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**Preconception Care: Does it make a Difference  
in Pregnancy Outcomes?**

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# **Preconception Care: Does it make a Difference in Pregnancy Outcomes?**

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## **Dedication**

To my husband and my mother-in-law who have been a source of unlimited support, encouragement and love.

I would also like to thank my father and mother for giving me the faith and passion to complete this study.

To the light of my eyes ... my kids.

To all my friends and colleagues from whom I learned and were the best gift I ever had.

## **Declaration**

I certify that this thesis submitted for the degree of master is the result of my own work research, except where otherwise acknowledged and neither this thesis nor any of its parts had been submitted for higher degree to any other university or institution.

**Signed**

**Maha B. Timraz**

Date...../...../.....

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With respect, Maha Timraz.

## Abstract

Pre-Conception Care comprises a set of prevention and management interventions that aim to identify and modify risks to a woman's health or pregnancy outcome by emphasizing factors that must be acted on before, or early in pregnancy. This study ascertains the effect of the preconception care program offered at UNRWA Primary Health Care centers on pregnancy outcomes.

A quasi-experimental mixed method design was used, in which data had been triangulated, combining both, quantitative and qualitative methods. A stratified, random sampling process resulted in selecting 5 clinics, from which a sample of 800 conveniently selected women were chosen distributed as 400 PCC recipients and 400 non-recipients. A purposive sample of 11 Key informants were interviewed in addition to 60 beneficiaries and non-beneficiaries participated in focus group discussions. A structure interviewed questionnaire and records review were used for the quantitative part while a semi-structured protocol were used for the qualitative method. Quantitative data were analyzed using Statistical Package for Social Science and open coding thematic technique was used to analyze the qualitative part.

Findings showed that nearly half of recipients (47%) first knew about the service through midwives, 44.1% registered for the services because they were planning to get pregnant. Of the non-recipients, 31.5% indicated that the reason for not registering was not knowing about the availability of this service. Regarding preconception care activities, 71.7% of recipients indicated that they received health advices, around 99% of them were screened for hypertension, diabetes, dental problems and given folic acid, and more than 82.3% were counseled about its importance. Nevertheless, 75.8% of recipients were compliant in ingesting folic acid. The mean number of folic acid tablets taken by recipients was 113.1. Results showed that 92.2% of preconception care recipients took folic acid before conception vs 15.1% of non-recipients.

The total overall score which reflects perceptions about the appropriateness of the services was 73.8% with 47.9% of recipients indicated that they were involved in care. The total score for coordination and care continuity was 69.7%. The mean waiting time was 47.8 minutes, 54.5% of recipients perceived waiting time as being long and 48.3% indicated that the contact time was less than 5 minutes. Less than 10% of the clinic staff have introduced themselves to clients.

With regard to the program impacts, 57.9% of preconception care recipients and 67.4% of non-recipients faced complications during their last pregnancy, 53% of recipients and 55.8% of non-recipients had genitourinary tract infection, 51.7% among recipients suffered from anemia versus 71.4% of non-recipients and the differences were statistically significant. The percentage of women who delivered via caesarian section was 25.3% among recipients and 18% among non-recipients. A quarter (22.8%) of preconception care recipients and 32.5% of non-recipients faced complications during their last delivery, especially bleeding (36.3% and 51.5% for preconception care recipients and non-recipients respectively). Around 63.7% of recipients and 67.4% of non-recipients have full term pregnancy, mean birth weight of babies in grams among recipients was 3274.5 and 3225.4 among non-recipients. About 3.8% of preconception care recipient's vs 2.5% of non-recipients gave birth to a baby with congenital anomaly. The later unexpected variations might be attributed to the fact that the program targets particularly vulnerable groups who could be much worse without it.

The study concluded that the provided preconception care supports maternal outcomes, yet it needs further enhancement to achieve better outcomes. Targeting, staff beneficiary interactions, informing/counselling and compliance with the technical instructions are among the areas that require further investments. Also, it is important to strengthen monitoring and supervision.

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## List of Abbreviations

<b>ANC</b>	Ante-Natal Care
<b>ANOVA</b>	One way Analysis of Variance
<b>BP</b>	Blood Pressure
<b>CBR</b>	Crude Birth Rate
<b>CDC</b>	Center of Disease and Control
<b>CF</b>	Conceptual Framework
<b>CFHP</b>	Chief Field Health Program
<b>CS</b>	Cesarean Section
<b>CWD</b>	Children with Disability
<b>DM</b>	Diabetes Mellitus
<b>FFHO</b>	Field Family Health Officer
<b>FGD</b>	Focused Group Discussion
<b>FP</b>	Family Planning
<b>GDM</b>	Gestational Diabetes Mellitus
<b>GG</b>	Gaza Governorates
<b>GS</b>	Gaza Strip
<b>HbG</b>	Hemoglobin
<b>HCP</b>	Health Care Provider
<b>HCS</b>	Health Care System
<b>HTN</b>	Hypertension
<b>IM</b>	Infant Mortality
<b>IMR</b>	Infant Mortality Rate
<b>KI</b>	Key Informant
<b>KII</b>	Key Informant Interviews
<b>LBW</b>	Low Birth Weight
<b>LSD</b>	Least Significant Difference
<b>MCH</b>	Maternal and Child Health
<b>MEAC</b>	Middle East and Arab Countries
<b>MICS</b>	Multiple Indicators Cluster Survey
<b>MM</b>	Maternal Mortality
<b>MMR</b>	Maternal Mortality Rate