Structural equation modelling for assessing the psychosocial risk factors of abortion on demand

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Abstract

Introduction: In Romania, an increasing number of women are opting for abortion on demand, despite the large variety of contraceptive methods and their ease of use. Some of the factors that influence the decision of undergoing abortion are family, education and income. The aim of our study was to observe to what extent psychosocial factors had an influence on the decision of abortion on demand (DoAoD). Material and methods: Data were measured during a sociological survey-based study, including 603 patients who presented for abortion on request during the period 2015-2018 at the "Bega" University Clinic of Obstetrics-Gynecology, Timisoara. The study investigated the degree of information and use of contraceptive methods at the moment of pregnancy’s termination request. Based on measured data, the considered latent constructs were women’s general perception of abortion, emotional involvement regarding the pregnancy, relationship and family context, knowledge about the abortion’s consequences, and social status. A structural model was derived, describing the direct (and indirect) effects among latent variables. Results: The DoAoD model showed significantly adequate fit ($\chi^2/df=1.53$, GFI=0.91, CFI=0.98, RMSEA=0.05, and $p<0.001$). The model also showed adequate fit with significant direct effects of general perception of abortion on DoAoD ($\beta=0.158$, $p<0.001$), emotional involvement regarding the pregnancy on DoAoD ($\beta=0.176$, $p<0.001$), relation and family context on DoAoD ($\beta=0.201$, $p<0.001$), and social status on DoAoD ($\beta=0.193$, $p<0.001$). The multi-factor analysis showed that the structural model was significantly different between women living in urban and rural areas, with social status completely mediating the relationship between DoAoD and latent variables in urban area and partially mediating the relationship in rural area. Conclusions: Results support the use of structural equation modeling for investigating the moderating and mediating effects, while simultaneously measuring latent constructs. Also, results showed that social status was a stronger mediator to the DoAoD than emotional involvement regarding the pregnancy relationship.

Keywords: Abortion, Legal; Psychological Factors; Surveys and Questionnaires; Latent Class Analysis