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Unconscious patient - role and tasks of the therapeutic team

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Summary: Unconscious patients are not able to decide for themselves whether to cooperate effectively with the medical personnel. That is why it is so important for all members of the therapeutic team to work together in a comprehensive way.

Purpose of the research: Defining the role and tasks of the members of the therapeutic team caring for the unconscious patient in the intensive care unit.

Materials and methods: The study involved 103 persons (79 women and 24 men). The study group consisted of nurses, doctors, physiotherapists and paramedics who work in Anesthesiology and Intensive Care Units. A questionnaire of our own authorship was used for the research.

Results and conclusions: Good communication between the members of the therapeutic team, respect and good relations with the superior do not affect the effectiveness of work according to the respondents. A clear division of duties between the members of the therapeutic team influences the quality of care for unconscious patients, which is significantly different from the care for conscious patients. The members of the therapeutic team know the methods of care, nutrition, rehabilitation of unconscious patients.

Key words: unconscious patient, therapeutic team, intensive medical care

Introduction

In 1926 Jan Christian Smuts developed the paradigm (model) of holistic medicine. He considered it an antidote to the analytical reductionism of the 20th century science, addressed to doctors, health teachers, nurses, physiotherapists, dieticians, music therapists and all those who care for others, regardless of whether they operate within or outside the health care system.¹ The assumption of holism is to interest the whole person in the aspect of biopsychosocial needs as well as various treatment methods and therapeutic practices, including unconventional medicine.² According to the assumptions of holistic medicine, the patient (if it is possible, and if he/she is unconscious, then his/her relatives) should be required to take an active approach to the issues of treatment, abandon passive attitude in the reception of therapeutic services. A lot of time should be spent with patients during their care. Each patient requires different therapeutic techniques, pharmaceuticals, diets, different psychotherapeutic approaches and respect for cultural determinants of the ways of illness and treatment. In the case of unconscious patients, however, the situation is different, because they are not able to decide for themselves whether to undertake effective cooperation with medical personnel. In the case of the care of such a patient, a comprehensive cooperation of all the members of the therapeutic team is extremely important. However, the therapeutic team must respect the rights of the patient.³ The right of each patient to personal autonomy and independence, behavior and behavior different from generally accepted standards and models of life, specific reaction to various external and internal stimuli, as well as to other people, should be recognized.⁴

Intensive care units are specialized hospital wards that aim to treat patients in an immediate life-threatening condition that results in potentially reversible failure of one or more fundamental body systems, such as the respiratory, circulatory or central nervous systems.⁵ The essence of intensive care is the use of special methods, which consist of invasive and non-invasive monitoring, as well as mechanical and pharmacological support for the function of organs or systems that are unable to function.⁶

The staff who work in the Intensive Care Unit is burdened with great responsibility in the battle for the patient's life and health. The situation becomes even more dramatic and difficult in the case of an unconscious patient, from whom it is difficult to obtain any feedback and who requires special care and medical care.⁷

¹ Smuts J.C., *Holism and evolution*, MACMILLAN and CO, London 1927

² Rostami S, Jafari H. *Nurses' perceptions of futile medical care*. Mater Sociomed. 2016;28(2):151-5.

³ Morton S i wsp. Position statements and guidelines for perioperative nursing practice, part 1, pp. 105–106 EORNA, Bruksela 2015

⁴ Kózka M., Paluch H., Standard opieki nad chorym nieprzytomnym, [in:] Kózka M. (red.), Stany zagrożenia życia. Wybrane standardy i procedury postępowania pielęgniarskiego, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2001, 124

⁵ Goldsworthy S, Kleinpell, R, Williams G. International best practices in critical care. World Federation of Critical Care Nurses, 2017

⁶ Krysiak I., Pielęgowanie chorego nieprzytomnego, [in:] Dyk D., Wołowicka L. (red.) Anestezjologia i intensywne opielęgowanie. Klinika i pielęgniarstwo. Podręcznik dla studiów medycznych, PZWL, Warszawa 2010, 516-518

⁷ Sawicka W., Monitorowanie w oddziale intensywnej terapii, [in:] Wujtewicz M., Kwiecińska B., Intensywne opielęgowanie dla studentów, Gdańsk 2005, 12

The aim of the study

The aim of the study was to evaluate the role and tasks of members of the therapeutic team caring for unconscious patients in the intensive care unit.

Material and methods

Questionnaire technique was used in this paper. The questionnaire was distributed among the selected group, which ensured anonymity of the respondent. The research was conducted in the period from August to December 2018 at the Provincial Hospital of St. Padre Pio in Przemyśl and at the Medical Care Centre in Jarosław. The study group consisted of nurses, doctors, physiotherapists and paramedics who work in the anesthesiology and Intensive Care Unit. The differences between the variables were verified using the χ^2 independence test, assuming the level of significance $p < 0.05$. The calculations were performed with IBM SPSS Statistics 20. Determination: N - number of people, p - level of statistical significance.

The study group consisted of 103 persons. The majority of the respondents (N=79, i.e. 76.7%) were women. Men constituted 23.3% of all respondents (N=24). 21.4% of respondents (N=22) had up to 35 years of age. Slightly more than half of the members of the therapeutic team (N=53, i.e. 51.5%) were between 36 and 45 years old. Almost $\frac{3}{4}$ of the respondents (N=77, i.e. 74.8%) had higher education. Post-secondary education was provided to 13.6% of respondents (N=14), and secondary education to 11.7% of respondents (N=12). Doctors accounted for 19.4% of the respondents (N=20) and rehabilitators for 11.7% (N=12). Few (N=4, i.e. 3.9%) were medical rescuers. Up to 1 year of seniority, 4.9% of people had job tenure (N=5). From 1 to 5 years 28.2% of the respondents worked in the profession (N=29), and from 6 to 10 years 21.4% of the respondents (N=22). The length of service of 11-20 years was 23.3% of the members of the therapeutic team (N=24), and 22.3% of people worked over 20 years (N=23).

Results

The most frequently performed tasks for the unconscious patient were care and nursing (N=78, i.e. 75.7%), therapeutic (N=67, i.e. 65.0%) or diagnostic (N=63, i.e. 61.2%) tasks. To a lesser extent, the respondents performed rehabilitation (N=39, i.e. 37.9%) or educational tasks (N=29, i.e. 28.2%). Almost all respondents (94.2%) considered it important to document the assessment of the health condition of an unconscious patient, indicating the assurance of continuity of care, but more than half of the respondents (57.3%) devoted at least one hour to it during on-call time. The majority of respondents considered that when caring for an unconscious patient in ICU, particular attention should be paid to airway patency or circulation (after N=100, i.e. 97.1%), respiration (N=92, i.e. 89.3%), nutrition (N=87, i.e. 84.5%), reactions to stimuli (N=86, i.e. 83.5%) and excretion (N=83, i.e. 80.6%). Intubation (N=96, i.e. 93.2%), central puncture (N=93, i.e. 90.3%) and bladder catheterization (N=88, i.e. 85.4%) were the most frequent medical procedures performed in the unconscious patient. More than half of the respondents also mentioned probe insertion (N=72, i.e. 69.9%), arterial puncture (N=71, i.e. 68.9%), tracheostomy or transfusion of blood and blood components (after N=70, i.e. 68.0%), dialysis puncture (N=62, i.e. 60.2%), peripheral puncture (N=60, i.e. 58.3%) and dialysis (N=56, i.e. 54.4%). Less than half of the patients also participated in procedures such as gastrostomy (N=51, i.e. 49.5%), ECG (N=46, i.e. 44.7%). Few (N=9, i.e. 8.7%) took part in other medical procedures (bronchoscopy or rehabilitation) for an unconscious patient.

As part of the special care of the unconscious patient, the respondents most often mentioned respiratory tract care with mechanical ventilation and anti-decubitus ulcer prophylaxis (after N=101, i.e. 98.1%). The bronchial aspiration was indicated by 97.1% of

patients (N=100) and 95.1% of patients (N=98) reported compliance with aseptic and antiseptic principles. To a lesser extent, special care of the unconscious patient was related to oral and nasal hygiene (N=92, i.e. 89.3%), proper nutrition (N=87, i.e. N=92, i.e. N=92, i.e. N=92, i.e. N=87). The results of the study were presented in the following areas: patient hygiene (N=86, i.e. 83.5%), deep vein thrombosis prevention (N=78, i.e. 75.7%), corneal protection (N=71, i.e. 68.9%) or anti-inflammatory prophylaxis (N=67, i.e. 65.0%) - Figure 1.

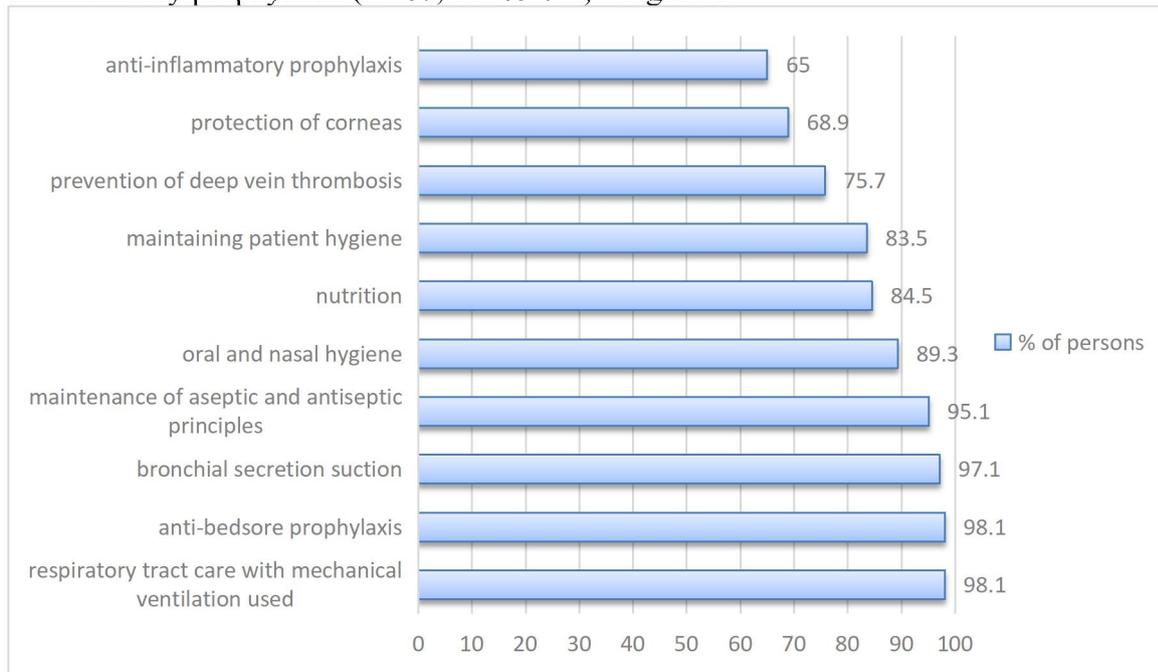


Figure 1: Activities that are part of the specific care of a patient who is unconscious in the ICU*.
*The results didn't add up to 100%.

Among the most frequent care problems occurring in unconscious patients, the subjects mimicked urinary and stool dysfunction (N=88, i.e. 85.4%), lack of cough reflex and swallowing (N=76, i.e. 73.8%) and inability to maintain airway patency (N=75, i.e. 72.8%). To a slightly lesser extent, the problems occurring in the care of the unconscious patient were inability to take food, liquids (N=63, i.e. 61.2%), inability to move (N=61, i.e. 59.2%) and to maintain personal hygiene (N=53, i.e. 51.5%). The maintenance of constant body temperature was less problematic (N=39, i.e. 37.9%) or the abolition of deep and surface sensation (N=32, i.e. 31.1%).

The support of the unconscious patient's family most often consisted of informational help (N=86, i.e. 83.5%), emotional support (N=83, i.e. 80.6%). To a slightly lesser extent, this assistance was related to education (N=69, i.e. 67.0%), assistance in contact with clergy (N=61, i.e. 59.2%). Assistance in contact with a psychologist was provided to families of patients by 35.9% of respondents (N=37), and a few (N=4, i.e. 3.9%) provided in-kind assistance.

The work related to the care of unconscious patients was assessed by the respondents as requiring a great deal of knowledge and competence (N=91, i.e. 88.3%), a source of physical strain (N=91, i.e. 88.3%) and a source of high stress and mental strain (N=90, i.e. 87.4%). To a lesser extent this job brought professional satisfaction (N=57, i.e. 55.3%), and for 20.4% of respondents (N=21) it was a cause of frustration.

The quality of care for unconscious patients in the Intensive Care Unit was assessed on the basis of 7 questionnaire questions. The answer options were scored in the range of 1-4 points. (1-very rarely, 4-very often). The sum of points could be in the range of 4-28 points, therefore the results were divided into 3 equal groups reflecting low, average and high quality

of patient care. It was shown that the level of patient care was most often high (67.0%), to a lesser extent average (33.0%), but there were no cases of low quality of care. It was shown that a high level of patient care was observed more often (72.9%) among people who had a very good/good assessment of communication between the members of the therapeutic team, and to a lesser extent among those who assessed it satisfactorily (52.2%) or indicated the need for improvement (60.0%).

Table 1. Level of patient care and evaluation of communication between the members of the therapeutic team

		Evaluation of communication between the members of the therapeutic team			Total	
		very good/ good	satisfactory	requires improvement		
Level of patient care	average	N	19	11	4	34
		%	27,1%	47,8%	40,0%	33,0%
	high	N	51	12	6	69
		%	72,9%	52,2%	60,0%	67,0%
Total		N	70	23	10	103
		%	100,0%	100,0%	100,0%	100,0%
p					0,1658	

Source: own.

The effectiveness of a therapeutic team member's work was assessed on the basis of 6 questionnaire questions (No. 20-22, 29-31). The answers were graded from 1 point. - Very rarely, up to 4 points. - Very often. The sum of points (range 6-24 points) corresponded to the level of effectiveness of a therapeutic team member. The results were divided into 3 groups, which allowed to achieve a low, average and high level of effectiveness. It was shown that the average level of effectiveness of a member of the therapeutic team was 43.7% of the respondents and high 56.3% of the respondents. Nobody obtained low values. The high level of effectiveness of a therapeutic team member was achieved by slightly more frequent (58.8%) persons with a very good/good assessment of professional relations among the members of the therapeutic team at work. Individuals demonstrating a high level of patient care were significantly more likely (85.5%) to perform care and nursing functions in the case of an unconscious patient - Table 2.

Table 2. Level of patient care and tasks performed most often in the case of unconscious patients

		Level of patient care				p
		average		high		
		N	%	N	%	
diagnostic	nie	11	32,4%	29	42,0%	0,3434
	tak	23	67,6%	40	58,0%	
therapeutic	nie	13	38,2%	23	33,3%	0,6237
	tak	21	61,8%	46	66,7%	
care and nursing	nie	15	44,1%	10	14,5%	0,0010
	tak	19	55,9%	59	85,5%	
rehabilitation	nie	18	52,9%	46	66,7%	0,1769
	tak	16	47,1%	23	33,3%	
educational	nie	28	82,4%	46	66,7%	0,0960
	tak	6	17,6%	23	33,3%	

Source: own.

Individuals with a high level of knowledge were more likely to participate in medical procedures such as dialysis puncture (69.6%), intubation (97.1%), tracheostomy (81.2%), ECG (58.0%), bladder catheterization (92.8%), arterial puncture (78.3%) or peripheral puncture (65.2%) - (Table 3).

Table 3. Level of patient care and participation in medical procedures for unconscious patients

		Level of patient care				p
		average		high		
		N	%	N	%	
central puncture	no	6	17,6%	4	5,8%	0,0561
	yes	28	82,4%	65	94,2%	
dialysis puncture	no	20	58,8%	21	30,4%	0,0056
	yes	14	41,2%	48	69,6%	
intubation	no	5	14,7%	2	2,9%	0,0252
	yes	29	85,3%	67	97,1%	
tracheostomy	no	20	58,8%	13	18,8%	0,0000
	yes	14	41,2%	56	81,2%	
EKG	no	28	82,4%	29	42,0%	0,0001
	yes	6	17,6%	40	58,0%	
marrow puncture	no	34	100,0%	69	100,0%	-
	yes	0	0,0%	0	0,0%	
transfusion of blood and blood components	no	15	44,1%	18	26,1%	0,0652
	yes	19	55,9%	51	73,9%	
dialyses	no	20	58,8%	27	39,1%	0,0592
	yes	14	41,2%	42	60,9%	
putting on the probe	no	14	41,2%	17	24,6%	0,0853
	yes	20	58,8%	52	75,4%	
setting up a gastrostomy	no	22	64,7%	30	43,5%	0,0427
	yes	12	35,3%	39	56,5%	
bladder catheterization	no	10	29,4%	5	7,2%	0,0027
	yes	24	70,6%	64	92,8%	
arterial puncture	no	17	50,0%	15	21,7%	0,0036
	yes	17	50,0%	54	78,3%	
peripheral puncture	no	19	55,9%	24	34,8%	0,0412
	yes	15	44,1%	45	65,2%	
others	no	31	91,2%	63	91,3%	0,9828
	yes	3	8,8%	6	8,7%	

The majority of respondents indicated that the care of unconscious patients requires a great deal of knowledge and competence (88.3%), is a source of physical strain (88.3%) and a source of great stress and mental strain (87.4%). More than half of the nurses (55.3%) stated that this job is a source of professional satisfaction, and few (20.4%) considered it a cause of frustration. Nobody admitted that there were no differences in the care of the unconscious patient and other patients. The majority of the members of the therapeutic team (73.8%) always informed the unconscious patient about the medical activities being performed, and 71.8% of the patients knew that the most common use of enteral nutrition in ICUs was using a stomach probe. Among the laboratory/bacteriological tests performed on the unconscious patient, in which the respondents participated, the most frequently mentioned were arterial blood gasometry (84.5%) and blood morphology (80.6%), slightly less frequently culture from bronchial tree secretion (78.6%), biochemistry (76.7%), CRP (74.8%) or other.

Discussion

Intensive care units are multi-specialist hospital wards whose priority task is to maintain vital functions and treat patients in life-threatening situations. Hospitalized patients require appropriate treatment and specialized equipment.⁸ Very often, the patients of the intensive care unit are unconscious, so it is impossible to cooperate and communicate with them, which makes the work of the members of the therapeutic team even more difficult.⁹ The work of every member of the therapeutic team, especially in the case of unconscious patients in intensive care units, is extremely important in the course of effective treatment and rehabilitation of the patient.¹⁰

The conducted studies show that the majority (over 76%) of the members of therapeutic teams are women, most often aged 36-45 years (over 50% of the respondents). The vast majority of members of therapeutic teams have higher education (almost 75%). The largest professional group in therapeutic teams according to the performed examinations are nurses and nurses (65%), every fifth person was a doctor, while the remaining ones are physiotherapists and medical rescuers. This corresponds to the results obtained in the studies of D. Nalepa, D. Weber and others, where most of the members of the therapeutic teams were women, and the nursing staff was a very important part of the team.

When asked who, in the opinion of the respondents, forms a therapeutic team, all respondents indicated the doctor, and over 98% also the nursing staff. The members of the therapeutic team also included a psychologist 85.4% of the respondents, a specialist was mentioned by almost 74% of the respondents, and a clergyman by slightly more than half of the respondents. Few respondents also mentioned family (24.3%), hospital director (less than 5%) or teacher (almost 3%). On the other hand, in terms of cooperation between individual team members, the results obtained in this study also correspond to the results obtained by D. Nalepa et al.¹¹ and Z. Sienkiewicz et al.¹². It turned out that the cooperation - especially between the medical and nursing staff - was going well. In the opinion of 68.9% of the respondents, the working relationship among the members of the therapeutic team in the workplace is good, while almost 9% consider it to be very good. In the aforementioned studies 63% of the respondents assessed the cooperation in the therapeutic team well, 15% assessed it very well, an equivalent result was obtained by a bad assessment of the cooperation, and 7% of the respondents indicated that they did not cooperate. In the research conducted in this study, almost 77% of respondents also positively speak about the motivation and support they receive from their superiors. Unfortunately, a very important problem are the shortages in the number of employed employees, which often hinders the efficient course of work. The vast majority (94.2%) of respondents noticed the importance of ensuring continuity of medical records of unconscious patients. This is consistent with the research of both Nalepa and Sienkiewicz, where it was noticed how important it is to keep proper records of patients. Equally important is the sharing of information about changing parameters of patient's vital functions, which was also discussed in the studies by Z. Sienkiewicz, where comparable results were obtained. As the survey results showed, the respondents found that the person

⁸ Gaszyński W., Intensywna terapia i medycyna ratunkowa. Najważniejsze zagadnienia, Wyd. Lekarskie PZWL, Warszawa 2013, 300

⁹ Kwiatkowska A., Krajewska- Kułak E., Panek W., Komunikowanie interpersonalne w pielęgniarstwie, Wyd. Lekarskie PZWL, Warszawa 2012, 70-74

¹⁰ Miszewska A., i in. Fizjoterapia chorych w oddziale intensywnej terapii, Journal of Education, Health and Sport, Bydgoszcz, 2017, 154

¹¹ Nalepa D., Weber D., Guz E., Mianowana V., Czekirda M., Communication and teamwork in the therapeutic, Journal of Education, Health and Sport. 2017;7(7);

¹² Sienkiewicz Z., Korycińska W., Czekala D., Dykowska G., Wójcik G., Imiela J., Zespół terapeutyczny w stacjonarnym zakładzie opieki długoterminowej, Bez ochrony nr 4, 2016

who primarily evaluates the vital signs is a nurse (100% of the respondents), to a lesser extent the doctors' responsibility in this matter was indicated - less than 40% of the respondents. These results are similar to those obtained by D. Nalepa, where the responsibility of nursing staff was indicated by over 90% of the respondents. As far as the care and rehabilitation of unconscious patients is concerned, the cooperation of individual members of the therapeutic team is extremely important, as it was established in the course of our own research. The majority of respondents indicated the need to provide the patient with gastrointestinal nutrition through a gastric probe (71.8%), while almost every fifth respondent chose gastrointestinal nutrition through percutaneous gastronomy as the most commonly used form of nutrition for unconscious patients. The subjects also frequently (33%) or frequently (44.7%) changed the position of the unconscious patient on a regular basis in order to prevent the consequences of long-term immobilization. Mariola Wolan-Nowakowska drew attention to these issues in her research.¹³ As the results of own research show, more than half of the members of the therapeutic team (54.4%) often provided support to the families of patients unconscious in matters of illness, care, death, death. Very often 28.2% of the respondents provided such support. According to the research conducted by Z. Sienkiewicz.¹⁴ Nearly 3/4 (69%) of respondents meet the families of patients at the beginning of on-call time, every working day to discuss problems, 15% meet once a week. 10% of respondents once a month and 6% analyze problems with patients less often or not at all. Analyzing our own research results and comparing them with those of other authors, we can conclude that close cooperation between the members of the therapeutic team, mutual respect between them, as well as meticulous maintenance of medical records of the patient are extremely important. Each of the members of the therapeutic team has their own tasks to perform, the vast majority of the medical staff tries to cooperate with the patient's family and offer their support. The joint effort and effort of all those involved in the care of unconscious patients in intensive care units can often bring surprisingly positive results, making it easier for patients to recover and regain their fitness.¹⁵ Therefore, it is important to appreciate the work of all the members of the therapeutic team and to understand each other.

Conclusions

1. Good communication and a clear division of responsibilities between the members of the therapeutic team influence the quality of care for the unconscious patient.
2. The care of unconscious patients differs significantly from the care of conscious patients.
3. The members of the therapeutic team are familiar with the methods of care, nutrition and rehabilitation of unconscious patients.

¹³Wolan-Nowakowska M., Znaczenie współpracy specjalistów w kompleksowej rehabilitacji osób niepełnosprawnych, *Niepełnosprawność. Dyskursy pedagogiki specjalnej* Nr 11/2013

¹⁴Nalepa D., Weber D., Guz E., Mianowana V., Czekirda M., Communication and teamwork in the therapeutic, *Journal of Education, Health and Sport.* 2017;7(7);

¹⁵Dyk D., Wołowicka L. (red.), *Anestezjologia i intensywna opieka. Klinika i pielęgniarstwo. Podręcznik dla studiów medycznych*, PZWL, Warszawa 2010,

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