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Assessment of the need for information about planned gynecologic surgery

Ocena poziomu zapotrzebowania na informacje odnośnie planowanej operacji ginekologicznej

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Abstract

The objective of the study was to assess the level of patients' need for information about the planned gynecologic surgery.

Material and Methods. The number of 173 patients preparing to undergo planned gynecological procedure were qualified for the study. The participation in the survey was entirely voluntary. Each patient was asked to fulfill the survey conducted using the Amsterdam Preoperative Anxiety and Information Scale- APAIS that enables the estimation of the patient's need for surgery-related information. Furthermore patients' clinical and demographic data was collected. Results were analyzed using appropriate statistical tools: the Shapiro-Wilk W-test (for distribution of the studied parameters) and the Mann-Whitney U-test (for comparing two independent groups). P value less than 0.05 was considered statistically significant.

Results. It was shown that premenopausal women have a greater need for information about the planned surgery than postmenopausal patients ($p<0.05$). Patients, who have never been operated, displayed a significantly greater need ($p=0.04$) for information about their planned surgery in relation to women who have already undergone surgery. The patient's age, the phase of the menstrual cycle, the education level, the marital status, as well as the preoperative diagnosis and the type of the planned surgery did not affect the level of the preoperative information requirement ($p>0.05$).

Conclusions. The high level of the need for information about the planned surgery characterizes premenopausal patients and those operated for the first time.

Keywords: gynecological surgery, need for information, anxiety

Streszczenie

Celem pracy było oszacowanie poziomu zapotrzebowania na informacje na temat planowanego zabiegu operacyjnego u pacjentek zakwalifikowanych do operacji narządów płciowych.

Materiał i Metodyka. Do badania zakwalifikowano grupę 173 pacjentek hospitalizowanych i zakwalifikowanych do operacji ginekologicznej. Udział w badaniu był dobrowolny. W celu oceny poziomu zapotrzebowania na informacje dotyczące planowanej operacji zastosowano Amsterdamską Skalę Lęku Przedoperacyjnego i Zapotrzebowania na Informacje (APAIS). Przeanalizowano dane kliniczne i demograficzne pacjentek. Wyniki opracowano statystycznie wykorzystując test Shapiro-Wilka do oceny rozkładu, a następnie test Manna-Whitneya. Za graniczny poziom istotności statystycznej przyjęto $p = 0.05$.

Wyniki. Kobiety przed menopauzą mają większe zapotrzebowanie na informacje dotyczące planowanej operacji niż pacjentki po menopauzie ($p<0,05$). Kobiety, które nigdy nie były operowane miały istotny statycznie wyższy poziom zapotrzebowania na informacje odnośnie zaplanowanej operacji w odniesieniu do tych, które były już operowane ($p=0,04$). Wiek, faza cyklu płciowego, wykształcenie, stan cywilny pacjentek, jak również rozpoznanie przedoperacyjne i rodzaj planowanej operacji nie wpływa na poziom zapotrzebowania na informacje dotyczące planowanej operacji ($p>0.05$).

Wnioski. Wysoki poziom zapotrzebowania na informacje dotyczące planowanej operacji cechuje pacjentki przed menopauzą oraz operowane po raz pierwszy.

Słowa kluczowe: operacja ginekologiczna, zapotrzebowanie na informacje, lęk

Introduction

Preoperative anxiety is an extremely common problem, usually underestimated and disregarded by doctors qualifying patients for surgery. There are no accurate data assessing the frequency of this phenomenon. However, it is estimated that preoperative anxiety is experienced by

20% to even 80% of patients, depending on the extent of the planned surgery [1].

The standard use of anxiolytic medication before surgery is not sufficient in alleviating preoperative anxiety in patients with a high level of it [2, 3]. Therefore, it is extremely important to identify this patient group and to apply additional methods reducing anxiety level. Good results in alleviating preoperative anxiety are achieved by the use of cognitive-behavioral training. It consists in the exact description of the course of surgery and anesthesia. The information about the planned surgery should be presented in simple language adapted to the patient's intellectual level, avoiding the use of medical jargon. All visual aids, e.g. human anatomy charts and those of procedures carried out during the surgery are more effective in reducing anxiety intensity than information passed only by word of mouth. Even better effects are achieved by information given to patients through short film presentations. Apart from their higher efficacy in alleviating preoperative anxiety, audiovisual methods also make it far easier for the doctor to present information about an operation [4]. Providing patients with accurate information about the extent of the planned surgery, its course and possible complications is an indisputably effective method in alleviating preoperative anxiety. Appropriate cognitive-behavioral training before the surgery can even reduce the hospitalization period afterwards [5, 6].

The Objective of the Study

The objective of the study was to assess the level of patients' need for information about the planned gynecologic surgery.

Material and Methods

We studied a group of 204 patients hospitalized in the 1st Department of Oncological Gynecology and Gynecology, Medical University in Lublin. On the day of hospitalization, which was a preoperative day at the same time, an interview was made before which, the patient signed the Form of Informed Consent for Participation in a Survey. Excluded from the survey were women with higher medical or psychological education and those treated for mental diseases, as well as patients permanently taking hypnotics and sedatives. The number of 173 women were qualified for the study. After the interview the patients were given questionnaires to be filled in the afternoon of the hospitalization day. The participation in the survey was entirely voluntary. The patients were informed that refusal to participation in the survey would in no way influence diagnostic-therapeutic procedures. The study was approved by the Lublin Medical University's Bioethics Committee. The analyzed parameters included the patients' clinical data: age, education, place of residence (town or country), the extent of planned surgery, marital and menopausal statuses, the phase of menstrual cycle, diagnosis of a malignant tumor and the experience of previous surgeries (Tab.1).

Tab. 1. Clinical characteristics of study groups.

Age	**≤ 30 y.o.**	**> 30 y.o. ≤ 50 y.o.**	**> 50 y.o.**
N	32	62	79
Menopausal status	**preme-nopausal**		**postmenopausal**
N	102		71
Phase of the cycle	**follicular**		**luteal**
N	57		45
Education	**higher**	**secondary**	**elementary**
N	71	62	40
Marital status	**in relationship**		**single**
N	113		60
Place of residence	**town**		**country**
N	95		78
Malignant process	**yes**		**no**
N	35		138
Extend of the surgery	**large**	**middle**	**small**
N	43	83	47
Previous surgery	**yes**		**no**
N	82		91

The survey was conducted using the widely used Amsterdam Preoperative Anxiety and Information Scale-APAIS [7]. Apart from the objective assessment of anxiety, it also enables the estimation of the patient's need for surgery-related information. The scale consists of six questions: three about anesthesia and three about the surgical procedure. At the same time, four questions are about preoperative anxiety and two about the need for information about the surgery. The results concerning the need for information ranging 2-4 points show a low need, 5-7 average, while 8-10 a high need for information about the surgery. A statistically significant positive correlation was demonstrated between preoperative anxiety and the need for information in patients assessed with the APAIS [1]. Among advantages of the scale there is a fact that it is easy and short to complete. It can be used both in daily work with patients and for scientific research.

The distribution of the studied parameters was assessed based on the Shapiro-Wilk W-test. Further statistical analysis comparing two independent groups was carried out, guided by the distribution of variables, by means of the Mann-Whitney U-test. P value less than 0.05 was considered statistically significant. Data is presented as medians (Me), minima (Min), maxima (Max). Statistical

analyses were made using the STATISTICA v. 8.0 (StatSoft, Poland) computer software.

Results

The level of patients' need for information about the planned gynecologic surgery is presented in Table 2.

Tab. 2. The level (Median, Minimum-Maximum) of patients' need for information about the planned gynecologic surgery.

Age	**≤ 30 y.o.**	**> 30 y.o. ≤ 50 y.o.**	**> 50 y.o.**
APAIS	6 (2-10)	6 (2-12)	6 (3-9)
Menopausal status	**premenopausal**		**postmenopausal**
APAIS	6 (2-12)		6 (2-9)
Phase of the cycle	**follicular**		**luteal**
APAIS	7 (2-12)		6 (2-10)
Education	**higher**	**secondary**	**elementary**
APAIS	6 (2-10)	6 (2-9)	6 (4-12)
Marital status	**in relationship**		**single**
APAIS	6 (2-12)		6 (2-10)
Place of residence	**town**		**country**
APAIS	6 (2-10)		6 (3-12)
Malignant process	**yes**		**no**
APAIS	7 (4-10)		6 (2-12)
Extend of the surgery	**large**	**middle**	**small**
APAIS	6 (2-10)	6 (2-10)	6 (2-12)
Previous surgery	**yes**		**no**
APAIS	6 (2-9)		7 (2-12)

It was shown that premenopausal women have a greater need for information about the planned surgery than postmenopausal patients (p=0.05) (Fig 1).

Patients who have never been operated before displayed a significantly greater need (p=0.04) for information about their planned surgery in relation to women who have already undergone surgery (Fig. 2).

Fig. 1. APAIS values determining the need for information about the planned surgery in pre- and post-menopausal patients

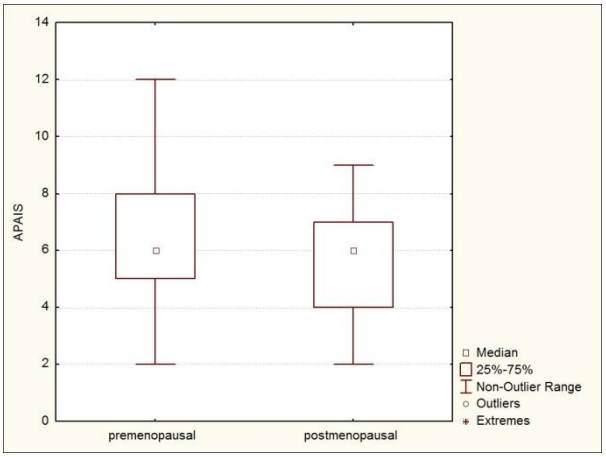
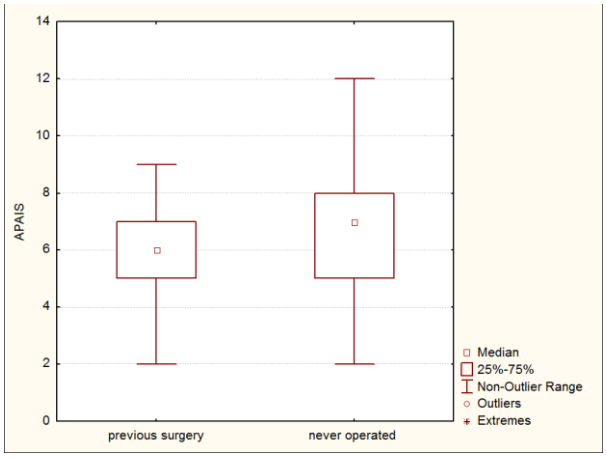


Fig. 2. APAIS values determining the level of need for information about the planned surgery in patients with and without a past history of surgery.



The level of the need for information about the surgery assessed with the APAIS scale did not differ significantly in statistical terms between women aged under 30 and those aged 30-50 years (p=0.8), under 30 and over 50 years of age (p=0.4), and between those aged 30-50 years and over 50 years (p=0.3).

Statistically significant differences regarding the need for information about the planned surgery were not found between patients operated during the follicular and luteal phases of the menstrual cycle (p=0.2), as well as in groups differing in education, place of residence (town or country), and in the extent of the planned procedure.

Furthermore, no statistically significant differences (p=0.7) in the need for information about the planned surgery were noted between single patients and those in relationships.

Nor were statistically significant differences (p=0.15) in the need for information about the planned surgery demonstrated between patients with a diagnosis or a suspicion of a malignant tumor and those operated for benign disease.

Discussion

An interesting and surprising result of our study is that it is not age but the menopausal status that influence the level of the need for information about the planned surgery. It was found that a craving for information about the expected surgical procedure did not statistically significantly differ between the surveyed age groups of women. It was shown, however, to be significantly statistically higher in premenopausal women as compared to those in whom menstruation had already ceased. The fact is difficult to interpret, although it may be associated with the repression mechanism as an element of the ego's defense against painful emotions and factors that may upset mental balance. Repression, also called suppression,

is a defense mechanism that enables one to cope with intrapsychic tensions. It consists in extinguishing and removing stress factor from consciousness. Menopause involves a higher risk of the development of ovarian, endometrial and vulvar cancer. The extent of surgical procedures connected with the diagnosis of these diseases is obviously larger than in the case of benign processes. It may be surmised in the repression mechanisms, postmenopausal patients can cope both with the highly stressful diagnosis and with the need to undergo a more complex operation, i.e. carrying a higher risk of complications. That is why, hypothetically, the lower need for information about the planned surgery may be a form of repression of factors detrimental to the mind and "ignorance" may be associated with defending the ego against highly stressogenic stimuli. The need for information about the planned operation also did not statistically significantly differ between those two groups of women.

It can be assumed that higher education alleviates preoperative anxiety through several mechanisms. Well-educated patients may be more aware of both their disease and the extent of surgery together with its course and possible complications. They theoretically expect this knowledge far more than lower-educated patients, both from doctors referring them to hospital and during an interview qualifying them for surgery during hospitalization.

Interestingly enough, statistically significant differences in level of the need for information were not reported neither between patients with different education, nor between women living in town and in rural areas. In view of the well documented role of cognitive-behavioral training in alleviating preoperative anxiety, these results are surprising and difficult to interpret. It can be assumed that in some cases of patients with higher education and living in town, they gained knowledge about their disease and surgery during visits to the doctor or from other sources like books or the Internet. In contrast, in the case of women with lower education and living in rural areas the need for information, as in the case of patients with higher and secondary education and those who live in town, many stem from the mechanism of repression described above. It should be emphasized, however, that regardless of the patient's education and place of residence, the level of the need for information obtained using the Amsterdam Preoperative Anxiety and Information Scale, stayed within the point range classified as average.

The level of the need for information about the planned surgery did not statistically significantly differ between patients diagnosed with a malignant tumor and those with a benign disease, as well as between women qualified to surgery of different extent. It appears, however, that the results should not be surprising. In the case of the diagnosis of a malignant process and waiting for extensive surgery, the mechanism of repression can work to a greater degree than in the case of the other studied risk factors of preoperative anxiety. The defense of the ego in this case may not admit the thought of possible death because of a malignant tumor. Undoubtedly, the repression mechanism may also protect the psyche against the images of suffering associated with the progression of the cancer process as well as the awareness of many and severe complications related to the large extent of surgery.

Conclusions

1. The high level of the need for information about the planned surgery characterizes premenopausal patients and those operated for the first time.
2. Cognitive-behavioral training is likely to become a method to reduce the feeling of preoperative anxiety in the patients by providing them with reliable in-depth knowledge about their surgical procedure. This kind of approach appears to be particularly desired by premenopausal women and those who have not been operated before.

Conflict of interest

The authors have declared no conflict of interest.

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