ORIGINAL ARTICLE

QUANTITY AND QUALITY OF INFORMATION, EDUCATION AND COMMUNICATION DURING ANTENATAL VISIT AT PRIVATE AND PUBLIC SECTOR HOSPITALS OF BAHAWALPUR, PAKISTAN

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Background: Information, education and communication (IEC) by health care provider to pregnant woman during the antenatal visit are very crucial for healthier outcome of pregnancy. This study analysed the quality and quantity of antenatal visit at a private and a public hospital of Bahawalpur, Pakistan. **Methods:** An exit interview was conducted from 216 pregnant women by using validated, reliable and pre-tested adapted questionnaire. First sample was selected by simple random sampling, for rest of the sample selection systematic random sampling was adapted by selecting every 7th women for interview. Ethical considerations were taken. **Results:** Average communication time among pregnant woman and her healthcare provider was 3 minute in public and 8 minutes in private hospital. IEC mainly focused on diet and nutrition in private (86%) and (53%) public, advice for family planning after delivery was discussed with 13% versus 7% in public and private setting. None of the respondents in both facilities got advice or counselling on breastfeeding and neonatal care. Birth preparedness components were discussed, woman in public and private hospital respectively. In both settings antenatal clients were not received information and education communication according to World Health Organization guidelines. **Conclusion:** Quality and quantity of IEC during antenatal care was found very poor in both public and private sector hospitals of urban Pakistan.

Keywords: Antenatal Care, Public and Private Hospitals, Communication, Information, Education

INTRODUCTION

Antenatal Care (ANC) is the 'care given to women during pregnancy'. It is one of the pillars of safe motherhood initiative[1], provides an opportunity to health care providers to inform pregnant women on nutrition and diet, birth preparedness theory and complication readiness which includes, cognising danger sign of pregnancy[2] and how all these could meliorate the health of the mother and child (Figure-1).

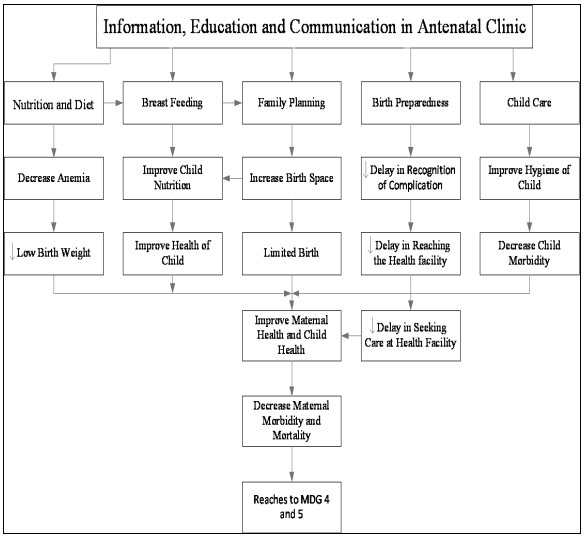

Figure-1: Conceptual framework of IEC for ANC based on WHO standard guidelines

Although obstetric ramification cannot be forecast through antenatal screening out but women can be educated to recognised danger signs and take actions that likely interconnected to severe problems.[3] It is imperative that all health professionals should be aware of the need for effective information, education, and communication, and incorporate it into antenatal care visit. Information, education and communication interventions are motivational method grounded in the concepts of prevention and primary healthcare. It creates awareness, increases knowledge, changes attitudes and moves people to transform or keep on their behaviour or to adopt an improvement and continue their wellbeing in everyday life.[4] Contact time among healthcare provider (HCP) and patients during her antenatal visit is important for fruitful information, education and communication interventions.[5] For healthier result it is necessary that HCP should give significant time to every antenatal client as per guidelines of World Health Organization (WHO) protocols.[6] Hence, the health staff performance and behaviour with pregnant woman is very important to provide the ANC in the families and communities.[7–9]

According to Pakistan Demographic Household Survey (PDHS) 2006–2007 only 34% deliveries in Pakistan take place in health facilities while the ANC coverage accounts for 60.9%.[10] This huge gap could be possible due to poor knowledge of pregnant women on importance of ANC. Maternal deaths toll

could be stave off if women is fully informed during her antenatal visit regarding the importance of skilled care during pregnancy, delivery, and after delivery, and how could it reach the hospital timely and receive treatment when it is needed.[11]

In Pakistan, overall private sectors provide health services to more than 71% of population. Due to profit nature of private hospitals, they would be more motivated than public hospitals to provide excellence services to patients to meet their needs more effectively and efficiently.[12,13]

The objective of this study was to assess the quantity and quality of information, education and communication during antenatal care in public and private hospitals of Bahawalpur.

METHODS

This cross-sectional comparative study was conducted from March to July 2011. Data were collected from Bahawal Victoria Hospital, a tertiary care public sector hospital, and from a private hospital that gives round a clock services for maternity care. Simple random sampling technique was adopted for first respondents and then every 7th respondents were interviewed by using the systematic random sampling method. All those pregnant women were attended the obstetric outpatient department (OPD) of both public and private hospital for their antenatal visit were included in the study while those pregnant women with emergency complication during the antenatal period were excluded from the study. The quality of IEC during the ANC was measured by adapting the reliable and valid tool from antenatal record review questionnaires in safe motherhood need assessment kit.[14] Institutional ethical approval from the Institutional Review Board (IRB) of Health Services Academy (HSA) was taken before the data collection process. The differences between women attending public and private hospitals were assessed using the Chi-square test. Frequencies, mean, and percentages with *p*-value are presented. Data were analysed using SPSS-16.

RESULTS

In public hospital mean age of women was 24.03±5.34 with a minimum age of 16 years and maximum being 40 years, and in private hospital mean age of respondents was 26.13±4.42 years with a minimum age of 18 years and maximum being 36 years. Out of all those who visited the public hospital, 43% were illiterate and only 6 percent had higher education. Those attending private hospital 20% were illiterate and 34% had higher education. Similarly, 83% of those visiting public hospital had income <10,000 Pakistani Rupees per month while 70% of private hospital clients had income >10,000 Pakistani rupees per month. Monthly income had statistically significant correlation with the choice of health facility ($p<0.05$). In public hospital 71% of women spent 4 mints on average with their HCP during their antenatal visit. In private hospital 57% spent on average 5–8 minutes with their healthcare provider, with an average 3 minutes in public and 8 minutes in private hospital. More than 50% of women in private hospital had attended more than 4 antenatal visits, however about one third women (30%) had completed 4 ANC visits in public hospital at the time of interview. During ANC visit most commonly topic discussed and advises was diet and nutrition in both facilities. Higher proportion of private (43%) than public (18%) clients received information regarding danger signs of pregnancy, delivery and postnatal. It is concerning that (13%) of women got information for family planning in public facility but only (7%) in private facility. None of antenatal clients in both settings received any kind of education and advice for care of baby after birth or breast feeding in both facilities. Birth components identification of healthcare facility, HCP, transport, blood donor, and money saving were discussed (Table-2). At the end of ANC checkups 57% of pregnant women in public facility and 93% in private were asked for next follow-up visit.

Table-1: Socio-demographic characteristics

Socio-Demographic characteristics	Public Hospital		Private Hospital		*p*
	N	%	N	%	
Age (Years)					
16–25	78	72.2	48	45.4	0.01
26–35	28	26	58	52.7	
>35	2	1.9	2	1.9	
Education					
Uneducated/informal	48	43.5	22	20.3	0.006
Primary and Middle	32	30.6	20	18.5	
Secondary and Higher Secondary	21	19.5	18	26.9	
Graduation+	7	6.5	37	34.3	
Profession					
Housewife	106	98	96	88	0.2
Working woman	2	2	12	11	
Income (PKR)					
<10,000	83	76.6	32	30.6	0.001
11,000–30,000	21	19.5	44	39.8	
31,000–50,000	2	1.9	8	7.4	
>51,000	2	1.9	24	22.2	

Table 2: IEC in ANC visits regarding birth preparedness and other health related topics

Birth preparedness	Public Hospital		Private Hospital	
	N	%	n	%
Arrangement of Transport	3	2.8	1	0.9
Money saving	3	2.8	2	1.9
Arrangement of blood donor	2	1.9	1	0.9
Identification of health facility	4	3.7	1	0.9
Identification of Health care provider	3	2.8	1	0.9
Diet & Nutrition	58	52.8	93	86.1
Family Planning	14	13	8	7.4
Care of Baby/Breast Feeding	0	0	0	0
Benefit of HF/SBA Delivery	11	10.2	20	18.5
Danger sign of Obstetric	19	17.6	45	43.5

DISCUSSION

In public hospital most of the women were illiterate and belonged to low income group with monthly income less than the respondents attending the private hospital. Women visited public hospital for antenatal care and not for acquiring information and education which is mandatory for their wellbeing, whereas the respondents who were interviewed at private hospital were literate and belonged to high income group. Similar study revealed that the public health facilities were more used by the poor and rural population with low income as compared to private health facilities which were attended by the population living in urban areas with high income.[15] Our study shows that the most of the women attended antenatal clinic for their check-up but unfortunately they were not properly benefiting from the aim of ANC. More than half of the women did not receive any information and education during antenatal visit in both facilities. A study with similar findings from Sudan reported that few women recalled that they received advice for diet and nutrition during the ANC.[16] Another study shows that family planning counselling was discussed with 13% of respondents of public and 7% of private hospital.[17]

Pregnant women in private and public hospital were not informed about danger signs of pregnancy and none of the study participants were advised for the care of baby after birth and breast feeding. During the IEC none of health workers told the woman that how information on these topics reduces maternal and child morbidity and mortality. For better information and education, communication time between woman and her HCP is very important. Low rate of IEC is due to short time that providers spend with each woman during antenatal visit. Majority of the respondents claimed in public hospital that they had spent average 4 minutes with health provider, while in private hospital average 8 minutes were given by the HCP. Although this is better than public hospital but does not match WHO new antenatal care model. In this short duration of time HCPs didn't convey the quality IEC to antenatal patient which is essential for pregnant woman and that is needed for change in the behaviour of woman and her family members toward the health seeking behaviour. Studies from other countries support these findings that the patients who came for antenatal check-up get only less than 3 minute for the communication with their HCP.[18] A study from Sudan found that the women spent 5 minutes or less with the antenatal care provider.[16]

One important function of antenatal care is to educate all women for arrangement and planning for birth. Birth preparedness is a fundamental component of antenatal care which aims to reduce unnecessary delays to seek emergency obstetric care, hence improves maternal and foetal outcomes. Unfortunately only few women obtain guidance from HCP for birth preparedness during their ANC. Knowledge of danger signs is part of birth preparedness. Awareness of danger sign enables family and women to take timely action when any emergency develops, but in public hospital 18%, and in private hospital 43% women got information of danger signs of antenatal, natal and postnatal period. It is evident from different studies and evaluation that majority of pregnant women and their families do not know how to recognise the danger signs of complications and when complications happen, the unprepared family will waste an enormous time in recognising the problem, getting prepared, receiving money, finding transport and reaching the appropriate referral facility.[19,20] Pembe *et al* found that 42% clients were not informed about any pregnancy danger signs, 50% knew about vaginal bleeding, and 45% knew about severe headache/blurred vision.[21]

CONCLUSION

Quality of IEC during ANC provided is better in private hospitals compared to public sector hospital. It might be because of the time duration spent on patients was greater than the public and the different socioeconomic group of women who were availing the private health facilities.

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