Immunization Status of Children Under 6 Years Old in Holly Karbala Governorate

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Abstract

A cross-sectional study was carried out among 110 mothers of children to assess the immunization status of the children, they selected by using non probability sampling (convenience sampling). According to study findings, most of children were males (25.7%) and (95.5%) of them from urban resident and most of children have a good immunization status. The study concluded that performance of Iraqi national immunization program is effective Keywords: Immunization Status, Children Under 6 Years Old.

Keywords: *Immunization, Children, Karbala Governorate.*

Introduction

Immunization has been described as the first line of defense against disease, and one of the most effective health advantages available to children. It is proven as one of the most cost effective health interventions worldwide, through which a number of childhood diseases have been prevented or eradicated .Immunization against diseases is one of the most important public health interventions with cost effective means to preventing childhood morbidity ,mortality and disability. [1] The term dropout refers to children who miss scheduled vaccinations for any reason, including health facility problems such as canceled sessions or vaccine stock outs. Immunization contributes significantly to the achievement of millennium development goal number 4 and is one of the eight elements of primary health care. Effective utilization of immunization services is associated with reduced infections in young children with immature immune system and improved child health outcome. [2] The failure of immunization is result of postponing it until another time, child being ill and hence not brought to the center for immunization , un aware of the nee d of immunization , place of immunization being too far, no faith in immunization ,un aware of the nee d to return for 2ndand3rd dose ,mother being too busy, fear of side reactions ,and wrong ideas about immunization .[3] Improvements in national immunization program performance are necessary to reach and sustain high vaccination coverage to increase protection from vaccine preventable diseases for all persons. [4]

Methodology

Subjects: The study population included (110) mothers of children under 6 years selected by nonprobability sampling method (convenience sampling) in the medical health center of Holly Karbala Governorate . The researcher explain the study and the objective to the sample and take their oral consent to participate in the study, then collect the data about the subject

Instrument: The researcher using a questionnaire consist of 2 parts: the 1st part contain the general information and the 2nd part contain the Iraqi immunization schedule which contain the vaccination from birth to 6 years. The data was analysis by using the descriptive statistical analysis (frequency and percent).

Results

Table (1) distribution of the study sample by their general information

Variables		No.	%
Gender	Female	52	47.3
	Male	**58**	**52.7**
	Total	110	100
Age by years	Urban	**105**	**95.5**
	Rural	5	4.5
	Total	110	100.0

No.= number, %= percentage

This table indicate that (52.7%) of children were males and (47.3% were females, (95.5%) of them were urban resident and (4.5%) wer rural.

Table (2) Immunization Status of Children Under 6 Years (n=110)

Periods	Variables	Yes		No	
		f	%	f	%
1-7 days	BCG) Bacillus – Calmette –Guirine	106	**96.4**	4	3.6
	Oral polio - zero dose	89	**80.9**	21	19.1
	Hepatitis B (Hep –B-)	87	**79.1**	23	20.9
2 months	Hexaxim vaccine - first dose	86	**78.2**	24	21.8
	Oral polio - first dose	102	**92.7**	8	7.3
	Rotavirus vaccine - first dose	18	16.4	92	**83.6**
	Pneumococcal vaccine - first dose	61	**55.5**	49	44.5
4 months	Hexaxim vaccine - second dose	92	**83.6**	18	16.4
	Oral polio – second dose	98	**89.1**	12	10.9
	Rotavirus vaccine – second dose	18	16.4	92	**83.6**
	Pneumococcal vaccine – second dose	53	48.2	57	**51.8**
6 months	Hexaxim vaccine - third dose	86	**78.2**	24	21.8
	Oral polio – third dose	86	**78.2**	24	21.8
	Pneumococcal vaccine – third dose	57	**51.8**	53	48.2

Cont... Table 2

9 months	Single measles vaccine	92	**83.6**	18	16.4
	Vitamin A – 100.000. IU	80	**72.7**	30	27.3
15 months	(MMR) Mixed measles vaccine (measles, rubella, mumps)	84	**76.4**	26	23.6
18 years	Second pentagon vaccine	78	**70.9**	32	29.1
	Polio vaccine - first active dose	81	**73.6**	29	26.4
	Vitamin A – 200.000. IU	66	**60.0**	44	40.0
4-6 years	The fourth quaternary vaccine	37	33.6	73	**66.4**
	Oral polio vaccine - second active dose	27	24.5	83	**75.5**
	MMR Mixed measles vaccine	17	15.5	93	**84.5**

f= frequency, %= percentage

This table indicates that according to the immunization schedule of the children age 18 months. (96.4%) of children had receive the BCG vaccine, (80.9%) of them had receive oral polio- zero dose and (79.1%) of them receive hepatitis B viral at period (1-7) days. (78.2%) of them receive Hexaxim vaccine - first dose, (92.7%) of them receive Oral polio - first dose, (83.6%) not receive Rotavirus vaccine - first dose and (55.5%) receive Pneumococcal vaccine - first dose at period 2 month. (83.6%) of them receive Hexaxim vaccine - second dose, (89.1%) receive Oral polio – second dose, (83.6%) not receive Rotavirus vaccine – second dose and (51.8%) not receive Pneumococcal vaccine – second dose at period 4 months. (78.2%) receive Hexaxim vaccine - third dose, (78.2%) receive Oral polio – third dose, and (51.8%) receive Pneumococcal vaccine – third dose at period 6 month. (83.6%) receive Single measles vaccine and (72.7%) take Vitamin A – 100.000. IU at period 9 months. (76.4%) take (MMR) Mixed measles vaccine (measles, rubella, mumps) at period 15 months. (70.9%) take Second pentagon vaccine, (73.6%) take Polio vaccine - first active dose and (60%) take Vitamin A – 200.000. IU at period 18 months. (66.4%) not take The fourth quaternary vaccine, (75.5%) not take Oral polio vaccine - second active dose and (84.5%) not take MMR Mixed measles vaccine at period 4-6 years.

Conclusion

The study concluded that the children have a good immunization status through the Iraqi immunization schedule, the children were take most of vaccines and there was some of children dropout of the rotavirus vaccine at the 1st and 2nd dose that may be related to absence of vaccine vial in the health care centers or there was some factor like diseases or so far distance or environmental factor that make the families late to the vaccine date.

Recommendation

Using the mass media to encourage family about benefits of vaccine, give the vaccine to the families whom late the date of vaccination and provide the vaccines to the health care center and prevent deficiency.

Financial Disclosure: There is no financial disclosure.

Conflict of Interest: None to declare.

Ethical Clearance: All experimental protocols were approved under the Karbala Health Directorate, Iraq and all experiments were carried out in accordance with approved guidelines.

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