European Population Conference (EPC)

Liverpool, UK, 21-24 June, 2006

Human Development, Reproductive Behavior and Fertility:

An analysis of Provincial Differences in Iran

Author(s): Amir H. Mehryar, Ph.D., Hassan Eini-Zinab, MA & Nader Motie Haghshenas, MA, Shirin Ahmad-Nia, Ph.D.

Contact details: Population Studies and Research Center (PSRC), Capital Computer Building, Tower B, Apartment 602B, Mirdamad Boulevard, Postal Code:19697, P.O.Box: 13145-1439, Tehran, IRAN.

Email Address: a.mehryar@imps.ac.ir, h_eini_z@yahoo.com, & nader_m_h@yahoo.com, s_ahmadnia@hotmail.com.

Abstract

Iran has experienced a tremendous fall in fertility rate since late 1980s. Average TFR for the country had fallen from 7.1 to 2.96 between 1986 and 1996. By 2000 it had further dropped to just over 2 and was below replacement level in urban areas of most provinces. There were, however, considerable variations in fertility levels of different provinces. Using several measures of development derived from the Human Development Report for Iran (UNDP, 1999), four different indices of fertility and information on age at marriage, breast-feeding and contraceptive practice derived from the huge DHS-type survey conducted in late 2000 for urban and rural areas of all 28 provinces and Tehran Metropolitan Area, this study attempts to identify proximate and intermediate determinants of provincial variations in fertility in Iran. Methods of analysis include step-wise and multiple regression designed to test Bongaarts (1982) model. Results indicate significant correlations among different measures of fertility and development. Indices of social development together account for just over one-third (38%) of the observed variations in fertility. When intervening variables measuring reproductive behavior are introduced to the model, the coefficient of determination rises to above .70, correlations with development factors, age at marriage, breast feeding and abortion become statistically non-significant and measures of contraceptive practice remain as the sole determinants of provincial variations in fertility. Both modern and traditional method use rates correlate significantly with all four measures of fertility. Prevalence of modern methods of contraception has higher correlations with three of the four measures of fertility (TFR, -.721; GFR, -.673, CBR, -.614, CEB, -.265) while traditional contraceptive use rates have somewhat lower correlations with three measures of current fertility (TFR, -.526; GFR, -.514, CBR, -.378) but they emerge as the best predictor of variations in cumulative fertility (children ever born, -.996).