination affect parents' vaccination acceptance. The rate of vaccination with paid vaccinations is lower than in routine vaccines (4,5). Lack of information and the belief that misinformation, fear, insecurity and vaccination are unnecessary are an obstacle to vaccination (6). It is obvious that vaccination rejection will cause a serious public health problem. In our country, the number of studies for vaccine rejection is quite insufficient. For this reason, it is

planned to reveal the knowledge and attitudes of mothers giving primary care to children regarding immunization. Determining their knowledge and attitudes about how to vaccinate mothers will be a guide for the initiative and educational practices for vaccination.

Material and Methods

This study is a descriptive study planned to determine the knowledge, thoughts and attitudes about childhood immunization of mothers with children aged 0-2 years.

The Universe of Research

The research is planned to be carried out in the children's services of a university hospital in the city center of Konya. There are three modules of patient service, pediatric emergency room, pediatric intensive care unit and neonatal intensive care unit. The universe of the study is made up of mothers with children between the ages of 0-2 who are hospitalized for any reason in children's services and neonatal intensive care unit. In this study, random sampling method was used from improbable sampling methods.

Sample Size

Power Analysis method was used according to the referenced source (7) to determine the sample size. When sampling 220 people were taken, it was determined that the magnitude of the study was 95% with a 95% confidence interval and the magnitude of the study was 0.3% statistical power with a margin of error of 0.05. The study is ongoing and the data is calculated out of 176 people.

Sample Selection Criteria

Open to communication and cooperation,
Stable condition of baby/child,
Baby/child in 0-2 age group

Data Collection Techniques and Tools

In the study, data collection tool including socio-demographic characteristics and information, thoughts and practices for childhood vaccines, data collection form and Vaccine-related Community Attitude - Health Belief Model Scale used.

Data Collection Form

The data collection form created by the researchers consisted of 17 questions. 8 of the questions question socio-demographic characteristics, 5 of them question information and practices for childhood vaccines. There are also 4 questions that question mothers' thoughts on childhood vaccinations.

Community Attitude on Vaccine - Health Belief Model Scale Scale

It is a likert scale developed by Canbolat and Tanyer at 2018. Scale evaluation cannot be made on the total score. The lower dimensions of the scale, which has a five-dimensional and five-likert response, are all evaluated separately. (8). Cronbach Alpha was rated 0.89 as a result of the test, which was conducted fifteen days apart on 26 items on the scale. The Cronbach Alpha value from this study was 0.81.

Data Collection

Data collected by the researcher between 15.04.2019/15.05.2019, and data collection is still ongoing. Data collection forms are collected by face-to-face interview method. The data were visited by mothers researchers every weekday; Taking into account clinical routines outside of treatment and care hours, mothers were collected in the patient's room at the appropriate times.

Data Analysis

SPSS 21.00 package program was used in data analysis. The conformity of the data to normal distribution was analyzed by Kurtosis and skewness multiples and nonparametric tests were used in the analysis of the data that matched the normal distribution and nonparametric tests in the analysis of non-normal non-distributiondata.

Ethical Dimension

For the execution of the study, written permission was obtained from the Ethics Committee of Selcuk University Institute of Health Sciences and from the institution where the study was conducted. The mothers involved in the sampling were given verbal permission by making the necessary explanations and the data were collected on a voluntary basis.

RESULTS

The mean age of the mothers surveyed was 29.6±6.1 years, 43.8% had primary education, 75.3% were housewives and 36.3% had 2 children. When the perceptions of the economic situation of mothers were examined, it was determined that the majority of mothers stated their economic situation as moderate (64.0%), while the majority of the spouses (35.2%) were educated at primary level.

When the information, practices and thoughts of mothers for childhood vaccinations are examined; it was determined that the majority of mothers (85.6%) received information about vaccines, first indicated midwife-nurse (72.2%) as the source of their preference for information, followed by a doctor (13.6%) and then the Internet (10.2%). 11% of mothers. 9 of them had their children vaccinated outside the routine vaccination schedule, and the most mothers of paid vaccinations had their children vaccinated rotavirus (n=10). 97.7% of mothers stated that their baby would get all the vaccinations, 11 (6.3%) mothers answered yes to the question of whether there was an undone vaccine. In addition, 32.2% of mothers think that vaccines are side effects, 12.3% of vaccines are harmful, 73.3% should be required to get vaccinated, and 33.5% of them should be left to the wishes of parents. 8.7% (n=15) of the mothers who participated in the study stated that they did not rely on vaccinations in the vaccination calendar.

Mothers' Vaccine-Related Community Attitude-Health Belief Model scale sub-dimensions of Health Responsibility (19.89±3.66) and Perceived Benefit (19.40±3.72) points averages were found to be higher (Table 1).

Table 1. Vaccination-related Community Attitude Scale - Distribution of Health Belief Model Score Averages

Vaccine-related Community Attitude Scale - Health Belief Model Scale	$\bar{X} \pm SS$	MİN-MAX	Median (IQR)
Perceived Seriousness	15,92±3,14	4-20	16,00(2,75)
Perceived Importance	15,20±3,23	4-20	16,00(2,75)
Perceived Benefit	19,40±3,72	5-25	20,00(3,00)
Perceived Obstacle	18,96±5,97	8-37	18,00(6,00)
Health Responsibility	19,89±3,66	5-25	20,00(3,75)

In this study, demographic characteristics of mothers and AITT - Health Belief Model Scale score averages were compared. Maternal age does not affect lower size scores, but it is not the same as the lower size scores. mother's educational status had an impact on the perceived seriousness sub-dimension, primary and high school graduate mothers' scores were similar, while the scores of mothers with a degree in university were significantly higher. While the working status of mothers affects the perceived severity and perceived importance sub-dimension, it was observed that the points hydrangeas of working mothers were significantly higher than the housewives ($p<0.05$). There was a statistically significant difference between the number of children of the mother and the perceived severity and health responsibility sub-dimensions ($p<0.05$).

Compared to the vaccination practices and lower size scores of mothers, mothers who are considering taking all vaccinations in the vaccination calendar have a significantly higher score average for the lower dimension of health responsibility and have a positive attitude (p.0.05). Outside the routine vaccination schedule, the score medians for the health liability sub-size of

mothers who have been vaccinated are significantly higher (p.0.05). Mothers who indicate that they will not be vaccinated have a significantly lower average of perceived seriousness, perceived benefit, perceived disability and health responsibility score and appear to have a negative attitude (p.0.05).

Perceived severity, perceived benefit and perceived disability sub-dimensional scores of mothers who think they are a side effect of vaccines are statistically significant (p.0.05). Mothers who think that vaccines have a side effect have a negative attitude. The scores of mothers who think vaccines are harmful are statistically significant in all sub-dimensions and they appear to have a negative attitude (p.0.05).

It was determined that mothers who wanted childhood vaccinations to be mandatory had significantly higher scale scores than mothers who did not want them to be mandatory (p.0.05). Mothers who do not want vaccinations to be mandatory have a negative attitude in four sub-dimensions, while mothers who are unstable in the lower dimension of disability seem to have a negative attitude. The scale lower size scores of mothers who want vaccinations to be left with parental consent are significantly lower compared to mothers who do not want to be left with parental consent ($p<0.05$).

CONCLUSION

In our study, the proportion of mothers who thought that vaccines had side effects was 32.2%, and the proportion of mothers who thought they were harmful was 12.3%. Similar studies stated that 7.6% of families had a side effect related to the vaccine, and in the oral polio vaccination campaign, 21.1% of the family rejected the vaccine on the grounds that it was harmful; in another study, 27.1% of the study participants stated that they did not get vaccinated because they did not rely on the route virus vaccine. (5). The data and study results show that there is a trust problem with vaccines. As a matter of fact, 8.7% of mothers stated that they did not rely on vaccines.

73.3% of the mothers participating in our study think that vaccination should be compulsory, and 33.5% of the mothers and fathers should be left to their wishes. In Turkey in 2015, the prosecutor who won the case by not vaccinating their twin babies, the father then increased awareness of the families and began not to get vaccinated with parental consent. In response to rapidly increasing vaccination denial, the Turkish Medical Association submitted to the Turkish Parliament a proposed amendment stressing the necessity of vaccinations. (9)

When we compared socio-demographic data with the sub-dimensions of the AITT - Health Belief Model Scale, it was found that university graduate mothers exhibited a significantly positive attitude in the lower dimension of seriousness compared to other school graduates. Gulgun et al. (2014) study has shown that gender, spouse's educational status and economic status do not affect vaccination (10). Another study found that the rate of vaccine rejection increased in mothers with high socioeconomic levels (11).

In our study, the proportion of mothers who reject vaccines, who think their vaccines are harmful and who say they do not trust vaccines is quite high. It has been found that mothers who have a negative attitude towards vaccines are mothers who find vaccines harmful and do not rely on vaccines. Mothers who had all the vaccinations of the child or who had paid vaccinations were found to have a positive attitude towards vaccinations.

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