

The assessment of selected factors influencing intent to get pregnant in the Greater Poland Region

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Wojciechowska M, Krauss H, Bogdański P, Mikrut K, Chęcińska Z, Szulińska M, Piątek J, Pięta B, Sosnowski P, Żukiewicz-Sobczak W, Kupsz J. The assessment of selected factors influencing intent to get pregnant in the Greater Poland Region. *Ann Agric Environ Med.* 2014; 21(2): 435–439. doi: 10.5604/1232-1966.1108620

Abstract

Introduction and objective. Nowadays, people decide to have a baby by first analysing their financial situation. Tradition is no longer a factor which determines the decision whether or not to have a baby. A prognosis of the Polish Central Statistical Office (GUS) shows that the population of Poland will fall from 38 to 36 million by 2035. The aim of this study is to assess the procreation behaviour of women in Greater Poland Region.

Materials and methods. For the research purpose, 3,120 women of reproductive age were examined by using an author designed questionnaire and a synthetic Family Financial Standard Index.

Results: 74.6% of the respondents lived in an urban area, 25.4% of women come from a rural area. 49% of examined women did not want to have a bigger family, 45% would like to have another child. Analysis of the reasons why women did not want to have another baby revealed that predominance of the financial factor – 67%, living conditions – 18.4% and health – 13.2%. Only 11.9% of the women declared their high financial status, 4.8% of families received family allowance from the government; 88.4% of the examined families did not receive any social benefits. Bad housing situation was declared by 5% of the respondents, 26.7% of the interviewees lived with family members, i.e. parents or grandparents. Analysis of the data concerning religious bonds showed that 67.6% of women declared their indifference to religion.

Conclusions. The economic factor was an important reason limiting procreation. The bad situation on the real estate market combined with an insufficient range of social welfare led to a decrease in the birth-rate in the Greater Poland region. The impact of religion on family planning was less important. The influence of the analysed socio-economic factors on family planning was similar in rural and urban areas.

Key words

socio-economic factors, family planning, mother and child health

INTRODUCTION

The region of Greater Poland is the third biggest region in Poland in terms of population. In terms of population density it occupies the eighth position in the country. [1] 2008 was the first year in an 11 year period of time which brought an increase in the population count. However, the birth-rate is still low and shows a tendency which started in 1989.

Greater Poland is among three regions which experienced the highest growth in the population count – this growth tendency will continue until 2020 (beyond that point in time the number will start to decrease. The demographic potential of different parts of the region are not evenly distributed, a situation that is not going to change. There are and will continue to areas with a bigger concentration and areas more populated, especially the northern parts of the region [2]. This tendency mainly refers to the rural areas, whereas the urban areas are predicted to experience a continuous drop

in population growth. By 2020, the population in Greater Poland will rise by 1.6%, and shortly after that will continue to decline until 2030 when it will reach the value of 99.6% – the same as in 2003.

The situation described in the Greater Poland region is opposite to the prognosis for the country as a whole, where a regular drop in the population number will take place – in 2003–2003 the population rate will amount 93.5%. [3]

According to the 2010 GUS birth-rate data, the biggest increase in the population on at the beginning of the twenty-first century will be experienced in the following regions: Masovia (0.32%), Lesser Poland and Pomerania (0.18%). A positive birth-rate was also noted in province of the Greater Poland region (0.19%) while the other regions had negative values [4]. Some reasons for the low increase in the population count are the following: poor family planning policy (up to 26% of children are endangered with poverty) and economic emigration. A low birth-rate leads to a collapse of the pension and health-care systems and it also deteriorates the employment market. There is a strong fall in the average number of children per individual couple.

Objectives. The aim of the study is to assess the importance of selected economic, social and demographic factors in

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Received: 01 February 2013; accepted: 04 April 2013

family planning scheme in Greater Poland province and the comparison of the influence of selected socio-economic factors in family planning by the women living in rural and urban areas.

MATERIALS AND METHOD

The project received a positive opinion of the Bioethic Commission at the K. Marcinkowski University of Medical Science in Poznań (Opinion No. 156/09, dated 5 February 2009). The study comprised 3,120 randomly selected women of reproductive age. All interviewees lived in the Greater Poland province. Reproductive age was the only criterion for selection into the research group. The study was carried out from December 2008 – December 2010 in the wards of four hospitals in Poznań: the Gynaecological – Maternity Clinic, F. Raszeja Hospital, Holy Family Hospital and the Provincial Hospital.

For the purpose of the study, the author designed a questionnaire and used the synthetic Family Financial Standard Index created by Woźniak. [5] The survey investigated three categories of place of residence: city, smaller town and village. City and small town were categorised as an 'urban area' and the village as a 'rural area'.

The research tool was prepared in compliance with the formal requirements of methodology literature (initial assessment of the questionnaire based on 500 respondents, validation process – Cronbach's factor equals $91 \pm 2\%$). The questions were constructed to correspond with the main topic of the study. Before participating in the research, the participants were informed that it was completely voluntary and anonymous. The diagnostic method of the survey was accomplished by filling-in the questionnaire by the respondent without the presence of the questionnaire provider. After completing the questionnaire card, each participant sealed it in envelope and dropped it into ballot-box. Eventually, 3,000 properly completed questionnaire cards were accepted for further analysis.

Statistics. Statistical calculations were performed using the CSS Statistica 8.0 programme. The quality data was calculated using the Chi² test. For the ordinal type of data, non-parametric tests were used: to compare two groups of women the Mann-Witney test was performed, to test the importance of the differences for more than two groups of women the Kruskal-Wallis test was performed. The hypotheses were verified on the level of significance $p < 0.05$. The correlation between the variables were analyzed using the Spearman's rank correlation coefficient.

RESULTS

3,000 women aged between 17–42 years participated in the study, with an average age of 37.5y. The most numerous group were respondents from Poznań – 1,420 women (47.3%); 817 (27.3%) came from small towns of the province, whereas 763 (25.4%) women come from rural areas.

From the 3,000 respondents, the largest group was represented by participants aged 26–30y – 1,260 women (42.0%). The smallest group was represented by women aged 17–20y – only 105 persons (3.5%).

Analysis of the level of education showed that 111 (3.7%) of the respondents had a technical or primary education, 273 (9.1%) had secondary education, 903 (30.1%) had Bachelor's degree and 1713 (57.1%) of the women had Master's degree.

Analysis of data referring to the professional status of the interviewees showed that the highest number – 1,841 (61.4%) – were working women, a quarter of the respondents – 770 (25.7%) were unemployed, and the remaining 389 (12.9%) women were studying in secondary school. According to the age factor, there were 43 women studying (1.4%), 239 students of Bachelor and Master's studies (7.9%), 61 extramural students who were full- and part-time workers (2.0%), and 46 extramural students who were seasonal workers (1.5%). The study examined 2,187 working respondents. More than a half of them were white-collar workers 1118 (51.1%), 531 (24.3%) were physical workers and 538 (24.6%) did both.

Analysis of the marital status of the respondents revealed that a significant number – 632 (21.1%) of the 3,000 interviewees constituted unmarried women, both single and living in concubinage. The remaining 2,368 (78.9%) declared being married.

The family structure analysis showed that almost three out of four families were complete families – 2,236 (74.5%) while 739 (24.7%) were single parents. In 25 (0.8%) cases, there were blank boxes next to this question. 150 (5.0%) of the 3,000 women declared a bad or very bad housing situation, whereas 1,092 (36.4%) had very good housing conditions. Analysis showed that 517 (17.2%) interviewees lived with their parents, 197 (6.5%) lived with grandparents and 90 (3.0%) with other family members – sister, brother, aunt or uncle.

Analysis of the financial situation of the respondents revealed that 357 (11.9%) women had a very high standard of living. Women who declared a good financial situation constituted the biggest group – 2,427 (80.9%), while sufficient or bad financial status was marked by 131 (4.4%) and 85 (2.8%) interviewees, respectively. Analysis of family income showed that the largest group, 42.6%, constituted families with an income between 1,000–2,000 PLN per household. 27.4% of respondents declared an income as less than 1,000 PLN and 30.0% as higher than 2,000 PLN. The lowest income was declared by women living in a rural area and the highest by families living in an urban area. Analysis of social welfare revealed that 146 (4.8%) families received family allowance, while 2,654 (88.4%) families did not receive any social benefits. 88 (2.9%) women marked that their financial support came from other sources: offered by parents, grandparents or other relatives.

The great majority of women had one child – 1,299 (43.3%). In comparison, 738 (24.6%) families did not have any children at all, and 734 (24.5%) families had two children. There were only two families with six children and two families with seven children – 0.1% of all respondents. An insignificant percentage of the research population declared having four or five children – 1.4% and 0.7%, respectively. 5.4% of families had three children.

The use of contraceptives was stated by 1,236 (41.2%) of the respondents, and not using contraception was declared by 1,632 (54.4%) respondents. 132 interviewees (4.4%) did not answer this question. 683 women protected themselves against pregnancy in some way: those aged 26–35 declared that they either used contraceptive pills or their partners used condoms. The youngest respondents preferred their partners to use condoms – 3.2%, and oral contraceptives – 1.4%.

Table 1. Influence of selected socio-economic factors on family planning by women living in rural and urban areas*

	Planning to have a child	
	Rural N (%)	Urban n(%)
<i>Environment</i>		
rural	287 (37.6)	-
urban	-	1065 (47.6)
<i>Education</i>		
primary	5 (1.8)	29 (2.7)
secondary	24 (8.5)	49 (4.6)
Bachelor's degree	101 (35.8)	273 (25.8)
Master's degree	152 (53.9)	708 (66.9)
<i>Marital status</i>		
unmarried	50 (17.5)	211 (19.9)
married	235 (82.5)	852 (80.1)
<i>Type of employment</i>		
regular post	214 (85.2)	819 (81.2)
order agreement	9 (3.6)	52 (5.2)
periodic work	6 (2.4)	23 (2.3)
annuity	3 (1.2)	40 (4.0)
other	19 (7.6)	74 (7.3)
<i>Character of work</i>		
physical worker	84 (34.1)	218 (22.4)
white-collar worker	162 (65.9)	757 (77.6)
<i>Independent residence</i>		
yes	179 (62.4)	815 (76.5)
no	103 (35.9)	224 (21.0)
with parents	98	198
with grandparents	5	26
others	5 (1.7)	26 (2.5)
<i>Financial situation</i>		
very good	37(13.0)	125 (11.9)
good	242(84.9)	898 (85.5)
sufficient	5(1.8)	26 (2.5)
bad	1(0.3)	1 (0.1)
<i>Additional benefits</i>		
unemployment	2 (0.7)	2 (0.2)
social welfare benefit	2 (0.7)	9 (0.6)
family allowance	4 (1.4)	14 (1.3)
health benefit	6 (2.1)	20 (1.9)
other	14 (4.88)	34 (3.19)
<i>Income per household member^a</i>		
<1,000 PLN	48 (25.1)	76 (10.5)
1,000–2,000 PLN	97 (50.8)	435 (60.1)
>2,000 PLN	46 (24.1)	213 (29.4)
<i>Religious factors</i>		
yes	88 (31.8)	300 (29.4)
no	186 (67.1)	703 (68.8)
others	3 (1.1)	18 (1.8)
<i>Contraception</i>		
yes	88 (31.5)	434 (42.3)
no	191 (68.5)	593 (57.7)

* % with reference to the number of received responses

^a Chi²=6.646, p<0.05

Analysis of the data concerning religious bonds showed that the great majority – 2,028 (67.6%) women declared their indifference to religion. Tight religious bonds were marked by 930 (31.0%) women, while only 42 (1.4%) respondents declared having no attitude towards religion. More than half of the women – 1,902 (63.4%), claimed that religion did not influence either the functioning of their family or offspring planning. Regarding women who had problems in conceiving, almost a half of them – 1464 (48.8%) gave serious consideration to *in-vitro* fertilization.

While analyzing the data concerning the occurrence of genetic diseases in the family, it was revealed that in the highest number of families – 83.8%, no genetic diseases occurred, while 6.2% of women declared such diseases in their families.

Analysis of alcohol consumption showed that in 1,617 (53.59%) respondents' families alcohol consumption was an occasional activity, 1,251 (41.7%) women declared the lack of alcohol consumption, and a small percentage of respondents (1.9%) stated that they or their families consumed alcohol only once a week (0.5% a few times a week). 2.0% did not answer this question.

Almost a half of the respondents – 1,470 (49.0%) did not plan to have a bigger family, and 1,352 (45.0%) women would like to have another child. 178 (6.0%) respondents did not answer the question. Analysis of the reasons for not planning another pregnancy revealed the predominance of financial considerations – 2,010 (67.0%), housing – 552 (18.4%), and health – 396 (13.2%). The most common factors showed by respondents as a reason influencing the decision not to have another child were:

- occurrence of the genetic disease in the family;
- limited access to the health service;
- travel for work purposes of one of the parents;
- lack of places in nurseries;
- lack of places in kindergardens;
- lack of employment opportunities;
- work in harmful condition;
- insufficient local labour market.

Analysing the influence of place of residence, it was noted that no statistically significant differences existed in plans to enlarge a family between women living in urban and rural areas. Income per household member was more frequently indicated as an important factor influencing the decision – women living in the urban environment.

Analysis of the correlation between education and baby planning showed an average link between these variables (Spearman's rank correlation coefficient $r_s = 0.431$). The higher the level of education the greater the desire to have a child. A weak but positive correlation ($r_s = 0.367$) between marital status and baby planning showed that married women planned to have more children than those living in free or informal relationships. Assessment of the influence of employment on baby planning was performed using the Chi² test. The correlation between these variables was also measured and showed that there was no statistically significant link between type of employment and readiness to have more children. Analysis of the relation between character of work and baby planning indicated that there was a low positive correlation between these variables ($r_s = 0.242$). This means that women employed in white-collar work wanted to have children more often than women who worked physically. Analysis of a correlation between the number of family members sharing accommodation and baby planning showed that the fewer the family members living in one accommodation declared more readiness to have more children. The correlation coefficient ($r_s = 0.431$) showed an average positive correlation between these variables.

The Spearman correlation coefficient ($r_s = 0.29$) between financial situation and baby planning indicated a low positive link between these factors; it showed that a good financial situation of the family was reflected in more frequent baby

planning. A positive correlation coefficient ($r_s=0.242$) between receiving additional welfare benefits and baby planning proved a connection between receiving benefits and family planning – having children depended on receiving different forms of social help. The correlation between income per household member and baby planning was weak but positive ($r_s=0.242$). This may suggest that those respondents with an income higher than 1,000 PLN per person want to have children more often than the others.

The correlation coefficient ($r_s=0.244$) between religious factors and baby planning showed a weak positive connection between these two variables. This could indicate that women for whom religion plays an important role in life, declare enlarging a family more willingly.

Analysis of the correlation between not using contraception and planning to have a child indicated that women who did not use any contraceptive methods, planned more often to have children than the others (Spearman correlation coefficient: $r_s=0.29$).

DISCUSSION

The report of the Family and Social Policy Commission for Organisation for Economic Co-operation and Development (OECD) shows Poland in comparison to other countries: it occupies the last position in terms of financial and housing situations. The report shows that the average income of a typical Polish family is the lowest among other OECD nations. Moreover, almost 21.0% of Polish children exist below the poverty line (average equals 12%). Only Mexico and Turkey have worse situations [6].

The majority of respondents declared a good or very good financial situation and most of them also blamed their housing conditions for not planning to have more children. From the social point of view, it is expected that parents provide a good material status for their child, ensuring their good physical condition by providing proper food, healthcare, physical development, as well as proper emotional and social development – cultural existence, education and readiness to enter adult life with the right skills to perform various social functions [6, 7].

The natural need of parents is to provide their children with assets facilitating a better start in adult life. Aiming for a better quality of life in subsequent generations is among the key reasons for a falling birth-rate, even with an income increase in the population [6, 7].

The threat of poverty among families who have children is a serious social issue. The rate of poverty rose until 2004, and then fell in 2005 [6, 7]. 7.0% of the population declared a bad financial situation. The size and structure of a family is a demographic factor affecting the threat of poverty, with the biggest families being the most endangered. In the researched population, 7.7% of mothers had more than two children. This was also the group which declared the worst financial situation. The poverty of these families led to social exclusion, which is inherited by the next generation, and jeopardises social structure and development. The 2010 GUS data shows that 25.7% respondents were unemployed, while the remaining 12.1% of youngest respondents were students (secondary schools or students of BA or MA studies). Weekend students who worked constituted 2.0%, and those who worked seasonally constituted 1.5%. [1,7]

The unemployment tendency in the region of Greater Poland was observed to be smaller in the city of Poznań, and bigger in other towns and villages of the region [2,8]. This fact resulted in a smaller number of the city's inhabitants being dependant on social help and benefits. [3]

The social policy of Poland must therefore aim at poverty prevention. This type of assistance should be provided in particular to dysfunctional and poor families to save the children from social pathology and poverty. The State should therefore provide versatile help. In the period of transformation, Polish family policy became solely social with a low level of benefits. Analysis of such financial help shows that 75.4% of families receive family benefit, while unemployment and health benefits are being received by 11.4% and 4.6%, respectively. Only 8.6% of women received no additional benefits. Research by Firlit-Fesnak [9] shows that there are fewer and fewer families in the Greater Poland Region who receive no benefits; in the following years – 2005, 2006 and 2007 – this percentage was 18.0%, 17.3% and 12.4% of the general family population in Greater Poland. There is also a decreasing rate in the number of family members receiving social help per 1,000 citizens. In the same sequence of years, the number of people was 161, 151 and 104. It is not clear whether this stems from improvement in the financial situation of families, or the lack of social assistance from the State. [9]

Therefore, the attempt was undertaken to answer the question whether there is a correlation between readiness to have another child and accessibility of extra benefits. Statistical analysis proved that such a positive correlation exists. The Spearman correlation coefficient indicated a weak positive correlation between readiness to have another child and receiving social benefits.

It was also proved that education has big impact on the birth-rate. Research showed that women with a higher level of education planned to have 1.14 children, on average, whereas those with only primary education want to have 1.45 children, on average. Although the correlation coefficient indicated a weak but positive link between education and readiness to have more children, this was not observed in the population. There is a difference between declaring to have more children and the actual birth-rate.

Is it therefore possible that the readiness to have more children depends on the character of work? The correlation coefficient shows that a weak positive correlation exists between the two – respondents who work intellectually are more likely to have more children. 49.0% of women did not plan to have more children, the main cause being their financial situation. It was also proved that religious and wealthier people made a conscious choice to have more children, but at the same time, there was less and less impact of religion on family planning – 63.4% did not link these two [10,11,12]. It also seems that the decision to have more children was connected to the assumption that the proper functioning of a family depends on its size. This correlation is quite significant for families in Greater Poland who assume that the smaller the family size, the better it functions.

Despite economic progress in Poland, one of the biggest reasons of not having children is bad housing conditions – the fewer people living under the same roof, the more willingly they plan their family.

Eurostat research defines a single parent family as one in which a parent does not remain in a relationship with their

partner, and have a child below the age of 18 [13]. In the assessed population, 24.7% constituted single parent families and 21.1% of the women were unmarried. A single-parent family does not only pay all the consequences stemming from the fact of being a single parent family. The fact that this parent is usually a woman makes the situation even worse. Because all the responsibilities are borne by the woman, she is limited in terms of earning a living, especially when the children are young. Even countries with a well-developed infrastructure of childcare institutions, they are bereft of ideal solutions. Single mothers who are professionally active are not treated equally with men in the work environment. In fact, these women are often discriminated against and are not get promoted. The above-listed factors play key roles in establishing the single parent family income, placing them among those with a low budget. Activity to improve the socio-economic conditions among single-parent families in the EU is common practice among the member states. [14]

In the light of presented discussion, the question is whether the readiness to have more children also depends on marital status. The study showed that married women more willingly plan another baby than single women.

Modern contraception methods promote the separation between the spheres of eroticism and procreation. The observed sexual freedom, and a lesser pressure to avoid premarital and extramarital sex, promotes decisions to start sexual life. In the assessed population, 54.4% did not practice contraception. Does this mean that more procreational activity should be expected in this group? As already proved, women who do not use any contraception declare a readiness to have more children more often than women who use contraception.

It was also observed that alcohol use was surprisingly low in the assessed population: 1.9% of respondents admitted that they use alcohol only once a week, 0.5% admitted that alcohol is used several times a week, whereas 2.0% of respondents did not give an answer. There is a significant correlation between readiness for having more children and alcohol consumption in the family – the readiness depending on the level of alcohol use [15]. Thus, the more often alcohol is used in a family, the less frequently women declare willingness to have more children [16].

CONCLUSIONS

The tendency towards limited procreation is caused mainly by economic factors which indicate the consumption model

of Polish society. Limited accessibility of housing combined with an insufficient range of social welfare has led to a serious drop in the birth-rate in the Greater Poland Region. The impact of religion in family planning was less important, and the influence of the analysed socio-economic factors on family planning was very similar in rural and urban areas.

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