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Southern Technical University
College of Health and
Medical Technologies/Basra

Assessment of Immunization Session Knowledge and Practices in Primary Health Care Centers in Al-Najaf Province, Iraq for the Year 2022-2023

A Thesis
Submitted to the Council of College of Health and Medical Technologies in a Partial Fulfilment of the Requirements for the Degree of Master of Science in Community Health Techniques
By

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Dedication

To my father …

To my mother…

To my brother and sister …

To my wife…

To my children…

To my friends…

With my pure love and respect…

Mustafa Al-Ghanemi

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Abstract

Immunization has played a vital role in improving global health by reducing the transmission of infectious diseases. To ensure the successful implementation of immunization programs, it is crucial to thoroughly examine various elements within the Primary Health Care Centers, including immunization session management, cold-chain and logistics management, supervision, and reporting.

The study aims to assess the practices of immunization sessions in randomly selected primary healthcare centers in Al-Najaf province, as well as evaluate the knowledge of healthcare workers working in the immunization unit.

A descriptive cross-sectional study was conducted at 26 primary healthcare centers, selected using stratified sampling then simple random sampling, across six districts in Al-Najaf governorate. A total of 143 healthcare workers were included in the study. A questionnaire was utilized to assess immunization session practices and to evaluate the healthcare workers' knowledge of vaccines. Data collection commenced on December 4, 2022, and concluded on March 2, 2023, with a provision of three days per center for data collection, occurring an average of five days per week.

The results of the study revealed a moderate level of overall knowledge among healthcare workers. Furthermore, a statistically significant correlation was found between the healthcare workers' place of residence and their knowledge (P=0.007), indicating higher knowledge levels among those residing in urban areas compared to those in rural areas. Immunization session practices were evaluated as having poor vaccine and diluent management. The cold chain management, communication with clients and caregivers, vaccine preparation and administration practices, and waste management practices were evaluated as having fair level of assessment. However, immunization session equipment availability, as well as card review and registration during

immunization, revealed good evaluations. The overall assessment of immunization session practices was determined to be fair. In addition, the study identified significant associations between immunization session practices and the number of non-vaccinators working in the immunization unit (P=0.035) and the average number of daily vaccine recipients in primary healthcare centers (P=0.046). The findings show a moderate level of healthcare worker knowledge concerning vaccine information, with a strong correlation between knowledge and the healthcare worker's place of residence. Moreover, immunization session practices were negatively correlated with the number of daily visitors to the immunization unit and the presence of non-vaccinators in the unit.

The study concluded that Healthcare workers have a moderate level of knowledge regarding vaccine information, and the knowledge was strongly related to the healthcare worker's residences place. The immunization session practices achieved a fair level of assessment. The increased number of daily visitors to the immunization unit and the number of health workers who are non-vaccinator in the unit affected negatively on the immunization session practices.

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List of Abbreviations

N	Abbreviations	definition
1	BCG	Bacillus Calmette - Guerin
16	DNA	Deoxyribonucleic Acid
2	DT	Diphtheria, Tetanus
5	DTaP	Diphtheria-Tetanus- a cellular Pertussis
3	DTP	Diphtheria-Tetanus-Pertussis
4	DTwP	Diphtheria-Tetanus- whole cell Pertussis
6	Hep B	Hepatitis B
7	Hib	Haemophilus influenzae serotype B
8	IPV	Injectable Polio Vaccine
9	MMR	Measles-Mumps-Rubella
10	NCIRD	National Center for Immunization and Respiratory Diseases
11	OPV	Oral Polio Vaccine
12	PHCC	Primary health care center
16	RNA	Ribonucleic acid
13	VPDs	Vaccine-Preventable Diseases
14	VVM	Vaccine Vial Monitor
15	WHO	World Health Organization

Chapter One