

EFFECT OF SOCIO-ECONOMIC STATUS ON THE ATTITUDES AND PRACTICES OF ANTE NATAL WOMEN ATTENDING COMBINED MILITARY HOSPITAL QUETTA

Saidul Abrar¹, Bilal Ahmad Sethi², Muhammad Hanif³, Nusrat Shjaat⁴, Wasim Iqbal⁵

ABSTRACT

Background: Socio-economic factor is an important health determinant. Its classic indicators are education, occupation and income. These indicators play an important role in the social life of an individual. During pregnancy, women attitudes and practices regarding breast feeding, birth spacing and family size might be associated with these indicators. This study was conducted to see if there existed any significant association between socio-economic status, and attitudes and practices of pregnant women.

Methods: This cross-sectional analytical study was conducted at Combined Military Hospital Quetta from from 1st November 2017 to 28th February 2018 on antenatal women attending out patient department. A structured interviewer administered questionnaire was used to extract information from 384 study participants selected through simple random sampling technique. Data was analysed using SPSS Version 20 and MS-Excel 2007. Appropriate descriptive statistics were calculated for different variables and significance was tested using Chi square test of independence at 95% level of confidence. Ethical principles were properly observed.

Results: 66 (17.2%) of the study participants were primi gravida. Mean age of study participants was 27.5±4.8 years with a mode equal to 30 Years. A non-normal skewed to the right distribution was noted for birth spacing. Statistically high significant results were obtained for educational status as a predictor of breast feeding and parity.

Conclusion: Maternal education is found to be an important predictor of the important attributes of family planning.

Key words: Educational status, Pregnancy, Breast feeding, Birth intervals.

INTRODUCTION

Definition of health encompasses physical, social and mental well being. Of all the factors affecting health, fifty percent share is attributed to socio-economic factors¹. These factors include the environment in which a person is born, brought up, has lived or worked². Education, occupation and income are the three classic indicators of socio-economic status^{3,4}. These indicators are usually interconnected; education fits an individual into a specific occupation while that occupation provides income for his/her subsistence. As a result, individuals thinking, behavior and actions are determined⁵.

Social life of an individual is governed by three pillars; Knowledge, attitudes and practices. The ability to obtain, retain and utilize information is called knowledge, the propensity to react specifically in specific situations is called attitude while the application of rules and knowledge as a result of specific attitude is called practice⁶.

The concept of family planning was introduced in 1960s and by 1990s, more than 115 countries had implemented it⁷. Contrary to the common belief of birth control, family planning is a way of life adopted by couples to lead a productive life. It was in 1994, when family planning program was introduced in Pakistan for improving maternal and child health⁸.

World Health Organization recommends exclusive breast feeding till sixth months, and then with complementary feeding, continuing up to 2 years of age and beyond⁹. Breast feeding provides all necessary nutrients for optimal growth of the child, strengthens his immune system, and establishes emotional attachment with mother¹⁰.

It also decreases risk of postmenopausal breast and ovarian cancer and is a natural way of birth spacing¹⁰. With controlled number and spacing of births, families can have many lifetime physical, mental and economic benefits¹¹. This study was conducted to see if there existed any significant association between socio-economic status, and attitudes and practices in

¹ Department of Community Medicine, Gajju Khan Medical College Swabi

² Department of Paediatrics, North West School of Medicine, Peshawar.

³ Department of Community Medicine, Quetta Institute of Medical Sciences, Quetta.

⁴ Combined Military Hospital Quetta.

⁵ Mardan Medical Complex, Mardan.

Address for correspondence:

Dr. Said ul Abrar

Associate Prof, Department of Community Medicine, Gajju Khan Medical College Swabi

E-mail: abrardr@yahoo.com

Cell No: 0321-9103569

terms of adherence to family planning(breast feeding, birth spacing, gravidity and parity).

METHODOLOGY

An analytical study with cross-sectional design was conduct at Combined Military Hospital(CMH) Quetta from 1st November 2017 to 28th February 2018. All ante natal women attending Out Patient Department were included in the study. If a woman refused to participate due to any reason or was referred for an emergency intervention, she was excluded from the study. OpenEpi online sample size calculator was used at 95% confidence level and a sample size of 384 was obtained¹².

A structured interviewer administered questionnaire was used for extracting and recording information. Educational status, occupation and monthly income of the family were taken as independent variables(collectively termed as socio-economic status) while breast feeding practices, gravidity, parity and birth spacing were regarded as outcome variables(collectively termed as attitudes and practices). Birth spacing was calculated as the age of the youngest child minus gestational period, in months¹³. Descriptive statistics, frequencies and percentages were calculated for selected variables and chi square test of independence was applied at 95% confidence level to check significance. SPSS version 20 and MS Office Excel 2007 were used for analysis. Ethical approval was obtained from the Ethical Review Committee of the Institute of Health Sciences Mardan. Commandant CMH officially allowed co-authors to collect data. Participants were requested to sign an informed consent form with full autonomy. It was made clear to them that no one's identity will be exposed and that all data will be destroyed after the publication of findings.

RESULTS

Out of 384 pregnant study participants,66 (17.2%) were primi gravida. Ages of the study participants ranged from 18-41 years with a mean of 27.5 + 4.8 years and mode equal to 30 Years. Majority of the participants i.e 381(99.2%) were the wives of in-service personnel; of those 49(12.9%) were commissioned officers, 275(72.1%) were non-commissioned officers,5(1.3%) were entitled civilians while 52(13.6%) were non-entitled civilians.

DISCUSSION

Out of the total sample i.e 384,17.2% were primi gravida and for those, data only on gravidity was collected numerically. For attributes like breast feeding, parity and birth spacing, only their intentions were recorded. A highly significant difference was observed for breast feeding practices among educated versus uneducated and working versus non working participants. Similar results were reported by Ullep et al¹⁴.Breast feeding

trend was more amongst uneducated than educated. Only chance difference was observed for monthly income and breast feeding. Education status and gravidity were also found to be associated while no association of gravidity was found with other attributes like working status and monthly income. Un educated participants had six or above gravidity while educated had a lower figure. (Table:01).

Education plays an important role in deciding family size. Usually educated families have small family sizes¹⁵. Similar results were obtained through this study; uneducated participants had the highest number of children ever given birth. Those who had low monthly income had more children as compared with those having high monthly income.

Studies have shown that proper inter birth spacing has beneficial effects on the wellbeing of both child and mother¹⁶. World Health Organization¹⁷ recommends a minimum inter birth interval of 36 months. however a lot of variation is seen in different cultures and socio-demographic stratas regarding inter birth interval. Both education status and monthly income were associated with birth spacing. Studies conducted in Pakistan¹⁸, Nepal¹⁹, and middle eastern countries^{20,21} reported that maternal education had a positive linear relationship with birth intervals.

Like the findings of this study, a study conducted in Saudi Arabia also established significant association between lower family income and shorter birth interval²⁰. However, current study couldnot establish any significant association between working status and birth spacing. In contrast,a study conducted in Iran²² and afore mentioned Nepal¹⁹ study reported that working women had longer birth intervals than those of the house wives. In current study,distribution of the birth spacing in months, of all participants, was skewed to the right(Figure:01). Majority of the participants had a short birth interval. Primigravida were not included in plotting histogram for birth spacing .

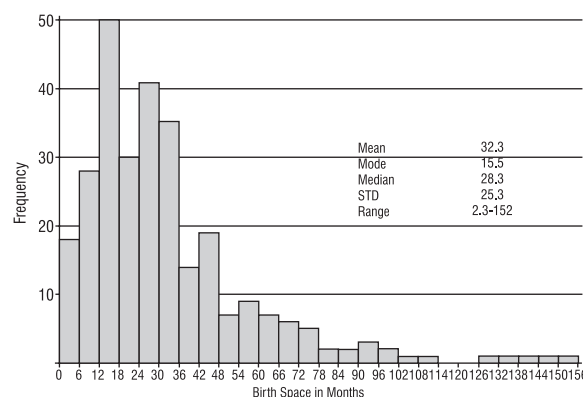


Figure:01 Distribution of Birth Spacing Observed B/W Current & Previous Pregnancy (n=285)

Table:01 Test of Significance [n=384, frequency(%)]

Independent Variables	Outcome Variables			P-Value
BREAST-FEEDING PRACTICES				
	All babies	Some of them	None of them	
Educated	20(5.2)	96(25.0)	167(43.5)	p<0.00001**
Uneducated	61 (15.9)	23(5.9)	17(4.4)	
House Wife	78(20.3)	115(29.9)	156(40.6)	p=0.0003**
Serving	3(0.8)	4(1.0)	28(7.3)	
Monthly income < 30,000	52(13.5)	88(22.9)	113(29.4)	p=0.075
Monthly income >30,000	29(7.6)	31(8.1)	71(18.5)	
GRAVIDITY				
	Primigravida	2nd to 5th	6th & above	
Educated	49(12.8)	207(53.9)	27(7.0)	p=.001**
Uneducated	17(4.4)	60(15.6)	24(6.3)	
House Wife	62(16.1)	239(62.2)	48(12.5)	p=0.369
Serving	4(1.0)	28(7.3)	3(0.8)	
Monthly income < 30,000	46(12.0)	171(44.5)	36(9.4)	p=0.514
Monthly income >30,000	20(5.2)	96(25.0)	15(3.9)	
PARITY				
	None	1 to 4	5 & above	
Educated	63(16.4)	213(55.5)	7(1.8)	p=0.00001**
Uneducated	23(6.0)	61(15.9)	17(4.4)	
House Wife	78(20.3)	247(64.3)	24(6.3)	N.A
Serving	8(2.1)	27(7.0)	0(0.0)	
Monthly income < 30,000	61(15.9)	170(44.3)	22(5.7)	p=0.007**
Monthly income >30,000	25(6.5)	104(27.1)	2(0.5)	
BIRTH SPACING IN YEARS				
	< 1 Yr	1.01 to 2 Yrs	> 2 Yrs	
Educated	97(25.3)	69(18.0)	117(30.5)	p=0.008**
Uneducated	51(13.3)	14(3.6)	36(9.4)	
House Wife	135(35.2)	75(19.5)	139(36.2)	p=0.976
Serving	13(3.4)	8(2.1)	14(3.6)	
Monthly income < 30,000	110(28.6)	55(14.3)	88(22.9)	p=0.008**
Monthly income >30,000	38(9.9)	28(7.3)	65(16.9)	

** :Result highly significant at p<0.05.

N.A: p value cant be calculated through chi2 due to ZERO entry.

CONCLUSION

This study concludes that maternal education is an important predictor of the important attributes of family planning viz a viz breast feeding, family size and birth spacing. Monthly income can be regarded as the second important predictor. Working status of mothers could hardly exhibit itself as an important predictor as compared to education and monthly income.

REFERENCES

1. Shokouh SM, Mohammad AR, Emamgholipour S, Rashidian A, Montazeri A, Zaboli R. Conceptual models of social determinants of health: a narrative review. Iranian journal of public health. 2017 Apr;46(4):435-46.
2. Gontijo DT. Social determinants of health: perspective for understanding the relationship between

- processes of social exclusion and equity in health. *Rev Eletr Enf*.2010; 12(1):9.
3. Shavers V. Measurement of socioeco-nomic status in health disparities research. *J Natl Med Assoc*.2007; 99(9):1013-23.
 4. Adler NE, Newman K . Socioeconomic disparities in health: pathways and policies. *Health Aff (Millwood)*. 2002; 21(2): 60-76.
 5. Manstead AS. The psychology of social class: How socioeconomic status impacts thought, feelings, and behaviour. *British Journal of Social Psychology*. 2018 Apr;57(2):267-91.
 6. Kaliyaperumal K. Guideline for Conducting a Knowledge, Attitude and Practice (KAP) Study. *Community Ophthalmology*, 2004; 4(1): 7-9.
 7. Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J. Family planning: the unfinished agenda. *The Lancet*. 2006 Nov 18;368(9549):1810-27.
 8. Mumtaz Z, Salway S, Nykiforuk C, Bhatti A, Ataul-lahjan A, Ayyalasomayajula B. The role of social geography on Lady Health Workers' mobility and effectiveness in Pakistan. *Social science & medicine*. 2013 Aug 1;91:48-57.
 9. Breastfeeding [Internet]. World Health Organization. 2018 [cited 9 July 2018]. Available from: http://www.who.int/nutrition/topics/exclusive_breastfeeding/en/.
 10. Victora CG, Bahl R, Barros AJ, França GV, Horton S, Krasevec J, et al. Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. *Lancet*. 2016;387:475–90.
 11. Miller G. Contraception as development? New evidence from family planning in Colombia. *The Economic Journal*. 2010 Jun;120(545):709-36.
 12. Dean A, Sullivan K, Soe M. Open Source Epidemiologic Statistics for Public Health [Internet]. *OpenEpi*. 2013 [cited 29 October 2017]. Available from: http://www.openepi.com/Menu/OE_Menu.htm
 13. Fotso JC, Cleland J, Mberu B, Mutua M, Elungata P. Birth spacing and child mortality: an analysis of prospective data from the Nairobi urban health and demographic surveillance system. *Journal of Biosocial Science*. 2013 Nov;45(6):779-98.
 14. Ulep VG, Borja MP. Association between pregnancy intention and optimal breastfeeding practices in the Philippines: a cross-sectional study. *BMC pregnancy and childbirth*. 2012 Dec;12(1):69.
 15. Allen RH. The role of family planning in poverty reduction. *Obstetrics & Gynecology*. 2007 Nov 1;110(5):999-1002.
 16. Singh SN, Singh SN, Narendra RK. Demographic and socio-economic determinants of birth interval dynamics in Manipur: A survival analysis. *Online Journal of Health and Allied Sciences*. 2011 Jan 20;9(4).
 17. Exavery A, Mrema S, Shamte A, Bietsch K, Mosha D, Mbaruku G, Masanja H. Levels and correlates of non-adherence to WHO recommended inter-birth intervals in Rufiji, Tanzania. *BMC pregnancy and childbirth*. 2012 Dec;12(1):152.
 18. Asifa K, Khalid PM. Determinants of higher order birth intervals in Pakistan. *Journal of Statistics*. 2012;19:54–82.
 19. Suwal V. Socio-cultural dynamics of birth intervals in Nepal. *CNAS Journal*. 2001; 28(1):11–33.
 20. Fattah MA, Hifnawy T, Said TI, Moharam MM, Mahmoud MA. Determinants of birth spacing among Saudi women. *Journal of Family and Community Medicine*. 2007;14,(3): 103–111.
 21. Youssef R .Duration and determinants of inter-birth interval: community-based survey of women in southern Jordan. *The Eastern Mediterranean Health Journal*. 2005; 11(4):559–572.
 22. Abdurrahman R, Majid M. The determinants of birth interval in Ahvaz-Iran: a graphical chain modeling approach. *Journal of Data Science*. 2007;5: 555–576.

ONLINE SUBMISSION OF MANUSCRIPT

It is mandatory to submit the manuscripts at the following website of KJMS. It is quick, convenient, cheap, requirement of HEC and Paperless.

Website: **www.kjms.com.pk**

The intending writers are expected to first register themselves on the website and follow the instructions on the website. Author agreement can be easily downloaded from our website. A duly signed author agreement must accompany initial submission of the manuscript.