Couvade syndrome perceived by medical staff and partners of expectant fathers

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Original article

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Summary
Introduction. Couvade syndrome, also called sympathetic pregnancy, is one of less known phenomena that accompany men in the initial phase of fatherhood.
Aim. The aim of the study was to assess how medical staff identify the signs of couvade syndrome in partners of pregnant women and to analyze the manner in which pregnant patients notice such symptoms in their partners, including psychological correlates.
Material and methods. The study involved 60 heath care professionals and 63 patients of the Obstetrics Clinic of the Medical University of Gdańsk in Poland. Couvade syndrome was assessed using a survey containing 16 symptoms indicated by Lipkin and Lamb. Empathy was measured with the use of Empathic Sensitiveness Scale (ESS).
Results. The signs of couvade syndrome can be noticed by both health care professionals and pregnant partners. In the case of women, this identification of individual symptoms is associated with an empathy dimension and duration of the relationship. *Conclusions.* Increased awareness concerning couvade syndrome both among pregnant patients and their partners as well as in broadly-understood counselling, can contribute to the minimization of negative experiences associated with pregnancy.
Key words: Couvade syndrome; pregnancy; health personnel; pregnant women

INTRODUCTION

Couvade syndrome, also called sympathetic pregnancy, is one of less known phenomena that accompany men in the initial phase of fatherhood. It is associated with a number of symptoms that can be identified in men who are strongly emotionally attached to their partners [1]. The reason of couvade syndrome can be the fact that men feel that they are pushed aside once a woman is more focused on herself and the pregnancy [2].

Couvade syndrome is a condition where pregnancy symptoms are experienced by both a woman and her male partner. This phenomenon was noticed in ancient rituals of primitive cultures. The couvade ritual could be observed all around the world in communities living on various continents. Contemporarily, the father of a child unconsciously and intuitively seeks for the manner of being a part of the expectant women's experiences and tries to understand them [3]. Men start

co-experiencing pregnancy symptoms from the second or third trimester [4]. Most of them feel very emotional about their partner's pregnancy, and therefore they begin sharing almost all physical pregnancy symptoms, such as morning sickness, abdominal pain, increased appetite, food cravings, dizziness, weight gain, back pain, mood swings, sleep disorders, sleeplessness and malaise [5]. The evolution of the family model and a change from the patriarchal relationship to partnership has brought about numerous changes. Common activities during antepartum classes or labor simulations can be causes for practicing the ancient couvade ritual [2,3]. Sometimes, this process is deeper, and men expecting a child imitate their partner's way of thinking and assume physical signs of pregnancy [4,5]. At this period, fathers prefer contacts with people who have children or willingly give up various habits. This is also associated with the preparation of the house, which is another reflection of the ancient rituals [6]. The contemporary model of couvade is much milder. It apparently results from the eagerness to sympathize and participate in the events that are significant for both parents-to-be. The possibility of taking part in antenatal classes and family labors builds a deeper and more stable bond between the partners and the child [7].

Having reviewed the literature associated with couvade syndrome, it can be stated that studies on this phenomenon are usually conducted from the male partner's perspective [4,8,9]. There are few papers in which couvade syndrome is analyzed from the psychological point of view. Kaźmierczak et al. examined the relationships between empathy and individual sings of couvade syndrome in men [9]. It was confirmed that a considerable percentage of men declared that they experienced certain signs of couvade syndrome while their partners were pregnant (72% of the investigated population). The results also pointed to a relationship between negative emotionality of men and the occurrence of such symptoms. Men who tend to adopt negative emotions from others, feel discomfort associated with negative emotions of others or experience stress of other people more frequently presented signs of couvade syndrome [9].

AIM

The aim of the first part of the study was to assess how frequently health care professionals identify the signs of couvade syndrome in male partners of pregnant women. The second part of the study was conducted to answer the question whether or not pregnant patients notice the symptoms of couvade syndrome in their partners, including psychological and sociodemographic correlates of this phenomenon. The study focused on the dimension of personality associated with cognitive and emotional aspects of empathy [10]. The former aspect of empathy is usually understood as the ability to adopt roles or a point of view of another person. The latter is reflected in agitation or excitement raised by emotions of other people [11]. Empathy was supplemented with a construct associated with the degree to which one identifies with a partner assuming that the way of perceiving oneself in relation to the partner is also associated with the identification of couvade syndrome by women.

MATERIAL AND METHODS

The first study involved 60 workers of the Obstetrics Clinic of the Medical University of Gdańsk, Poland (51 midwives and 9 doctors). The youngest worker was 23 years old, and the oldest was 60 (M = 41.31, SD = 11.55). The mean work experience was 17 years (SD = 11.74). The study was conducted with the use of a survey. Couvade syndrome was assessed with a questionnaire containing 16 symptoms indicated by Lipkin and Lamb [8] and translated into Polish. The tool used in the study is characterized by high Cronbach alpha reliability ranging from 0.81 to 0.87.

The second study involved 63 patients of the Obstetrics Clinic of the Medical University of Gdańsk, Poland. The youngest respondent was 19 years old, and the oldest was 44; the mean age was 30.5 (SD = 4.7). Higher education was noted in 44% of the respondents; 13% reported secondary education, 7.7% – post-secondary education and 6.5% – primary and vocational education. The mean duration of the relationship was 5.9 years (SD = 4.4); 60.7% of women had their first child; 87% of women were married. The study used the Empathic Sensitiveness Scale (ESS) devised by Kaźmierczak, Plopy and Retowski [12]. It measures the level of empathy in three aspects: cognitive empathy (taking the perspective of another person in daily social situations), emotional empathy (empathic concern – sympathizing with others) and personal distress (tendency to adopt negative emotions of other people when they experience mental distress). The scale for couvade syndrome assessment consisting of 16 symptoms indicated by Lipkin and Lamb was also used. Statistical analyses were conducted in the SPSS 21.0 PL system (the license of the University of Gdańsk).

RESULTS

Couvade syndrome viewed by health care professionals – frequency of occurrence and correlates

The results presented in Table 1 indicate that men are mainly considered as providing both emotional and physical support. At the same time, a high percentage of health care professionals declare that a man frequently disturbs during childbirth and draws attention to himself thus disrupting the course of labor.

The data indicate that there are statistically significant relationships between the duration of work and the way in which individual roles of a man during labor are perceived (apart from emotional support, in the case of which the relationship was not statistically significant). The duration of work is positively correlated with perceiving men as disturbing during labor, drawing

attention to themselves and disrupting the course of labor. Moreover, it is negatively correlated with perceiving a man as a source of physical support.

As for the analyses proper, i.e. those concerning the identification of couvade syndrome by health care professionals, it was assessed how frequently health care professionals notice individual signs of couvade syndrome in pregnant patients and their partners. Of the symptoms experienced by patients, the ones associated with body mass, i.e. weight gain, nausea, change in appetite and constipation, are the most frequently observed by health care professionals. According to health care professionals, male partners present lower intensity of symptoms, with those associated with body mass being the most common (weight gain, nausea, change in appetite, weakness) (Tab. 3).

It was found that the duration of work significantly influences the identification of two symptoms: weakness in women and abdominal pain in men. Health care professionals with longer experience notice signs of weakness in women more rarely (Spearman's rho = -0.270; $p < 0.05$), and abdominal pain in men – more frequently (Spearman's rho = 0.281; $p<0.05$).

Couvade syndrome viewed by pregnant women – frequency of occurrence and correlates

The analysis involved the intensity of certain symptoms of couvade syndrome observed by pregnant

Tab. 1. Frequency in which health care professionals observe the roles of men during labor (mean intensity of adopted roles form the perspective of a heath care professional)

Frequency	Supports emotionally		Supports physically		Disturbs		Focuses attention		Disrupts parturition	
	L	%	L	%	L	%	L	%	L	%
Never	0	0	3	5,1	3	5,1	11	18,6	11	18,6
Sometimes	12	20,3	16	27,1	46	78,0	38	64,4	39	66,1
Often	38	64,4	36	61,0	7	11,9	6	10,2	5	8,5
Always	8	13,6	2	3,4	3	5,1	0	0	0	0
M (SD)	2,93(0,59)		2,65(0,64)		2,17(0,59)		1,9(0,55)		1,88(0,53)	

M – mean; SD – standard deviation

Tab. 2. Duration of work of heath care professionals and perceiving the role of a man during labor (Spearman's rho coefficient, bilateral significance)

Variable	Correlation coefficient				
	Supports emotionally	Supports physically	Disturbs	Focuses attention	Disrupts parturition
Work experience	-0,031	-0,291*	0,393**	0,355**	0,281*

$^{**}p < 0,01$ $^{*}p < 0,05$

Tab. 3. Average intensity of the Couvade Syndrome symptoms among female patients and partners of female patients perceived by health personnel

Couvade Syndrome symptoms	Female patients		Partners of female patients	
	M	SD	M	SD
Nausea	3,55	0,65	1,60	0,79
Viomiting	3,14	0,66	1,30	0,57
Abdominal pain	3,09	0,83	1,62	0,77
Flatulence	2,88	0,83	1,53	0,83
Changes in appetite	3,38	0,75	1,92	0,96
Weight gain	3,72	0,64	2,21	1,05
Weight loss	2,32	0,58	1,37	0,56
Intenstinal problems	2,54	0,66	1,52	0,73
Toothaches	1,93	0,68	1,23	0,51
Skin problems	2,57	0,71	1,23	0,55
Leg cramps	3,09	0,76	1,29	0,54
Fainting	2,37	0,70	1,51	0,75
Weakness	2,82	0,79	1,77	1,48
Colic	2,09	0,65	1,13	0,40
Diarrhoea	2,18	0,64	1,36	0,62
Constipation	3,10	0,72	1,43	0,77

M – average for the group; SD – standard deviation

Tab. 4. Average intensity of the Couvade Syndrome symptoms among men perceived by their partners

Couvade Syndrome symptoms	M	SD
Nausea	1,25	0,65
Abdominal pain	1,53	0,96
Flatulence	1,48	0,89
Changes in appetite	2,08	1,13
Weight gain	1,97	1,14
Weight loss	1,55	0,87
Intenstinal problems	1,75	1,09
Toothaches	1,38	0,83
Skin problems	1,37	0,82
Leg cramps	1,27	0,69
Weakness	1,43	0,81
Diarrhoea	1,3	0,7
Constipation	1,33	0,77

M – average for the group; SD – standard deviation

women in their partners. Of the symptoms experienced by partners of expectant women, the most frequently noticed are those commonly associated with couvade syndrome, i.e. related to body mass (change in appetite, weight gain, intestinal disorders, weight loss) (Tab. 4).

A correlation analysis was conducted in which Spearman rho coefficient was determined to test whether the individual aspects of empathy coexist with the symptoms of couvade syndrome identified in men by their pregnant partners and with the generally observed couvade syndrome (determined by summing up the intensity of individual symptoms) (Tab. 5).

The results suggest that symptoms of couvade syndrome coexist with emotional aspects of empathy: personal distress and emphatic concern. Personal dis-

Tab. 5. Components of empathy and Couvade Syndrome symptomps as well as Total Couvade Syndrome (Spearman's rank correlation coefficient, one-tailed test of significance)

Variable	Correlation coefficient		
	Empathic Concern	Personal Distress	Perspective Taking
Nausea	-0,004	-0,02	-0,01
Abdominal pain	-0,19[a]	0,16	-0,06
Flatulence	0,1	0,18[a]	-0,12
Changes in appetite	-0,05	0,04	-0,2
Weight gain	0,08	-0,05	-0,07
Weight loss	-0,08	0,23*	-0,12
Intenstinal problems	0,04	0,21[a]	-0,06
Toothaches	0,16	0,17	-0,15
Skin problems	0,29*	0,09	0,06
Leg cramps	0,14	0,17	0,03
Weakness	0,01	0,15	-0,11
Diarrhoea	0,05	0,12	-0,11
Constipation	0,11	0,18[a]	-0,05
Total Couvade Syndrome	0,13	0,19[a]	-0,15

* p<0,05 [a] p <0,1 (tendency)

Tab. 6. Couvade syndrome symptoms perceived by female – classification

Couvade syndrome symptoms	Complete Couvade		Common Couvade		Lack of Couvade		F(2,57)	p
	M	SD	M	SD	M	SD		
Nausea	2 a	0,82	1,14 b	0,49	1 b	0,00	12,33	0,0001
Abdominal pain	3,57 a	0,79	1,34 b	0,64	1,11 b	0,47	44,74	0,0001
Flatulence	3,29 a	0,76	1,37 b	0,69	1 c	0,00	39,82	0,0001
Changes in appetite	3,14 a	0,9	2,37 b	1,03	1 c	0,00	22,1	0,0001
Weight gain	2,43 a	1,27	2,23 a	1,17	1,17 b	0,38	7,49	0,001
Weight loss	2,29 a	1,25	1,63 a	0,88	1,11 b	0,32	5,7	0,006
Intenstinal problems	3,71 a	0,49	1,69 b	0,9	1 c	0,00	36,61	0,0001
Toothaches	3 a	1	1,26 b	0,61	1 b	0,00	32,79	0,0001
Skin problems	2,71 a	1,38	1,29 b	0,62	1 b	0,00	17,82	0,0001
Leg cramps	2,14 a	1,35	1,17 b	0,51	1,11 b	0,32	8,08	0,001
Weakness	3,14 a	0,69	1,26 b	0,56	1,11 b	0,32	43,55	0,0001
Diarrhoea	2,43 a	1,13	1,23 b	0,55	1 b	0,00	17,07	0,0001
Constipation	2 a	1,15	1,37 b	0,81	1 b	0,00	4,88	0,011
Total	35,86 a	4,3	19,34 b	3,32	13,61 c	0,98	141,52	0,0001

M – mean; SD – standard deviation; F – Fisher's test; p – statistical significance; a – higher level of variable; b – lower level of the variable; c – the lowest level of the variable

tress coexists with a greater number of symptoms, which is also reflected in the relationships between general couvade syndrome and empathy components. General couvade syndrome is positively correlated only with personal distress (Spearman rho personal distress–couvade = 0.19; $p<0.1$ – tendency, one-way significance). No significant relationships were identified between the identification of couvade syndrome and sociodemographic factors, such as age, education or number of children.

Couvade syndrome viewed by pregnant women – classification

A cluster analysis was conducted in the STATISTICA system. The analysis included complete data of 60 women. It was a hierarchical analysis conducted in accordance with the Ward's method on a Euclidean distance matrix. It was concluded that the clusters distinguished constitute significant simplification of the typology of tested women reducing the individual diversification by 50–60% in the scope of the level and characteristics of couvade syndrome symptoms. This value is viewed as considerable [13]. It can also be observed that the least numerous subgroup of women tested (referred to as "complete couvade" below) occurs to be the most significantly different from other women, and the level of similarity of this cluster to the remaining ones is the lowest (Euclidean distance is 100%).

The analysis indicates that there are three clusters, i.e. types of women who identify the symptoms of couvade syndrome in their partners in distinct ways. These types are:

1. Complete couvade (7 women – 12% of the group) – women usually notice all symptoms in their partners, in at least low intensity;
2. Common couvade (35 women – 58% of the group) – women tend to notice symptoms that are commonly associated with couvade syndrome in the literature: changes in appetite and weight gain;

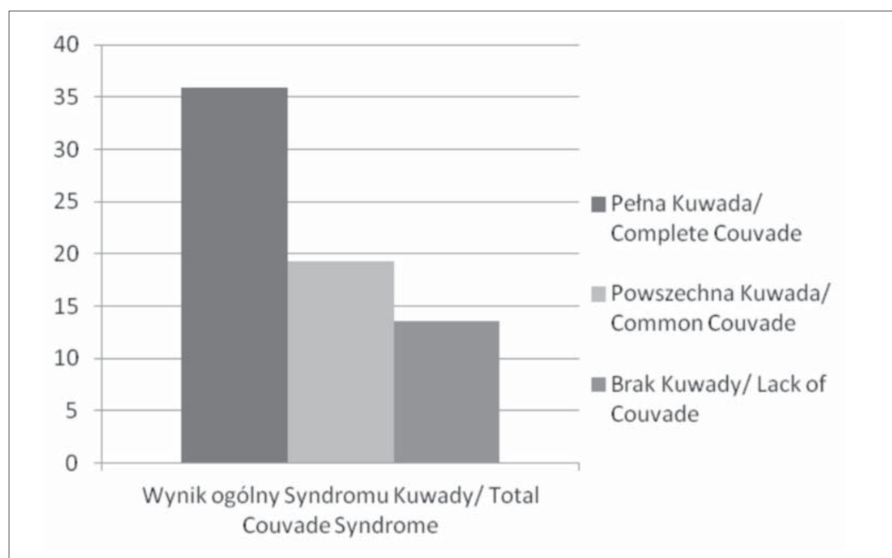

Fig. 1. Total Couvade Syndrome perceived by women – classification

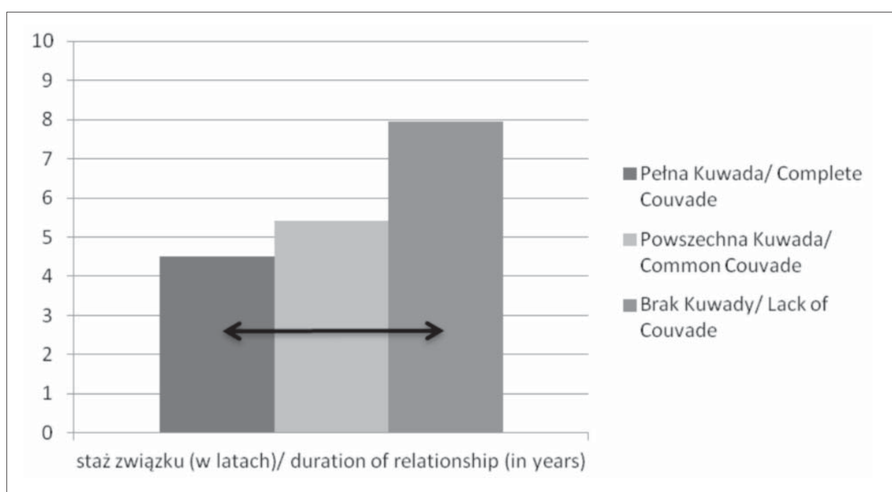

Fig. 2. Duration of relationship and couvade syndrome

3. No couvade (18 women – 30% of the group) – women do not usually notice any symptoms of couvade syndrome in their partners.

The distribution of the individual symptoms of couvade syndrome noticed and the general score in women are presented in Table 6 and Figure 1. The single-factor analysis of variance indicated that all the differences between the distinguished groups are statistically significant, and the group referred to as "complete couvade" is the most prominent.

The statistically significant differences between these three types of women are presented in Fig. 2. The results of the single-factor analysis of variance demonstrate that women belonging to the "no couvade" group are characterized by the longest duration of the relationship with the child's father (the result is at the level of statistical tendency: $F(2.56) = 2.51$; $p<0.10$; the "no couvade" group is characterized by a longer relationship compared with the remaining two groups – at the level of statistical tendency) (Fig. 2.).

DISCUSSION

The aim of the study was to answer the question whether or not the symptoms of couvade syndrome experienced by men [4,8,9] are also noticed by other persons, mainly health care professionals and pregnant partners.

The symptoms of couvade syndrome are, to a certain degree, noticed by health care professionals. These symptoms mainly include those commonly associated with this condition, i.e. related to body mass, e.g. weight gain, nausea, changes in appetite and constipation [9]. This manner of perceiving the symptoms can be connected with a short contact of health care professionals with patients as well as the situational context. For most symptoms of couvade syndrome, the duration of work was not correlated with their identification (apart from weakness in women – a negative correlation with the duration of work, and abdominal pain in men – a positive correlation). However, the duration of work was correlated with the way the role of men is perceived during labor. More experienced workers believed that men disturbed during childbirth, drew attention to themselves and disrupted the course of labor. Perhaps the burnout syndrome or routine contribute to such an attitude. These suspicions should definitely be verified in research.

The literature more and more often stresses the role of the active participation of men in pregnancy and labor, but it also searches for a constructive role a man can assume to be beneficial for the man himself and his partner [14,15]. The in-depth analyses concerning the role of men during pregnancy and labor, as well as couvade syndrome from the perspective of health care professionals can be an important contribution to the search for the ways to satisfy the needs of professionals working in obstetrics and parents-to-be.

Based on this study, it can be concluded that the frequency of noticing individual symptoms of couvade syndrome in the investigated group varies. The most frequently noticed symptoms were those commonly associated with couvade syndrome, i.e. those concerning body mass. The identification of individual symptoms of couvade syndrome by women somewhat depends on empathy dimensions, mainly the one concerning empathic inclination to adopt negative emotions of others, which is consistent with the results obtained in the group of men [9]. On the other hand, the aspect of personal distress leads to focusing on oneself as a result of observing other people's negative emotions. This could lead to the fact that women did not notice couvade syndrome in their partners. It seems that factors such as bonds with the partner or satisfaction from the relationship can be relevant for the correlation between female empathy and the ability to notice the symptoms of couvade syndrome in their partners. Taking into account all investigated women, no significant relationships were identified between perceiving the symptoms of couvade syndrome and sociodemographic factors, such as age, education or number of children.

Three types of women can be distinguished based on the degree to which they are able to notice the symptoms of couvade syndrome. The percentage of the subgroups in the sample corresponds to the literature reports. If the syndrome is noticed, the usual symptoms are weight gain and changes in appetite. The duration of the relationship of women who do not notice couvade syndrome in their partners is longer that in the two remaining groups /a tendency/. It can be therefore argued that certain symptoms of the syndrome are more common in the male population and are more frequently identified by partners irrespective of their personality traits (the role of empathy). Such a conclusion also seems to be confirmed by a low relevance of demographic characteristics as potential determinants of identifying the symptoms of couvade syndrome [16,17]. Perhaps, longer relationships translate into greater knowledge of reciprocal relationships and predispositions, and ailments experienced by men are interpreted as symptoms of general stress rather than couvade syndrome. Moreover, as mentioned in the family development stages [18,19], men in longer relationships can be more ready to undertake the responsibilities of a parent and are at a lower risk of such symptoms. This conclusion is consistent with previous studies suggesting that teenage fathers, who are unprepared for the role of a parent, are more susceptible to couvade syndrome [17].

These results can be treated as an introduction to further analyses of couvade syndrome, particularly including physiological and psychological functioning both of a woman and a man who expect a child, from the perspective of both parents-to-be and the role of health care professionals in supporting young parents and in maintaining their work satisfaction at a sufficient level.

Moreover, it seems important to study the feedback between symptoms experienced by women and those occurring in men, and the other way round. The currently available reports on the manner of identifying couvade syndrome should be supplemented with the measurement of actual symptoms, such as weight of men before and during their partner's pregnancy, the frequency of intestinal disorders, etc. Moreover, the inclusion of a time variable and conducting longitudinal studies to analyze the occurrence of given symptoms of couvade syndrome at various stages of pregnancy would provide more information about the dynamics of this phenomenon.

The couvade syndrome analyses conducted so far primarily concerned the perspective of men themselves, mainly from the anthropological point of view [20]. Perhaps currently men need this syndrome and support to find themselves in a new situation of their relationship when they cease to be in the center of attention [21]. The studies presented above constitute an attempt to supplement previous data with psychological analyses, including the perspective of the medical staff and pregnant patients. The results obtained indicate that the symptoms of couvade syndrome in men are also identified by people in their surroundings. Increased awareness concerning couvade syndrome both among pregnant patients and their partners as well as in broadly understood counselling, particularly including accompanying physiological and emotional consequences, can contribute to the minimization of negative experiences associated with pregnancy. This is of particular significance in the face of actions undertaken more and more frequently to engage men in taking care of a child, starting from pregnancy and labor.

It must be stressed that the studies presented above have certain limitations. One of the them is the correlational nature of data, which prevents the formulation of conclusions concerning cause and effect relationships between the variables tested. Further investigations should definitely be conducted on larger populations, which would increase the possibility of generalizing the results obtained.

CONCLUSION

Increased awareness concerning couvade syndrome among pregnant patients and their partners as well as in broadly-understood counselling can contribute to the minimization of negative experiences associated with pregnancy.

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