

Preliminary trial to ascertain the feeling of uncertainty of young women in Poland and Czech Republic in the context of their intention to have a child

Wstępna próba porównania poczucia niepewności wśród młodych kobiet w Polsce i Czechach w kontekście ich zamiaru posiadania dziecka

Andrzej Brodziak^{1, 3 (a, b, c, d)}, Jana Kutnohorska^{2 (a, c)}, Martina Cicha^{2 (b, c)}, Karina Erenkfeit^{1 (c, d)}, Barbara Białkowska^{3 (b, c)}

¹ Institute of Occupational Medicine and Environmental Health, Sosnowiec, Poland
Head of Institute.: P.Z. Brewczyński, M.D., Ph.D.

² Institute of Health Care Studies of Tomas Bata University, Zlin, Czech Republic
Head of Institute.: M. Cicha, M.S., Ph.D.

³ Institute of Nursing, State Higher School of Applied Sciences, Nysa, Poland
Head of Institute.: prof. A. Brodziak, M.D. Ph.D.

^(a) ideas

^(b) compilation of methods

^(c) collection of materials

^(d) work on text and references

ABSTRACT

Introduction. The aim of the study was to evaluate the frequency and severity of a sense of uncertainty concerning important determinants of human existence in selected groups of young women in Poland and the Czech Republic, when they found themselves to be at the right age to have children. **Material and methods.** Data were obtained based on a self developed questionnaire. The study involved 42 nursing students in the second year of studies in Poland and 51 nursing students in the Czech Republic. The average age in these two groups was 21.7 and 22.8 years respectively. The results were analyzed statistically using the chi-square test. **Results.** Polish young women in comparison to Czech women are more often afraid of considerable nuisance problems with future work, unsatisfactory relationships with future partners, and a sense of forthcoming impending dangers. **Conclusions.** The results suggest considerable uncertainty with regard to important spheres of human existence among young people. In the light of similar observations made by authors from countries of different economic standard, the insecurity is only one affecting factor among others. The results indicate the advisability of undertaking research on different approved models of the family.

Key words: decline of fertility, birth rate, feeling of economic uncertainty, unemployment, sense of security, model of family

STRESZCZENIE

Wstęp. Celem pracy była ocena częstości i nasilenia poczucia niepewności dotyczącej ważnych uwarunkowań egzystencjalnych w wybranych grupach młodych kobiet w Polsce i Czechach, które są w wieku poprzedzającym podjęciem decyzji o posiadaniu dzieci. **Materiał i metody.** Dane uzyskano poprzez badanie sondażowe przy pomocy własnego kwestionariusza ankietowego. Badaniu poddano 42 studentki pielęgniarstwa II roku studiów w Polsce i 51 studentek pielęgniarstwa w Czechach. Średni wiek w tych dwóch grupach wynosił odpowiednio 21,7 i 22,8 lat. Wyniki poddano opracowaniu statystycznemu, przy użyciu testu chi-kwadrat. **Wyniki.** Młode kobiety żyjące w Polsce znacznie częściej niż w Czechach obawiają się znacznych uciążliwości w przyszłej pracy, niesatysfakcjonującej relacji z przyszłym partnerem oraz częściej mają poczucie grożących w przyszłości niebezpieczeństw. **Wnioski.** Uzyskane wyniki przemawiają za częstym istnieniem wśród młodych ludzi znacznego poczucia niepewności w zakresie ważnych sfer egzystencjalnych. W świetle analogicznych spostrzeżeń autorów, pochodzących z krajów o różnej zaobnośności, poczucie niepewności ekonomicznej jest jedynie jednym z czynników oddziaływujących. Wyniki wskazują na celowość podjęcia badań nad różnymi akceptowanymi modelami rodziny.

Słowa kluczowe: spadek dzietności, wskaźnik urodzeń, poczucie niepewności ekonomicznej, bezrobocie, poczucie bezpieczeństwa, model rodziny

INTRODUCTION

An important contemporary social problem in most European countries is the decline of birthrate. The consequences of falling birthrates have already been experienced by all citizens. We realize that the „so-called” demographic crisis resulted in many schools being closed, a decrease in the number of potential students and the extension of retirement age. Due to the aging of the population the number of pensioners is increasing and the obligation to care for the elderly is becoming more demanding. The reasons for birthrate decline are not fully understood. Therefore we have devoted the recent paper to this problem [1–3]. First, we have tried to verify an interdisciplinary hypothesis explaining the decrease in the number of births [1]. This hypothesis assumes that the decline is the result of psychological changes that have occurred in modern societies. We have enumerated in our paper about 40 changes of perceived and altered attitudes [1]. The formulated changes allowed for the development of detailed questionnaire, which verified the convictions and attitudes of a particular person under consideration [1].

We have also checked which questions from our questionnaire meet the answers of the women who are childless, women who have only one child and women who have two or more children. Table I presents seven such questions for which differences in frequencies of responses in these subgroups of women are considerable and statistically significant. In order to put the detected regularities in a compact manner it should be noted that: The key element is usually the overwhelming desire of a woman to have a child. This desire has recently been counterbalanced by several factors e.g. the willingness to get an education. Therefore women have recently tended to postpone the time of getting pregnant. That postponement is possible due to the ability to control the time of getting pregnant by effective contraception and increasing acceptance of its use.

To better understand the true reasons for the declining birthrate we decided to compare the beliefs and attitudes of middle-aged women in Poland and the Czech Republic, ie countries, which are characterized by one of the lowest fertility rates in Europe. It is known that the average living standard of Czech citizens is better than of Polish ones. A separate pa-

Table I. Selected questions of the questionnaire with significant differences between Polish and Czech women. The first number relates to women, who did not have children, second - who had only one child, a third - who had two or more children. The second row of numbers determine the same values for Czech women, however sometime the differences are here not significant

Tabela I. Wybrane pytania ankiety dla których występują znamienne statystycznie różnice w odpowiedziach kobiet z Polski i Czech. Pierwsza cyfra dotyczy kobiet które nie miały dzieci, druga – kobiet które urodziły jedno dziecko, trzecia – kobiet które urodziły dwoje lub więcej dzieci. W drugim wierszu podano wartości uzyskane dla kobiet zamieszkujących w Czechach. Odpowiedzi dla kobiet z Czech nie zawsze wykazują znamienność statystyczną

Questions in the questionnaire and proportions of persons in %, who have chosen a particular option			Yes	No	Undefined
1	Is taking care of young children all day tiring and boring?	PL CZ	80/45/46 40/46/40	20/43/30 56/54/54	0/12/24 0/0/7
2	Is it difficult to combine raising two children with satisfactory social life and entertainments?	PL CZ	100/63/72 33/31/43	0/15/16 56/62/57	0/22/12 11/7/0
9	Are you concerned that in the case of childlessness you will be lonely?	PL CZ	60/40/38 22/46/29	40/23/16 67/23/29	0/37/46 11/31/42
13	Having a child temporarily or permanently diminish erotic ambiance and sexual life?	PL CZ	80/26/41 56/69/61	20/56/47 22/23/32	0/18/12 22/8/7
20	Do you think that having a child gives a significant meaning to your life?	PL CZ	20/85/100 11/8/11	20/3/0 56/77/68	60/12/0 33/15/21
21	Do you think that having a child's important for your sense of femininity?	PL CZ	33/76/88 22/23/7	33/12/2 67/77/82	33/12/10 11/0/11
37	Do you think that having children will cause conflict with different obligations?	PL CZ	60/20/29 78/86/79	40/68/60 11/8/18	0/12/11 11/8/3

per shows the outcome of these comparisons [2]. The data obtained allowed us formulate the following complementary theoretical explanation of the decline in the birth rate.

There are some convictions, attitudes and influences, which encourage women to have children. The most important factors encouraging a woman to have a child is the awareness that childlessness leads to loneliness, therefore raising two children is easier than raising one child and beneficial because it makes life meaningful. These encouraging factors can be suppressed by negative influences. It can lead women to stay childless or to decide to have only one child. The possible negative influences have been summarized as the following types of impact:

1. Fear of increased responsibilities and restrictions due to having a child.
2. Fear of inadequate financial situation.
3. Concern that having children will mean responsibilities and efforts right throughout lifetime.
4. Low life energy and existential optimism.
5. Self-centered attitude, favoring an easy life, without obligations, and freedom of action

It is possible to ascertain for a particular couple whether the different factors are in force or not. This provides a picture of the couple's social and mental situation. Identification of the causes of falling birth rates provides guidance for counteracting the decline in the birth rate. One possibility is the promotion of „so-called „system of rapid transition to a second child”. Therefore we have tried to check if there are favorable conditions in Poland for promoting shortening the time between the birth of the first two children [3]. In the observed groups of women a relatively large time gap was found between the average age of birth of the first and second child, which indicates the existence of a large group of women who could give birth to a second child earlier. The estimated attitude and sentiments of these women indicate the circumstances which would promote the more rapid transition to a second child [3]. There are different ways to explain the reasons for the decline of the birth rate [4–8]. Some researchers recently have taken into consideration the influence of uncertainty in various aspects of life which impacts the decision of young people to have children [9–13]. Brienna Perelli-Harris notes that the reasons for the decline of birth rate in European countries fall into four categories: economic uncertainty, social stress and anomie, changing values and belief systems, and unequal gender relations [13]. She wrote that economic un-

certainty caused by the bad economic situation of a country is one of the crucial determinants for the low fertility. According to this point of view, macro-level economic instability leads to financial uncertainty on the personal level, delaying partnership formation and childbearing.

Similar data are also available for countries in other parts of the world. Adsera et. al. have analyzed the impact of economic uncertainty on fertility in 18 countries of Latin America [11]. The most common is uncertainty of employment and economic conditions. Some other researchers also evaluate the influence of the recent economic recession on fertility [14–17]. However many authors point also to other areas. The authors who considered the impact of the feeling of uncertainty conclude, that there is no immediate, direct relationship between wealth and fertility. Brienna Perelli-Harris is convinced for instance that the actual low fertility rate is rather due to social stress and anomie [13].

The notion of social anomie was introduced by Durkheim in 1894 as a breakdown in social standards. It seems useful to explain the reasons for the drop in birth rate in some former communist countries. Brienna Perelli-Harris emphasizes the importance of mentality changes. She thinks that fertility decline in Ukraine may also be due to changes in values and belief systems. The breakup of the Soviet Union caused Ukraine to be flooded with external influences that may be changing priorities, behaviors, and the way people think. It influenced the changes in family structures like later age of first marriage and birth, increase in cohabitation and non-marital childbearing all these occur concomitantly with a reorientation towards autonomy. It is important to compare the comments made by the authors, who analyze impact of anxiety, fear and insecurity in rich countries and countries with low-income, especially those that have recently undergone profound social and economic transformation. Thus, a study of approximate assessment of the anxiety and uncertainty among young women in Poland and the Czech Republic would be helpful. So we decided to make an approximate assessment of the existence of the anxiety and uncertainty among young women in Poland and the Czech Republic. This time we attempt to check the state of mind of young women in the age range (21–23) yet before the optimal time for maternity.

Another purpose of this publication is the continuation of considerations about further factors affecting the decline of the number of births, noted by authors from different countries. The results are concluded in this paper.

MATERIAL AND METHODS

The data were collected in the groups of female students of nursing pursuing full-time studies classes in the academic year 2012/2013. We obtained the data from 42 students in Poland and from 51 students in the Czech Republic. The average age of young women in these groups was 21.7 years and 22.8 years respectively. Data were collected by means of self developed questionnaire presented in Table II. The questionnaire contains questions related to uncertainty of possible future employment,

the rigors and the atmosphere in the future work, relationships with current or future partner and general feeling of insecurity and threats of living in the country. The questions included in the questionnaire aim to roughly determine whether the examined person feels uncertainty towards the enumerated existential fields. The obtained differences in the frequency of possible options of answers were verified by the use of chi square test. We used the tool accessible under <http://statpages.org/ctab2x2.html> This program calculate also the Yates-corrected chi-square and the Mantel-Haenszel chi-square.

Table II. The elaborated questionnaire

Tabela II. Opracowany kwestionariusz

<p>We are kindly asking to complete the questionnaire.</p> <p>The questionnaire is completed by: woman <input type="checkbox"/> years old man <input type="checkbox"/> year old</p> <p>I have no children <input type="checkbox"/> I have one child <input type="checkbox"/>; two children <input type="checkbox"/>; three children <input type="checkbox"/>; >3 children <input type="checkbox"/> I born my child at the age of <input type="checkbox"/> years; second in age of <input type="checkbox"/> years; third in age of <input type="checkbox"/> I have no children yet, but I plan to have one child <input type="checkbox"/>; two children <input type="checkbox"/>; three children <input type="checkbox"/> I plan, I'll have my first child at the age of <input type="checkbox"/>, and the other at the age of <input type="checkbox"/> I live in a village <input type="checkbox"/>; in a small town <input type="checkbox"/>; in a medium-sized town (between 15–50 thousand inhabitants) <input type="checkbox"/>; in a large town (>50 thousand inhabitants) <input type="checkbox"/></p>				
<p>Please choose in any row numbered 1–4 one possible option a, b, c, d and circle.</p>				
1	<p>a. I am convinced that after graduation – I will have no difficulty in finding a job, which will be based on an advantageous kind of employment (a contract with benefits)</p>	<p>b. I am convinced that after graduation I will find probably only an unsatisfactory job (a contract limited in time or other kind of work without regular pension)</p>	<p>c. I predict that I will have great difficulty in finding any job</p>	<p>d. I have no opinion</p>
2	<p>a. I predict that I will have a satisfying job, without stressful challenges</p>	<p>b. I predict that in my future workplace I will experience a significant challenges conditioning my steady employment</p>	<p>c. I predict that the demands on me and the uncertain economic situation will force me to continuously search for a job</p>	<p>d. I have no opinion</p>
3	<p>a. My relationship with my partner will certainly be successful</p>	<p>b. Knowing the average contemporary behaviors of men and women it is probable that my relation with the partner might be unsatisfactory</p>	<p>c. I can come across significant difficulties in relations with my partner (a divorce can happen)</p>	<p>d. I have no opinion</p>
4	<p>a. Living in my country I have a sense of security. Our existence is not threatened</p>	<p>b. I have had a bad feeling of threat and danger</p>	<p>c. I'm almost certain that many hazards and dangers will occur in the future</p>	<p>d. I have no opinion</p>

RESULTS

Collective results obtained by the discussed questionnaire are presented in Table III. This table shows the frequency of answers for particular options of possible responses to each item of the questionnaire provided by the young women in Poland and the Czech Republic.

These options of answers to which the statistically significant difference in response rates were found between a group of young women in Poland and the Czech Republic are marked in the table III with an asterisk*. The most important findings are illustrated in Figure 1.

The analysis of obtained results convinces that the young women living in Poland were concerned significantly more frequently than in the Czech Republic – by a possible burden in future work, unsatisfactory relationships with future partners, and more often with a sense of impending danger in the future.

This finding should be interpreted in the light of our previous results presented in our formed publications, which focused on older women. The results presented in this paper relate to younger women in the age preceding the decision to have children. The importance of frequent feeling of uncertainty of young people for the whole range of factors relevant to making decisions about having children requires

detailed discussion. Such considerations should facilitate Figure 2.

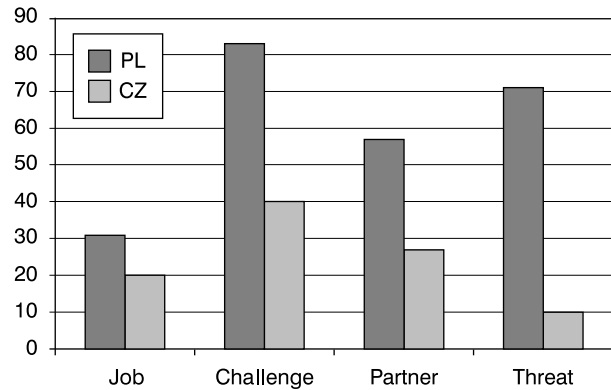


Fig. 1. Proportion in % of answers of young Polish and Czech women concerning the level of uncertainty in four existential areas (troubles of finding a job, challenges in the future place of employment, possible difficulties in relation with the partner, general insecurity and threats in the country). The differences in proportions of answers for three last items are statistically significant

Ryc. 1. Udział w % odpowiedzi młodych polskich i czeskich kobiet na pytania dotyczące poziomu niepewności w czterech obszarach egzystencjalnych (kłopoty ze znalezieniem pracy, wyzwania w przyszłym miejscu zatrudnienia, ewentualnych trudności w związku z partnerem, ogólnej niepewności i zagrożeń w kraju). Różnice w proporcjach odpowiedzi na trzy ostatnie pytania są istotne statystycznie

Table III. Number of answers a, b, c, d of young Polish and Czech women concerning the level of anxiety in four existential areas. The table should first be read after reading the questionnaire presented in table II. The quantities are given separately for a group of Polish and Czech young women. The answers statistically significant are marked with an asterisk (*)

Tabela III. Liczba odpowiedzi a, b, c, d młodych kobiet polskich i czeskich dotyczących poziomu niepokoju w czterech zakresach egzystencjonalnych. Tabelę należy odczytać zapoznając się wpierw z formularzem ankiety zamieszczonym w tabeli II. Odpowiedzi dla których znaleziono znamienne statystycznie różnice w częstościach zaznaczono gwiazdką (*)

Type of insecurity	Number of answers of the type a./other	Number of answers of the type b./other	Number of answers of the type c./other	Number of answers of the type d./other
1	a. PL 17/25 (40,5 %) CZ 15/36 (29,4 %)	b. PL 13/29 (30,9%) CZ 10/41 (19,6%)	c. PL 1/41 (2,4 %) CZ 7/44 (13,7%)	d. PL 11/31 (26,2%) CZ 19/32 (37,2%)
2	a. PL 3/39 (7,1%) CZ 11/40 (21,6%)	b. PL 35/7 (83,3%) * CZ 20/31(39,2%)	c. PL 4/38 ((9,5%) CZ 4/47 (7,8%)	d. PL 0/42 (0 %) * CZ 16/35 (31,4%)
3	a. PL 16/26 (38,1%) CZ 16/35 (31,4%)	b. PL 24/18(57,1%) * CZ 14/37 (27,4%)	c. PL 2/40 (4,8%) CZ 2/49 (3,9%)	d. PL 0/42 (0%) * CZ 19/32(37,2%)
4	a. PL 5/36 (11,9%) CZ 12/39 (23,5%)	b. PL 30/11(71,4%) * CZ 5/46 (9,8%)	c. PL 6/35 (14,3%) CZ 14/37 (27,4%)	d. PL 0/42(0%) * CZ 20/31(39,2%)
2 – b $\chi^2=18,55$, $p<0,0001$		3 – d $\chi^2=19,66$, $p<0,0001$		
2 – d $\chi^2=15,91$, $p<0,0001$		4 – b $\chi^2=40,88$, $p<0,00001$		
3 – b $\chi^2=8,40$, $p<0,004$		4 – d $\chi^2=20,98$, $p<0,00001$		

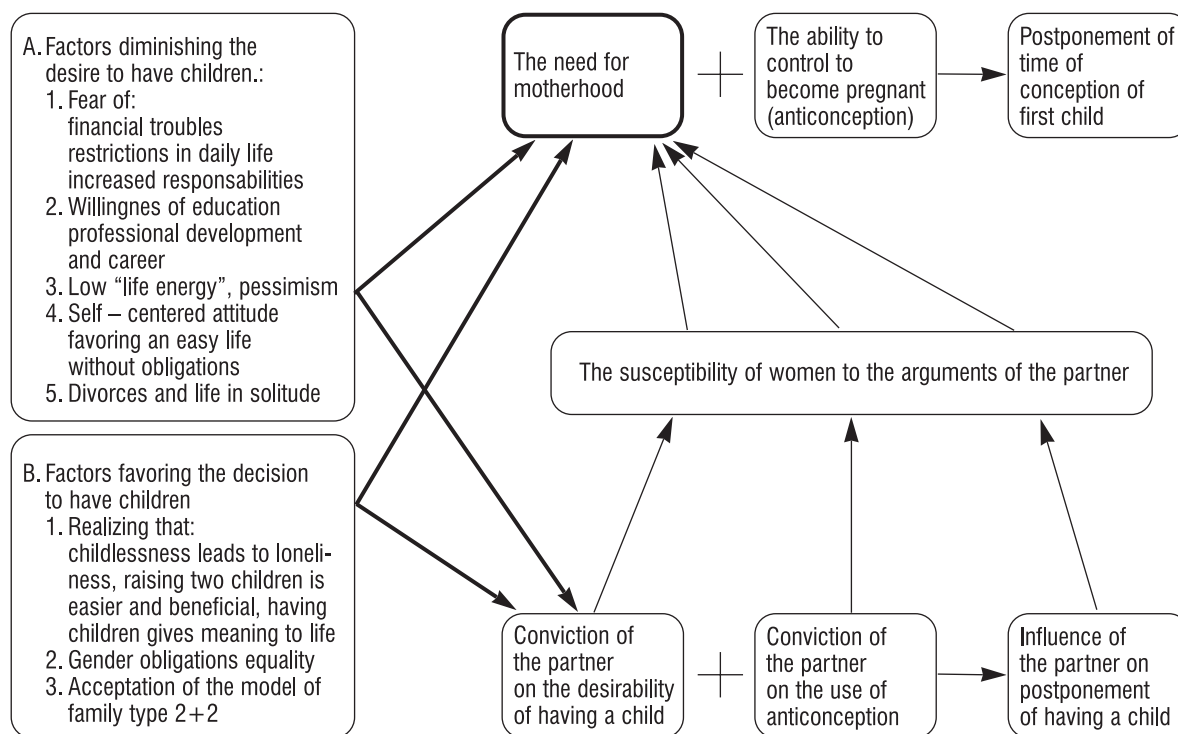


Fig. 2. The proposition of the scheme of relations among factors which determine the number of birth in a particular population
 Ryc. 2. Propozycja schematu relacji zachodzących pomiędzy czynnikami, które określają liczbę urodzeń w danej populacji

DISCUSSION

This paper presents the results of the next stage of surveys conducted by us in order to clarify the reasons for the decline in the birth rate. Our previous publications focused on the attitudes and beliefs of older women in childbearing age. According to many authors from different countries also the insecurity of young people in the age preceding the decision to have a child must be taken into account.

The results provide data that truly young Polish and Czech women perceive uncertainty in several existential areas. What's more the feeling of uncertainty is more pronounced among women living in Poland. The discussion, however is required about the importance of feeling of uncertainty on the background of other possible influences such as anomie, change of values, unequal gender relations and especially the predominant accepted model of family. It is necessary to remember that many different hypotheses are proposed to explain the reasons of decline of number of birth. We try to illustrate the relations of factors which are at play with the help of Figure 2. Frejka sees similar reasons for the decline in the birth rate in all post-communist

countries [18]. Lithuanian researchers are inclined to the hypothesis that the major impact on the decline in the number of births were social, economic and mental changes. Stankuniene et al. says that in the second half of the 1990s, the effect of the economic determinants started to weaken and was increasingly superseded by determinants related to mental changes which were taking place in the Lithuanian society [19]. These authors argue that the social transformation produced a sense of a social loss after some of the Soviet era guarantees, such as employment and income, free education and health care [19]. They emphasized also the influence of diffusion of individualization due to the consolidation of market relations, increasing freedom of choice, democratization of the society, and the liberalization of value-orientated lifestyles. Stankuniene et al. says that in Lithuania young people spend more and more time now studying, looking for opportunities for self realization, and development of their own professional career. Increasing importance is attached to quality of life, hedonistic aspirations, and consumption [19]. The authors analyzing the demographic situation in the Czech Republic, Hungary, Estonia, Slovenia, Slovakia

and Russia also generally refer to the impact of similar social changes [20–26]. The influence of economic uncertainty, anomie and changing values, can be exacerbated by unequal gender relation. The gender inequity may worsen in the light of combining work and childbearing. In southern European countries like Italy and Spain where fertility rate is low, women have taken major steps in equality in the educational system and labor force, but have not achieved similar equality at home. Women are provided with little domestic childcare or state childbearing support and must decide whether to limit their childbearing or reduce their career aspirations [27]. In northern European countries, on the other hand, women receive more support from their partners and from governmental resources, including subsidized childcare and maternity leave [28–30]. As a result, these countries have maintained fertility rates at satisfactory level. The above mentioned authors are of the opinion that in the post – communist countries, women have experienced increased equality in the workforce-similar to southern European countries). A large proportion of the female population enjoy higher education and participates in the labour force, however as in southern Europe the gender distribution of domestic work is unequal and, in addition, there is a little state support for families. Understanding of these conditions facilitate the comparison of the explanations formulated in post – communist, rather poor countries with the analogous considerations of the authors from Germany, Sweden, Denmark, Netherlands, Germany and France [28–34].

Dorbritz says that Germany is a low-fertility country with a rapidly ageing population and accordingly the trend will remain so for the foreseeable future [31]. He argues that there are several reasons for this trend. Germany is among countries with the highest rates of childlessness in the world, and that fact has become widely accepted. This is illustrated by changes in living arrangements. A broad range of living arrangements has been added to the basic model of marriage with children; single living, non-marital cohabitation, lone parenthood, patchwork families and living together but apart. Dorbritz is convinced that a culture of individualism has spread across Germany, which forms the basis for widespread decisions against family formation [31]. The desired number of children has become low and family policy is considered to be a failure in terms of its influence on fertility. German family policy has had a traditional orientation centered on monetary support to families and on the promotion of the male breadwinner model. Women have been

largely forced to choose between family and work, and leave the labor market when a child is born. The still prevailing concept of family policy does not help to reduce the pressure to choose between work and family life, and thus makes it easier to decide not to have children, especially in case of highly educated women [31].

There are some countries in Europe, which are characterized by rather high fertility rate. It is interesting how this phenomenon is explained by experts representing these countries [28–30]. Olah et al. notes that in Sweden post-modern values are dominant and that the society is highly secularized [28]. The desired number of children is among the highest in the European Union, and childlessness is not frequent. The level of female labor-force participation is the highest in Europe and young women are just as much educated as men. Family policies, based on the principle of equality across social groups and gender, seem to play an important role in keeping fertility rate relatively high. The family policies, with such elements as eligibility to parental-leave as well as the availability of public childcare has an impact on the fluctuations of fertility rates.

Fokkema et al. notes that in the Netherlands the periodical total fertility rate has stabilized since the late 1970s at around 1.6 children per woman [30]. So, the drop in fertility, however, has not been as sharp as in many other regions of Europe. Although the Netherlands has one of the oldest first-time mothers, total fertility rate is still rather high compared to other European countries. The main driving force behind specific fertility trends in the Netherland explains Fokkema et al. by changing patterns of home leaving and partnership formation, declining its stability, and the growing acceptability of contraception, extended education, rising participation of women in labor force, economic uncertainties, growing migrant population, and family policies.

Understanding the reasons of rather high fertility rate will be facilitated if we quote the explanations of the causes of high fertility in France, in the country where no demographic crisis exist. Toulemon et al. notes that the current total fertility rate in France is around 1.9 children per woman [33]. They emphasize that this is a relatively high level despite the fact that other demographic trends, like conjugal behaviour, social and economic trends are not very different from other Western European countries. Toulemon et al. state that the demographic situation in France can serve as a counterfactual test case for some of the hypotheses advanced to explain the cur-

rent low level of fertility in most European countries (delay in fertility, decline in marriage, increased birth control, greater economic uncertainty). These authors are convinced that France's fertility level can be partly explained by its active family policy introduced after the Second World War, and adapted in the 1980s to accommodate women's entry into the labour force. This policy is the result of a battle, fuelled by pro-natalism, between the conservative supporters of family values and the promoters of state-supported individual equality. French family policy thus encompasses a wide range of measures based on varying ideological backgrounds, and it is difficult to classify in comparison to the more precisely focused family policies of other European welfare states. The active family policy seems to have created especially positive attitudes towards two- or three child families in France [33]. Pailhé et al. investigated whether unemployment and insecure employment periods merely delay fertility or also impact on fertility in France. They conclude that employment uncertainty tends to delay a first parenthood but has a relatively little effect on lifetime fertility in France. They state that in France the generous state support to families associated with a generous unemployment insurance system, and the strong French two-child family norm, may explain why economic uncertainty affects fertility less there than elsewhere [34]. We try to illustrate the importance of the feeling of uncertainty and the relationships between various other factors influencing the number of birth, raised in the above discussion with the help of Figure 2.

CONCLUSIONS

1. The young women living in Poland are frequently concerned by uncertainty related to employment, possible burden in future work, possible unsatisfactory relationships with future partners, and a sense of impending dangers in the future.
2. The young women living in Poland were concerned significantly more frequently than in the Czech Republic uncertainty related to possible burden in future work, unsatisfactory relationships with future partners, and more often with a sense of impending danger in the future.
3. The assessment of the impact of uncertainty on the decision to have a child, carried out by the authors from more prosperous countries and in countries that have recently passed political transformation leads to the conclusion that these feelings of insecurity are only one of the factors affecting the decisions.
4. Further studies are needed to verify the legitimacy of other explanations of the decline in the number of births, in particular the prevalence and acceptance of different, desired models of the family.

Funding: *authors' financial sources*

REFERENCES

1. Brodziak A., Wolińska A., Ziółko W.: Próba weryfikacji interdyscyplinarnej hipotezy wyjaśniającej spadek liczby urodzeń i niską dzietność. *Medycyna Środowiskowa-Environmental Medicine*, 2012, 15(4): 104-115.
2. Brodziak A., Kutnohorska J., Cicha M., Wolińska A., Ziółko E.: Comparison of fertility ratios, attitudes and beliefs of Polish and Czech women. *Medycyna Środowiskowa-Environmental Medicine*, 2013, 16(2): 69-78.
3. Brodziak A., Wolińska A., Ziółko E.: Czy zachodzą okoliczności sprzyjające promowaniu systemu szybkiego przejścia do drugiego dziecka? *Medycyna Środowiskowa-Environmental Medicine*, 2013, 16(1): 67-74.
4. Hoem J.M.: Childbearing Trends and Policies in Europe. *Demographic Research*, 2008, 19: 1-4.
5. Frejka T., Sobotka T.: Fertility in Europe: Diverse, delayed and below replacement. *Demographic Research*, 2008, 19: 15-46.
6. Sobotka T., Toulemon L.: Changing family and partnership behaviour: Common trends and persistent diversity across Europe. *Demographic Research*, 2008, 19: 85-138.
7. Lutz W.: Fertility rates and future population trends: will Europe's birth rate recover or continue to decline? *Int J Androl*. 2006, 29: 25-33.
8. Lutz W.: Dimensions of global population projections: what do we know about future population trends and structures? *Philos Trans R Soc Lond B Biol Sci*. 2010, 365(1554): 2779-91.
9. Bachrach Ch.A., Philip Morgan Ph.: A Cognitive – Social Model of Fertility Intentions. *Population and Development Review*, 2013, 39: 459-485.
10. Adsera A.: The interplay of employment uncertainty and education in explaining second births in Europe. *Demographic Research*. 2011, 25: 513-544.
11. Adsera A., Menendez A.: Fertility changes in Latin America in periods of economic uncertainty. *Popul Stud (Camb)*. 2011, 65: 37-56.
12. Kotowska I., Józwiak J., Matysiak A., Baranowska A.: Poland: Fertility decline as a response to profound societal and labour market changes? *Demographic Research*, 2008, 19: 795-854.
13. Perelli-Harris B.: Ukraine: On the border between old and new in uncertain times. *Demographic Research*, 2008, 19: 1145-1178.
14. Sobotka T., Skirbekk V., Philipov D.: Economic recession and fertility in the developed world. *Popul Dev Rev*. 2011, 37: 267-306.
15. Uutela A.: Economic crisis and mental health. *Curr Opin Psychiatry*. 2010, 23: 127-30.
16. Gili M., Roca M., Basu S., McKee M., Stuckler D.: The mental health risks of economic crisis in Spain: evidence from primary care centres, 2006 and 2010. *Eur J Public Health*. 2013, 23: 103-8.

17. Billingsley S.: Economic crisis and recovery: Changes in second birth rates within occupational classes and educational groups. *Demographic Research*, 2011, 24: 375-406.
18. Frejka T.: Determinants of family formation and childbearing during the societal transition in Central and Eastern Europe. *Demographic Research*, 2008, 19: 139-170.
19. Stankuniene V., Jasilioniene A.: Lithuania: Fertility decline and its determinants. *Demographic Research*, 2008, 19: 705-742.
20. Sobotka T., Šťastná A., Zeman K., Hamplová H., Kantorová V.: Czech Republic: A rapid transformation of fertility and family behaviour after the collapse of state socialism. *Demographic Research* 2008, 19: 403-454.
21. Spéder Z., Kamarás F.: Hungary: Secular fertility decline with distinct period fluctuations. *Demographic Research* 2008, 19: 599-664.
22. Speder Z.: Rudiments of recent fertility decline in Hungary: Postponement, educational differences, and outcomes of changing partnership forms. *Demographic Research*, 2006, 15: 253-283.
23. Klesment M., Puur A.: Effects of education on second births before and after societal transition: Evidence from the Estonian Generations and Gender Survey. *Demographic Research*, 2010, 22: 891-932.
24. Stropnik N., Šircelj M.: Slovenia: Generous family policy without evidence of any fertility impact. *Demographic Research*, 2008, 19: 1019-1058.
25. Vaňo B., Pilinská V., Jurčová D., Potančoková M.: Slovakia: Fertility between tradition and modernity. *Demographic Research*, 2008, 19: 973-1018.
26. Zakharov S.: Russian Federation: From the first to second demographic transition. *Demographic Research*, 2008, 19: 907-972.
27. Delgado M., Meil G., Zamora-López F.: Spain: Short on children and short on family policies. *Demographic Research*, 2008, 19: 1059-1104.
28. Oláh L., Bernhardt E.: Sweden: Combining childbearing and gender equality. *Demographic Research*, 2008, 19: 1105-1144.
29. Lassen T.H., Sobotka T., Jensen T.K. et al.: Trends in rates of natural conceptions among Danish women born during 1960-1984. *Hum Reprod.* 2012, 27: 2815-22.
30. Fokkema T., de Valk H., de Beer J., van Duin C.: The Netherlands: Childbearing within the context of a „Poldermodel” society. *Demographic Research*, 2008, 19: 743-794.
31. Dorbritz J.: Germany: Family diversity with low actual and desired fertility. *Demographic Research*, 2008, 19: 557-598.
32. Prskawetz A., Sobotka A., Buber I., Engelhardt H., Gisser R.: Austria: Persistent low fertility since the mid – 1980s. *Demographic Research*, 2008, 19: 293-360.
33. Toulemon L., Pailhé A., Rossier C.: France: High and stable fertility. *Demographic Research*, 2008, 19: 503-556.
34. Pailhé A., Solaz A.: The influence of employment uncertainty on childbearing in France: A tempo or quantum effect? *Demographic research.* 2012, 26: 1-40.

Address for correspondence:

*Prof. Andrzej Brodziak, MD, PhD
Institute of Occupational Medicine and
Environmental Health in Sosnowiec, Poland
Phone number 48 774355951
andrzejbrodziak@wp.pl*