

# MILLENNIUM DEVELOPMENT GOALS; ACHIEVING THE (CHILD MORTALITY) AND GOAL NO.5 (IMPROVE MATERNAL HEALTH) IN TWO DISTRICTS OF PUNJAB PAKISTAN

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PROF-1989

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**ABSTRACT... Background:** The Maternal mortality rate in Pakistan remains unacceptably high **Objectives:** To study the awareness of immunization and breast feeding and the utilization of family-planning methods by the women of rural districts of Punjab, Pakistan. **Study Design:** A Cross-sectional study. **Setting:** The study was conducted in Vehari and Chakwal districts of Punjab, Pakistan. **Period:** May-July 2010. **Methodology:** A total of 100 women were included in the study. Data was collected, cleaned, tabulated and analyzed. **Results:** Among the hundred sampled women 58 (58%) were educated, and the commonly involved age group in the sample was 21-30 year accounting for 59% of the women. Among these 61% of the women have visited a family planning center, while the contraceptive prevalence rate (CRP) is 39%. Thirty eight (54%) out of the 70 multi-parous women have given birth with an interval of approximately 2 years. Only 6 (8.75%) have an optimum (safe) interval of 3 years. Among the total 90 child bearing women 74(82.22%) have got vaccinated their children, 46 (62.16%) of these are completely vaccinated according to the information obtained from the EPI vaccination cards. Among the 13(17.56%) who haven't vaccinated their children 10 (62.5%) complained of lack of awareness regarding the importance of vaccination. Five (31.25%) complained of inaccessibility to the BHU. Out of the 90 interviewed women 61 (67.7%) were vaccinated with tetanus toxoid during pregnancy. 82 (82%) women are aware of the benefits of breast feeding. 88(97.7%) out of total 90 child bearing women have breast fed their children with the percentage decreasing to 83.33% after 6-11 months of age and only 39(43.33%) counting breast till 1.5-2year (optimum age) of age. 53(58.88%) started weaning their child between 6-11 months of age. Direct causes of Neonatal Deaths were, 30% birth asphyxia and injuries, 35% due to infections (tetanus, sepsis, pneumonia, diarrhea), 20% due to complication of pre-maturity, 5% congenital anomalies and 20% due to other causes. **Conclusions:** There's a need for mass education regarding EPI and its compliance so that the target set under MDGs is achieved. Though women of the rural areas are aware of the advantages of breast feeding there is a lot of variation in the duration that the children are breast fed and weaned, so there is a need for the provision of standardized nutritional to the mothers by the health workers.

**Key words:** Vaccination, Birth spacing, Contraceptive prevalence rate (CPR), Breast feeding.

## INTRODUCTION

In September 2000, world leaders escorted the new millennium development goals declaration. It was endorsed by 191 countries and translated into a roadmap for setting out individual country goals to be reached by 2015. The eight millennium development goals represent the commitment by all countries<sup>1</sup>.

## MILLENNIUM DEVELOPMENT GOALS

- Goal 1: Eradicate Extreme Hunger and Poverty
- Goal 2: Achieve Universal Primary Education
- Goal 3: Promote Gender Equality and Empower Women
- Goal 4: Reduce Child Mortality
- Goal 5: Improve Maternal Health
- Goal 6: Combat HIV/AIDS, Malaria and other diseases
- Goal 7: Ensure Environmental Sustainability
- Goal 8: Develop a Goal Partnership for Development

Pakistan is a signatory of 191 countries to achieve the above MDGs, endorsed the United Nations. One of the health related goal No-4 is the 2/3rd reduction of under

five mortality rate up to 2015 and MDG No-5 is 75% reduction in maternal mortality ratio by 2015. Regarding infant mortality reduction (MDG.4)<sup>3</sup>.

Exclusive breast feeding for the first 6 months and continued breast feeding till 11 months prevent neonatal sepsis, diarrhea, pneumonia in the under 5's. The disability principle objective of the EPI program is to reduce mortality morbidity and disability associated with nine preventable diseases<sup>4</sup>. Our study primarily focuses on two of its major determinants; adequate breast feeding and up to date immunization.

Globally every year 5, 19,000 maternal deaths occur due to pregnancy related preventable causes. The world figure of MMR is estimated to be 400/100,000 live births, the maternal mortality rate (MMR) in Pakistan remains unacceptably high although several initiatives were introduced under the Millennium Development Goals. To monitor the progress of these initiatives it is important to have periodic studies for assessment and analysis of

maternal mortality and various measures to reduce it, one being the appropriate family planning<sup>5</sup>.

### Objectives

To assess the awareness of vaccination among the mothers of rural areas of north and south Punjab .To assess the utilization of family planning methods among the women of rural areas .To assess the importance of breast feeding among the of rural areas.

### Justification of The Study

Most of the studies of MMR are coming from hospital records of areas<sup>6</sup>. It is also known that most of the births in our country do not take place in hospitals<sup>7</sup>; therefore the reported statistics do not accurately reflect the problem of deaths during pregnancy and childbirth<sup>7</sup>.

In spite of the widespread awareness programs about breast feeding and immunization to reduce the infant mortality, the IMR still remains strikingly high in Pakistan. Now only three years are left for completion of the MDGs and it is now very essential impact of family planning, breast feeding and immunization for the reduction of MMR and IMR.

## MATERIAL AND METHODS

### Study design

Across sectional study.

### Setting

The study was carried out in the District Vehari and Chakwal.

### Duration of study

The duration of study was May-Aug 2010.

### Study population

Married women of District Vehari and Chakwal.

### Sample size

100 married women between the age of 15-50 years.

### Sampling technique

Cluster sampling technique was adopted for this study.

### Inclusion and Exclusion Criteria

All the married women were included in the study; white Women above the age of 50 years were excluded.

### Data Collection Procedure

Semi-Structured questionnaires were used to the utilization of family planning and immunization services and awareness about breast-feeding practices. The questionnaires were read to the women and the answers recorded.

### Data Analysis Procedure

The collected data were cleaned and analyzed by statistical analysis software SPSS (Statistical Package for Social Sciences) version 17. It was a simple descriptive cross-sectional, so to standardize the results, these were calculated in percentages and presented in the form of table and pie charts. Tests of significance were applied where necessary.

### Education of the Women

Education is an important factor in reducing child mortality and improvement of maternal health percentage of women regarding education in district Chakwal and Vehari.

### Family Planning

Family planning (FP) is a preventive intervention for maternal mortality. Many modern FP methods have been introduced. The assessment and analysis of their utilization gives us the contraceptive rate. The results from the women of Chakwal and Vehari.

### Birth Interval Among The Multi-Para Women

Safe birth interval play an important role fo better health of mother and child. The results are shown in fig.

### Immunization

Preventive interventions for child mortality include immunization, immunization coverage needed to meet child mortality goal are 90% coverage nationwide and 80% coverage in all districts. The results obtained from Vehari and Chakwal districts.

### Breast Feeding

To prevent infant mortality and various morbidities it is

Characteristics	Age Groups				Total	P-value
	0-20	21-30	31-40	41-50		
<b>Education of women</b>						
▶ Educated	9.00%	27.00%	13.00%	9.00%	58.00%	0.79
▶ Uneducated	6.00%	23.00%	9.00%	4.00%	42.00%	
<b>Women who visited FP Centre</b>						
▶ Visited	10.00%	30.00%	11.00%	10.00%	61.00%	0.43
▶ Non-visited	5.00%	20.00%	11.00%	3.00%	39.00%	
<b>Vaccination status under 5 children</b>						
▶ Vaccinated	13.00%	42.00%	18.00%	9.00%	82.00%	0.35
▶ Non vaccinated	2.00%	8.00%	4.00%	4.00%	18.00%	
<b>Women given Tetanus Toxoid Inj.</b>						
▶ Yes	11.00%	33.00%	16.00%	8.00%	68.00%	0.92
▶ No	4.00%	17.00%	6.00%	5.00%	32.00%	
<b>Women who Breast Fed</b>						
▶ Yes	9.00%	44.00%	18.00%	11.00%	82.00%	0.87
▶ No	6.00%	6.00%	4.00%	2.00%	18.00%	
<b>Contraceptive prevalence rate</b>						
▶ Yes	6.00%	24.00%	5.00%	4.00%	39.00%	0.21
▶ No	6.00%	24.00%	5.00%	4.00%	39.00%	
<b>Birth interval among multi-para women</b>						
▶ Less than 2 year	6.00%	22.00%	4.00%	5.00%	37.00%	0.41
▶ Interval of two years	7.00%	25.00%	16.00%	6.00%	54.00%	
▶ Safe interval of 3 years	2.00%	3.00%	2.00%	2.00%	9.00%	
<b>Women who fed Colostrums</b>						
▶ Fed	12.00%	40.00%	19.00%	11.00%	82.00%	0.47
▶ Not Fed	3.00%	10.00%	3.00%	2.00%	18.00%	

essential for a child to be exclusively breast fed in the first 6 months of his life. The data about breast feeding among the women of North and South Punjab.

## DISCUSSION

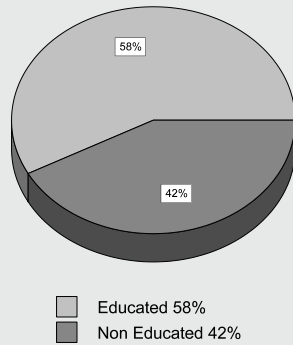
According to the demographic and health survey 2006-2007 the proportion of fully vaccinated children was 47% in 2007. From our study, it is evident that 82% of the children of rural districts of North and South Punjab were fully vaccinated. There has been an improvement in the vaccination coverage in the last 3 years but more improvement is required to achieve the target of MDG no. 4, according to which vaccination coverage should be more than 90% by 2015<sup>1,10</sup>.

MDG target is to achieve a CPR (contraceptive prevalence rate) of 55% by 2015 to improve maternal

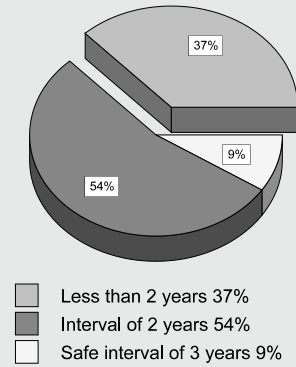
health. According to Pakistan demographic and health survey (PDHS) 2006 – 2007 the CPR was 30% among the married women<sup>1</sup>. the result obtained from our study i.e. 39% of the married couples are using contraceptive method in the rural districts of North and south Punjab, this proves the CPR is scaling up in these areas to meet the target of the MDGs.

One of the important indicators of infant mortality is nutrition, children that are breast fed have 3 times reduced risk of having diarrhea and 2.5 time decreased risk of pneumonia<sup>8,9,10</sup>. There is sufficient evidence that exclusive breast feeding for the first 6 months and continued breast feeding till 11 months prevents neonatal sepsis, diarrhea and pneumonia in the under 5's children<sup>11,12,13</sup>.

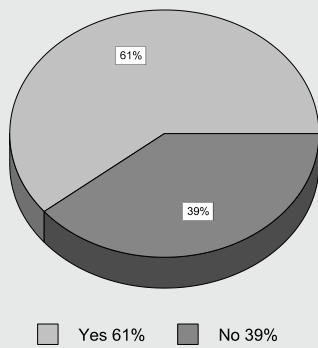
**Fig-I. Showing the percentage of women regarding education**



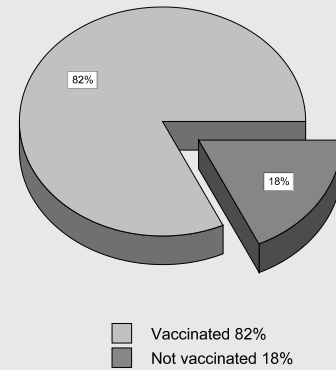
**Fig-IV. Showing birth interval among the multi-para women**



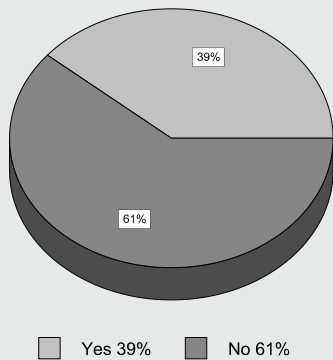
**Fig-II. Showing the percentage of women of visited family planning centre**



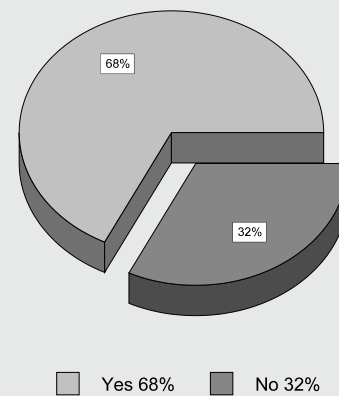
**Fig-V. Showing the percentage of women who have completely vaccinated their children with reference to the EPI vaccinated card**



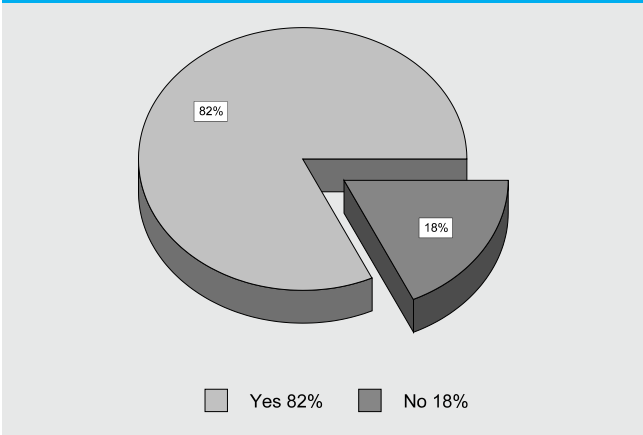
**Fig-III. Showing the percentage of women using contraceptive methods**



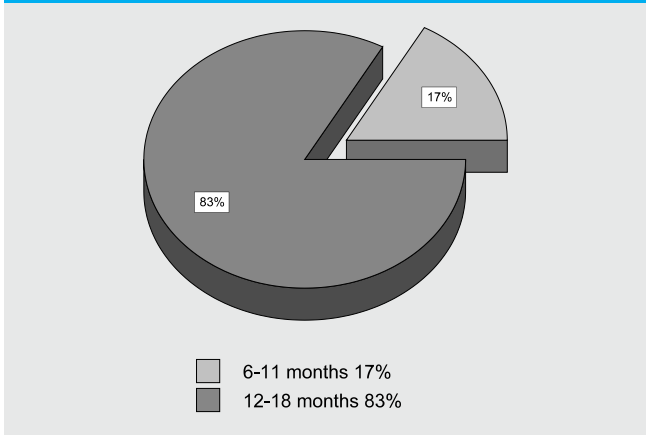
**Fig-VI. Showing the percentage of women vaccinated with tetanus toxoid during pregnancy**



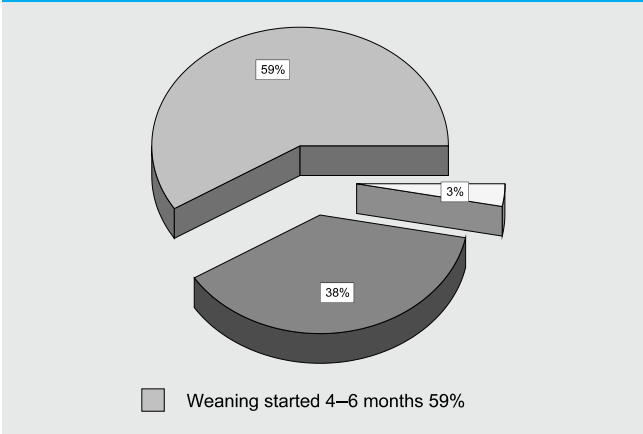
**Fig-VII. Showing the percentage of women who have breast fed their children**



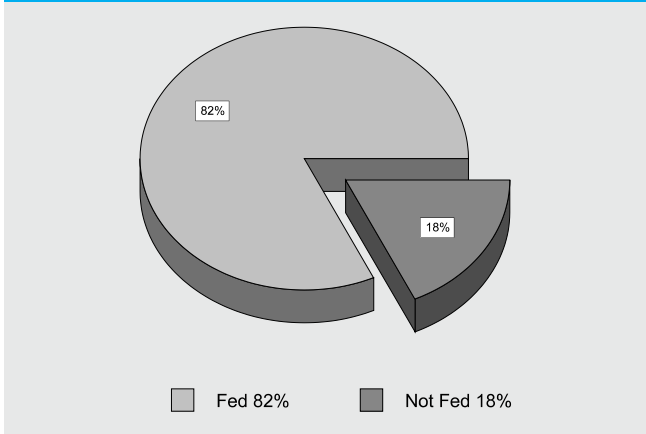
**Fig-VIII. Percentage of each time interval till which breast feeding was continued**



**Fig-IX. Women who weaned their children properly**



**Fig-X. Women who fed colostrums to their new born babies**



**CONCLUSIONS**

Various family planning methods are being commonly adopted by the rural females but still there is a great lack of information about proper birth spacing. Immunization coverage rates needed to reduce child mortality goal are 90% coverage nationwide and 80% coverage in all districts. The results of our study are encouraging as vaccination of children was 82% and for mothers tetanus Toxoid (T.T) was 68%.

Majority of the women are aware of the advantages of

breast feeding of children still there is a lot of variation in the duration breast feeding and weaning. To prevent infant mortality and various morbidities it is essential for a child to be exclusively breast fed in the 6 months of his life.

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Article received on: 30/04/2012

Accepted for Publication: 04/10/2012

Received after proof reading: 05/11/2012

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**Article Citation:**

Sulehri MA. Millennium development goal; achieving (child mortality) and goal no.5 (improve maternal health) in two Districts of Punjab-Pakistan. Professional Med J Dec 2012;19(6): 837-842.

“Friends may come and go,  
 but enemies accumulate.”

*Thomas Jones*