## LETTER TO THE EDITOR

## Conclusions from the analysis of adverse events in the Polish health care system in judicial decisions of civil courts between 2011 and 2013

To the Editor Adverse events are an inevitable part of the process of providing medical services. An analysis of what causes them allows for the adoption of preventive measures that avert the recurrence of similar incidents in medical practice. Court files are a crucial source of information about the occurrence of adverse events. The collection of information on adverse events in the health care system could have a major impact on patient safety in the course of providing medical services.

The purpose of the analysis was to evaluate the occurrence of adverse events in health care facilities in Poland on the basis of information contained in court files from civil proceedings brought by patients against hospitals. The analysis was undertaken within the project: "Safe Hospital – Safe Patient" (in Polish, "Bezpieczny Szpital – Bezpieczny Pacjent"), coordinated by the Centre for Monitoring Health Care Quality.

The research used the technique of examining files, whereby files from civil cases were analyzed in the seats of the courts. The source of the data consisted of 183 files pertaining to civil cases, in which a final judgment was entered in the years 2011–2013, brought against hospitals in connection with claims for damages, compensation, and disability pension for injury suffered in the course of medical treatment. The files were examined in 5 out of the total 45 district courts nationwide, which were selected according to a discrete size and number of inhabitants and the annual number of cases and their type. The 4-year follow-up was selected to obtain an appropriate number of cases for conclusive analyses.

In the statements of claim, patients or their family members indicated 1 or more reasons (therefore, the frequency exceeded 100% in total) that in their view caused the adverse event and led to filing an action against the medical facility. The most common reason for bringing a lawsuit was attributed to a hospital-acquired infection (n = 66; 36.07%). More than 1 of 3 lawsuits provided surgical errors as the basis for the claims (n = 65; 35.52%). The third most frequent claim

resulted from failure to exercise due diligence in providing medical services (n = 57; 31.15%). Other recorded reasons included diagnostic error involving failure to establish a correct diagnosis (n = 34; 18.58%), therapeutic error in using an outdated or inappropriate method of treatment (n = 31; 16.94%), delay in providing medical services (n = 29; 15.85%), and diagnostic error of a misdiagnosis (n = 23; 12.57%).

Of the 183 cases analyzed, 48% (n = 88) were discontinued because the court did not find that an adverse event had occurred. However, in 95 cases (51.91%), the court ruled that an adverse event had indeed occurred. The most common cause of the successfully established adverse events that occurred in the course of medical treatment was failure to exercise due diligence in providing medical services (n = 19; 20%). The second most frequent cause of successfully established adverse events was a hospital-acquired infection (n = 14; 14.73%). Irregularities pertaining to the very treatment of the infection were far less frequent and occurred only in 3.16% (n = 3) of the successfully established cases of adverse events.

Human error involving surgical intervention/ operation was indicated as the cause of nearly every tenth successfully established adverse event (n = 8; 8.42%). A significant number of events were caused by delaying the provision of medical services (n = 7; 7.36%) and by a diagnostic error consisting in failure to perform appropriate diagnostic tests (n = 9; 9.47%). A diagnostic error consisting in a misdiagnosis occurred in 4 successfully established adverse events (4.21%). Irregularities involving the area of patient autonomy, as well as duties connected with keeping medical records, constituted 12 cases (12.63%). Deficiencies concerning the choice of the method of treatment, such as a therapeutic error consisting in using an outdated or inappropriate method of treatment, and failure to implement the appropriate method of treatment, caused slightly more than every twentieth successfully established adverse event (n = 5; 5.26%). The number

of organizational errors precipitated by mismanagement of the hospital amounted to 3 (3.16% of the causes of the successfully established adverse events).

The single most common untoward consequence of medical treatment was bodily injury, which occurred in 25 cases (26.32%). The untoward consequence in the form of the patient's death was declared in 3 cases (3.16%). Successfully established adverse events impacted the hospitalization process associated with the primary condition in 15 cases (15.78%).

The majority of successfully established adverse events resulted from human error, while organizational errors were found just in a few cases of adverse events. Over half of the successfully established adverse events were attributed to physicians and less than 15%—to nurses. Even though in a number of cases organizational errors provided the basis for the judgment on an adverse event, in neither case the management was found to be explicitly at fault.

An adverse event is often considered equivalent to "medical error," "medical malpractice," and "treatment failure." However, the term "adverse event" encompasses not only medical errors, but also treatment failure not directly caused by a health care provider, which instead is the result of recommended procedures, the equipment, or the functioning of a health care entity in the health care system.1 For example, recommendations for good nursing practice by the national consultant in the field of nursing on risk management for adverse events define an adverse event as "damage inflicted during or as a result of medical treatment not associated with the natural course of the disease or patient's overall health."2 Current literature on the subject distinguishes 2 types of adverse events, namely, preventable and nonpreventable adverse events.3 A nonpreventable adverse event comprises situations out of medical control, such as the patient committing suicide in the hospital or leaving the hospital on their own initiative. It should be noted that applicable law does not provide for setting up a central register of adverse events. As part of the accreditation standards, accredited hospitals collect information on adverse drug and blood product reactions, but this obligation arises from the accreditation criteria for providing health care services and the functioning of hospitals. Relevant literature points to the need for creating respective registers on a national scale. Said registers could be used as a tool for eliminating the causes of adverse events in the future. Also worth mentioning is the legislative work currently underway on a bill on quality in health protection and patient safety. In accordance with the bill, adverse event reporting and analysis will become mandatory tools in managing health care entities in Poland.

Adverse events occur in 8% to 12% of all hospitalizations in European countries. <sup>4</sup> They are a serious economic burden for medical systems, ranging from 9.5% to 20% of all annual expenditures

on health.<sup>5</sup> Our own research has revealed a 40% confirmation rate for the legitimacy of patient claims. The rate is substantially lower than, for instance, that in the United States, where similar research has demonstrated that legitimate patient claims constituted 61% of all cases.<sup>6</sup>

Research has indicated that hospital-acquired infection was the most common cause of adverse events, which is consistent with the experience of the United Kingdom, where hospital-acquired infections were identified as the main adverse event suffered by 1 in every 20 hospitalized patients.<sup>7</sup>

In conclusion, the most common reasons for filing an action are hospital-acquired infections and surgical errors. In 48% of cases, the adverse event proceedings were terminated without establishing that an adverse event had occurred. A successfully established adverse event most often resulted from human error and included mainly hospital-acquired infections and breaches involving patient's rights. More than half of the successfully established adverse events were caused by medical malpractice, and its most frequent consequence was bodily injury suffered by the patient.

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