

# **Is there fertility knowledge gap between childless women and mothers in Hungary?**

## **Extended abstract**

### **Introduction**

Hungary belongs to the countries where fertility rate is low while most of the women plan to have a child. Sobotka and Beaujouan (2014) demonstrated that the average number of children perceived to be “ideal” for a family is around 2 almost everywhere in Europe, including Hungary. However, the realized fertility was 1.4 in Hungary in 2014. Several studies examined the reasons that can lead to childlessness or low fertility rate. Most of them highlighted that postponement is a main reason behind them. The main causes of parenthood postponement include higher educational attainment of successive generations of women and their growing aspirations to be economically active and financially independent, lack of stable partnerships, the difficulties of combining parenthood and paid employment and the wish of parents to secure financial security prior to having children (Kohler et al. 2002; Nicoletti – Tanturri 2008; Mills et al. 2011, Murinkó – Szalma 2015, 2016).

However, the postponement of becoming parents can bring several risks. Firstly, it can cause numerous medical complications, including higher rates of infertility (ESHRE 2005), a greater reliance on medical intervention to achieve viable pregnancies (de Graaff 2011), and poorer maternal, foetal, and child health outcomes (Alonzo 2002). Secondly, it can influence individual well-being, since those who fail to conceive despite medical treatment may face permanent childlessness (Szalma – Takács 2014, 2015, Cousineau – Domar 2007). Previous research revealed that women who delayed pregnancy until they ran out of time regretted waiting and wished they had started their families earlier (Szalma – Takács 2014). Thirdly, it has consequences at the societal level as well, specifically low levels of total fertility rate, which is partly due to the fact that a significant number of parents run out of time to conceive the children that they originally planned to have (Sobotka 2004).

From this perspective it is crucial to know whether women have enough knowledge about late childbearing and its consequences. So far the knowledge about fertility has not been examined in Hungary. The aim of this paper is to examine the level of knowledge of childless women in comparison with mothers in order to reveal whether there is any relationship between childlessness rate and fertility knowledge.

### **The estimated knowledge level about fertility**

Most of the respondents of the online survey consider that they are fairly (56%) or very knowledgeable (37%) about fertility while only 7% stated that they have only little knowledge. However, participants rated different levels of knowledge based on belonging to different socio-demographic groups or having or not having experience with fertility treatments.

Regarding educational levels, we can confirm the results of previous research: the more educated people have higher level of knowledge than men and lower educated counterparts (Bunting, Tsibulsky, & Boivin, 2013; Pourmasumi, Mostaghaci, Sabeti, & Ardian, 2016; Stoebel-Richter, Geue, Borkenhagen, Braehler, & Weidner, 2012). As for age, our results are also similar to the previous one (Bunting és mtsai., 2013): it seems that those who belong to the older age group rate their knowledge level higher than younger people. Having children seems to be a relevant factor: those who have parenting experience have significantly higher

knowledge. Remarkably those who would like to have (additional) children rate their knowledge level significantly lower than those who do not intend to have (additional) children.

### Perceived knowledge of fertility

For the 15 knowledge items, respondents were asked to decide whether the statement is true or false on a 5-point scale (i.e., 1= definitely not true, 2=probably not, 3=do not know, 4=probably true, or 5=definitely true) (Table 1). More than half of the items (1, 2, 3, 4, 5, 6, 8, 11 and 12) were exported from FAS (Daniluk & Koert, 2013; Daniluk, Koert, & Cheung, 2012).

For the purpose of reporting the findings we put definitely and probably not true together in one category, considered as not true, while definitely and probably true category into another one considered as true. Although most respondents considered themselves as fairly knowledgeable about fertility, using the above mentioned categorization 50% of the respondents answered only 11 out of 15 items correctly.

**Fertility knowledge item distribution, mean and standard deviation (SD)**

	True or False	% 1- Definitely not true)	% 2- Probably not true	% 3- Do not know	% 4- Probably true	% 5- Definitely true	Mean	SD
1. For women over 30, overall health and fitness level is a better indicator of fertility than age.	F	2.8	19.1	11.6	53.6	12.9	3.5	1.02
2. Taking birth control pills for more than 5 years negatively affects a woman's fertility.	F	12.3	38.3	16.4	30.2	2.8	2.7	1.1
3. A woman's eggs are as old as she is.	T	15.9	14.6	10.8	17.6	41.1	3.5	1.52
4. There is a progressive decrease in a woman's ability to become pregnant after the age of 35.	T	2	7.3	2.3	48.9	39.6	4.2	0.93
5. The rates of miscarriage are significantly higher for women in their 40s than for women in their 30s, even for physically fit women in excellent health.	T	1.3	4.3	11.8	50.9	31.7	4.1	0.85
6. Sexually transmitted diseases (e.g. Chlamydia, Gonorrhea) significantly increase the risk of later infertility.	T	0.5	4	5.5	43.3	46.6	4.3	0.79
7. The age of her male partner is an important factor in a woman's chances of becoming pregnant.	T	2.8	12.9	2.3	40	42.1	4.1	1.1
8. The majority of fertility conditions are caused by problems with the woman's fertility.	F	38.5	44.1	7.6	8.8	1	1.9	0.95
9. A woman's overweight also affects the chances of getting pregnant.	T	0.5	6.1	11.3	39.8	42.3	4.2	0.89

10. A women's too low weight also affects the chances of getting pregnant.	T	2	8.8	10.1	39.8	39.3	4.1	1.01
11. There is a significant decline in the quality of a man's sperm before the age of 50.	T	0.5	8.8	20.4	57.4	12.9	3.7	0.81
12. Children born to father >45 have higher rates of learning disabilities, autism, schizophrenia, and some forms of cancer.	T	7.3	26.7	40.8	21.2	4	2.88	0.96
13. Excessive alcohol consumption has been shown to increase infertility in both women and men.	T	1.5	3.5	6.8	42.3	45.8	4.3	0.85
14. Smoking cigarettes or marijuana can reduce the chance to conceive among women.	T	0.8	6.8	10.3	45.1	37	4.1	0.9
15. Smoking cigarettes or marijuana can reduce the quality of man's sperm.	T	0.8	0.8	3.2	33.2	62	4.55	0.67

## Methods

Besides the descriptive statics we conducted multivariate analysis. Using linear regression models revealed that besides the socio-demographic variables certain kinds of information sources have a significant effect. Furthermore, we are going to interview 4 focus groups in order to better understand not just the factors that can influence the level of fertility knowledge but the mechanism behind them.

## Limitations

Our study has lots of drawbacks. First of all, we reached our participants via an online survey. Therefore, the higher educated men and women are over-represented in our sample compared to the population base statistics. Moreover, it may also be likely that those who filled out the questionnaire had greater interest in fertility issues than the average. Despite these limitations our findings can contribute to the understandings of knowledge level about fertility.

## References

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