

Determinant Analysis of Divorce in Wolaita Sodo Town: In Case of Wadu Kebele, Snnpr, Ethiopia

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Abstract

Marriage is the very beautiful gift which Allah given to his human being. It gives pleasure, security, peace, and family. In life there is happiness and worries which men or women have to face and try to solve problems. Relation of husband and wife makes life beautiful and loveable, but unfortunately most of the couples these days fail to understand its beauty and charm. They mostly quarrel with each other and create misunderstandings, and end of this can be in the separation or divorce. Divorce is an emotional journey, due to this reason they have different impacts, among thus the children remains without family, street children number is increase, affected by a disease emotional disobedience occurred in children and other. All over the world the divorce rate among the couples is increasing an alarming rate. Rising of divorce rate has affected the economic structure of the country, as well as the world. The main objective of this study is to identify the effect of determinant of divorce. The source of the data is primary that can be obtained through structured questioner from the selected respondents. The samples required to the study were selected using simple random sampling. The study is analyzed using descriptive study such as frequency, percentage and inferential statistics like logistic Regression. As a result, there are 14.3% of the people are separated and 85.7% of the people are not separated. From this: age, religious, education, income, family size, family influence, the decision to marry, job, are significantly increasing the divorce rate. Finally the study concluded as the present study depict that increasing age ,religious, education, income, family size, family influence, job, the decision to marry have a positive effect on divorce. This indicates that the job have less amount of money , high amount of family size and the decision to marry at the time of marriage leads to divorce. The government and any stack holder should be give advice about the factors of divorce for all people to their family.

DOI: 10.7176/JHMN/106-01

Publication date: March 31st 2023

Back ground of the study

Marriage is considered a sacred sanctity in all cultures. The institution of marriage makes a couple unite and create a blissful environment to arise their young. The future of nations depends on the physical, emotional, psychological health of their youth. Men and women were created to conform each other as companions. Islam places strong implications on marriage (institute of interdisciplinary research, March 2012). Marriage is the very beautiful gift which Allah given to his human being. It gives pleasure, security, peace, and family. In life there is happiness and worries which men or women have to face and try to solve problems. The base of the family is made on the marriage. If the marriage is strong, the family will be happy otherwise the whole family suffers. In marriage, compromise should be from both sides words a plenty, (2011). Relation of husband and wife makes life beautiful and loveable, but unfortunately most of the couples these days fail to understand its beauty and charm. They mostly quarrel with each other and create misunderstandings, and end of this can be in the separation or divorce. Divorce is the final termination of canceling the legal duties and responsibility of marriage and dissolving the bones of marriage between husband and wife. Divorce is one of the hardest things a family can go through. Not so far in the past the word divorce was taboo. People even prolonged their suffering marriages to avoid divorce. This is not the case anymore all over the world. The divorce rate among couple is increasing an alarming rate. Many studies and researchers have common forward to discuss this social phenomenon. Most of these studies try to focus on the common cause of divorce. Rising of divorce rate has affected the stricture of the eastern countries after the western societies. The Islamic states are not that far behind either. This has forced people to think that it is becoming a global trend. The family structure is disintegrating world wise and spreading like an epidemic. (<http://downloads.frc.org/EF11b27> on Saturday, 2015)

Divorce laws vary considerably around the world but in most countries it requires the sanction of a court or other authority in a legal process. The legal process of a divorce may also involve issues of child custody, child support, distribution of property and division of debt. Where monogamy (a form of marriage in which an individual's has only one spouse at any one time) is law, divorce allows each former partner to marry another; where polygamy is a form of marriage in which a man has two or more wife the same time is a legal but polyandry (refers to a form of marriage in which a women has two or more husbands at the same time) is not legal. Divorce allows the women to marry another. Divorce refers to the often messy and painful end of a marriage. For better or for worse, divorce is a very common event these days. Almost everyone has been touched by it either by going through it themselves as a spouse or a child's divorce or knowing someone who has gone

through it's a spouse. Amato, P.R. and James,(2010).

Statement of the problem

The problem of divorce has local, national, and international or global issue today. When people's lives were mostly confined to a single state, local issue orders for maintenance and child support, and for contact with, and parental responsibility for, any children of the family will be administered through a relatively trouble-free system. But as the borders between states became increasingly porous, people moved in search of employment to build businesses or simply because they could. In International in the UK is a particularly complicated field, as financial and other outcomes differ enormously from country to country. One particular factual situation may produce a very different result depending on where the divorce takes place.

In our case there are many factors that are causes of divorce in Wolaita sodo town especially in Wadu kebele. Divorce has different problem on their family member, especially on their children. For example, their children on street and they loss family loves. All of these factors have a negative effect on divorce, however, some are considered on many factors that the necessary before selecting the appropriate method. This study attempts to investigate determinants of divorce in wolaita sodo town especially in Wadu Kebele. For this purpose of the following question that is going to be answered in this study.

- What is the factor that leads to divorce on their family?
- What is the relationship between the independent variable and dependent variable?

Objective of the study

General objective

The main objective of the study is to identify the determinant factor of divorce in Wolaita Sodo town Wadu Kebele.

Data Source and Methodology

The study was conducted on statistical analysis of the determinant of divorce in case of Wadu Kebele at Wolaita sodo town. Wolaita sodo town is the administrative center of Wolaita zone in south nation ,nationalities, and people region(SNNPR) and it is bordered on the south by Gamo Gofa , on the west by the omo river which separates it from Dawro ,on the northwest by the Kambata Tambaro , on the north by Hadiya , on the northeast by the Oromiya Region , on the east by Bilate River which separates it from Sidama ,and on the south east by Lake Abaya which separates it from Oromiya Region. The administrative center of wolaita is Sodo. Wolaita is one of 13 zonal administrations of the southern region of Ethiopia, located 330 km south of Addis Ababa. In Wolaita zone, climate is stable, with temperature variation between 24 and 30^oc during the day and 16-20^oc at night, all year round. Altitude of 1800 meters above sea level. The area enjoying tropical climate, an average 1212mm annual rain fall and 20c^o of mean monthly temperature. The data being considered here are obtained from Wadu Kebele at sodo town people. The data is classified by variables, which is the cause of determinants of divorce. Thus the study use primary source by personal interviewing and ask the respondents some specific questions and questionnaires.

The Logistic Regression Model

The logistic regression model is a generalized linear model with random components. In a variability of regression application a response variable of interest has only two possible qualitative outcomes and therefore can be represented by binary indicator variables taking on values 0 and 1. We shall denote this response variable by Y and the two possible values are 0 and 1 or by the general terminology failure and success respectively. Logistic regression allows one to predict a discreet outcome such as group membership from asset of predictor variable that may continuous discrete and dichotomous or a mixture of any of these. Consider allocation of P independent variables which will be denoted by a vector X = (x₁, x₂ x₃ -----x)

The ratio of probability success to probability of failure is $\left(\frac{p}{1-p}\right)$ is odd ratio of success. Therefore, the

logistic model can be written as;
$$p(X_i) = \frac{e^{\beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_p X_{ip}}}{1 + e^{\beta_0 + \beta_1 X_{i1} + \beta_2 X_{i2} + \dots + \beta_p X_{ip}}}$$

Then the equation logistic regression can be written as

$$\text{Logit}(Y) = e^{B_0 + B_1 X_{1i} + B_2 X_{2i} + \dots + B_p X_{pi}}$$

Binary logistic regression

Binomial or binary logistic regression is the form of regression which is used when the dependent variable is dichotomous and the independent variables are of any type .A binary variable only has two possible values, such

as presence or absence of particular event binary logistic regression has also been used to classify observation in to one of two categories and it may give classification errors then discriminates analysis for same cases. Many response variables are binary representing the success and failure outcomes by 1 and 0 respectively. The Bernoulli distribution for Bernoulli trial specifies probabilities $P(Y=1) = \pi$ and $P(Y=0) = 1-\pi$, for which $E(Y) = \pi$.

$$\text{Model } p(x) = \frac{\pi}{1-\pi} = \exp(\beta_0 + \beta_1 x_1 + \beta_2 x_2 + \dots + \beta_i x_i) \dots \dots \dots (*)$$

Where: x_i is an independent variable in the model, π = the probability of success, $1-\pi$: the probability of failure, B_0 : constant term X_i : is the independent variable, B_i : the coefficients of independent variable.

The general model for binary logistic regression model is as follows:

$$(\text{Logit } \pi) = \log(\pi/1-\pi) = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_p X_{pi} \dots \dots \dots (**)$$

Where, $\pi = p(y=1)$ = probability of success. 3.7 Parameter Estimation

Maximum Likelihood Estimation

The method of maximum likelihood used to estimate the parameters from the above linear transformed model $x_i' \beta$. $\hat{\beta}$ be the final estimate of the model parameters. $E(\hat{\beta}) = \beta$ and $\text{var}(\hat{\beta}) = (x'Vx)^{-1}$ where the matrix V is an $n \times n$ diagonal matrix containing the estimated variance of each observation on the main diagonal; that is the i^{th} diagonal element of v is $v_{ii} = n_i \hat{\pi}(1-\hat{\pi})$ the estimated value of the linear predictor is $\hat{\eta}_i = x_i' \hat{\beta}$, and the fitted value of the logistic regression model. Interpretation of the parameters in logistic regression model by using the odds ratio test statistics

$$\text{Odd ratio } (\hat{\theta}_R) = \frac{\text{odds}_{x_i+1}}{\text{odds}_{x_i}} = \exp(\hat{\beta}_1)$$

To use single explanatory variables, so that the fitted value of the linear predictor at a particular x_i is $\hat{\eta}(x_{i+1}) = \hat{\beta}_0 + \hat{\beta}_1(x_{i+1})$ where: $\hat{\eta}(x_i)$ is just the log-odds when the regression is equal to x_i . $\hat{\eta}(x_{i+1})$ is just the log-odds when the regression is equal to x_{i+1}

Descriptive statistics

In this part we are going to analyses about descriptive statistics and model values .In this descriptive statistics part there are some tables that describes our data and we are going to analyses and interpret.

Table 4. 1 For descriptive statistics

Variable	Category	Frequency	Percent
Sex	Male	67	52.3
	Female	61	47.7
Age	18-23	29	22.7
	24-29	24	18.8
	30-36	22	17.2
	Above37	53	41.4
Religion	Orthodox	25	19.5
	Muslim	29	22.7
	Catholic	31	24.2
	Protestant	27	21.1
	Other	16	12.5
Educational status	Illiterate	19	14.8
	Elementary	29	22.7
	High school	23	18.0
	Diploma	22	17.2
	Degree and above	35	27.3
Job	Government	24	18.8
	Merchant	44	34.4
	Farmer	25	19.5
	Other	35	27.3
Family influence	Yes	76	59.4
	No	52	40.6

Variable	Category	Frequency	Percent
Income level	Below 800	38	29.7
	801-1500	47	36.7
	1501-2500	18	14.1
	Above 2500	25	19.5
The marriage status of household	Living together	94	75.7
	Separated	34	24.3
Kind of marriage that you have used	Legal	35	27.3
	Cultural	31	24.2
	Religious	30	23.4
	Consensual	32	25.0
Family size	No	37	28.9
	one	44	34.4
	two	23	18.0
	above three	24	18.8

From the above table 4.1, about 52.3% of responses were male and 47.7% of female. Therefore majority of respondent is male. From table above 22.7% of the respondent age is from 18-23, 18.8% of the respondent age is between 24-29, 17.2% of the respondent age is between 30-36, 41.4% of the respondent ages are above 37. Therefore the majority of the respondent's age are above 37. Then out of 128 respondents, 19.5% are orthodox, 22.7% are Muslim, 24.2% are catholic, 21.1% are protestant and 12.5% are others. The majority of religious they follow catholic. From the above table, 57.06% are married, 23.40% are divorced, and 19.54% are widowed. Therefore, the majority of the marital status is married. 14.8% of the respondents are illiterate, 22.7% of the respondents are educated in elementary, 18.0% of the respondents are educated in high school, 17.2% of the respondents are graduated by diploma and 27.3% of the respondents are graduated by degree and above. Therefore the majority of the respondent's education levels are degree and above.

From the above table, 18.8% are works in Government, 34.4% are merchant, 19.5% are farmer, and 27.3% are others. Therefore, the majority of the respondent of job is merchant. 58.6% are there is religious difference and 41.4% are no religious difference. Therefore, the majority there is religious difference. 59.4% are having a family influence and 40.6% have no family influence. So, the majority is having a family influence. 29.7% of the respondents are gain bellows 800 amount of income, 36.7% of the respondents are gain from 801-1500 amount of income, 14.1% of the respondents are gain from 1501-2500 amount of income and 19.5% of the respondents are gain above 2500 amount of income. Therefore the majority of the respondents gain above 801-1500 amount of income.

The above table shows that 85.7% of the respondents living together and 14.3% of the respondent is separated. There for the majority of the respondents are living together. 27.3% are legal, 24.2% are cultural, 23.4% are religious and 25.0% are consensual. Therefore, the majority of the respondent is legal. From the above table, 28.9% are respondent have no children, 34.4% are have one children, 18.0% are two children and 18.8% are above three children. So the majority of the respondent has one children.

Binary logistic regression

Table 2 For parameter estimation Variables in equation for significance variables

Variable	Categories	B	S.E.	Wald	D f	Sig.	Exp(B)	95% CI Exp(B) Lower	Upper
Age	18-23(REF)			8.082	3	.044			
	30-36	4.351	3.743	1.351	1	.026	47.555	2.759	56.893
	>37	-10.421	4.089	6.495	1	.011	.009	.000	.090
Religious	Orthodox (REF)			9.068	4	.059			
	Muslim	-7.669	3.039	6.367	1	.012	.002	.000	.180
	Catholic	-8.977	3.685	5.933	1	.015	.001	.000	.173
Educational status	Illiterate (REF)	5.061	5.054	8.513	4	.074			
	Elementary			1.002	1	.006	9.741	8.802	10.324
	Diploma	-11.746	4.905	5.735	1	.017	.008	.000	.118

Variable	Categories	B	S.E.	Wald	D f	Sig.	Exp(B)	95% CI Exp(B) Lower	Upper
Income level									
	<800(REF)	-1.547	1.899	6.365	1	.415	.213		
	801-1500	-18.438	7.363	6.270	1	.012	9.828	4.962	18.380
	1501-2500	2.514	2.327	1.274	1	.019	12.354	7.956	82.594
	>2500	3.904	2.723	2.055	1	.015	49.600	14.697	72.068
Job									
	Government(REF)	-7.220	4.665	5.586	3	.134			
	Merchant	-9.566	4.374	4.784	1	.029	.006	.000	6.851
	Farmer	-9.566	4.374	4.784	1	.029	.005	.000	.370
Family influence									
	No(REF)								
	Yes	-5.938	2.629	5.102	1	.024	.003	.000	.456
Religious difference									
	No(REF)								
	Yes	-7.357	3.457	4.528	1	.033	.001	.000	.559
	Constant	2.054	3.161	.422	1	.516	7.799		

From the above table age(30-36 & >37), religious(Muslim, catholic), educational status(elementary, diploma), income level, job(farmer), famil, family influence and religious difference have p-value<0.05. So that they have relationship with the dependent variable. But the other variable have p-value>0.05 which means they have no relationship with dependent variable.

Interpretation of odds ratio

From the table 4.6-above the odds ratio of the separated family for the reason of age (30-36) is more likely separates than that of family 18-23 holding other variable constant. This means family having age(30-36) separated their family more than family having age 18-23 and odds ratio of separated family for the reason age of (>37) is less likely than family having (18-23) holding other variables constant.

The odds ratio of the separated family for the reason of having religion (Muslim, catholic) is $e^{-7.669}$, $e^{-8.977}$ =0.000 times less likely than family having orthodox holding other variable constant. This means the religious orthodox have more separated than a family having the religious Muslim& catholic. From the table above odds ratio of separated family for the reason of having educational status of elementary is more likely than that of family having educational status of illiterate. From the above table odds ratio of separated family for the reason of having income level of (1501-2500) = 12.354 times more likely than that of family having income level below (<800) and income level above 2500. This means income below (800) and above 2500 are more separated their family than that of income having 1501-2500. For odds ratio of separated family for the reason of job of farmer is less likely than job of government worker holding other variable constant. This means family having government worker more separated their family than that of farmer.

The odds ratio of separated family for the reason of having number of children above 3 are 3.440 more likely than family having no children. This means that family have more than three children are more separated their family than family having no children. From above table odds ratio of separated family for the reason of family influence is 0.003 times less likely separated their family. From the table above the odds of separated family for the reason of religious difference is 0.001 times less likely separated than having no religious difference, and decision to marry at the time marriage of consensual =0.011 which is less likely than that family based this means decision to marry of family based is more separated their family than that of consensual. odds of separated family for the reason kind of marriage (cultural) =136.455 times more likely than that of legal and this means a family for the reason of kind of marriage of cultural more separated.

Conclusion

It is important to note that there are numbers of factors for divorce, Such us age, education status, religion, occupation, family discussion, decision to marry, marital status, and kind of marriage. From descriptive statistics 14.3% are divorced and 85.7% are living together in wadu Keble most of the people are living together.

From the chi-square test religious, educational status, job, family size, religion difference and kind of marriage these independent variables have p-value <0.05 then there is association between these independent variables and the dependent variable (the marriage status of house hold). The other independent variables have p-

value >0.05 then there is no association from dependent variable.

From logistic regression age, religion, educational status, job, family size, the decision to marry, income, family influence and religious difference this independent variable have significant effect of the marriage status of house hold. But the other independent variable has no effect the dependent variable (the marriage status of house hold).

Recommendation

In short based on the finding of the study it is better to recommend the following points. Divorce is as we know one of the factor that affect the development of the country in wolaita sodo town wadu kebele, there are a number of divorced people live by different factors for example by age, job, religion, family size, religious difference, family influence, kind of marriage, the decision to marry at the time of marriage, therefore we recommend the following:

- The people should determine their family size by using family planning.
- The people should determine their decision to marry at the time of marriage.
- The government and any stake holder should be give advice about the factors of divorce for all people to their family.
- The people should be deciding their marriage by agreement.
- The people should not separate their family depending on money/income. Since, they can get money by working together

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