Abstract Reference Number

Parental awareness and attitude about childhood immunization in Riyadh, Saudi Arabia: A cross-sectional study

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Background

Childhood vaccination is considered as one of the most effective public health strategies of the 20th century to control and prevent infectious disease. The widespread availability and use of vaccines have tremendously reduced morbidity, mortality, and healthcare costs associated with infectious diseases. However, the low rate of complete vaccination remains a problem. Parental beliefs about vaccination are one of the main factors in reaching high vaccination rates.

Objectives

This study aims to assess the awareness and attitude regarding routine childhood immunization among Saudi parents in Riyadh, Saudi Arabia.

Methods

This survey with a pretested 18-item questionnaire was conducted on parents having at least one child from Riyadh, Saudi Arabia, between May 1st, 2019, and November 1st, 2019. The validated questionnaire consisted of three sections; participants' demographics, awareness, and attitude regarding the immunization of their children.

Conclusion

Parents have good knowledge and a positive attitude towards child immunization. However, parental education should be focused on the fact that religion supports immunization, and more awareness should be focused on the lack of correlation between autism and vaccination.

Results

1200 questionnaires entered into data analysis, of which 48.8% were mothers, 66.9% aged between 30 and 50 years old, and 81.8% with a university educational level. Overall, 883 (73.3%) of the parents have scored a good knowledge of childhood immunization and 93% knew that routine vaccination protects children from infectious diseases and their complications. Around 10% stated that immunization can cause autism. Only parents with age groups 30-39 and 40-49 were 1.76 ($p<0.05$) times and 1.92 ($p<0.05$) times, respectively, more likely to exhibit good knowledge. About 522 (43.6) of the parents attain a positive attitude toward immunization. Adherence to immunization schedule was confirmed important by 93%, while 91% presumed that immunization keeps their children healthy. Additionally, immunization was perceived important by 94% of parents and only 8% agreed that immunization is prohibited by religion. Males were 1.45 ($p<0.05$) times more likely to exhibit positive attitudes than females.

Table (1): Saudi parental knowledge about children immunization

Knowledge Items	Yes	No	Don't know
Routine vaccination prevents children from infectious diseases and their complications	1116 (93.0%)	47 (3.9%)	37 (3.1%)
First dose in vaccination given at birth	1041 (86.8%)	73 (6.1%)	86 (7.2%)
Most diseases against which children are vaccinated occur during the first years of life	876 (73.0%)	177 (14.8%)	147 (12.3%)
Multi-doses of the same vaccine given at intervals are important for child immunity	838 (69.8%)	151 (12.6%)	211 (17.6%)
More than one vaccine at the same time has no negative impacts on child immunity	571 (47.6%)	296 (24.7%)	333 (27.8%)
Is it important to vaccinate children during immunization campaigns	923 (76.9%)	200 (16.7%)	77 (6.4%)
It is recommended to vaccinate children against seasonal influenza	674 (56.2%)	316 (26.3%)	210 (17.5%)
Immunization can cause autism	119 (9.9%)	715 (59.6%)	365 (30.4%)
Common colds, ear infection, and diarrhea are not contraindications for vaccination	388 (32.3%)	558 (46.5%)	254 (21.2%)

Table (2): Saudi parental attitudes on child's immunization

Attitudes items	Strongly agree + Agree n(n%)	Not sure n(n%)	Strongly disagree + Disagree n(n%)
Child immunization is important	1123 (93.7)	51 (4.3)	24 (2)
Immunization is more beneficial than harmful	1075 (89.7)	84 (7.0)	39 (3.3)
Vaccines for child immunization are safe	1002 (83.6)	159 (13.3)	37 (3.1)
Child immunization is prohibited in religion	96 (8.0)	140 (11.7)	962 (80.3)
Immunization associated with side effects	492 (41.1)	417 (34.8)	289 (24.1)
Child can become infected after immunization with the disease/s against which he/she was vaccinated	413 (24.5)	432 (36.1)	353 (29.5)
Compliance to immunization schedule is important	1110 (92.7)	54 (4.5)	34 (2.8)
Immunization keep your child healthy	1090 (91.0)	75 (6.3)	34 (2.8)