Comparative Determination Of Factors That Affect Fertility For Turkish And Kurdish Populations According To The Usage Of Contraceptive Methods

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Abstract:

In this study, Turkish and Kurdish Populations in Turkey are compared according to their fertility and family structures. While Turkish population refers to the population lives in Turkey and their mother tongue is Turkish, Kurdish Population means that population lives in Turkey and speaks Kurdish as a mother tongue. Furthermore, both population structures will be examined in respect of the usage of contraceptive methods. Factors that affect fertility are determined for both Turkish and Kurdish populations by using bivariate probit model. Similarities and/or diversities in these factors are determined separately for both populations.

Turkey is one of the rare countries where induced abortions are legally allowed up to ten weeks' time of pregnancy. Though the right to have induced abortion is freely used by many women, the social characteristics of the women who prefer induced abortions instead of family planning services are noteworthy, and the fact that the previous habits of contraceptive use of those women are known is an interesting research subject.

Therefore, the aim of the study is to estimate parameters of bivariate Probit model established for the induced abortion and the contraceptive use by using socio-economic and demographic factors for Turkish and Kurdish population separately. Data used in this study are taken from 8075 married women aged 15 through 49 years in 2003 Turkish Demographic and Health Survey (TDHS-2003) that was conducted by the Hacettepe Institute of Population Studies (HIPS). Also, LIMDEP computer program is used for estimation of bivariate probit model. The specification of this model is

$$\left. \begin{aligned} y_1^* &= \mathbf{x}_1'\boldsymbol{\beta}_1 + \varepsilon_1 \\ y_2^* &= \mathbf{x}_2'\boldsymbol{\beta}_2 + \varepsilon_2 \end{aligned} \right\} \quad [\varepsilon_1, \varepsilon_2] \underset{\sim}{} \Phi_2(0,0,1,1,\rho) \tag{1}$$

where x_1 and x_2 are vectors of independent variables, β_1 and β_2 are vectors of parameters to be estimated, ε_1 and ε_2 are vectors of error terms, ρ is the coefficient of correlation between ε_1 and ε_2, and dependent (latent) variables y_1^* and y_2^* are only observed as dichotomous variables y_1 and y_2, defined as

$$y_1 = \begin{cases} 1 \text{ if } y_1^* \geq 0 \\ 0 \text{ otherwise} \end{cases} \quad \text{and} \quad y_2 = \begin{cases} 1 \text{ if } y_2^* \geq 0 \\ 0 \text{ otherwise} \end{cases} \tag{2}$$

In this study, independent variables are current age of woman, type of place of residence, region, education level of woman/partner, education level of woman/partner, number of living children, current type of employment of woman, total income in the household, woman/partner insured by health insurance, knowledge of family planning methods, woman/partner's approval of family planning methods, partner's position at work. Also, there are two dependent variables. The first is the decision of whether or not to have an induced abortion; the second is the decision of whether or not to use any contraceptive methods.

According to the results of this study, it seems that age is the most effective variable on using contraceptive methods when it is known that woman had an induced abortion. This result is the same for both Turkish and Kurdish population.

Also, it is concluded that the decision of married women's (15-49 age) induced abortion is affected by all other variables except for education level of woman/partner and partner's position at work when significance levels $\alpha = 0.05$ are used. The decision to use contraceptive methods is affected by all the independent variables in the equation.