#### MOTHERS' KNOWLEDGE ABOUT EXPANDED PROGRAM ON IMMUNIZATION VACCINES IN EL-SIOUF FAMILY HEALTH CENTER IN ALEXANDRIA

# Safia Ibrahim Ahmed Shehata, EmanAnwer Mohamed Sultan, Rabab Mohamed El-Sayed Mohamed

Department of of Community Medicine, Faculty of Medicine, University of Alexandria.



2019©Alexandria Faculty of Medicine CC-BY-NC

# Introduction

Immunization is an effective public health intervention to reduce morbidity and mortality among infants. It is an important means of controlling diseases, and has been considered the most cost-effective health intervention.

The Expanded Program on Immunization (EPI) was initiated by the World Health Organization (WHO) in 1974. The routine vaccination program for Egypt has made vaccination against ten diseases. These include diphtheria, tetanus and whooping cough (DPT), hepatitis B (HepB), poliovirus (OPV), tuberculosis (BCG), measles, mumps and rubella (MMR) and lastly haemophilus influenza type b (Hib).

### Aim of the work

The aim of this study is to assess the knowledge of mothers of children aged 0, 6 and 12 months attending El-Siouf Family Health Center regarding Expanded Program of Immunization (EPI).

# **Subjects and Methods**

**Research design:** A descriptive cross-sectional study was conducted to reveal the mothers' knowledge about Expanded Program on Immunization vaccines.

**Research setting:** The study was conducted in El-Siouf Family Health Center in Alexandria.

**Target Population:** The target population of the study included mothers of infants attending El-Siouf Family Health Center during the field visits of the study for vaccination of their children.

#### Data collection tool:

All participants were subjected to an interviewing questionnaire using predesigned questionnaire to collect data about:

- 1-Mother's personal data: name, age and marital status..
- 2-Socioeconomic data: education, occupation, address, husband's education and occupation, monthly income, residence, type of family and crowding index.
- 3-Infant's data: name, age, sex, birth order, prematurity, birth weight, admission to NICU, and chronic illness.
- 4-Knowledge about: time of vaccine, type of vaccines, diseases prevented, adverse effects and how to deal with. true and false contraindications to vaccinations.

#### Results

**Table (1):** Distribution of the studied mothers according to their knowledge about the Expanded Program on Immunization (n = 320)

	No.	%
Timings of vaccination*		
At birth	117	36.6
At 2 months	308	96.3
At 4 months	306	95.6
At 6 months	296	92.5
At 9 months	196	61.3
At 12 months	255	79.9
At 18 months	210	65.6
Diseases against which vaccines are given* Hepatitis B	126	39.4
Poliomyelitis	249	77.8
Measles	147	45.9
Tuberculosis	104	32.5
Mumps	12	3.8
German Measles	51	15.9
Whooping cough	15	4.7
Diphtheria	5	1.6
Tetanus	44	13.8
Bacterial Influenza Type B	3	0.9
Type(s) of vaccines		
Do not know	320	100.0

**Table (2):**Distribution of the studied mothers according to their knowledge about side effects of vaccination (n = 320)

Side effects of vaccination	No.	%
Side effects can occur following vaccination	- 101	, ,
No	3	0.9
Yes*	317	99.1
Fever	317	99.1
Pain and redness at the site of injection	206	65.5
Anorexia	18	5.7
Fatigue	21	6.6
Convulsions	27	8.5
Allergy	14	4.4
Managing symptoms at home		
Giving analgesics	315	99.4
Compresses	307	96.8
Side effects requiring going to the hospital*		
High fever not responding to treatment	250	78.1
Convulsions	26	8.1
Severe fatigue	21	6.6
Severe allergy	12	3.8
Wrong answer	172	53.8

Table (3): Distribution of the studied mothers according to their knowledge about contra-indications to vaccination (n=320)

Contra-indications to vaccinations	No.	%
No	191	59.7
Yes*	129	40.3
Mild illness	99	76.7
Severe illness	126	97.7
Antibiotics	120	93.0
High dose of cortisone	23	17.8
Chemotherapy or radiotherapy	50	38.8
HIV/AIDS	25	19.4
Family history of convulsions following a vaccine	9	7.0
Family history about any other side effects of vaccinations	10	7.8
Prematurity	29	22.5
Small size of children at birth (low birth weight)	41	31.8
Neonatal jaundice	35	27.1
Epilepsy or Down syndrome	21	16.3
Mother of the child is pregnant	1	0.8

**Table (4):** Distribution of the studied mothers according to sources of information about vaccinations (n = 320)

Sources of information about vaccinations	No.	%
From health care personnel	292	91.3
From relatives and friends	185	57.8
From previous experience with older children	167	52.2
From mass media	124	38.8

## **Conclusions & Recommendations**

Most of the mothers mentioned 2, 4 and 6 months of age as timings of vaccination. The most commonly mentioned disease to be prevented by vaccination was poliomyelitis followed by measles. The most commonly identified side effect was fever. Most of the mothers said that they can manage side effects at home by giving analgesics and compresses. The most mentioned contraindications to vaccinations were severe illness, followed by current intake of antibiotics and mild illness. Most of the mothers received their information about vaccinations from health care personnel.

It is recommended to conduct public campaigns and to enhance health care providers activities of to improve mothers' knowledge and awareness about vaccinations.