

Marek Motyka¹, Beata Szpak²

¹ Cracow University of Economics, Department of Psychology and Education

² The Jan Kochanowski University in Kielce, Collegium Medicum,
Department of Gynecology and Obstetrics

Psychological support in serious gynecological surgeries and the patient's need for medication in postoperative period

Wsparcie psychologiczne w poważnych zabiegach ginekologicznych a zapotrzebowanie na leki w okresie pooperacyjnym

ABSTRACT

This review discusses the role of therapeutic support in the preparation of patients for serious gynecological surgeries. The goal of the studies was to evaluate the relationship between emotional support, which was provided to women awaiting the operation of genital organs excision, and their general feeling, as well as the postoperative need for analgesics and tranquilizers.

The study was performed on 60 patients from the gynecological ward who were waiting for the operation of the genital organs excision due to oncologic disease. They were divided into an experimental and control group of 30 patients each.

Patients from the control group were prepared for the surgery in a standard way, while women from the experimental group were provided with additional emotional support from a midwife.

As a result, the postoperative general feeling of patients from the experimental group improved considerably and their need for analgesics, tranquilizers and sleep-inducing drugs decreased.

These results prove that it is essential to consider the psychological actions as an integral element of treatment and nursing.

Key words: psychological support, nursing care, therapeutic communication, need for medication

Address for correspondence: mxmotyka@interia.pl

ORCID: Marek Motyka – 0000-0002-1025-6443; Beata Szpak – 0000-0001-7217-6644

No sources of financing

STRESZCZENIE

Opracowanie dotyczy terapeutycznej roli wsparcia psychicznego w przygotowaniu chorych do poważnych zabiegów ginekologicznych. Celem badań była ocena zależności pomiędzy wsparciem psychicznym udzielonym kobietom oczekującym na zabieg usunięcia narządu rodowego a ich samopoczuciem i zapotrzebowaniem na leki przeciwbólowe i uspokajające w okresie pooperacyjnym.

W badaniach uczestniczyło 60 pacjentek oddziału ginekologii onkologicznej oczekujących na zabieg usunięcia narządu rodowego z powodu zmian nowotworowych, przyporządkowanych do grupy eksperymentalnej i kontrolnej, każdej liczącej po 30 osób. Grupa kontrolna była przygotowywana do zabiegu operacyjnego w sposób standardowy, podczas gdy grupę kobiet z grupy eksperymentalnej objęto dodatkowym oddziaływaniem o charakterze psychologiczno-wspierającym realizowanym przez położną.

W wyniku tego działania w grupie eksperymentalnej uzyskano wyraźną poprawę samopoczucia pacjentek po zabiegu operacyjnym, jak również zmniejszenie zużycia leków przeciwbólowych, uspokajających i nasennych.

Wyniki te potwierdzają potrzebę traktowania środków psychologicznych jako integralnego elementu leczenia i pielęgnacji.

Słowa kluczowe: wsparcie psychologiczne, opieka pielęgniarska, komunikacja terapeutyczna, zapotrzebowanie na leki

Introduction

The emotional state of a patient is an important factor which affects the course of treatment and recovery in all diseases (Anderson, 2004; Sarafino, 2002). Its importance increases with the severity of diseases and the level of invasiveness of the performed medical procedures. Stress that accompanies illness and treatment can be alleviated both thanks to the patients personal resources (Lewicka, Makara-Studzińska, Sulima, Wiktor, 2014) as well as thanks to the psychological support coming from the immediate environment i.e. from medical staff (Street, Makoul, Arora, Epstein 2009; Di Matteo, Zolnierok, Martin, 2012) as well as from family and friends (Jamison, Virts, 1990; Miller, DiMateo, 2013). Therefore, in the field of surgery it is also important to prepare a patient properly for an operation and provide them with professional emotional support (Corney, Everett, Howells et al., 1992; Biley, 1989; O'Reilly, 2001; Street, Makoul, Arora, Epstein, 2009).

The main goals of emotional support, which should accompany all nursing and

treatment procedures, are as follows (Motyka, 2003; 2011; 2013):

- Alleviation of patient tension and unpleasant emotions which are related to a disease and treatment,
- Psychological mobilization of a patient to recover and / or adapt to inevitable facts (refers to maintaining hope and focusing patient imagination on constructive goals),
- Creating good contact with a patient in order to avoid iatrogenic mistakes i.e. traumatic factors and situations caused by medical personnel.

Emotional support is based on a therapeutic communication aimed at creating a therapeutic relationship with a patient which allows him or her to cope more efficiently with disease – and treatment-related stress.

Study goal and hypotheses

The goal of the described studies was to evaluate the influence of intensive emotional support on the course of the postoperative period in women who had undergone extensive surgery of the genital organs excision.

The following preliminary assumptions were made:

- Preoperative emotional support provided to a patients improves their postoperative general feeling.
- Preoperative emotional support provided to a patients reduces their postoperative need for analgesics, tranquilizers and sleep-inducing drugs.

Examined persons

The study was performed on a group of 60 patients from The Oncological Gynecology of Świętokrzyskie Oncological Centre in Kielce – Poland, who were waiting for surgery of the genital organs excision due to oncological disease and were subjected to the operation. Sixty patients, in total, were examined and divided into an experimental and control group of 30 patients each. Qualification criteria were: neoplastic changes in the reproductive organs which are an absolute indication for radical surgery to remove the uterus with the appendages, good contact with the patient and their informed consent to participate in the study.

To the experimental group were selected patients of the same diagnosis, age, place of residence, marital status, education, professional activity and previous history of hospitalization, as to the control group.

The average age in both groups was slightly above 53 years. The majority of the patients lived in a city (73% in the experimental group and 83% in the control group). Most of them were married (63% in the experimental group and 67% in the control group). In both groups, the majority of patients had secondary education (50% in the experimental group and 37% in the control group) and were professionally active (47% in the experimental group and 50% in the control group). 70% of women from the experimental group and 77% from the control group had been hospitalized earlier and 50% of the patients from both groups had also undergone gynecological operations in the past.

The study method

The study was based on an experimental method of providing patients from the experimental group with a short but intensive psychological supportive intervention by an experienced midwife. This intervention consisted in an additional conversation which was conducted with each patient and aimed at providing emotional support. The conversation was conducted by a midwife on the day preceding surgery and lasted approximately 60 minutes. The control group was prepared for the surgery in a standard way.

The doctors who performed the surgery and took care of the patients after the surgery were informed that patients from the ward were subjected to studies of emotions related to hospitalization and treatment, but they were not informed about the goal of the studies or the division of the patients into the experimental and control group.

Talking to patients, a midwife tried to provide patients from the experimental group with emotional support. She was calming them down, encouraging and reassuring them that “they were not alone with their problems” and “can rely on the ward personnel and expect their help at any moment.” She also aimed at learning about the problems which were faced by patients and clarified all the problematic issues properly showing empathy and acceptance at the same time. She explained the procedures which were performed by nurses prior to surgery and the most important postoperative stages. She encouraged a patient to ask questions related to the surgery and the preparation for the surgery. Speaking slowly, she made sure that she was being understood. She acted in a reasonable and easy manner. Furthermore, she helped the patient to express her emotions with questions: “How do you feel about it?”, “What are your feelings?”, “Please, describe in words what you are feeling”. She also provided a patient with the chance to recover from stress, “talk through her problems” and “have a good cry”.

The following subjective indexes of the course of the postoperative period were taken into account:

- self-evaluation of the general feeling of the patient on the 2nd day after the operation
- self-evaluation of the general feeling of the patient on the 4th day after the operation

Patients evaluated their general feeling on a four-point ordinal scale, according to the following categories:

- Very bad general feeling
- Bad or rather bad general feeling
- Rather good or good general feeling
- Very good general feeling.

The following objective indexes of the postoperative period were taken into account:

- number of the administered doses of analgesics
- number of the administered tranquilizers and sleep-inducing drugs in the postoperative period (this information was prepared on the basis of medical documentation – medication sheets)

This information was prepared on the basis of medical documentation.

All patients participating in the study were informed about the purpose and course of the study and gave informed consent to participate in it.

Results¹

Preoperative emotional support provided to patients and their postoperative general feeling

The relationship between the emotional support, which was provided to patients in order to prepare them psychologically for the surgery of genital organs excision, and their general feeling after the surgery is presented in Tables 1 and 2.

¹ The full study was completed in 2005 and a comprehensive version of the obtained results was published in 2008 in the paper: *Psychologiczne przygotowanie do poważnych zabiegów ginekologicznych a przebieg okresu pooperacyjnego* (Psychological preparation

According to data in Table 1, describing the emotional condition on the 2nd day after the surgery, patients from the experimental group less often reported negative emotions than patients from the control group ($Chi^2=3.675, p=0.057$).

Data in Table 2 lead to the conclusion that this tendency was maintained on the 4th day after the surgery and a proportion of patients with a good and bad general feeling changed even more in favor of the experimental group. ($Chi^2=4.176; p=0.0429$).

Preoperative emotional support and the postoperative demand for analgesics, tranquilizers and sleep-inducing drugs

Tables 3 and 4 show data of analgesic treatment.

According to the presented data, patients from the experimental group were given almost half as much strong opioid analgesics as patients in the control group. Wilcoxon Test=4.043; $p=0.0001$.

The study hypothesis was also supported by another postoperative period index. (Tab. 4).

Table 4 shows that patients in the experimental group were given less of the mild analgesics which were administered in the control group. This difference showed to be of statistically significant importance. Wilcoxon Test=3.053; $p=0.0023$.

The quantity of sleep-inducing drugs and tranquilizers (in total) which were administered after surgery was approximately by one third higher in the control group than in the experimental one (Tab. 5). This difference showed to be of statistical significance. Wilcoxon test = 3.223; $p=0.0013$.

for major gynaecological procedures and the course of the post-surgical period) in the Polish magazine *Pielęgniarstwo XXI Wieku* (Nursing in the 21st century), 2008, No. 2–3, pp. 16–23. Considering the growing need for the public presentation of empirical evidence of the efficiency of therapeutic communication in medical practice, the authors have decided to present the part of their results in English as well.

Tab. 1. Patients general feeling on the 2nd day after the surgery in the experimental and control group

General feeling on the 2nd day after the surgery	Experimental group		Control group	
	Total (N)	%	Total (N)	%
Definitely bad	1	3.3	5	16.6
Bad or rather bad	5	16.6	9	30
Good or rather good	21	70	12	40
Definitely good	3	10	4	13.3
Total	30	100	30	100

Tab. 2. Self-evaluation of general feeling on the 4th day after the surgery in the experimental and control group

General feeling on the 4th day after the surgery	Experimental group		Control group	
	Total	%	Total	%
Definitely bad	0	0	3	10
Bad or rather bad	4	13.3	9	30
Good or rather good	20	66.6	15	50
Definitely good	6	20	3	10
Total	30	100	30	100

Tab. 3. Number of postoperative doses of opioid analgesics

Experimental group			Control group		
Total number of doses	Mean number of doses	Median	Total number of doses	Mean number of doses	Median
48	1.6	1.5000	90	3	3.0000

Tab. 4. Number of postoperative doses of mild analgesics

Experimental group			Control group		
Total number of doses	Mean number of doses	Median	Total number of doses	Mean number of doses	Median
227	7.5	8,0000	293	9,7	10.0000

Tab. 5. Number of postoperative doses of sleep – inducing drugs and tranquilizers

Experimental group			Control group		
Total number of doses	Mean number of doses	Median	Total number of doses	Mean number of doses	Median
141	4.7	5,0000	209	6.9	7.0000

All the results thus show that the preoperative intensive emotional support which was provided to patients considerably improved their postoperative well-being and decreased their demand for both strong and mild analgesics, as well as for sleep-inducing drugs and tranquilizers. Therefore, the both study hypothesis has been confirmed by these studies.

Recapitulation

The study confirmed both preliminary experimental hypotheses. The preoperative emotional support, which was provided by a midwife to patients, considerably decreased their demand for analgesics, tranquilizers and sleep-inducing drugs. According to the study results, it also affected the postoperative general feeling of the patients.

Significant differences between the emotional condition of the patients, in favor of the group provided with emotional support, which were shown by both subjective (self-evaluation of emotional condition) and objective indexes (smaller amount of used analgesics, tranquilizers and sleep-inducing drugs) encourage such actions to be performed as an important element of medical procedures. The study results show that this element may have an important influence on the quality of the patient's life (improvement of their general feeling) and treatment results, including economic aspects.

While discussing the effects of the performed psychological intervention, it should be emphasized that the patients who were examined faced a very high health threat and that they were subjected to a very serious operation. Moreover, it should be taken into account that the intervention was of a limited, temporary and quite isolated character. It consisted of only one additional hour which was devoted to each patient and did not include any changes in the standard nursing

and medical procedures. Considering the reality of the medical service, devoting one hour to a patient may seem a lot, but in the case of team cooperation, this could have taken considerably less time and the effects could probably have been better. It should also be strongly underlined that the additional psychological actions, which were undertaken in the experimental group, remained completely within the scope of nurses and doctors abilities.

Even though, it is difficult to evaluate the effects of psychological actions which accompany medical and nursing procedures, these type of studies are currently necessary. Nowadays, when medicine and nursing procedures are based on evidence, discussion about the psycho-social factors in treatment and nursing must be supported by data of an empirical character.

Although the study was conducted on a relatively small group of patients and did not include many important postoperative indexes such as e.g. length of hospitalization period, healing of the postoperative wound or the incidence of complications and additional medical interventions, their results may be considered promising. This also confirms the effectiveness of an integral combination of medicine and nursing care with psychotherapeutic elements.

Conclusions

1. Providing patients with intensive emotional support favorably affects the course of the postoperative period by improving their general feeling and decreasing their need for analgesics and tranquilizers.
2. The described results encourage the improvement of the quality of nursing by developing the professional skills of providing emotional support and including this aspect to a greater extent in the education of nurses.

References

- Anderson C.A. (2004) *Health Psychology*. Wiley & Sons, New Jersey.
- Corney R., Everett., Howells A., et al. (1992). The care of patients undergoing surgery for gynaecological cancer: the need for information, emotional support and counseling. *Journal of Advanced Nursing*, 1992, 17, 667–671.
- Jamison R.N., Virts K.L. (1990). The influence of family support on chronic pain. *Behaviour Research and Therapy*. Volume 28, Issue 4, 283–287.
- DiMatteo M.R., Zolnierok K.B., Martin L.R. (2012). Improving patient adherence: A three-factor model to guide practice. *Health Psychology Review*, 6 (1), 74–91.
- DiMatteo M.R. (2013). Importance of family/social support and impact on adherence to diabetic therapy. *Diabetes Metabolic Syndrome and Obesity: Targets and Therapy*, 2013, 6, 421–426.
- Lewicka M., Makara-Studzińska M., Sulima M., Wiktor H. (2014). Intensification of anxiety and depression, and personal resources among women during the peri-operative period. *Annals of Agricultural and Environmental Medicine*, 2014, 21, 1, 91–97.
- Motyka M. (2003). Komunikacja terapeutyczna (Therapeutic communications). Kwiatkowska A., Krajewska-Kułak E., Panek W. (ed.), *Komunikowanie interpersonalne w pielęgniarstwie* (Interpersonal communications in nursing). Wyd. Czelej: Lublin, 2003, 126–146.
- Motyka M. (2011) *Komunikacja terapeutyczna w opiece ogólnomedycznej* (Therapeutic communication in medical care). Wyd. UJ: Kraków.
- Motyka M.: Znaczenie komunikacji terapeutycznej. (Meaning of therapeutic communication). *Sztuka Leczenia*, 2013, 3–4, 17–24.
- O'Reilly D. (2001) An analysis of preoperative care. *British Journal of Perioperative Nursing*, 2001, 9, 402–411.
- Sarafino E.P. (2002) *Health Psychology. Biopsychosocial interactions*. Wiley & Sons Inc.: New York.
- Street Richard L., Makoul Gregory, Arora Neeraj K., Epstein Ronald M. (2009). How Does Communication Heal? Pathways Linking Clinician-Patient Communication to Health Outcomes. *Patient Education and Counseling*, 74 (3), 295–301.

Manuscript received: 4.03.2020 / manuscript accepted: 24.03.2020

Praca zgłoszona do czasopisma: 4.03.2020 / praca zaakceptowana do druku: 24.03.2020