Men's Decision Making: Determinant of Home Delivery among Women in Khyber Pakhtunkhwa Pakistan

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Abstract

Poor maternal health is one of the public health issues facing rural women in Pakistan. Various socio-demographic and cultural factors confine women to the domestic sphere. The main objective of this research is to examine men's decision-making in the household in Pakhtun society as a determinant of home delivery in Khyber Pakhtunkhwa province, Pakistan. In the present study, researchers used a quantitative research design and collected data through a household survey in the Pakhtun society. The data are collected from 503 ever-married women in District Malakand, from May 1 to November 30, 2016. The results show that nearly two-thirds, 62.3 percent, of men are key decision-makers regarding antenatal care utilization, and more than a third, 76 percent, of husbands are key decision-makers regarding home delivery due to their wives' subordinate position within the household. The researchers concluded that men are key decision makers and their decisions affect women's maternal health care. To achieve Sustainable Development Goal No. 3, the study recommends mainstreaming women into decision-making in the domestic sphere and their involvement in decisions regarding access to and use of maternal health care services.

Keywords: Home delivery, Men's decision, Subordinate position, Women Empowerment.

Introduction

Poor maternal health is one of the fundamental public health issues facing the majority of women in Pakistan (Bhutta, 2004). The World Health Organization (WHO) estimated that 358,000 women worldwide died due to poor maternal health. Similarly, WHO (2007) stated that maternal deaths are reported as 400/100,000 live births worldwide, of which the majority (99%) are recorded from developing countries. Various reports stated the high maternal mortality in Pakistan during pregnancy and at the time of delivery. According to the Pakistan Demographic and Health Survey (PDHS), the maternal mortality rate in the country is 276/100,000 live births (NIPS, 2013). The proportion of maternal deaths is likely 500/100,000 live births. It is stated in PDHS (2013) that still more than fifty percent (52%) of deliveries take place at home, and a very minimum of 15 percent of deliveries are reported in public health facilities (NIPS, 2013). In the same report, it is reported that in the study area, 60 percent of home deliveries are assisted by a traditional birth attendant.

Determinants of Home Delivery

Recent research studies highlighted various barriers to accessibility and utilization of maternal health care in health facilities. Most of the research studies focus on quantifiable obstetric causes of poor maternal health (Fikree, 2004). Similarly, the research studies focused on the

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structure and programmatic strategies initiated by the government to reduce the maternal mortality rate (MMR) in the country (Bhutta, 2013). An increasing number of research studies indicate that in developing countries, most of the population resides in rural areas, where they are not only confined to the domestic sphere but also have financial autonomy in the hands of male family members (Mumtaz, 2009). A study reveals that women are in a subordinate position and have limited or no access to economic resources (Mahmood, 2002). Research stated that women are not permitted to make individual decisions about their health and place of delivery (Gabrysch, 2009). In Pakistan, women are treated as subordinate in families, and they are bound to take permission from their husband or any other male family members to access and utilize maternal health care services available in their area (Alix-Dancer, 2003).

Pakhtun women's mobility in the public sphere is restricted by male family members, and they are engaged in day-to-day domestic work (Stephenson, 2006). Men are the only decision-makers in public-sphere mobility and access to public services in the Pakhtun society. A recent study conducted in the area stated that women are living in poor maternal health conditions and they prefer to stay at home for treatment (Bhatti, 2002). In Pakistan, women's mobility is influenced by men's decision-making. Research indicates that husbands with lower education restrict their wives' mobility and compel them to stay at home (Marie, 2006; Fikree, 2004). The recent studies conducted in developing countries highlighted that some important socio-cultural factors are responsible for poor maternal health, i.e., restricted women's mobility, limited decision-making, waiting for permission from the husband on access to health facilities, and the husband's consent about the place of delivery (Ganle, 2016, 2015; Gupta, 2015). Similarly, it is highlighted that in patriarchal structures of families where men are the household heads, they typically are the final decision makers about women's access to health facilities (Moyer, 2013). The study by Marie (2006) explained that the weak position of women within the house restricts them from accessing ANC and PNC services at home from unskilled personnel (Marie, 2006). It is a very alarming situation highlighted by various researchers that women are restricted from visiting alone to any health facility and they are not socially permitted by men-headed households to spend money on their maternal health without the approval of their husbands (Zanconato, 2006; Nyamongo, 2002). The main objective of this research is to examine men's decision-making within the household in Pakhtun society as a determinant of home delivery among Pakhtun women in Khyber Pakhtunkhwa province, Pakistan.

Methodology

Theoretical Framework

The choice of health care access and utilization is one of the challenging determinants. This is because of various factors that influence the decision to access and use maternal health care. These factors include both the socio-cultural and accessibility. Various models and theories have been developed to understand health care utilization. These include the illness and medical case theory introduced by Suchman (1965) and the self-help-seeking theory developed by Mechanic (1978). In addition to the mentioned theories, various models are introduced to understand healthcare utilization and accessibility. The models included are the choice-making model by Young (1982), the health behavior model by Andersen (1995), and the Thaddeus three-delay model (Thaddeus & Maine, 1994).

Researchers applied Thaddeus's three-delay model in this research. The model contains three phases of delay. The first phase of delay is the woman's delay in deciding to seek care. The delay is influenced by various factors, including men's decision-making, women's low status, no knowledge about complications as outcomes of pregnancy, acceptance of home delivery, and the financially poor situation of the family. The second phase of the three delay model is the delay in reaching the care facility. This delay is due to the distance from health facilities,

the unavailability of transportation, poor infrastructure, and the fact that most residential areas are in the mountains. The third phase of the model covered the delay in receiving adequate health care. The main factors are poor medical facilities and untrained, non-serious health service providers. The referral mechanism is missing in the health facilities, and the facilities are lacking in dealing with pregnancy complications on an emergency basis.

Research Design

The researchers used a quantitative research design. Quantitative data were collected using an interview schedule from Pakhtun married women aged 15-49 years. The women who had a delivery in the last twelve months and permanently reside in the study area were interviewed. In the research study, the data were collected from n=503 respondents. The researcher translated the interview schedule into the local language to collect data from the respondents. The study was conducted in District Malakand, *Khyber-Pakhtunkhwa* province of Pakistan, which has one of the highest maternal mortality rates (MMR) reported in the country (NIPS, 2013). Due to cultural sensitivity and women's confinement to the domestic sphere, the data were collected through Lady Health Visitors *(LHVs*). Before the field activity, *LHVs* were trained and oriented about the research objectives and significance of the study. Verbal consent was obtained from the respondent to ensure their privacy and confidentiality, as written consent was not permitted by their male family members. The research was conducted over 7 months, from May 01 to November 30, 2016. In the research study, the dependent variable (home delivery) was measured in two categories in the interview schedule: health facility (coded 01) and home (coded 02). The independent variable in the present study was socio-demographic and cultural factors. The socio-demographic factors were measured with women's education, husband's education, women's occupation, area of residence, and women's age. The cultural factors were measured with decision-making in maternal health care access and utilization, decision-making in family planning use, women's position in the family, decision-making in household purchase, decision-making about place of delivery, and decision-making about public sphere mobility and intimate partner violence during pregnancy. SPSS was used for data analysis, and the researcher applied binary logistic regression to examine the relationship between place of delivery (dependent variable) and men's decision-making (independent variable). In the present study, delivery was measured by place of delivery, while men's decision-making was measured through their decisions about household purchases, access to maternal health care facilities, visits to outdoor social spaces, and the use of family planning methods.

Ethical Consideration

To ensure the confidentiality and privacy of the women, verbal informed consent is taken before the study. In the present research study, data were collected from women by a team of women research assistants, as male interaction with women is not permitted by male-headed households in the study area. There is no conflict of interest with the content of this research study.

Results and Discussion

Table 1: Socio-demographic characteristics association with place of delivery

Socio demographic Variables	*Place of Delivery*			
	Health facility	*Home*	*OR, 95% C.I*	*P.*
	Frequency, %	*Frequency %*		*Value*
Women's Education				
Uneducated	63 (24.2)	196 (92.0)	36.052 (20.368-63.814)	.000
Educated	197 (75.8)	17 (8.0)	1.00	
Women's age				
15-30 years	125 (48.6)	76 (35.8)	1.00	
Above than 30 years	132 (51.4)	136 (64.2)	1.695 (1.168-2.459)	.005
Husband's Education				
Uneducated	47 (18.1)	102 (47.9)	4.164 (2.751-6.305)	.000
Educated	213 (81.9)	111 (52.1)	1.00	
Area of residence				
Plain	185 (85.3)	207 (77.2)	1.00	
Mountains	32 (14.7)	61 (22.8)	1.704 (10.63-2.730)	.027
Women's Occupation				
Employed	87 (33.5)	19 (8.9)	1.00	
House wife	173 (66.5)	194 (91.1)	5.135 (3.001-8.785)	.000

Table 01 shows the association between socio-demographic and place of delivery in the study area. In the selected population, statistically significant difference was found with place of delivery among uneducated women who delivered in home (92.0% vs. 24.2%) compared to those who has institutional delivery in hospital. The odd ratio of uneducated women is 36.052 times higher than the educated women (OR 36.052, CI 95% 20.368-63.814). This shows that women qualification is statistical significantly associated with place of delivery (P- value .000). In the selected study respondents, statistically significant difference was found with place of delivery among women with more than 30 year of age who delivered in home (64.2% vs. 51.4%) compared to those who has institutional delivery in hospital. By applying binary logistic regression the odd ratio of women with more than 30 years of age the odd ratio is 1.695 times higher than women with 15-30 year of age (OR 1.695, CI 95% 1.168-2.459). The age of women is statistically significant and positively associated with place of delivery (P-value .005).

In the selected population, statistically significant difference was found with place of delivery among women's uneducated husband who delivered in home (47.9% vs. 18.1%) compared to those who has institutional delivery in hospital. By applying the binary logistic regression the odd ratio of uneducated husband is 4.164 time higher than the educated husband (OR. 4.164, CI 95% 2.751-6.305). This show that husband education is statistically significant and associated with place of delivery (P-value .000). In the selected women, statistically significant difference was found with place of delivery among women with mountains residence and their home delivery (22.8% vs. 14.7%) compared to those who has institutional delivery in hospital. The odd ratio of women resides in mountains area is 1.704 times higher than women reside in plan areas (OR. 1.704, CI 95% 10.63-2.730). Place of residence is statistically significant and associated with place of delivery (P-valve .027). Among the respondents, statistically significant difference was found with place of delivery among women with living as housewife with home delivery (91.1% vs. 66.5%) compared to those who has institutional delivery in hospital.

The binary logistic regression results indicated that the odd ratio of housewives is 5.135 times higher than employed women (OR. 5.135, CI 95% 3.001-8.785). There is statistically significant association between women occupation and place of delivery (P-value .000).

Table 2: Decision making association with place of delivery

Decision making authority	*Place of delivery*			
	Hospital facility Frequency, %	*Home Frequency%*	*OR, 95% C.I*	*P. Value*
Decision making for antenatal care				
Husband	94 (43.3)	167 (62.3)	2.164 (1.502-3.116)	.000
Jointly	123 (56.7)	101 (37.7)	1.00	
Decision making about place of delivery				
Husband	131 (64.2)	198 (76.4)	1.809 (1.206-2.713)	.004
Jointly	73 (35.8	61 (23.6)	1.00	
Decision to visits outdoor socialize				
Husband	140 (64.5)	238 (88.8)	4.363 (2.725-6.986)	.000
Jointly	77 (35.5)	30 (11.2)	1.00	
Decision about family planning				
Husband	50 (26.5)	90 (39.3)	1.800 (1.185-2.734)	.006
Jointly	139 (73.5)	139 (60.7	1.00	
Women position in family				
Inferior than men	139 (64.1)	216 (80.6)	2.331 (1.546-3.514)	.000
Equal to men	78 (35.9)	52 (19.4)	1.00	
Intimate partner violence				
Yes	90 (42.3)	175 (66.0)	2.657 (1.831-3.856)	.000
No	123 (57.7)	90 (34.0)	1.00	

Table 02 indicates the association between the decision making authority and place of delivery in *Pakhtun* society. In the selected population, statistically significant difference was found with place of delivery and men's decision making for antenatal care of their women and home delivery (62.3% vs. 43.3%) compared to those who have institutional delivery in hospital with antenatal care services from health facility. By applying binary logistic regression the odd ratio of decision by her husband is 2.164 times higher than decision taken jointly (OR 2.164 CI 95% 1.502-3.116). This shows that there is statistical significant association between men's decisions making in family matter and place of delivery (P- valve .000). In the selected population, statistically significant difference was found with place of delivery among women with their husband decision about selection of delivery place in Pakhtun family (76.4% vs. 64.2%) compared to those who have institutional delivery in hospital. By applying binary logistic regression the odd ratio of decision taken by husband is 1.809 time high than decision jointly (OR 1.809, CI 95% 1.206-2.713). This shows that there is statistical significant association between men's decision making authority and place of delivery (P-valve .004). In the selected population, statistically significant difference was found with place of delivery and decision regarding women public sphere mobility in Pakhtun family. The home delivery is higher (88.8% vs. 64.5%) compared to those who have institutional delivery in hospital. By applying binary logistic regression the odd ratio husband decision about women public sphere mobility is 4.363 time higher than decision taken jointly (OR 4.363, CI 95% 2.725-6.986). This shows that there is statistical significant association between men's decision making and place of delivery (P-valve .000). In the selected population, statistically significant difference was found with place of delivery among women with their husband decision about women use of family planning method in Pakhtun family. The home delivery is higher as (39.3% vs. 26.5%) compared to those who have institutional delivery in hospital. By applying binary logistic

regression the odd ratio of husband decision about use of family planning method is 1.800 higher than decision making jointly (OR 1.800, CI 95% 1.185-2.734). This shows that there is statistical significant association between men's decision making about family planning use and place of delivery (P-valve .006). In the selected population, statistically significant difference was found with place of delivery among women with their inferior status in Pakhtun society. The home delivery is higher as (80.6% vs. 64.0%) compared to those who have institutional delivery in hospital. By applying binary logistic regression the odd ratio of women inferior status than men in Pakhtun society is 2.331 time higher than women superior status to men (OR 2.331, CI 95% 1.546-3.514). This shows that there is statistical significant association between the women status in Pakhtun society and place of delivery (P-valve .000). In the selected population, statistically significant difference was found with place of delivery among women who facing physical violence in Pakhtun family. The home delivery is higher (66.0% vs. 42.3%) as compared to those who have institutional delivery in hospital. By applying binary logistic regression the odd ratio of women having physical violence during pregnancy is 2.657 times higher than women having no physical violence (OR 2.657, CI 95% 1.831-3.856). This shows that there is statistical significant association between women physical violence during pregnancy and place of delivery (P-valve .000).

Table 3: Pearson Correlation matrix for Socio-demographic factors and Decision Making Authority

Variables		1	2	3	4	5	6	7	8	9	10
1	Home Place of delivery	1.000	.076	-.534**	-.337**	.367**	-.238**	-.151**	-.147**	-.236**	-.191**
2	Women age	-	1.000	-.119**	-.130**	.003	-.048	-.005	-.006	-.017	-.013
3	Women education	-	-	1.000	.475**	-.605**	.331**	.246**	.240**	.495**	.214**
4	husband education	-	-	-	1.000	-.351**	.294**	.135**	.123**	.260**	.089*
5	Women Occupation	-	-	-	-	1.000	-.241**	-.115*	-.110*	-.616**	-.165**
6	Intimate Partner Violence	-	-	-	-	-	1.000	.172**	.148**	.269**	.169**
7	Decision making for antenatal care	-	-	-	-	-	-	1.000	.985**	.165**	.253**
8	Decision making about place of delivery	-	-	-	-	-	-	-	1.000	.148**	.274**
9	Decision to visits outdoor socialize	-	-	-	-	-	-	-	-	1.000	.194**
10	Decision about family planning	-	-	-	-	-	-	-	-	-	1.000

**. Correlation is significant at the 0.01 level (2-tailed)
*. Correlation is significant at the 0.05 level (2-tailed).

The results of the correlation analysis are presented in Table 3 as a correlation matrix. The Pearson Correlation method was applied. The correlation results show that both socio-

demographic factors and decision-making processes significantly influence the place of delivery and overall maternal health of women in Pakhtun society. The correlation matrix confirms the research hypothesis that women are socially confined to the domestic sphere and men are the key decision makers about maternal health care access and utilization.

Discussion and Conclusion

The present study reveals that socio-demographic factors and decision-making variables greatly influence the place of delivery (home). In the present research, the researchers hypothesized that both socio-demographic and decision-making factors are responsible for home delivery and poor maternal health in the study area. The statistical results in the present research supported the hypothesis.

Socio-demographic factors, including women's education, age, area of residence, occupation, and their husband's education, are important in the decision to select home delivery. The same results are found in other research studies conducted in developing countries. according to Pakistan Demographic and Health Survey (PDHS) the socio-demographic characteristics are influencing the women accessibility and utilization of maternal health care services in the study area (NIPS, 2013; Maqsood, 2009; Yasir, 2009) A study conducted by WHO, UNICEF, UNFPA and World Bank (2006) stated that poor reproductive health condition prevail among the women living in rural areas. Another research study reveals that women with no or low education stay at home during antenatal care, and the delivery takes place at home with the help of a Traditional Birth Attendant (TBA). They are not permitted to access and utilize health facility services available in their areas (Adamu, 2011; Marie, 2006). In developing countries, various studies have reported that women aged 30 or older often deliver at home (Mathole, 2004). The studies highlighted that women with mobility restrictions in the public sphere stay at home during deliveries attended by a TBA (Marie, 2006). According to PDHS (2013), women with rural residence prefer home delivery from TBA due to the restriction on access to health facilities (NIPS, 2013).

The findings in Table 02 also indicated that women are in a subordinate position and that men are the key decision-makers in the household. The results of the present study indicate that men are involved in decisions about women's antenatal care, place of delivery, outdoor mobility, and family planning methods. The research findings are also supported by previous studies that show women are confined to the domestic sphere and are not allowed to visit a health facility without their husbands' permission (Kadir, 2003). Another research conducted in the same research area stated that women are considered inferior with limited decision-making authority. Due to their inferior position, they are restricted from delivery in a health facility (Naz, 2011). Research in developing countries indicates that women are not permitted to use family planning methods without their husbands' consent (Bhutta, 2004). Public sphere mobility is also restricted in developing countries, leading women to be compelled to stay at home for delivery (Fikree, 2004). The Pakistani government admits that women's mobility is one of the responsible factors for poor maternal health care and utilization of health care facilities in their local area (GoP, 2001). The present study indicated that intimate partner violence (IPV) is also responsible for poor maternal health care among the women in the study area. The research studies conducted in Pakistan reveal that women are facing both physical and sexual violence, especially during their pregnancy (WHO, 2005). A research study stated that violence against women prevails in Pakistan, which directly affects women's health, especially during pregnancy (Perveen, 2009).

In conclusion, this research study has shown the importance of men's decision-making and socio-demographic factors as barriers, including men's decision-making about ANC utilization, Place of delivery, visits to outdoor socialize, use of family planning methods, and

intimate partner violence, which restricts women from accessing maternal health care services in the study area, especially at the time of delivery.

References

- Adamu, H. S. (2011). *Utilization of maternal health care services in Nigeria: An analysis of regional differences in the patterns and determinants of maternal health care use* (Doctoral dissertation, University of Liverpool).
- Alix-Dancer, P. (2003). Access to health care in developing countries. In *Developing countries, society and technology*. Stockholm: Royal Institute of Technology.
- Andersen, R. M. (1995). Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior, 36*, 1–10.
- Bhatti, L. I., & Fikree, F. F. (2002). Health-seeking behavior of Karachi women with reproductive tract infections. *Social Science & Medicine, 54*(1), 105–117.
- Bhutta, Z. A. (2004). Pakistan and the millennium development goals for health: A case of too little too late? *Journal of the College of Physicians and Surgeons Pakistan, 14*(9), 9.
- Bhutta, Z. A., Das, J. K., Rizvi, A., Gaffey, M. F., Walker, N., Horton, S., Black, R. E. (2013). Evidence-based interventions for improvement of maternal and child nutrition: What can be done and at what cost? *The Lancet, 382*(9890), 452–477.
- Fikree, F. F., & Pasha, O. (2004). Role of gender in health disparity: The South Asian context. *BMJ, 328*(7443), 823–826.
- Fikree, F. F., Ali, T. S., Durocher, J. M., & Rahbar, M. H. (2005). Newborn care practices in low socioeconomic settlements of Karachi, Pakistan. *Social Science & Medicine, 60*(5), 911–921.
- Gabrysch, S., & Campbell, O. M. (2009). Still too far to walk: Literature review of the determinants of delivery service use. *BMC Pregnancy and Childbirth, 9*(1), 34.
- Ganle, J. K., Otupiri, E., Parker, M., & Fitzpatrick, R. (2015). Socio-cultural barriers to accessibility and utilization of maternal and newborn healthcare services in Ghana after user-fee abolition. *International Journal of Maternal and Child Health, 3*(1), 1–14.
- Ganle, J. K., Dery, I., Manu, A. A., & Obeng, B. (2016). "If I go with him, I can't talk with other women": Understanding women's resistance to, and acceptance of, men's involvement in maternal and child healthcare in northern Ghana. *Social Science & Medicine, 166*, 195–204.
- Government of Pakistan. (2001). *An overview of the health sector: The way forward*. Islamabad: Ministry of Health.
- Gupta, M. L., Aborigo, R. A., Adongo, P. B., Rominski, S., Hodgson, A., Engmann, C. M., & Moyer, C. A. (2015). Grandmothers as gatekeepers? The role of grandmothers in influencing health-seeking for mothers and newborns in rural northern Ghana. *Global Public Health, 10*(9), 1078–1091.
- Kadir, M. M., Fikree, F. F., Khan, A., & Sajan, F. (2003). Do mothers-in-law matter? Family dynamics and fertility decision-making in urban squatter settlements of Karachi, Pakistan. *Journal of Biosocial Science, 35*(4), 545–558.
- Mahmood, N. (2002). Women's role in domestic decision-making in Pakistan: Implications for reproductive behaviour. *The Pakistan Development Review*, 121–148.
- Maqsood, F. (2009). *Effect of socio-cultural exclusion and community-level factors on reproductive behavior: Comparison between urban and rural Pakistani women*. University of the Punjab.
- Mathole, T., Lindmark, G., Majoko, F., & Ahlberg, B. M. (2004). A qualitative study of women's perspectives of antenatal care in a rural area of Zimbabwe. *Midwifery, 20*(2), 122–132.

- Mumtaz, Z., & Salway, S. (2009). Understanding gendered influences on women's reproductive health in Pakistan: Moving beyond the autonomy paradigm. *Social Science & Medicine, 68*(7), 1349–1356.
- National Institute of Population Studies & ICF International. (2013). *Pakistan demographic and health survey 2012–13*. Islamabad, Pakistan & Calverton, MD, USA.
- Naz, A., Chaudhry, H. U. R., & Khan, W. (2011). Pakhtun social organization (Pakhtunwali) and gendered decision-making process in mate selection among Pakhtuns of District Malakand, KPK, Pakistan. *Journal of Social Sciences, 5*(2), 134–150.
- Nyamongo, I. K. (2002). Health care switching behaviour of malaria patients in a Kenyan rural community. *Social Science & Medicine, 54*(3), 377–386.
- Perveen, R. (2009). *Violence against women in Pakistan: A qualitative review of statistics for 2009*. Islamabad: Aurat Foundation.
- Stephenson, R., Baschieri, A., Clements, S., Hennink, M., & Madise, N. (2006). Contextual influences on the use of health facilities for childbirth in Africa. *American Journal of Public Health, 96*(1), 84–93.
- Suchman, E. (1965). Social patterns of illness and medical care. *Journal of Health and Human Behavior, 6*(3), 114–128.
- Thaddeus, S., & Maine, D. (1994). Too far to walk: Maternal mortality in context. *Social Science & Medicine, 38*(8), 1091–1110.
- World Health Organization, UNICEF, UNFPA, & World Bank. (2007). *Maternal mortality in 2005*. Geneva: WHO Press.
- World Health Organization. (2005). *Multi-country study on women's health and domestic violence against women*. Geneva.
- Yasir, P. K., Shereen, Z. B., Sharma, M., & Zulfiqar, A. B. (2009). Maternal health and survival in Pakistan: Issues and options. *Journal of Obstetrics and Gynaecology, 31*, 920–929.
- Young, J. C., & Young-Garro, L. Y. (1982). Variation in the choice of treatment in two Mexican communities. *Social Science & Medicine, 16*(16), 1453–1465.
- Zakar, R., Nasrullah, M., Zakar, M. Z., & Ali, H. (2016). The association of intimate partner violence with unintended pregnancy and pregnancy loss in Pakistan. *International Journal of Gynecology & Obstetrics, 133*(1), 26–31.
- Zanconato, G., Msolomba, R., Guarenti, L., & Franchi, M. (2006). Antenatal care in developing countries: The need for a tailored model. *Seminars in Fetal and Neonatal Medicine, 11*(1), 15–20.