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Postpartum examination, breastfeeding, and contraception in the postpartum period in the Czech Republic

Research Article

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Abstract: In the majority of recent textbooks of obstetrics, a routine follow-up examination at the end of the postpartum period is recommended. To date, no studies have been done in the Czech Republic addressing use of contraception and follow-up care in the postpartum period. Questionnaires were sent to 672 participants who gave birth in the year 2008, inquiring about follow-up examinations in the postpartum period and use of contraception. In total, 458 (68.2%) questionnaires were returned. 430 women (93.9%) underwent routine examinations at 6 weeks into the postpartum period. At the time of examination, 36 women were asked about their particular health problems (8.4%). In 130 instances, the question most often addressed by the outpatient gynecologist concerned use of contraception (30.2%). However, only 34 physicians expressed concern about changes in sexual life or other sexually related problems. 426 women (93.0%) were sexually active and 310 women (72.8%) did not use any contraception with the exception of breastfeeding. The current practice of outpatient gynecological visits at 6 weeks postpartum and advice on contraception both seem inadequate.

Keywords: *Postpartal examination • Contraception • Breastfeeding • Sexuality • Puerperium*

1. Introduction

A routine check-up of women following delivery is recommended at the end of the puerperium period by the majority of recent textbooks of obstetrics. The examination is usually performed by the outpatient gynecologist. A complete vaginal exam should be included in the follow-up visit. However, questions concerning women's sexuality and possible sexual dysfunctions, and counselling on contraception as part of the routine examination are not included in textbooks. In the most popular German textbook, it is recommended that women visit a gynecologist, who should provide advice about family planning and methods of contraception, six weeks into the postpartum period [1]. In the USA, Great Britain, Australia, and Canada the postpartum examination is performed by a general practitioner, family physician, or a specifically trained midwife. A vaginal examination is not usually performed, but issues related to the prospect of unwanted pregnancy are addressed [2,3].

The effectiveness of contraception depends on both the woman's nutrition and the intensity or frequency of breastfeeding. Women with amenorrhea who fully nurse their babies during the first 6 months (even in night intervals) have a relatively high contraceptive effect and are less likely to become pregnant. Nevertheless, if menstruation does occur, the risk of ovulation is increased [4].

The occurrence of pregnancy during the short period after delivery is often not planned. The risk of terminating the pregnancy culminates at 6 to 8 months after delivery [5]. A short interval between pregnancies is linked to an increased risk of negative perinatal outcomes and maternal health risks, a likely cause being chronic psychological stress [6-8].

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Recent pregnancy combined with the need to take care of the baby provide strong motivation for women to use contraception. In women who do not breastfeed, ovulation can begin 4 weeks following birth. For this reason, some authors recommend an examination and post-natal consultation following birth [9]. Women should begin using contraception 3 months after birth. Those who do not breastfeed should begin some form of contraceptive method 3 weeks after birth. Women who have an abortion within the first 12 weeks of pregnancy should start using contraception 3 weeks following the abortion.

Information concerning successful contraceptive methods in the postpartal period is limited [10]. Practically all available methods are suitable, except combined hormonal contraception, which is not recommended during the first six months of breastfeeding due to the possible suppressive effects on the production of maternal milk [11,12]. Intrauterine devices should be inserted immediately after delivery, or within 42 days after delivery, otherwise the risk of displacement increases. Breastfeeding, however, is not a risk factor for displacement from the body [13]. The condom is recommended by 41% of gynecologists as the first choice method during the postpartal examination. Decreased fertility of breastfeeding women and highly motivated couples significantly increase the safety of this contraceptive method [14]. The condom is also the method of first choice in women with gestational diabetes [15]. The alternatives to condoms are locally applied chemical contraceptives, which can be better accepted by couples than condoms but are only rarely recommended [16]. There is a lack of research concerning the safety of new chemical contraceptive methods in the postpartal period.

Since there have not been any relevant studies to date in the Czech Republic concerning postnatal care and contraceptive use in women, we sought to inquire about the routine gynecological examination from the woman's viewpoint. We wanted to asscess the influence of breastfeeding on contraceptive use and the influence of gynecological consultation during puerperium on the use of hormonal contraception. We were also interested in knowing which method of contraception was used in women after caesarean section, whereby an unwanted pregnancy less than a year following birth could severely affect the outcome of the next pregnancy. The complete healing of an incision or scar after caesarean section takes at least 6 months and can be accompanied by acute complications [17]. If a woman gives birth in the period less than 18 months after the previous caesarean section, the risk of symptomatic rupture of the suture is 3 times greater [18].

Table 1. Frequency of some parts of routine examination of women after the puerperium.

Process of examination in 430 primiparous women		
Vaginal examination	424	98,6%
Question about urinary incontinence	70	16,3%
Question about stool problems	49	11,4%
Question about pain in the region of birth injury	165	38,4%
General question about quality of sexual life	122	28,4%
Particular inquiry of sexual dysfunctions	38	8,8%

2. Material and Methods

The patient group included primiparous women who delivered at the Department of Obstetrics and Gynaecology of the First Medical Faculty of Charles University in Prague and University Hospital Na Bulovce from January 1st, 2008 through June 31st, 2008. In this period there were 1255 births, of which 676 mothers were primiparous women. Women whose mother tongue was not Czech and women with fetus mortuus were excluded. The study consisted of 628 women in total, and administered questionnaires concerning the follow-up examinations after birth and use of contraception. In the questionnaire, we inquired as to whether or not women had underwent a vaginal examination, about the existence of vaginal secretory problems and other sexual problems in their relationships, and which subjects of sexual health she would be interested in further addressing. Furthermore, we sought to determine if the patient asked about specific problems or if there was any questions to which she wanted to know the answer but did not ask. Another question concerned methods of contraception used during the first intercourse following birth and the type of contraception used at present. Finally, we asked about breastfeeding during the first three months and a half months following birth.

If women did not reply in the first 14 days, the questionnaire was sent again. In total, 458 questionnaires were returned and the collected data was processed by the Microsoft Office Access program.

Informed consent was obtained from all subjects and the study was approved by the local Ethics Committee.

3. Results

430 women (93.9%) underwent routine postpartal examination. Table 1 presents a summary of results related to the process of examination. 36 women (8.4%) actively asked about their particular health problems. Most frequently, (in 15 cases) women asked about

Table 2. Type of contraception used by sexually active couples at the beginning of sexual life and half a year after the birth.

Type of contraception	First sexual intercourses		6 months after the birth	
	N	%	N	%
Hormonal pill	94	22,1	126	29,6
Hormonal injection	14	3,3	15	3,5
IUD	5	1,2	10	2,3
Condom	108	25,4	101	23,7
Interrupted intercourse	84	19,7	83	19,5
Spermicides	1	0,2	2	0,5
Infertile days	4	0,9	4	0,9
Only breastfeeding	109	25,6	66	15,5
None (does not breastfeed)	7	1,6	19	4,5

Table 3. Frequency of breastfeeding in a group of primiparous women at the time of six weeks after the birth and six months after the birth.

Breastfeeding	6 weeks after the birth		6 months after the birth	
	N	%	N	%
Fully	353	82,9	205	48,1
Partially	55	12,9	107	25,1
None	18	4,2	114	26,8

pain in the region of the vagina and perineum during sexual intercourse. 10 women complained about urinary incontinence, 5 women had a feeling of vaginal inflammation, and 2 women inquired about loss of sexual appetite. They had the sensation of vaginal constriction and bleeding after sexual intercourse. One woman complained about loosening of her vagina, flatulence, and fear of incorrect healing of the birth injury.

The outpatient gynecologist most often dealt with questions of contraception (130 cases, 30.2%); however, only 34 doctors (7.9%) were concerned with patient questions of possible changes and problems in sexual life.

Thirteen women stated that they had wanted to ask their doctors certain questions but refrained from doing so. Most of these were questions related to their sexual lives (9 cases), with one woman asking about urinary incontinence and treatment of haemorrhoids. Two women said that they had several questions but did not ask them at all. The primary reason for not asking was mainly shame (9 cases), and only once was it due to mistrust of the physician. In another case, the doctor was under time pressure and one woman had forgotten to ask. One woman, however, did not ask for fear of other patients overhearing the discussion in the waiting room.

At the time we received all questionnaires, 426 women (93.0%) were sexually active. Contraception of any kind other than breastfeeding was used in 310 women (72.8%). 341 women (80%) had sufficient protection at 6 months following delivery. Table 2 shows the specific type of contraception used. Table 3 represents the frequency of women breastfeeding at 3 months and 6 months after birth.

4. Discussion

90% of women undergo a routine check-up in the puerperium. This provision is highly popular in the western world, and some authors even determine the use of this service to be over 90% [19]. It is important to state that this particular datum was collected from puerperas in the same way as in our study. Women who cooperate in the investigation also more often cooperate with medical staff. In Tanzania, 2-13% of all women undergo postnatal examination depending on the geographic region [20]. In our sample, only 28 women did not attend the check-up and 3 of them (10.7%) had insufficient prenatal care (less than 7 examinations in the prenatal period). In total, 2.8% of all the women in our study had unsatisfactory prenatal care. Some authors do not recommend a routine examination because of its inadequacy in diagnosis of uterine subinvolution [2,21]. Vaginal examination is performed as part of the usual postnatal examination in 65-77% of check-ups [22]. Complete vaginal examination should not be focused only on the diagnosis of uterine subinvolution, but should explore the healing of the cervix, vagina, perineum, and pelvic floor tonus. For this reason, vaginal examination should be an integral part of the postnatal check-ups. A

Table 4. Frequency of particular types of contraception dependent upon consultation with outpatient gynaecologist.

Type of contraception	OG consulted contraception n = 127		OG did not consult contraception n = 276	
	N	%	N	%
Hormonal pills	35	27,6	79	28,6
Hormonal injection	1	0,8	13	4,7
IUD	4	3,1	5	1,8
Condom	40	31,5	58	21,0
Interrupted intercourse	21	16,5	58	21,0
Spermicides	1	0,8	1	0,4
Infertile days	1	0,8	3	1,1
Only breastfeeding	22	17,3	45	16,3
None (does not breastfeed)	2	1,6	14	5,1

clinical history of urinary incontinence, anal incontinence, and sexual problems was taken in an insufficient number of examinations, despite the fact that it is highly recommended and urinary incontinence can affect up to 34% of women [23]. An early diagnosis combined with timely rehabilitation significantly improved the pelvic floor tonus and decreased the incidence of incontinence [24]. The Australian questionnaire study dealing with GPs who performed routine examinations showed very low interest in urinary incontinence (8.6%), faecal problems (19.4%), and sexuality (19.4%) in women in the puerperium. Higher interest in sexual problems was found among female doctors, who also perform vaginal examinations more often [3].

In our study, 30.2% of women received instructions from their gynecologist about contraception and 7.9% of women were informed about changes in their sexual life. This difference can be explained by the successful marketing practices of pharmaceutical companies that target the use of hormonal contraception for breastfeeding women. Barret et al. found that over 95% patients were informed about hormonal contraception; however, only 18% of women were informed about possible sexual dysfunctions after birth. In his study, 15% of women actively asked about possible dysfunctions after birth and 15% of women actively asked about possible solutions to their health problems; in contrast to our study, in which only 8% of women did so [22]. At the same time, 53-83% experienced sexual problems that appear from 6th weeks to 3 months after birth [22,25,26]. It is important to actively inquire about these problems because women themselves tend not to verbalize their problems [27].

3% of the patients in our study stated that they had a question to ask their doctors but did not do so. The study by Barret et al. yielded a similar figure of 5%. In both studies the most frequent doubts dealt with sexual health. Only once was the question not asked due to the time pressure of the physician, which was a positive finding.

From their telephone research in the Netherlands, Van Wouve et al. showed that 55% of women use sufficient contraception in the half year following birth (30% use condoms, 22% hormonal contraception, 3% other methods) [28]. In our study, up to 80% of women used some kind of contraception in the six months following birth. The most common is hormonal contraception (29.6%) and use of condom (23.7%).

When we address hormonal contraception, we suggest pure gestagen or combined estrogen-progesterone contraception. At the moment, pure gestagen contraception is the most reliable method in women who breastfeed. According to some studies, it even increases milk production and women using progesterone contraception breastfeed for a longer time and start weaning later [29]. In the 8 years follow-up study, there was no proven effect on children with regard to disease, differences in intelligence, or influence on psychological development [30].

Barrier contraception such as condoms appears to be one of the best methods of contraception in experienced and motivated couples. When the condom is well lubricated, it resolves the problem of vaginal dryness that arises in breastfeeding hypoestrogenic women. The reliability of condoms in breastfeeding women has not yet been studied. We assume its high reliability because it is used by skilled couples, where there is a low risk of wrong manipulation. In Turkey, condoms are used by 16% of women as contraception after the birth [31]. In our study condoms were used by 25.4% of couples during the first sexual experience after birth, and by 23.7% half a year afterwards. Spermicidal creams are rarely used, which in our opinion is a pity. These highly reliable modern spermicidal creams or gels in combination with breastfeeding represent a good alternative contraception in the early postpartum period, when sexual intercourse

is rare anyway. In spite of this, we recommend it for its lubrication effect. This is an apparent area to increase awareness in women, especially those who cannot use hormonal contraception.

We were surprised by the relatively high popularity of interrupted sexual intercourse used by 19% of couples. However, it is quite an unreliable method that interferes with the process of sexual intercourse. In the Dutch study, it was used by less than 2% of the couples; in contrast, in Turkey it was the most popular method, used in 35% of couples [31,28].

The method of delineating certain days as infertile is very uncertain in the period after birth because the detection of mucus and other signs of ovulation are affected by breastfeeding. For this reason, the routine use of this method is not recommended. In our study, it was used by less than 1% of couples.

Lactation by itself as a method of contraception against unwanted pregnancy was used by 25.6% of couples during the first sexual intercourse. Half a year following birth, it was used by 15.5% of couples, with the remainder of the couples opting towards the use of hormonal contraception. We were interested in how this change was influenced by consultation with a gynecologist after the puerperium. There were 127 sexually active women who underwent the first check-up and were informed by their gynecologist about possible methods of contraception. In contrast, 276 sexually active women (see table 4) did not receive any instruction about contraception.

A surprising finding was that in the group of women who were informed about hormonal contraception, the most popular method of contraception was the condom, while in the group without consultation, the most preferred was hormonal contraception. The differences, however, are not statistically significant. We can state that consultation and instruction about contraception at the end of the puerperium in the gynecologic outpatient department does not have any influence on the selection of contraception half a year after birth. Various forms of information such as media, magazines for pregnant women, adverts, and internet pages are publically available. Despite this exposure, it would be very interesting to study the way outpatient gynecologists instruct women after childbirth about future sexual health and methods of contraception.

49 women underwent caesarean section; however, only 14 (28.6%) mentioned that they were instructed by a gynecologist about possible methods of contraception. Out of a total of 430 women, contraception was addressed in 127 women (29.5%). Based on this we can state that most physicians do not place much emphasis on protection against unwanted conception in women after caesarean section. 32 women who had underwent caesarean section only partially breastfeed or not at all. 6 (12%) did not use any form of contraception, and 3 (6.1%) resorted to interrupted sexual intercourse. These women are at a high risk for unwanted pregnancy. Out of the group of 17 women following caesarean section who fully breastfeed, two did not use any method of contraception, and 3 had interrupted sexual intercourse. Out of the group of 14 women following caesarean section that had some form of consultation with a gynecologist, only one woman who partially breastfed did not use any contraception and 3 resorted to interrupted sexual intercourse. Two women from this group did not have any sexual intercourse half a year following birth. Out of the total number of cooperating primiparas, 14 of them (28%) are directly endangered by unwanted pregnancy in a short period of time after the caesarean section. The current model of postnatal consultations and instructions to patients about various contraceptive methods seems very unsatisfactory. There is a lack of current knowledge in textbooks and in the specialized journals addressing this problem. Since the beginning of 2009, our hospital has offered detailed written information about available methods of contraception after birth. In the near future, this process will be evaluated and its success assessed by further questionnaire studies.

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