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Medical errors and their consequences for human life and health

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Health security of patients is an issue of paramount importance for the medical profession. More and more often, a patient receives help from a therapeutic team and not only from a doctor or a nurse, a paramedic or a physiotherapist. Hence, it is the duty of the whole team to act in a way which will not cause damage to the patient. It is not unimportant that health care nowadays is more and more complicated and specialized. Therefore, it is more and more important to properly assign tasks to individual members of the therapeutic team, with clearly defined roles and duties for individual members and effective interpersonal relations within the team and communication with the patient.

Patients and the general public in all countries are usually passive observers of the changes taking place in the health protection system. Many patients do not participate fully in the decision-making process concerning their course of treatment¹. As active participants of the therapeutic process they could very often prevent

¹ Światowa Organizacja Zdrowia, *Bezpieczeństwo pacjenta – nauczanie na kierunkach medycznych. Poradnik dla wykładowców*, „Polskie Wydawnictwo Medycyny Ubezpieczeniowej” 2017, s. 90.

the occurrence of negative results of wrongly performed medical interventions, if only the level of their health awareness was higher².

After analyzing statistics, we can make the assumption that errors connected with medical care are widespread, although there are countries, and Poland is one of them, in which the number and rate are impossible to assess reliably because of lack of obligation to report medical errors and adverse events³.

The results of research performed by scientists in the United States, Australia, Great Britain and Denmark show that about 30% of adverse events in health care (including medical errors) were the result of the carelessness of medical workers. Moreover, it was found that about two thirds of them could have been avoided⁴.

An adverse event means detriment of the patient's health brought about in the course of diagnostics and (or) treatment, not connected with the natural course of the condition or the patient's state of health, and also the risk of its occurrence. An adverse effect includes a medical error, which is the subject of this article.

A medical error is an act or an omission (no action) by a medical professional (a doctor, a nurse, a midwife, a paramedic, a physical therapist) concerning a diagnosis or a therapy, which is against medical science in the scope which is available to the person⁵. Nowadays a narrow definition of a medical error is applied, which means an objective, independent of the features of a particular person, conflict between the act of a doctor (or other authorised person) and the valid rules of medical procedure⁶. In other words, a medical professional undertaking an action on a patient should

² Y. Longtin, H. Sax, L. Leape, S. Sheridan, L. Donaldson, D. Pittet, *Zaangażowanie pacjenta: stan wiedzy i wpływ na bezpieczeństwo opieki*, „Medycyna po Dyplomie” 2010, nr 6, s. 127.

³ Światowa Organizacja Zdrowia, op.cit., s. 103–105; Y. Longtin, H. Sax, L. Leape, S. Sheridan, L. Donaldson, D. Pittet, op.cit., s. 117–132.

⁴ Światowa Organizacja Zdrowia, op.cit., s. 103.

⁵ D. Korytkowska, *Pojęcie błędu medycznego i zdarzenia medycznego*, „Acta Universitatis Lodzianensis” 2012, s. 64.

⁶ M. Białkowski, *Pogląd doktryny prawa cywilnego i orzecznictwa na pojęcie błędu medycznego*, „Przegląd Prawniczy Uniwersytetu im. Adama Mickiewicza” 2013, nr 2, s. 57–70.

do 'everything they can and should, they are also obliged to act sensibly, with the highest care and within their competences'⁷.

There are no infallible people, and there are no infallible doctors, nurses, midwives or other people engaged in taking care of a patient, that is who provide care with adequate care, in accordance with the code of professional ethics and, first of all, who aim to improve the health of the patient based on the current medical knowledge, because saving life and improving health of the population are the bases of the functioning of the healthcare system.

The doctrine has developed a few divisions of medical errors, both based on the criterion of action which leads to the occurrence of the error (diagnostic error, therapeutic error, prognostic error)⁸ as well as the objective-subjective criterion, that is concerning people performing medical acts and their types (decision, executive, organization, subject-matter, formal, technical error)⁹.

A diagnostic error (mistake in diagnosis) is usually the result of an inadequate interpretation of symptoms on which the doctor made the diagnosis. The error can be positive, meaning an erroneous diagnosis of a disease that does not exist in reality, or negative, that is not diagnosing a patient with the disease they have. This type of error usually has the furthest reaching negative consequences for the patient. The diagnosis is the first and the most important step in the therapeutic process and if it is incorrect, it can lead to choosing inadequate methods and means of treatment and, in consequence, it can lead to the occurrence of serious damage, often irreparable (for example in the form of losing the opportunity to recover or to improve the state of health). In the literature we can come across the statement that a diagnostic error is, by principle, caused by lack of due care by the doctor and as such it is culpa-

⁷ A. Liszewska, *Odpowiedzialność karna za błąd w sztuce lekarskiej*, Zakamycze 1998, s. 28.

⁸ A. Fiutak, *Klasyfikacja błędów medycznych*, „Medycyna Rodzinna” 2010, nr 2, s. 50–55; M. Białkowski, op.cit., s. 58.

⁹ D. Korytkowska, op.cit., s. 65; M. Białkowski, op.cit., s. 68; A. Fiutak, *Prawo medyczne w orzecznictwie z komentarzami*, Warszawa 2012, s. 26; A. Sieńko, *Błędy medyczne – odpowiedzialność lekarza i placówki medycznej*, Warszawa 2015, s. 67.

ble. An example of it is a wrong diagnosis of the state of health of a patient because no history was collected from the patient and his family, no basic or additional tests were performed or the results of the tests were wrongly interpreted¹⁰.

A wrong diagnosis means wrong treatment which does not lead to the patient being cured or which can simply lead to a worsening of the patient's health.

An error in treatment (therapeutic error) happens when a wrong method or course of treatment is chosen. It is quite often connected with a wrong diagnosis, as a consequence of a wrong diagnosis. A therapeutic error can mean, among others, prescribing the patient a wrong medication and also using a treatment which has been disused, which causes damage or makes the condition worse, not referring the patient to hospital, an improperly performed operation, an expansion of the operative field without justification, performing a procedure despite medical contraindications¹¹.

We should remember that when providing medical services, old methods which are not expected to be effective (or may have a negative effect) should be excluded from use if they are generally replaced with new methods of treatment. Therefore, abandoning diagnostic medical activities, such as for example a USG scan or computerized tomography, despite the fact that the medical health centre has appropriate equipment and necessary expertise, can result in a wrong therapeutic decision¹². At the same time, court decision have shown that the introduction of new diagnostic techniques does not lower the importance of the basic form of patient examination, such as interview and physical examination in the form of auscultation, percussion, inspection. These are the key forms of examination to use when planning medical activities because they are the original source of information about the patient and

¹⁰ M. Nesterowicz, *Prawo medyczne*, Toruń 2013, s. 231; P. Zieliński, *Kilka słów o pojęciu oraz rodzajach błędów medycznego*, „Medyczna Wokanda” 2016, nr 8, s. 189; A. Fiutak, *Klasyfikacja błędów*, s. 51.

¹¹ M. Nesterowicz, *Prawo*, s. 235.

¹² Wyrok SA w Łodzi z dnia 22 grudnia 2014 r., I ACa 903/14. LEX nr 1659104.

they often constitute an indication towards further, more detailed diagnostics¹³.

A prognosis error, that is prognosis concerning the state of health of the patient. This error can be of no consequence for the course of treatment, both with respect to commencing or not commencing treatment. But if this type of error is combined with a diagnostic error, we cannot rule out the possibility of complications and serious detriment to health (for example a patient is found to be temporarily unfit to work when the disability is permanent). Although a wrong prognosis affects the patient's mental state and does not physically damage the functioning of the organism, yet there is no doubt that this aspect of the patient's health is also under special care, as proved by the institution of compensation for damage to a person¹⁴. An example we can give here is a wrong diagnosis of a live foetus in a patient who had a miscarriage before and starting treatment in order to sustain pregnancy. In the court's opinion, the fact that the patient obtained contradictory information about her state of health and mutually exclusive methods of treatment were performed can result in health disorders in the form of mental suffering, which justifies the award of compensation¹⁵.

Next, a decision error includes those factual circumstances which fall under the above-described diagnostic and therapeutic errors, when a medical professional does not make the correct diagnosis and applies wrong treatment. A decision error is based on the lack of interview with the patient, negligent examination or not performing additional tests or wrong interpretation of the results, a consequence of which is a wrong therapy¹⁶. An example of this is a doctor making a decision to perform an obviously unnecessary operation to remove a part of the digestive system due to a mistake made a medical secretary, who in the patient's medical history enters the diagnosis of "microcellular carcinoma", which in

¹³ Wyrok SA w Gdańsku, I ACa 866/11, LEX nr 1396851.

¹⁴ A. Fiutak, *Klasyfikacja błędów*, s. 53.

¹⁵ Wyrok SN z dnia 20 marca 2002 r., V CKN 909/00, LEX nr 56027.

¹⁶ Z. Marek, *Błąd medyczny: odpowiedzialność etyczno-deontologiczna i prawna lekarza*, Kraków 2007, s. 13.

fact concerns another patient. The court in the said case admitted the liability of the health centre unit for the damage caused to the patient in the form of a permanently damaging operation. In the opinion of the court, when an operation is not an emergency, life-saving one, the doctor who makes the decision to perform a far-reaching surgical intervention, resulting in a serious injury to the patient, must be absolutely certain that this is the only and necessary solution¹⁷.

Another example I can give is the wrong decision of a doctor not to apply antibiotic therapy to a child with a cut on the sole of the foot which the child had after stepping on a nail, which led to the formation of an abscess, whose treatment required a surgical procedure and a plastic surgery to release adhesions, which were formed as a result of the inflammation¹⁸.

An executive error means incorrect execution of correct medical recommendations. It concerns various categories of persons working in the health care system, such as doctors as well as laboratory diagnosticians, nurses, midwives, or scrub nurses assisting surgical procedures. It can be in the form of wrong examinations, incorrect labelling of blood type, administration of a wrong medication, or a wrong dose¹⁹.

An organisational error, concerning the wrong organization of the healthcare system in the form of:

- improper management of health care service centres and managers of smaller teams (heads of laboratories, heads of hospital departments);
- cases connected with the improper storage of medicines, their improper labelling, lack of care when maintaining sterility of surgical instruments or wound dressings.

However, we should agree with the opinion expressed in the doctrine that an organizational error cannot be included into typical medical errors, which is the result of adopting a narrow defini-

¹⁷ Wyrok SO w Katowicach z dnia 12 grudnia 2003 r., II C 911/01/05, LEX nr 1714205.

¹⁸ Wyrok SO w Zamościu z dnia 5 kwietnia 2016 r., I C 226/14, npubl.

¹⁹ Z. Marek, *op.cit.*, s. 13.

tion of a medical error which includes activities incompatible with medical knowledge²⁰.

The last element of the presented division is a consultative error, which is connected with issuing all sorts of certificates or opinions, for example a certificate of no contraindications to perform a particular type of job, to drive a car or to own a weapon²¹.

In connection with the above, we should say that not every unsuccessful treatment will fall under the definition of a medical error and only one which is the result of failing to comply with current principles of medical knowledge. In accordance with the established opinion of Polish judicature and literature, the concept of a medical error does not include, for example, exceeding the time of a patient's exposure to X-ray, wrong identification of the patient leading to performing a procedure or operation on another patient, leaving a foreign body in the operative field. The said actions are not medical errors but failures connected with the provision of safety and care to the patient during dangerous procedures. This is because to identify such offences we do not have to refer to medical sciences or knowledge. Not every sphere of a doctor's activity, even professional (connected with professing the profession), wrong from the point of view of the medical law, falls under medical error. It excludes other types of negligence, which, however, can result in compensation liability, when the circumstances described by law have been satisfied²².

Cases concerning leaving foreign bodies in the patient's body (compresses, tampons and bandages, surgical instruments and materials – probes, needles, forceps and scissors) relatively often are the subject matter of court settlements in Polish court decisions. In most cases, judgement justification clearly stresses that the identification of an improper procedure, in the form of leaving a foreign body, did not require referring to the principles of medical knowledge and the doctor's negligence in such cases, due to far-reaching consequences for the patient (peritonitis often leading to

²⁰ M. Białkowski, *op.cit.*, s. 57–70; M. Nesterowicz, *Prawo*, s. 412–422.

²¹ Z. Marek, *op.cit.*, s. 13.

²² Wyrok SN z dnia 1 kwietnia 1955 r., IV CR 39/54.

the death of the patient) should be treated as very negative. There even appeared a view that leaving a foreign body inside a patient is a presumption of guilt of the doctor and in case of lack of counter-evidence it results in the doctor's liability for the damage done to the patient. In the doctrine there is also present a view which says that when a doctor during an operation uses an improper instrument, which because of the improper use breaks or gets damaged (and is left in the patient's body) we should speak of a medical error and not failure to provide basic care and caution. This is because this kind of behaviour is against the principles of medical knowledge and is not just a technical oversight or lack of care²³.

The occurrence of medical errors is connected with considerable costs, both personal and economic. Their main result is detriment to the patient's health, that is damage to a person. The results of research conducted by scientists in the United States, which led to starting the register of medical claims, showed that such mistakes concern about one million patients a year. In Australia they gave the number of about 50,000 patients a year for whom the consequence of a medical error was disability²⁴. The occurrence of detriment to the patient's health, especially when determining disability, results in functional limitation of social life, which can lead to the feeling of social mis-adaptation and even exclusion from society. Personal costs, in the form of pain and suffering, including the loss of independence, are most strongly felt by patients as well as members of their families. However, in the light of calculating costs of errors they are very rarely taken into consideration due to their non-material status.

It is the right of a patient and people close to them to demand that the offender rectify the damage in the form of financial compensation²⁵. If there is no agreement or amiable settlement of the

²³ Wyroki SN: z dnia 17 lutego 1967 r., I CR 435/66, OSN 1967, poz. 177, z dnia 25 lutego 1972 r., II CR 610/71, OSPiKA 1972, poz. 210; wyrok SA w Lublinie z dnia 16 grudnia 2003 r., I ACa 573/03, opubl. „Prawo i Medycyna” 2005, nr 1, s. 119; M. Nesterowicz, *Prawo*, s. 226–227.

²⁴ Światowa Organizacja Zdrowia, op.cit., s. 103–105.

²⁵ G. Bieniek, Uwaga 11. do art. 445, w: *Komentarz do Kodeksu cywilnego. Księga III. Zobowiązania*, red. G. Bieniek, LexisNexis 2011.

argument, the injured party can seek compensation in a court of law competent for such type of cases. The amount of compensation depends on the extent of the damage suffered. The amount awarded by the court should reflect the type of injury and it should be perceivable and it should also satisfy the expectations of the injured person. An order for a specific amount of compensation should consider the degree and duration of physical suffering, the irreversibility of the injury, the age of the patient and the limitation or impossibility to perform an occupation as well as other activities, the influence of the accident on the previous lifestyle of the injured person and their prospects for the future. It should also reflect individual feelings of the injured person, their individual properties, the feeling of social mis-adaptation or helplessness of the injured person resulting from the wrongful act. Compensation plays a compensating function when the awarded amount of money is at a level adequate to the type of violated interests and to the size of the damage suffered by a party. It can be said that compensation takes place, first of all, with the restoration of the emotional balance which was earlier disturbed by physical suffering²⁶.

Proceedings in cases concerning the protection of life and health are usually complicated also on the formal side. Their settlement requires usually specialist knowledge and complex evidentiary procedure²⁷. As a result, such proceedings often become costly and long. In Poland cases concerning medical errors in courts usually take at least four years. During that period, the injured party usually does not receive any payment towards compensation for the damage, including physical and mental suffering which they sustained as a result of the error. Considering the relatively long waiting time for the court proceedings to end, the detriment often increases because no action is taken to improve health, because

²⁶ Wyroki SN: z dnia 29 października 1997 r., II CKN 416/97, LexPolonica nr 2027973; z dnia 15 lutego 2006 r., IV CK 384/05, LexPolonica nr 1354994; z dnia 28 stycznia 2010 r., I CSK 244/09, LexPolonica nr 2438713; G. Bieniek, Uwaga 59. do art. 445, w: *Komentarz do Kodeksu cywilnego*.

²⁷ M. Nesterowicz, *Prawo medyczne. Komentarze i glosy do orzeczeń sądowych*, LexisNexis 2014; A. Partyk, *Pojęcie wiadomości specjalnych, wymagających dopuszczenia dowodu z opinii biegłego*, LEX/el.2014.

of the dire circumstances in which the injured person often finds themselves. Very often they become unfit for work due to ill health, which deprives them of the opportunity to earn a living. These factors influence the material and social status of the individual, because in such circumstances they often deteriorate. In this context we should bear in mind that the health of an individual, apart from their education, creates the global human capital, which is the most important factor of economic growth. Hence, the increasing number of medical errors is a factor determining the health status of society in every country and should be taken into account in the strategies of health and economic policies.

In the United States about one thousand people die because of medical errors every year, which places such deaths at the eighth position of all deaths²⁸. Cases of death caused by an error made by a doctor or another medical worker are an enormously negative experience for the family of the deceased person. Undoubtedly, they are also traumatic for the person who made the error as they often suffer criminal liability for it. However, the number of deaths caused by medical errors is not representative of most adverse events connected with the health care system. It is more likely that less serious, but also troublesome, event will occur, such as: failed surgeries, hospital infections, errors connected with child birth. In the case of patients treated during surgical procedures, that is orthopaedics, obstetrics and gynaecology, the risk of the occurrence of a medical error is higher.

Apart from personal costs, which are the most severe and undoubtedly the most difficult to compensate one, because lost health, to say nothing about life, cannot be returned, we should also remember that consequences of medical errors influence the economics of healthcare providers. Detriment to the health of the injured person means the need for extra hospitalization and care, diagnostic tests, rehabilitation, which generates additional costs both for the patient and for the healthcare providers in centres where the patient continues treatment, which would not have to do if the damage had not happened. Therefore, in countries where treatment is financed

²⁸ Światowa Organizacja Zdrowia, *op.cit.*, s. 103–105.

almost entirely from public funds, health policy, and especially the principles of refunding medical services should promote and somehow force the interest of particular hospitals to keep a register and analysis of medical errors in order to undertake actions aimed at solving this problem, which over the past years has spread on a wide scale. The Agency for Healthcare Research and Quality in the USA stated that the prevention of medical errors can result in saving about 17 billion dollars a year which we should consider as hospitals pay large amounts as compensation to injured patients and their families. In reality, instead of preventing diseases and restoring health, a huge amount of money from the financial resources of healthcare providers is spent on repairing what medical workers have done incorrectly. Considering the scale of the occurrence of medical errors and the size of the damage, we can say that they result in limiting the availability of health care services to a group of the society whom an adverse event has never concerned directly.

In this context it is impossible not to address the issue of lack of trust shown by the injured persons towards the offending medical worker or a service provider where the event took place. It is most often manifested by refraining from using medical services at a particular health care centre. But it also happens that the injured person, because of fear of potential damage, uses the health care system only in emergency, in life threatening situations, or chooses the private sector of the health care service. In view of health security it is difficult to call this behaviour proper, while the occurrence of the problem should mostly provoke medical workers to reflect on this. Namely, in models of the health care system focused on diseases and treatment, the most important are still medical workers due to their importance in the course of treatment. However, it is the patient that should be in the centre of the health care process and the provided health care should be realized with respecting the rights of patients so that they feel they are treated with dignity and respect and not as intruders²⁹. Frequently, if the behaviour of people performing the medical profession had been proper, with

²⁹ B. Bober, *Bezpieczeństwo zdrowotne jako istotny komponent bezpieczeństwa państwa*, „Studia nad Bezpieczeństwem” 2016, nr 1, 33–36.

due care, forethought and anticipation of the results of their behaviour, with a bit of understanding and patience for the patient, in many cases the damage to the patient would have never happened.

To sum up, it should be stressed that an analysis of the decisions of courts confirms that medical errors are often the result of ignorance, disrespect for legal rules and principles of the professional ethics code. Improper organization of the workplace is also not unimportant, as demonstrated by, among others, the shortage of medical workers with specific qualifications, lack of diagnostic equipment, or lack of qualified people to operate it, lack of basic or specialist instruments and materials necessary for a proper therapeutic process, in accordance with current medical knowledge. Of course, routine, hurry, lack of patience and inquisitiveness are disastrous, as is “taking short cuts”, which in reality should never take place in the medical profession but, they do and result, what is more important, in the patient’s feeling good being moved to the background. That is why it is so important to report and monitor the occurrence of medical errors, analysing the causes of their occurrence and taking steps preventing their occurrence in the future.

At the same time, a real knowledge of risks which form an inseparable element of contemporary medicine is connected with the need for concrete cooperation of the therapeutic team with the patient as the party that should be in the centre of the health care system. But this requires medical workers to take an active approach to the issues of health safety and professional liability for their actions. This means, first of all, a dialogue with the patient and respect for their needs, expectations, fears and hopes because damage to the most important value – health is the consequence of medical errors.

STRESZCZENIE

Błędy medyczne i ich konsekwencje dla życia i zdrowia ludzi

Bezpieczeństwo zdrowotne pacjentów jest kwestią o nadrzędnym znaczeniu dla przedstawicieli zawodów medycznych. Coraz częściej opieka nad

pacjentem sprawowana jest przez zespół terapeutyczny, a nie wyłącznie przez lekarza czy pielęgniarkę, ratownika medycznego czy fizjoterapeutę. Stąd obowiązkiem całego zespołu jest działanie w sposób, który nie wyrządzi u pacjenta szkód. Nie bez znaczenia jest fakt, że opieka zdrowotna w dzisiejszych czasach jest coraz bardziej skomplikowana i wyspecjalizowana. Dlatego tym większego znaczenia nabiera właściwy przydział zadań poszczególnym członkom zespołu terapeutycznego, wyraźne określenie ról i obowiązków poszczególnym pracownikom oraz efektywne relacje interpersonalne w zespole i komunikacja z pacjentem.

Analiza praktyki orzeczniczej potwierdza, że błędy medyczne są często wynikiem ignorancji, lekceważenia reguł prawnych i zasad kodeksu etyki zawodowej. Nie bez znaczenia jest nieprawidłowa organizacja pracy, ujawniająca się m.in. niedoborem pracowników medycznych o konkretnych kwalifikacjach, brakiem sprzętu diagnostycznego lub brakiem osób kompetentnych do ich obsługi, brakiem podstawowych lub specjalistycznych narzędzi i materiałów niezbędnych do prawidłowego, zgodnego z aktualną wiedzą medyczną procesu terapeutycznego. Oczywiście zgubna jest rutyna, pośpiech, brak cierpliwości i dociekliwości, „pójście na skróty”, co w rzeczywistości nie powinno mieć miejsca w profesji medycznej, a istnieje i powoduje, że to, co najważniejsze, czyli dobro pacjenta, schodzi na dalszy plan. Dlatego tak istotne jest zgłaszanie i monitorowanie występowania błędów medycznych, analiza ich przyczyn i podejmowanie działań zapobiegających ich występowaniu w przyszłości.

Słowa kluczowe: błąd medyczny; odpowiedzialność za szkody; prawa pacjenta

SUMMARY

Medical errors and their consequences for human life and health

Health security of patients is an issue of paramount importance for the medical profession. More and more often, a patient receives help from a therapeutic team and not only from a doctor or a nurse, a paramedic or a physiotherapist. Hence, it is the duty of the whole team to act in a way that will not cause damage to the patient. It is not unimportant that health care nowadays is more and more complicated and specialized. Therefore, it is more and more important to properly assign tasks to individual members of the therapeutic team, with clearly defined roles and

duties for individual members and effective interpersonal relations within the team and communication with the patient.

An analysis of court decisions confirms that medical errors are often the result of ignorance, disrespect for legal rules and principles of the professional ethics code. Also significant is incorrect work organization which manifests itself, among other things, in the shortage of medical workers with specific qualifications, lack of diagnostic equipment or lack of competent persons to operate them, lack of basic or specialist tools and materials necessary for a proper therapeutic process consistent with the current medical knowledge. Of course, routine, hurry, lack of patience and inquisitiveness are disastrous, as is "taking short cuts", which in reality should never take place in the medical profession, but they do and result, more importantly, in the patient's well-being being moved to the background. That is why it is so important to report and monitor the occurrence of medical errors, analysing the causes of their occurrence and taking steps preventing their occurrence in the future.

Keywords: medical error; liability for damages; patient's rights

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