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"Abortion Prevalence and Its Socio-Demographic Correlates: *The Case of Ardabil District, 2004*"[1]

By:

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Abstract

Abortion/Miscarriage is considered not only as a major reproductive health matter, but also as a health risk factor for mothers' well-being. Bringing its different aspects into light- especially in a context like Iran's, which abortion is legally restricted to cases of great danger to mother's life- will contribute to demonstrate the role of Abortion/Miscarriage in demographic trends of the Ardabil District. Furthermore, examining its socio-demographic correlates, will increase first, the understanding of Abortion/Miscarriage and second, can facilitate better planning.

Requena and Klinger (1970) discussing the demographic transition theory, regarded three general stages that most of the societies pass through in transitional period. In the second and third stages of this transition, where the fertility is decreasing, abortion plays a role in controlling unwanted pregnancies.

Tietze and Dawson pointed out that the abortion and contraception share a common task; the prevention of unwanted births (1973, Cited in Tak, 1974:2). Bongaarts and Westoff argued that the abortion plays a birth-preventing role when contraceptives fail (2000).

This study deals with 456 clients admitted to a public hospital in Ardabil District (Alavi Hospital). Data were collected by interviewing women during their hospitalization period using a 51-question questionnaire including open and close-ended questions. The study was done in 2004.

The study shows that from all deliveries by woman attended to study (456), 96 (21.1%) have experienced Abortion/Miscarriage in their last deliveries, and the rest (78.9%) did not have such an experience. From those who have experienced an Abortion/Miscarriage, 13.5 percent have been classified as induced. This number is 2.85 percent with respect to the whole sample.

Applying Logistic Regression Analysis showed that, five variables; *Pregnancy Status*, *Parity* (number of living children), *Wife's Age*, *Wife's Literacy Status*, and *Husband Educational Attainment* were the significant independent predictors of experiencing Abortion/Miscarriage. Explanatory model with these variables could classify 83.7 percent of cases correctly.

With regard to Abortion Status (induced vs. spontaneous), Logistic Regression Analysis shoed that among all variables included in the analysis, only two (Parity and Method Failure) had significantly predictive power. Parity could classify about 90.6 percent of the cases correctly. The -2 LL Ratio improved from 51.27 to 45.58 in the first step of the analysis, indicating a high predictive power for dependent variable.

Introduction

Recently, considerable attention has been paid to population issues, especially reproductive health in demography, all over the world. Among these issues, abortion is one of the most important ones, because of hazards that it can bring for women's life, especially in restricted contexts. However, similar to the past history of developed countries, in developing countries – at least in large number of them– abortion is considered as an illegal or restricted human act. Nevertheless, regarding the important role of abortion, it takes the desired share among population problems in these countries. According to the IDHS[3] results, about 21.1 percent of women in Ardabil Province have confronted with at least one abortion incidence in their fertile life (Ministry of Health Care and Medical Training, 2000: 58).

Some studies have been done to analyze the medical aspects of the phenomenon (Karimzadeh, 1997; Khosravi, 1998), however, more and more attentions must be paid to study the socio-demographic aspects of abortion the same as studying medical aspects.

The problem addressed here is the crucial status of abortion in Ardabil District and the effects of socio-demographic factors on it, i.e., what socio-demographic factors affect the rate of abortion and which of them have a larger share in this regard. In other words, this research is going to answer the following questions:

1. What is the prevalence of abortion among women in Ardabil District?
2. What socio-demographic factors do affect the abortion incidence and trend among population at risk in the District?
3. What is the relative share of each factor in explaining abortion?

Finally, this research provides clear illustrations of the role of abortion in demographic trends of the District and can end in proper plans to treat or

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[3] - Ministry of Health and Medical Education, Iran DHS results, 2000.

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direct abortion in a way that reduce those costs and hazards that can be initiated by it.

Theories Stated

Tietze and Dawson (1973) argued that "induced abortion and contraception, share a common objectives; the prevention of unwanted births (cited in Tak, 1974: 2). Therefore, when societies and individuals are motivated to begin the effort to control their fertility, abortion and contraceptive use can rise simultaneously.

Bongaarts and Westoff (2000) linked the transitional theory and the trend of abortion in another way. To them "an assessment of the tradeoff between contraception and abortion yields estimates of the decline in the total abortion rate that would result from an illustrative increase of 10 percentage points in prevalence. This effect varies among societies, primarily because the tendency to use abortion after an unintended pregnancy varies. In Bongaarts and Westoff points of view abortion rates are generally highest in societies where small families are desired, because of the increase in the risk of unintended pregnancy; in societies where low contraceptive prevalence or ineffective methods are combined with low-fertility norms; and in societies with a high propensity to rely on induced abortion.

Some of the main concepts and variables included in the study have been introduced as follows;

Abortion/Miscarriage Experience: This variable refers to the situation whether a woman has experienced abortion or miscarriage with respect to her last pregnancy. Here, it makes no difference how this Abortion/Miscarriage has occurred, whether it was induced or spontaneous.

Abortion Status: For defining abortion, it is necessary to distinguish between two types, including spontaneous and induced. *Spontaneous abortion*, most of the times called miscarriage, is a kind of abortion that takes

place by itself, may be because of physical problem of parents or fetuses. *Induced abortion* refers to those kinds of pregnancies that are terminated by deliberate human intervention, usually during the 28 weeks period of gestation. In this research, *induced abortion* refers to those cases of pregnancy terminations that have been obtained in order to postpone childbearing, stop childbearing, or having other baby to look for. On the other hand, *spontaneous abortions* take place because of avoiding medical problems facing mother/child. In other words they refer to those cases of miscarriages that occur because of defects of the fetus or physical problems of the mother.

Pregnancy Status: Pregnancy Status refers to two main types of pregnancies: *wanted pregnancies;* those regarded as desired and wanted by both of parents, and *unwanted pregnancies*, which are classified as unintended or mistimed from their viewpoints. There is a midpoint also for those cases that only pregnancy is wanted from one of their viewpoints.

Data come from a survey that has been performed in Alavi Hospital in Ardabil District, the major public hospital of the District, in April 2004 by the research. Two trained interviewers, interviewed respondents for a complete month interval. Data are analyzing by the use of SPSS (Statistical Package for Social Sciences), in terms of descriptive and inferential statistics, i.e., Uni, Bi, and multivariate analysis.

The study might suffer from the fact that abortion is regarded as a restricted human act in Iran and this may cause some problems in terms of obtaining much valid data from respondents which are included in the study. Although it has been attempted to solve this problem through some strategies like using indirect questions, however, this might not be fully eliminated.

Findings of the study

The study shows that from all woman (456), 96 (21.05%) have experienced Abortion/Miscarriage and the rest (78.95%) did not have such an experience (figure 1).

Figure 1: Abortion/Miscarriage Experience
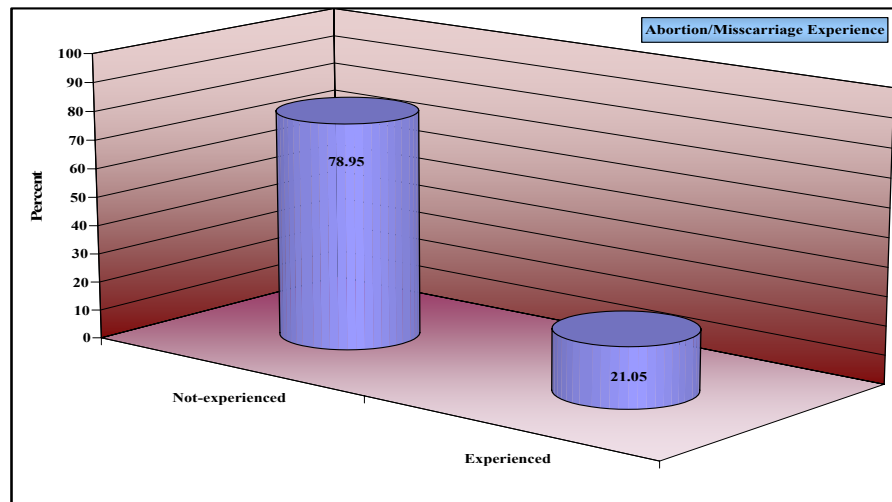
From those who have experienced an Abortion/Miscarriage, around 13.5 have been classified as obtainers of induced abortion (figure 2). This number is 2.85 percent with respect to the whole sample.

Figure 2: Abortion Status (Spontaneous vs. Induced)
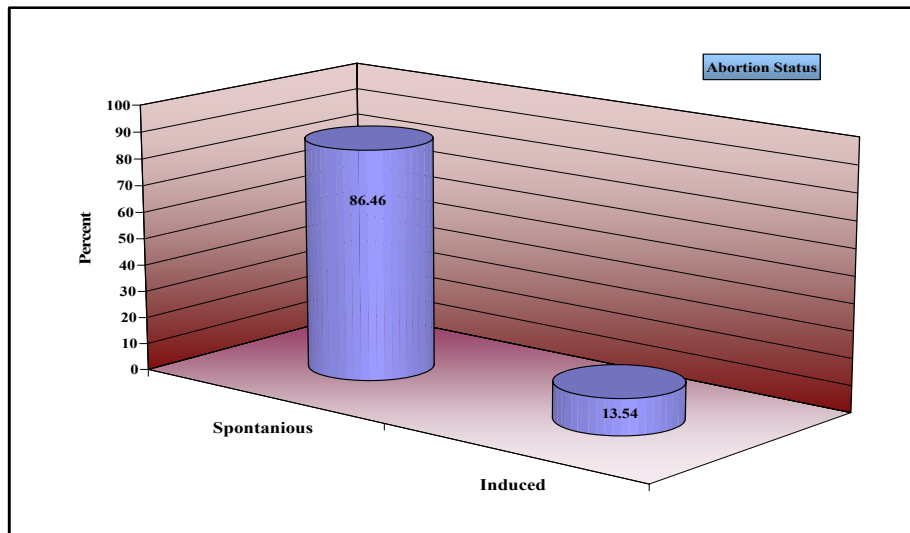
Among all pregnancies, around 12.06 percent of them were unwanted according to parents' view and 7.24 percent of them were unwanted from viewpoints of one of parents, and more than 4/5 of them were wanted from viewpoints of both of parents. More illustrations come from figure 3.

Figure 3: Pregnancy Status (Wanted vs. Unwanted)
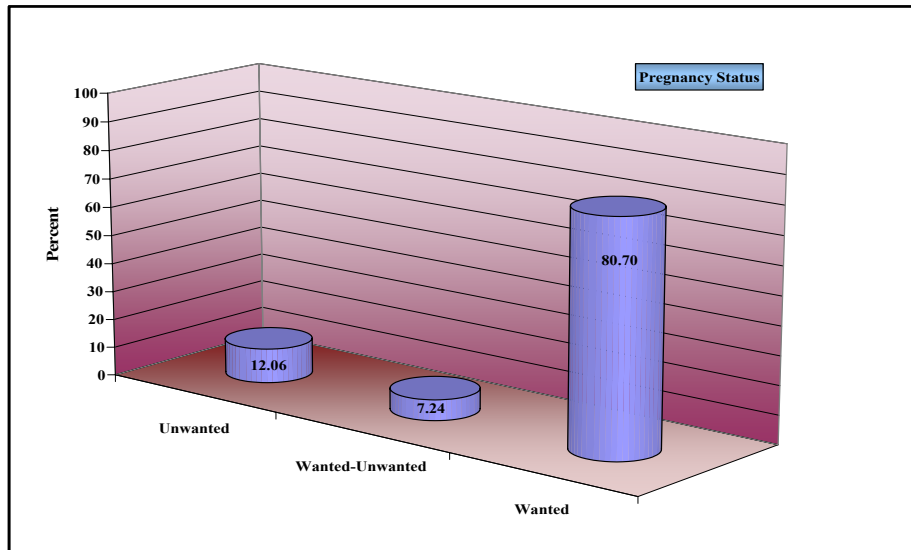
Among those who have obtained an induced abortion in their last pregnancy, about 4/5 have used the *prostatine* (a kind of injectable) to abort their unwanted pregnancy, and other 1/5 have used other different procedures for this purpose, among them; doing difficult things to force the fetus out.

Figure 4: Procedure for Obtaining Abortion
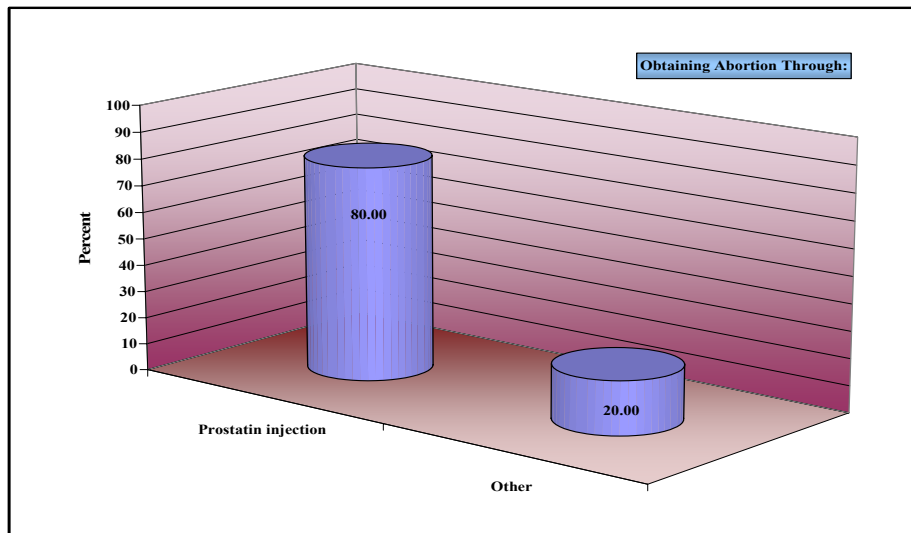
Symmetric and asymmetric measures used to examine bi-variate relationships between variables, shows significant effects of variables below, table 1, on Abortion/Miscarriage Experience. Results for Cramer's V. (a symmetric measure) and Uncertainty Coefficient (an Asymmetric Measure) and tests' significant level, surmised in table 1. The most influencing variable is the Pregnancy Status (test value: .206, sig.: .000 according to Cramer's V.) that is followed by the variables Husband age and Contraceptive Accessibility with correlation coefficients .178, .124 and significance levels of .006 and .008 respectively.

Table 1: Symmetric and Asymmetric measures for Abortion/Miscarriage Experience

		Symmetric - A.M. Experience		Asymmetric - A.M. Experience	
	Variables	**Cramer's V.**	**Sig.**	**Uncertainty Coefficient**	**Sig.**
1	**Pregnancy status (wanted & unwanted)**	.206	**.000**	.036	**.000**
2	**Husband age at present**	.178	**.006**	.031	**.006**
3	**Contraceptive accessibility**	.124	**.008**	.015	**.008**
4	**Contraceptive failure**	.124	**.008**	.014	**.012**
5	**Wife age at first marriage**	.177	**.007**	.027	**.014**
6	**Husband educational attainment**	.164	**.014**	.029	**.019**
7	**Parity (No. of living children)**	.125	**.029**	.016	**.025**
8	**Wife literacy status**	.106	**.024**	.010	**.029**
9	**Wife employment status**	.110	**.019**	.010	**.030**
10	**Husband literacy status**	.105	**.025**	.010	**.032**
11	**Wife age at present**	.149	**.039**	.022	**.036**
12	**Ideal family size**	.123	**.048**	.013	.071

However, where the symmetric measures do not consider the directional effect of an especial variable on the other, and only regards the reciprocal relationship, using Directional or Asymmetric measures, the magnitude of the coefficients are more or less lessening regarding the asymmetric measures.

Results for Bi-variate analysis regarding Abortion Status, demonstrated in detail in the table 2. The effects of variables; *Pregnancy Status*, *Parity*,

Contraceptive Failure, *Contraceptive Availability*, *Parental consultation* about different aspects of the life, *Ideal Family Size*, and *Contraceptive Use-effectiveness* are evident, since the significant levels are all small enough to reject the null hypothesis in these cases. Here also the most influencing variable is the Pregnancy Status (test value: 0.628 & sig.: 0.000 according to Cramer's V.) that followed by Parity and Contraceptive Failure.

Table 2: Symmetric and Asymmetric measures for Abortion Status

		Symmetric - A. Status		Asymmetric -A. Status	
	Variables	**Cramer's V.**	**Sig.**	**Uncertainty Coefficient**	**Sig.**
1	**Pregnancy status (wanted & unwanted)**	.628	**.000**	.497	**.000**
2	**Parity (No. of living children)**	.596	**.000**	.327	**.000**
3	**Contraceptive failure**	.509	**.000**	.272	**.000**
4	**Contraceptive accessibility**	.509	**.000**	.272	**.000**
5	**Parental consultation**	.370	**.001**	.225	**.000**
6	**Ideal family size**	.341	**.007**	.130	**.024**
7	**Contraceptive use-effectiveness**	.267	**.034**	.105	**.019**

Multivariate Analysis

Applying Logistic Regression Analysis in two separate parts for "Abortion/Miscarriage Experience" and "Abortion Status" has brought the following results which briefly are as follows. Number of cases Included in two types of analyses is as illustrated in table 3:

Table 3: Number of Cases included in Logistic Regression Analyses

		Abortion/Miscarriage Experience		Abortion Status	
Unweighted Cases		N	Percent	N	Percent
Selected Cases	Included in Analysis	**393**	86.2	**96**	21.1
	Missing Cases	63	13.8	360	78.9
	Total	456	100.0	456	100.0
Unselected Cases		0	.0	0	0.
Total		456	100.0	456	100.0

According to the table, because of missing values in the data, with respect to analysis of Abortion/Miscarriage Experience, only 393 cases have been included, which is even smaller regarding Abortion Status (84) cases.

Abortion/Miscarriage Experience

For completion of the analyses, all variables that have shown significant effect on the Abortion/Miscarriage Experience, with regard to asymmetric measures, have been used to establishing the predictive model for the dependent variable. Table 4 shows that Analyses continued till fifth step, and since significance level for all 5 steps are well below .05, all steps contribute significantly to the model.

Table 4: Omnibus Tests of Model Coefficients

Step	Variables		Chi-square	df	Sig.
1	Pregnancy Status	Step	23.119	2	**.000**
		Block	23.119	2	.000
		Model	23.119	2	.000
2	Parity	Step	18.272	2	**.000**
		Block	41.391	4	.000
		Model	41.391	4	.000
3	Wife's age	Step	20.434	4	**.000**
		Block	61.825	8	.000
		Model	61.825	8	.000
4	Wife's Literacy Status	Step	5.883	1	**.015**
		Block	67.708	9	.000
		Model	67.708	9	.000
5	Husband's Educational Attainment	Step	8.454	3	**.038**
		Block	76.162	12	.000
		Model	76.162	12	.000

Table 5 shows the detailed results for regression coefficients, Wald Statistic, Test sig. level, and also 95% confidence interval for logistic coefficients (B). According to this table, a pregnancy being unwanted rather than wanted, increases the odds of experiencing an Abortion/Miscarriage by a multiplication factor of 19.553, it means that compared to "wanted" category

of Pregnancy Status, the odds of experiencing an Abortion/Miscarriage will be about 19.5 times more than for "unwanted" category. This is a well significant increase regarding confidence interval values for the variable since it dose not include 1 in related interval (6.365-60.062).

Table 5: Variables Included in the Logistic Analysis for Abortion/Miscarriage Experience

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C. I. for EXP(B)	
	Variables							Lower	Upper
Step 5	Pregnancy Status, Wanted			27.16	2	**0.000**			
	Unwanted (1)	2.97	0.57	26.96	1	**0.000**	19.55	**6.36**	**60.06**
	Wanted-Unwanted (2)	0.60	0.71	0.70	1	0.400	1.82	0.44	7.43
	Parity, 4 and more			25.76	2	**0.000**			
	0 & 1(1)	3.38	0.84	16.22	1	**0.000**	29.56	**5.69**	**153.61**
	2 & 3 (2)	1.04	0.67	2.39	1	0.122	2.82	0.75	10.55
	Wife Age, 35 & Upper			13.74	4	**0.008**			
	Less than 19 (1)	-2.77	0.85	11.04	1	**0.001**	0.06	**0.01**	**0.32**
	20-24 (2)	-1.94	0.77	6.31	1	**0.012**	0.14	**0.03**	**0.65**
	25-29 (3)	-1.25	0.72	3.04	1	0.081	0.28	0.06	1.16
	30-34 (4)	-1.12	0.74	2.28	1	0.130	0.32	0.07	1.39
	Wife Literacy Status, Illiterate(1)	1.33	0.48	7.59	1	**0.006**	3.80	**1.47**	**9.85**
	Husband Edu. attainment, University and Upper			7.85	1	**0.049**			
	Elementary (1)	-1.36	0.58	5.36	1	**0.021**	0.25	**0.08**	**0.81**
	Secondary (2)	-0.57	0.56	1.03	1	0.310	0.56	0.18	1.71
	High School (3)	-0.49	0.57	0.75	1	0.385	0.60	0.19	1.86
	Constant	-2.02	0.94	4.54	1	**0.033**	0.13		

Regarding Parity, it has also significant effects on Abortion/Miscarriage Experience since the sig. level for the variable is 0.000. However, the main influencing category is "0 & 1" which refers to parities 0 and 1. B value for this category is about 3.387 (odds ratio being $e^{3.387}$= 29.57), indicates that compared to parity "4 and more", parity "0 and 1" will increase the odds of experiencing an Abortion/Miscarriage by a multiplication factor of 29.56. Again, this increase is well significant according to the confidence interval of the B coefficient. This is somehow reasonable since most of miscarriages are taking place in early parities, because of physical problems with the mother or her reproduction system.

Wife age also shows a significant effect in the model (sig.: 0.008). However, the effects of two categories are highly apparent. Compared to age group "35 and upper" the age group "19 and lower" and "20-24" (respectively) will reduce the odds of experiencing an Abortion/Miscarriage by a multiplication of 0.062 and 0.143. Theses two are significant enough according to the confidence interval of coefficients, revealing the fact that most of Abortion/Miscarriage experiences might take place because of old ages of childbearing. These kind of abortions mostly can resulted from high-risk pregnancies that includes pregnancies after age 30 for the women.

Wife Literacy Status is the other influencing factor in the model, regarding the significance level of the variable. Compared to "literate" category, the odds of experiencing an Abortion/Miscarriage for "illiterate" category increases by a multiplication of 3.808 ($e^{1.337}$). Confidence interval of the related coefficient which is not including value 1 indicates significant increase in this regard. This is very clear that mothers with no education are more likely to experience Abortion/Miscarriage rather than their counterparts in the Literate group. Higher education can indirectly reduce the rate of abortion especially miscarriage through preparing good quality care for mother and fetus during pregnancy.

Husband Educational Attainment is the last variable contributing significantly to model. Compared to "University and upper", the "Elementary" category reduces the odds of experiencing an Abortion/Miscarriage by a multiplication of .256, revealing that the more literate the father, the more the probability of experiencing Abortion/Miscarriage by his wife. This confusing finding is not so reasonable since the well-educated parents can prepare good care of their pregnancies and in turn this should reduce the probability of the Abortion/Miscarriage Experience. However, this is the contradictory finding that the Author himself has witnessed when reviewing the literature of the study. Education most of

the times and in different studies shows different effects on demographic variables including fertility and abortion.

Table 6: Step Summary for Logistic Regression Analysis, Abortion/Miscarriage Experience

Step Summary							
	Improvement			Model			Correct Class %
Step	Chi-square	df	Sig.	Chi-square	df	Sig.	
Pregnancy Status	23.119	2	0.000	23.119	2	0.000	80.916
Parity	18.272	2	0.000	41.391	4	0.000	81.425
Wife age	20.434	4	0.000	61.825	8	0.000	81.934
Wife Literacy Status	5.883	1	0.015	67.708	9	0.000	82.443
Husband Edu. Attainment	8.454	3	0.038	76.162	12	0.000	83.715

From the table, Step summary, it is clear that all variables included in the model are reducing the amount of Chi. Square statistic, with the one exception (last variable: Husband Educational Attainment). Five variables all together could classify around 83.7 percent of cases (Abortion/Miscarriage Experienced vs. not-experienced) correctly in the last step.

Abortion Status

According to table 7, both steps contribute significantly to the model, since the significance level for the tests are well below the 0.05.

Table 7: Omnibus Tests of Model Coefficients for Abortion Status

		Chi-square	df	Sig.
Step 1	Step	24.866	2	.000
	Block	24.866	2	.000
	Model	24.866	2	.000
Step 2	Step	5.715	1	.017
	Block	30.582	3	.000
	Model	30.582	3	.000

With respect to the Abortion Status as outcome variable, only significant effects of two variables, *Parity* and *Contraceptive Failure* are evident according to results of Logistic Regression Analysis. Both contribute significantly to the model, since the 95 percent confidence interval dose not include the value 1, makes it possible to reject the null hypothesis in these cases (Table 8).

Table 8: Variables Included in the Logistic Analysis for Abortion Status

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C. I. for EXP(B)	
								Lower	Upper
Step 2	Parity, 4 and more			9.4433	2	**0.008**			
	0 & 1(1)	-2.8112	1.0836	6.7302	1	**0.009**	0.0601	**0.0071**	**0.5028**
	2 & 3 (2)	-2.4488	0.9385	6.8075	1	**0.009**	0.0863	**0.0137**	**0.5437**
	M.FAILUR	2.0846	0.9015	5.3463	1	**0.020**	8.0417	**1.3737**	**47.073**
	Constant	-0.7904	0.9290	0.7238	1	0.394	0.4536		

However, Parity is the main predicting variable of Abortion Status. Despite of the effect of Parity on Abortion/Miscarriage Experience, it affects the Abortion Status completely in a different way. Here, compared to "4 and more" parities, low parities (0 and 1) reduces the odds of obtaining an induced abortion by a multiplication factor of .0601, which the effect is highly significant at 0.05 level. The same conclusion came from comparing lower and upper bound of 95 percent confidence interval for the related coefficient. Compared to the parities "4 and more", the parities "2 and 3" decreases odds of obtaining an induced abortion by a multiplication factor of .0863, again is highly significant with respect to test significance level (Sig.: 0.009) and 95 percent confidence interval for the coefficient. This could be reasonable by noting to the fact that most of induced abortion are obtaining because of preventing unwanted births which possible in high parities (where parents have got their Ideal Number of children). So, it could be concluded that high parities is accompanied with high probabilities of being aborted.

Method Failure has also significant contribution to the logistic model. Compared to the "Not-failure" category, the "Failure" category increases the odds of obtaining an Induced Abortion by a multiplication factor of 8.042 ($e^{2.846}$). 95 percent confidence interval for the coefficient dose not include the value 1, and the significance level well smaller than 0.05, indicates the meaningful effect of the variable on the Abortion Status.

Table 9: Step Summary for Logistic Regression Analysis, Abortion Status

	Improvement			Model			Correct Class %
Step	Chi-square	df	Sig.	Chi-square	df	Sig.	
Parity	24.866	2	.000	24.866	2	.000	90.6%
Contraceptive failure	5.715	1	.017	30.582	3	.000	89.6%

Results for the model with two variables for correctly classification of the cases are illustrated in the table 9. Although it is the Parity which lonely could classify the 90.6 percent of the cases correctly and inclusion of Contraception Failure is reducing the amount to 89.6 percent, however with respect to significant contribution of the variable to model and improving the Chi-square of the model significantly, it has been included in the model.

Discussion

Since, findings of the study have shown that the most influencing variables on the *Abortion Status* are *Parity* and *Contraceptive Failure*; it seems that the Requena and Klinger's description of the Demographic Transition Theory, in three main stages, is more relative regarding the situation in Ardabil District. As *Method Failure* and *Parity* both affect *Abortion Status* positively (i. e., the high the Failure rate and Parity the higher the induced abortion rate would be), thus, may indicate that it is the falling fertility that contributes to obtaining induced abortion. Small desired number of children accompanied by high parity, both of which can be regarded as a sign of desire to control fertility, confirms what is stated by the mentioned theory. However, it seems the findings of the study are also supportive of Bongaarts and Westoff's statement on abortion trend.

This study is one of the few field studies that were able to distinguish between Induced and spontaneous abortions, without using medical procedures. This was possible because of the inclusion of questions on reasons for abortion that could be classified in two sets, each referring to one of the "Abortion/Miscarriage Experience" and "Abortion Status".

The study also has structured in two separate sets of analyses with respect to each of "Abortion/Miscarriage Experience" and "Abortion Status", which makes it possible to compare between two different sets of variables that affect both of the "Abortion/Miscarriage Experience" and "Abortion Status".

However, the study might suffer from not being able to include those cases of abortion that have obtained in centers other than the District's only public hospital, which most probably should not be too small in number. Because of the sensitive nature of the subject matter, it is also possible that some women repoert their induced abortions as spontaneous. Although, some considerations have been taken into account in organizing the questionnaire of the study (like applying indirect questions about abortion rather than directly asking women was their abortion induced or not?), however, it seems problem could not be solved completely.

The findings of this study are somehow different from those of other studies cited in the literature review. Most of them reported both demographic and socio-economic factors are affecting Abortion Status. Nevertheless, in this study it seems that the only influencing factors are demographic, especially with respect to "Abortion Status", the most important of them being *Parity* and *Method Failure*. The effects of the other factors disappear in Logistic Regression Analysis.

According to findings of the study, the high quality family planning services should continue their work to prevent pregnancies that are unwanted in terms of both of parent's viewpoints, to help them to prevent pregnancy rather than birth!

The final concluding point is that high parity (having large number of living children) and any other factor that can end in high parity (like method failure and etc.) are the most important predictors of induced abortion. In this respect, first, all women and couples should be informed about he

advantageous of a limited family rather a large one. At the same time, higher quality family planning services must be delivered to those couples who want to control their fertility. Obviously, desire to control fertility and inaccessibility of qualified family planning services will end in unwanted pregnancies which the final solution for preventing them may be obtaining an abortion. Second, because of the failure rate that goes along with most of the methods, some unwanted pregnancies will be inevitable even in 100 percent experience of contraceptives. So, administrators should, *first* provide high quality family planning services to their clients, *second* is regulating laws and rules for dealing with cases that couples do not want more children anyway. Otherwise, obtaining abortion, especially under unhealthy conditions will bring lives of mothers under great hazards. Establishing centers to deliver abortion related services to those couples who unwontedly coming with pregnancy and do not want carry them to term, seems one of possibilities.

Conclusion

Pregnancy Status (wanted vs. unwanted) *Parity* (No. of living children), *Wife's age*, *Wife's Literacy Status*, and *Husband's Educational Attainment* are variables affecting the "Abortion/Miscarriage Experience". With respect to "Abortion Status" (induced vs. spontaneous), two variables have shown significant contribution on the model; *Parity* and *Contraceptive Failure.*

Since, it seems most of influencing factors on abortion stem from lowering fertility and desire for smaller family size by the couples of the society, the situation can lead to classifying of more and more pregnancies as unwanted when contraceptives fail. Except carrying these pregnancies to term, that are not planned of course, other way to cope with these types of pregnancies is aborting the fetus before term. This condition brings all family and health administrators of the society into great challenges. So, preventing

costs resulting from abortion, especially in unhealthy conditions, necessitates that in addition to providing qualified family planning services, do something for those cases of unwanted pregnancies that couples do not want carry them to term. The thing administrators should be consider in all kind of planning which is related to reproductive health of the couples.

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