

Assessment of Knowledge, Attitude and Practice of Parents about Immunization in Hail City, 2018

Tamam Murdi Alshammari^{1*}, Yazeed Saad R Alsubaie², Someili, Suleman Ali³, Najla Mohammed Alajmi⁴, Alanazi Khalid Khalaf M⁵, Mohammed Abdulkareem M Abdrab Alamir⁶, Zayed Ahmad Eisa Albenawi⁷, Ahmed Mohammed Alsahli⁸, Noor Sayed Saleh Darwish Alsharkhat⁹, Abdulaziz Jazza Almejlad¹⁰, Mohammad Nasser Almatrafi¹¹, Almotasem Bllah Ali Alhazmi¹²

¹University of Hail, Saudi Arabia, ²Majmma University, Saudi Arabia, ³Princess Basma Teaching Hospital, Jordan, ⁴Almaarefa University for Science and Technology, Riyadh, Saudi Arabia, ⁵Tabuk University, Saudi Arabia, ⁶Imam Abdulrahman Bin Faisal University, Saudi Arabia, ⁷King Khalid University, Abha, Saudi Arabia, ⁸General practitioner, University Of Science & Technology in Sana'a, Yemen, ⁹Jordan University of Science and Technology- Irbid, Jordan, ¹⁰King Abdulaziz University, Jeddah, Saudi Arabia

Corresponding author: Tamam Murdi Alshammari, **Email:** itamam35@gmail.com

ABSTRACT

Background: Immunization has shown major preventive aspects of infectious diseases, disability and death. **Objectives:** Assessing the knowledge, attitude and practice (KAP) of Saudi parents in Hail City regarding the immunization programs for children, Saudi Arabia (KSA), 2018. **Methods:** It is a cross sectional survey study that was carried out upon 420 parents that were randomly selected as the team focused on collection from public areas to get the appropriate knowledge level from the community for 3 months from May to the end of July, 2018. Parents and were asked to complete a questionnaire. The questionnaire contained 4 different parts about the demographics, knowledge, attitude and practice of parents toward immunization. **Results:** The included parents have shown a high level of awareness about vaccination regarding the preventive measures and importance of vaccination which resulted in positive attitudes and practice pattern among most of them. The overall KAP was good among most of parents. The higher KAP level wasn't significantly associated with gender, educational degree and number of children. **Conclusion:** Most of Saudi parents in Hail City had good KAP toward immunization which wasn't associated with gender and educational degrees. However, educational programs are still in need to increase the parents' knowledge and practice especially among illiterate and less educated parents living in rural areas.

Keywords: Knowledge, Attitude, Practice (KAP), Immunization, Vaccination, Parents, Children, KSA, 2018.

INTRODUCTION

Vaccines have thrived as one of the most successful health interventions that have diminished the occurrence of infectious diseases and improved quality of life in the population^[1]. During the last few decades, the burden of the infectious diseases has been reduced through immunization. It is a safe and effective method of preventing many severe infectious diseases. The most common vaccine-preventable diseases are rubella, measles, diphtheria, tetanus, pertussis, and polio^[2,3]. The WHO estimated a reduction in the death rate from infectious diseases between 2 and 3 million each year.

Despite the major efforts of health authorities to keep KSA free of diphtheria, pertussis, tetanus, polio, and measles, many physicians face major obstacles from the parents about the safety, efficiency and the necessity of regular childhood vaccines. Giving the child the appropriate vaccine would significantly decrease the costs of disease treatment and rates of disease thus enhance a good quality of life for children^[4]. Most of the parents in KSA believed that vaccines can cause autism and disabilities^[5]. Also, in a global report issued by the CDC, it was stated that the general attitude of parents was negative among most of them toward

childhood vaccination programs [6]. Knowledge and practices among parents regarding immunization are the major factors that contribute to their vaccination decisions [7]. Deficiencies in parents' knowledge about the adverse effects and contraindications of vaccines often lead to many immunization errors. Many parents believe there is a relation between mild illness and vaccine contraindication, therefore they considered mild illness as a reason for not giving their children up-to-date vaccinations [8,9]. The knowledge, attitude and practice pattern of parents toward vaccination from the first day of birth could provide early prevention from many communicable diseases, disabilities as well as other causes of death [10,11].

AIM OF THE STUDY

This study aimed at assessing the knowledge, attitude and practice (KAP) of Saudi parents in Hail City regarding the immunization programs for children as well as defining the correlation between KAP and parent's demographics.

METHODS:

Study design:

It is a cross sectional survey study that was carried out upon 420 parents that were randomly selected as the team focused on collection from public areas to get the appropriate knowledge level from the community for 3 months from May to the end of July 2018.

Study population:

The study included 420 different parents having at least one child.

Study tools:

This survey included an interview with the parents and they were asked to complete a questionnaire. The data of the questionnaire were collected and reviewed by 3 supervisors to test its viability. The questionnaire contained 4 different parts:-

1. Socio-demographics: Age, sex, and educational status.
2. Attitude of parents toward vaccination
3. parents' practice toward immunization of children

Ethical approval

The study protocol and the questionnaire was approved by the supervisors. The participated parents gave a written informed consent for being involved in the study.

Statistical analysis

The collected data were analysed using SPSS, version 24. The descriptive analysis was shown as percentages and frequencies.

RESULTS:

Demographics of the studied subjects

Table 1. Sociodemographic characteristics of participants

A total of 419 participated in the study, females represented 277 (66%) of the study sample, while males represented 142 (34%). Parents' age ranges from < 20 years to > 50 years and most of them (238) were between 20 – 29 years (56.7%) and 94 of them were between 30 – 39 years (22.4%). Most of parents had bachelor degree or more (79.8%), 18.6% had high school. About 58.6% of parents have one child, 20.2% have two or 3 children and only 21.2 had more than 3 children. The demographic details of the sample are summarized in table 1

Table 1. Sociodemographic characteristics of participants	
Variable	N (%)
Gender	
Female	277 (66)
Male	142 (34)
Age	
<20	42 (10)
20 - 29	238 (56.7)
30 - 39	94 (22.4)
40 – 49	36 (8.6)
50 <	10 (2.4)
Education level	
Primary school	3 (0.7)
Secondary school	4 (1)
High school	78 (18.6)
Bachelor or more	335 (79.8)
Number of children	
One	246 (58.6)
2 – 3	85 (20.2)
3 <	89 (21.2)

Evaluation of the subject’s attitude:

The parent’s attitude toward vaccination was positive among most of them as most of them declared

that the vaccination is beneficial and will advise relatives to immunize their children. Also, 83.3%

felt that vaccination is safe and 92.9% are in favor of obligatory vaccination (Table 3).

Table 3. Attitude of parents toward vaccination	
Variable	N (%)
What do you think about vaccination benefits?	
Beneficial	363 (86.4)
Not beneficial	13 (3.1)
I don’t know	44 (10.5)
What do you feel when vaccinating your child?	
Safe	350 (83.3)
Fear	70 (16.7)
Are you in favor of obligatory vaccination programs designed by the health authorities?	
Yes	390 (92.9)
No	30 (7.1)
Will you advice your relatives and family to immunize their children?	
Yes	396 (94.3)
No	24 (5.7)

Practice pattern of included parents

More than half of parents’ practice toward vaccination was good among most of them as all of them followed the obligatory vaccination programs. Also, 46.2% of parents searched for other vaccines. As for pain and swelling management, about 66% of parents used cold compresses and 59% used analgesics for pain control (Table 4).

Table 4. Parents’ practice toward immunization of children, N (%)		
Variable	Yes (%)	No (%)
Do you follow the obligatory vaccination programs?	309 (73.6)	111 (26.4)
Will you search for other available vaccines for your children?	193 (46)	227 (54)
Will you manage swelling by cold compress?	277 (66)	143 (34)
Will you use analgesics or swelling and pain after vaccination?	248 (59)	172 (41)

DISCUSSION:

The childhood immunization programs have played a great part in the prevention of many diseases; hence, vaccination coverage is an indirect way to assess child health care^[12]. Thus the KAP of parents toward vaccination is important issue to enhance the children health as well as prevention of diseases^[13].

Our study revealed that almost all parents were aware of childhood immunization and the majority of them knew the importance of following the immunization schedule to keep their children healthy. Also, most of parents had vaccinated their children according to the MOH vaccination schedule in Al-Madinah Al-Monawara in KSA^[14]. The same aspects of high knowledge, attitude and practice were presented in other worldwide studies^[15,16]. Many studies around the world have shown that successful childhood immunization depends on good knowledge of parents and their positive attitudes^[17,18,19]. This observation is in contrast with other studies. One of these studies from Libya reported that knowledge of studied mothers about vaccination was not completely adequate^[20]. In China, Wang et al., observed that 60% of studied mothers were found to have inadequate knowledge towards immunization in childhood^[21]. Low levels of knowledge in many countries can be affected by many factors including immunization providers, sources of information and other barriers.

A study from Jeddah City showed a significant association between female gender, high educational degree as well as higher number of children with good KAP results^[13]. In addition, parents having more children were supposed to have higher KAP results^[22,23]. Also, study from Al-Mukalla, Yemen showed that parents aged 30 years or younger had significantly lower knowledge scores^[24] compared to older parents. This finding is consistent with another study,^[25] that reported that older parents have higher knowledge. This may be because older parents are more knowledgeable and experienced.

With regard to attitudes, our findings generally revealed that participants had a positive attitude towards immunization in childhood. All parents

agreed with vaccination programs and agreed that the vaccination was important. As well, the majority of them agreed that they should follow the vaccination schedule to keep their children healthy. Our finding was consistent with other studies from different countries in which the majority of respondents have a positive attitude towards childhood vaccination [18,24,26,27] “Understanding parents’ knowledge and attitudes towards immunization is important”^[19]. The present study showed some limitations. Most of the parents were from urban areas as it was hard to deal with many rural areas, thus the results can’t be generalized to the whole population.

CONCLUSION

Most of Saudi parents in Hail City had good KAP toward immunization. However, educational programs are still in need to increase the parents’ knowledge and practice especially among illiterate and less educated parents living in rural areas.

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