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**Assessment of Injection Safety in Primary Health Care
Centers - Gaza Governorates**

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**Assessment of Injection Safety in Primary Health Care
Centers - Gaza Governorates**

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Dedication

I dedicate this thesis

To my mother and father for their endless love, support and encouragement,

To my brothers and sisters,

To the souls of all martyrs who sacrificed themselves for the sake of Palestine to give us the freedom we deserve,

To all those who encouraged and helped me to complete this work

To all of them I dedicate this work

Maysoon Mahmoud Abu Rabee

Declaration

I certify that this thesis submitted for the degree of Master, is the result of my own research, except where otherwise acknowledged, and this study (or any part of the same) has not been submitted for a higher degree to any other university or institution.

Signed:

Maysoon Mahmoud Abu Rabee

.../.../...

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With respect

Maysoon Mahmoud Abu Rabee

Abstract

Safe injection practice is considered as an important component of basic infection control. It includes measures taken to perform injections in a manner that is safe for patients and providers. Unsafe injection may transmit various blood borne infections. Injection safety is still neglected in low-countries due to overwhelming social, economic and political challenges and put the patients and healthcare providers at risk of infectious and non-infectious adverse events. This study was conducted to assess the injection safety practices and management systems in Primary Health Care centers (PHCCs) in Gaza Governorates.

The design of this study is a mixed-methods one, in which data has been triangulated (quantitative and qualitative). This study is a descriptive analytical cross-sectional one. This design was used to assess the injection safety practices and management in thirty primary health care centers in Gaza Governorates (11 PHCCs in Ministry of Health (MOH) & 19 PHCCs in United Nation Relief and Works Agency for Refugees in The Near East (UNRWA)). A cluster sample from primary health care workers in Ministry of Health and UNRWA health care facilities were selected. In total, 360 health care workers, 5 working stations in 5 Government and 5 UNRWA clinics were included. Beside this In-depth interviews were carried out with six Key informants in both UNRWA and MOH. Data was collected through a self-administered questionnaire, observation checklist and in-depth interviews with key informants with response rate 100%. The statistical Package for Social Science software version 20 was used for the quantitative data entry and analysis while open coding thematic technique was used to analysis qualitative data.

Results revealed that 52.2% of health workers had good knowledge of key injection safety issues. These groups showed higher knowledge score in UNRWA as service providers (P value < 0.01), staff that had training on injection safety (P value 0.002), senior medical officer as job title of the staff (P value 0.003) and diploma holder of staff (P value 0.021). During in depth interview key informant pointed the accumulative experience of head nurses due to attendance of several workshops and seminars of injection safety and two of them said that it's due to the main cause that the role of head nurse is to supervise others, so she supposed to be more knowledgeable Also in this study showed differences in practice of injection safety in relation to health facility and education level of health workers. These groups showed accidental of needle stick injuries accrued more between health workers in MOH health centers, training regarding injection safety was more between health workers in MOH health centers, but these differences did not reach to statistically significant level. Vaccinated against hepatitis B was more among health workers in UNRWA health centers, this difference reached to statistically significant (P value 0.002). Relationship between accidental needle stick injuries, vaccinated of hepatitis B and education level of health workers reached to statistically significant (P value 0.00, 0.002 respectively). Most of health care workers had received full doses of Hepatitis B vaccine and were knowledgeable about at least one pathogen transmitted through unsafe injection practices. Injection safety management policy and waste disposal guideline was not available for viewing in any of the facilities. Although that during in-depth interview with Key informants. All of MOH teams emphasized that no written protocols or guidelines at MOH health facilities, in the other hand all UNRWA team insist that hard and soft copy protocols and guidelines are available and updated in 2010. During observation checklist the researcher observed the office staff who disposed the bio-medical wastes without taking any safety measures. Moreover, none of these staff had received any formal training in waste management but during in depth interview half of key informants said designated staff that handles healthcare waste received training in waste management and other half mentioned that they did not receive training. Improper infection control practices among health providers and poor health care workers protection. All health care workers did not wash their hands by soap and water or cleaned them by alcohol before or after giving injection and the researcher observed 40% of overflowing pierced or open safety boxes in all health facilities.

The study concluded that there are different gaps in injection safety at primary health care centers in the Gaza Strip, all gaps can be bridge through regular and on job training, supported by Information Education and Communication programs. There is need for periodic injection safety assessment in all health facilities by the relevant stake holders.

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List of abbreviations

AD	Auto-Disable
AIDS	Acquired Immune Deficiency Syndrome
BBVDs	Blood Borne Viral Diseases
BCG	Bacillus of Calmette and Guerin
CDC	Centers for Disease Control and Prevention
DFID	Department for International Development
GGs	Gaza Governorates
GS	Gaza Strip
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HCWM	Health Care Waste Management
HCWs	Health Care Workers
HIV	Human Immunodeficiency Virus
IPC	Infection Prevention and Control
IS	Injection Safety
MOH	Ministry of Health
NGOs	Non-Governmental Organization
NSI	Needle Stick Injury
NUG	National Unity Government
PCBS	Palestinian Central Bureau of Statistics
PHC	Primary Health Care
PHCCs	Primary Health Care Centers
PHCWs	Primary Health Care Workers
SIGN	Safe Injection Global Network
SMO	Senior Medical Officer
SOP	State of Palestine
SOPH	School of Public Health
SPSS	Statistical Package for Social Science
UNDP	United Nation Development Program
UNRWA	United Nation Relief and Works Agency for Refugees in The Near East
USEPA	United States Environmental Protection Agency
WHO	World Health Organization