

# MEDICAL SCIENCE

## To Cite:

Biduchak A, Hopko N, Chornenka Z, Alsalama MWO, Tymkul D.  
Comparative analysis of patient complaints for medical care over the last  
10 years. *Medical Science* 2023; 27: e205ms2984.  
doi: <https://doi.org/10.54905/disssi/v27i135/e205ms2984>

## Authors' Affiliation:

<sup>1</sup>Associate Professor of the Department of Social Medicine and Public  
Health, Bukovynian State Medical University, Ukraine

<sup>2</sup>General Director of the State Institution Chernivtsi Regional Center for  
Disease Control and Prevention of the Ministry of Health of Ukraine,  
Ukraine

<sup>3</sup>Associate Professor of the Department of Internal Medicine, Physical  
Rehabilitation, Sports Medicine of Bukovynian State Medical University,  
Ukraine

<sup>4</sup>Associate Professor of the Department of Hygiene and Ecology of  
Bukovynian State Medical University, Ukraine

## ORCID List

Anzhela Biduchak	0000-0003-3475-1497
Nataliya Hopko	0000-0002-6612-2620
Zhanetta Chornenka	0000-0003-2314-1976
Mohammad Wathek O Alsalama	0000-0002-8150-5611
Diana Tymkul	0000-0001-6802-8358

## Peer-Review History

Received: 28 March 2023

Reviewed & Revised: 01/April/2023 to 22/April/2023

Accepted: 26 April 2023

Published: 02 May 2023

## Peer-review Method

External peer-review was done through double-blind method.

Medical Science

pISSN 2321-7359; eISSN 2321-7367

This open access article is distributed under [Creative Commons Attribution License 4.0 \(CC BY\)](#).

# Comparative analysis of patient complaints for medical care over the last 10 years

Anzhela Biduchak<sup>1</sup>, Nataliya Hopko<sup>2</sup>, Zhanetta Chornenka<sup>1</sup>, Mohammad Wathek O Alsalama<sup>3</sup>, Diana Tymkul<sup>4</sup>

## ABSTRACT

**Background:** As is known, the health and life expectancy of the population depend on many factors: The environmental situation, the quality of air, drinking water, food, as well as the quality of the provision of medical services in health care institutions. Even if the work of a medical institution is perfectly organized, it is still possible to receive a complaint from a patient. Accepting it correctly and navigating the legislation on this issue is almost an art. **Methods:** Using statistical and medical-epidemiological methods, an analysis of the database with appeals from citizens of the Ministry of Health of Ukraine during 2013-2022 was carried out. **Results:** The most frequent complaints of Ukrainian citizens over the past 10 years were analyzed in order to further create a base that will help health care organizations improve the monitoring of medical services and the organization of public education. **Conclusion:** Analysis of the population's complaints can and should become the basis for reforming the health care system.

**Keywords:** Complaints of the population, appeals of citizens, medical institutions

## 1. INTRODUCTION

A complaint is an official appeal of a participant to the appeals body for the restoration of rights and protection of the legitimate interests of citizens violated by actions or inaction, decisions of state bodies, local self-government bodies, enterprises, etc., with a demand to eliminate violations that exist in the opinion of the complainant. The complaint is not limited to general statements, for example, that the complainant is outraged by the situation in which he finds himself. The complainant necessarily demands the renewal of specific violated rights and interests. Unlike other types of appeals, such as a proposal (comment) or a statement (petition), a complaint has a special object of appeal. Only actions or inactions and decisions can be appealed. The consequences of a natural disaster, the social policy of the state, etc. are not subject to appeal.

Instead, you can appeal actions, inaction or decisions that:

Violate the rights, legitimate interests or freedoms of an individual citizen or group of people;

Prevent the realization of rights, legitimate interests or freedoms of citizens;

Illegally impose any duties on a person;

Illegally bring a citizen to justice.

Complainants who make complaints in the field of health care usually:

Demand to provide effective or affordable medical care;

Appeal actions or inaction and decisions of employees, institutions and health care authorities;

Address complaints not only to managers or other employees of health care institutions, but also to control bodies.

Upon the fact of filing complaints, control bodies are obliged to carry out inspections and make appropriate decisions. The head of the health care institution bears personal responsibility for the state of record keeping for citizens' appeals. However, this does not mean that the head of the institution must personally accept and process citizens' appeals. These issues can be dealt with by specially appointed officials or a whole unit. Let's consider the specifics of the appointment of officials authorized to consider complaints. Legal responsibility: Civil, administrative or criminal - depending on the committed violation, prompts a responsible attitude to the process of receiving and processing complaints from citizens and officials of the health care institution.

Today, Ukraine, unfortunately, lags significantly behind neighboring European countries in terms of average life expectancy. So, in our country this indicator is about 71 years, while in Lithuania - over 74, in Slovakia - about 77, in Poland - almost 78, therefore, in general in the European region - over 77 years. Currently, Ukraine has the highest mortality rate from multidrug-resistant tuberculosis and cardiovascular diseases among European countries. Ukraine is also responsible for a large percentage of deaths from AIDS and cancer. Complaints of patients against doctors or even the entire medical institution are more often heard in the event of an adverse outcome of treatment. Of course, an adverse consequence of medical care can occur even when it is properly provided. But mistakes in medical practice are a fairly common phenomenon, even in the developed countries of the world. Careless or accidental harm to a patient's health is, unfortunately, a characteristic feature of medical activity, although it is very undesirable. Recently, there has been an increase in the number of conflicts in the "doctor-patient" system (Carini et al., 2021) and citizens' appeals to various authorities regarding the illegal actions of medical workers during the performance of their professional duties.

Analyzing the complaints of patients and their families about poor health care is an urgent priority for health care providers and researchers. Recently, it has become increasingly clear that patients can provide genuine data on a range of health care issues and complaints that have identified problems in patient care (e.g., medical errors, breaches of clinical standards, poor communication). Patients are a valuable source of data for many reasons. First, patients and their families collectively monitor the vast number of access points in healthcare facilities (Pukk-Harenstam et al., 2007) second, they have privileged access to information about continuity of care (Gillespie and Reader, 2016; Bodenheimer, 2008) communication failures (Naderifar et al., 2017) dignity issues (Maroon, 2019) and patient-centered care (Renkema et al., 2014), thirdly, after completing treatment, they have more freedom of expression than the staff (Okuyama et al., 2014) fourth, they are outside the organization, thereby providing an independent assessment that reflects societal norms and expectations (Hanganu et al., 2020). In addition, patients and their families evaluate information and write complaints only when the threshold of dissatisfaction with medical care is significantly exceeded (Guest et al., 2011).

Citizens' appeals to the health authorities with complaints about the adverse consequences of the provision of medical care are an attempt to resolve the conflict with the doctor outside the court. For the most part, citizens are limited only to this level of appeal and other methods of protecting their rights to quality medical care are used less often, as evidenced by analytical reports and reports of health care departments. Accounting and analysis of cases with negative consequences of medical interventions should become mandatory measures aimed at increasing the level of patient safety. Unfortunately, there is no accounting system for information on defects in medical care in Ukraine. There is also a lack of objective information on this problem in scientific publications. This is due to the fact that medical professionals, when making mistakes, very rarely report them to colleagues and patients. The reasons for this phenomenon are that medical errors are most often perceived as a manifestation of ignorance, negligence and unprofessionalism. The lack of a system of open discussion of errors and "disclosure" of medical care safety problems does not allow us to have an idea of the real prevalence of adverse consequences in connection with medical care defects. Therefore, there is no possibility of a full and comprehensive analysis of existing defects in order to prevent them.

Complaints about health care from the public require not only encouragement and support from the medical system, but also as much dissemination and communication as possible among the public (for example, when patients do not understand how to complain, consider complaints invalid or fear negative health consequences) (Entwistle et al., 2010) and as well as conducting

systematic procedures for the analysis of complaints, especially in the case of information about adverse events (Murff et al., 2006). It has even been suggested that patient complaints may actually precede rather than follow public safety incidents, potentially acting as an early warning system (Reader et al., 2014). However, any systematic study, including complaints, requires a reliable and effective tool for coding and further analysis of patient complaints about medical care. Current coding systems lag far behind existing methods for analyzing adverse events and critical care incidents (World Alliance for Patient Safety Drafting Group, 2009; Runciman et al., 2009; Runciman et al., 2010; Beaupert et al., 2014).

## 2. MATERIALS AND METHODS

In accordance with the main state document "Constitution of Ukraine" and with reference to the Law of Ukraine "On Appeals of Citizens", as well as taking into account the acts of the President of Ukraine, the Cabinet of Ministers of Ukraine, the Ministry of Health of Ukraine on ensuring that citizens exercise the constitutional right to appeal, an analysis of the database of appeals by citizens of the Ministry of Health of Ukraine was carried out during 2013-2022 years.

For the implementation of the constitutional right of citizens to a written appeal and personal reception, any questions regarding the organization of work with citizen appeals, as well as the results of work with citizen appeals, unsubstantiated or incomplete responses to citizen appeals, violations of the deadlines established by law for responses to complaints are available at constant control of the leadership of the Ministry of Health. Applications are also received and processed using the telephone "hotline" of the Ministry of Health, which functions in accordance with the order of the Ministry of Health of November 9, 2021 No. 2471 "On approval of the Procedure for the operation of the telephone "hotline" of the Ministry of Health". Statistical and medical-epidemiological methods were used.

## 3. RESULTS

In order to consider appeals (complaints) of citizens about cases of providing medical assistance with adverse consequences, clinical and expert commissions of the health care management body are established in accordance with the Law of Ukraine "On Appeals of Citizens" dated October 2, 1996 No. 393/96VR, which study the patient's medical documentation and other documents that make it possible to establish the actual state of affairs. An examination of the case is carried out based on the processing of all the material presented by the medical institution that provided assistance to the patient. The results obtained during the examination are included in the Conclusion of the clinical expert commission, in accordance with the order No. 163 of the Ministry of Health of Ukraine "On the management of the quality of medical care" dated February 24, 2010. There is such a problem here: Since there are no methodological materials for conducting an expert evaluation of medical documentation, the commissions perform it at their own discretion, which complicates their work and prevents the use of the researched material for generalization and comparative analysis.

Citizens who have filed a complaint and express claims about the quality of medical care or an adverse consequence of its provision are invited to the health care management body to clarify the essence of the conclusions regarding the consideration of the adverse case, about which the appeal was made. There is also a meeting between the complainants and the doctors, where the parties try to reconcile. Thus, the health management authority is a third party, a mediator in resolving conflicts between patients or their relatives and doctors.

To consider the adverse effects of medical care, we developed a case-by-case study plan that includes fourteen points:

1. Case description: Information about the patient's identity, basic anamnestic data and objective examination data, diagnosis, course of the disease, treatment received is indicated.
2. The problem that has arisen: The essence of the problem that has arisen, which has led to an adverse consequence, is explained.
3. Nature of the adverse effect: Describe the nature of the adverse effect (death, permanent disability, etc.).
4. Responsible person: Indicate who provided medical care to the patient.
5. Where the appeal came from: Indicate where the appeal came from (from citizens, from the highest health management body, from the prosecutor's office, etc.).
6. The results of the examination: Indicate the identified shortcomings and violations. Determine whether the adverse effect was reversible. They draw conclusions and determine whether the doctor's actions were lawful, whether there is a cause-and-effect relationship between the doctor's actions (inaction) and the adverse outcome. Give suggestions.
7. Conflict resolution process: Describe the conflict resolution process (clarification of the essence of the commission's conclusions, conversation with the applicant).
8. The result of the resolution of the conflict: Indicate whether the conflict was resolved in the Department of Health Care or not.

9. Measures to respond to defects in the work of doctors and managers: Indicate information on the imposition of disciplinary sanctions on doctors, heads of structural divisions and health care institutions, the results of consideration of the question of the doctor's compliance with the qualification category in the regional certification commission.
10. Appeal to the court: Provide information about whether or not the appeal to the court took place and where the conflict was resolved (in court or not).
11. Establishing the fault of the medical institution (doctor): In the case of citizens' appeal to the court, it is indicated whether the fault of the medical institution (doctor) was established or not.
12. Compensation of damage: In the case of citizens' appeal to the court, it is indicated whether the damage caused to the patient or his relatives was compensated.
13. Medico-legal qualification of an adverse effect: Provide a reasonable medico-legal characterization of an adverse effect and draw a conclusion about what this adverse effect is — an accident, a medical error or a medical tort.
14. Type of conflict: Establish the type of conflict that took place (this is one of eight types - according to our own typology).

In accordance with the Constitution of Ukraine, the Law of Ukraine "On Appeals of Citizens", in accordance with the acts of the Cabinet of Ministers of Ukraine and the President of Ukraine, we analyzed the work during 2013-2022 in the Ministry of Health of Ukraine to ensure the realization of the constitutional right of citizens to apply for medical services (Table 1).

**Table 1** The results of the analysis of written appeals according to the content of the main issues

The main reasons for the appeal	Years									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
About the provision of medical assistance	23,4	26,3	34,27	23,29	29,7	34,05	30,66	23,35	28,89	56,59
Regarding referral to MSEC, MCC	12,9	11,4	14,89	13,86	10,0	15,25	10,93	10,33	4,45	11,3
About illegal actions of medical workers	7,7	6,8	20,51	22,29	21,0	23,61	27,86	9,58	12,44	7,06
On issues of sanatorium-resort treatment	2,4	1,0	1,24	1,38	1,2	2,53	2,47	0,12	0,27	0,11
About sanitary provision of the population	2,1	2,4	4,3	6,3	5,9	3,3	3,5	5,4	3,97	0,82
In connection with the death of patients	1,9	1,3	1,5	1,6	1,3	1,4	0,74	1,6	1,66	0,95
About gratitude to medical workers	1,4	0,6	0,88	0,94	0,7	1,42	1,36	0,71	0,68	0,63
Advertising drugs, fraud facts	0,8	0,7	0,2	2,4	0,9	0,1	0,1	-	0,11	0,01
About the rude, formal attitude towards patients and relatives	0,6	0,6	0,7	1,4	0,1	3,2	0,7	0,52	0,47	0,21
Facts of corruption	0,4	1,1	1,44	0,66	0,63	1,53	0,71	0,39	0,5	0,79
The issue of COVID-19	-	-	-	-	-	-	-	51,46	45,76	12,98
About the closure of medical facilities and institutions	-	-	-	-	-	-	-	1,04	0,37	0,3
A total of complaints has been filed	16930	16235	16279	19308	26472	19629	18268	19849	22260	15846

In November 2014, a hotline was organized to monitor and urgently resolve the issues of providing health care facilities of communal and state ownership of administrative-territorial units of Ukraine with all the necessary medicines and medical products purchased from the State Budget for the implementation of national target programs line of the Ministry of Health of Ukraine - "Hotline": Monitoring of petitions, complaints and comments of citizens. The operation of this line is provided 24 hours a day. In 2020, issues related to COVID-19 (in connection with the pandemic) and the closure of medical facilities and institutions (in connection with the reform of the health care system) were added to the main complaints of citizens.

As can be seen from the table, citizens raise the highest percentage of complaints regarding the provision of medical care, while the indicators change in a wave-like manner with the lowest values in 2013 and 2020, and the highest in 2022. Also, high indicators

are observed regarding complaints about illegal actions of medical workers and regarding referrals to MSEC, MCC. The percentage of the rest of citizens' complaints is presented (Table 1). Special attention should be paid to issues related to COVID-19 - the highest rate - in 2020, which is most likely due to the peak of the pandemic and its gradual decrease until 2022.

The results of work with citizens' appeals, issues of streamlining work with citizens' appeals, ensuring the implementation of citizens' right to written appeals and personal reception specified in the Constitution of Ukraine, prevention of providing ambiguous, unfounded or incomplete answers to citizens' appeals, in violation of the terms established by legislation, are at constant control of the leadership of the Ministry of Health. The largest number of appeals from citizens is usually considered and resolved by the structural divisions of the Ministry of Health: The Directorate of Public Health and Disease Prevention and the Directorate of Medical Support (Table 2).

**Table 2** Status of consideration and resolution of issues raised in appeals 2013-2022

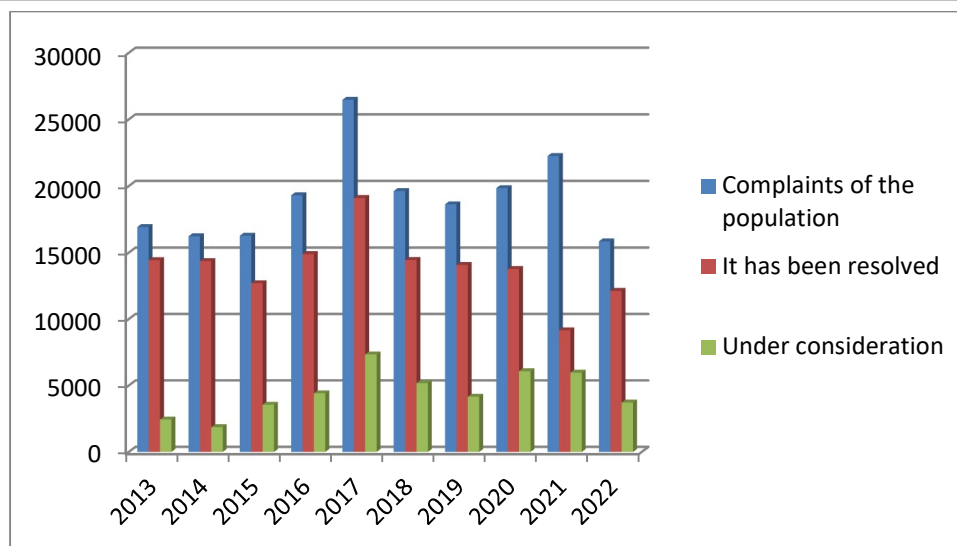
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1. It was decided in the Ministry of Health	14,7	60,9	50,2	60,1	60,8	48	43,3	62	32,06	86,55
An explanation is given	25,4	45	40,9	55	55	43,5	39	56,3	31,83	27,67
Resolved positively	20,8	20,8	8,6	4,7	5,6	4,4	4,1	5,2	0,06	0,18
Refused	3,9	2	0,8	0,4	0,1	0,1	0,1	0,5	0,16	0,05
2. Referred for solution to the local	35,1	27,6	27,8	17,1	11,5	25,7	32,2	7,29	9,08	15,5
Authorities	3,5	4,5	2,9	2,8	3,4	3,1	3,4	8,33	4,25	3,41
3. Directed as appropriate to others	11,0	7	19	20,1	24,3	23,2	18,9	22,38	22,56	13,45

So, according to the indicators in the table, compared to 2013, the majority of public complaints (as of 2022) are resolved at the Ministry of Health. The resolution of complaints from the population at the Ministry of Health increased almost 6 times compared to 2013 and the number of complaints that were redirected to local authorities for clarification and resolution decreased almost 2 times. The situation with the redirection of complaints from citizens to other departments has not changed significantly, which indicates the diversity of complaints and issues that arise among the population. Also, in 2022, the number of complaints under consideration decreased significantly (almost twice) compared to 2015-2021.

Analyzing the complaints of the population and the methods of solving them during the last ten years (Figure 1), it is clearly visible that the largest number of complaints from citizens was received in 2017, which is most likely connected with the final reform of the primary link of the health care system in Ukraine. Also, high indicators of complaints are observed in 2020-2021, which is most logically associated with the Covid-19 pandemic (overcrowding of hospitals, high morbidity and mortality not only among patients, but also among medical workers, etc.) The relatively low level of complaints in 2022 is most likely due to the fact that in connection with the introduction of martial law in Ukraine, some state bodies suspended the provision of answers to citizens' appeals and requests for public information not related to the state of war, military activities, provision of medical assistance, population evacuation, etc.

Also, from the data of the diagram, it is clearly visible that the highest percentage of issues raised in citizens' complaints resolved in one way or another (clarified, positively resolved or rejected at the level of the Ministry of Health or local authorities) regarding medical care was noted in 2013-2014 which is probably connected with the beginning of the reform of the primary link of the health care system of Ukraine and almost 100% completion of its relevant departments. The lowest rate of resolved complaints is observed in 2021, which is most likely due to high morbidity among medical workers (mutation of the covid-19 virus, post-COVID complications, etc.).





**Figure 1** Analyzing the complaints of the population and the methods of solving them during the last ten years

#### 4. DISCUSSION

Our study revealed the impact of both social and organizational changes on the relationship between patients and healthcare professionals, especially regarding the professionalism of the latter. Key characteristics of professionalism include expert knowledge and practice (Sheaff et al., 2004) self-assessment of productivity and care (Exworthy et al., 2003) and control over the nature and volume of medical interventions (Hastings et al., 2014). Scott and Grant, (2018) claimed that the weakening of professionalism has led to the individualization of patient complaints. They refer to how the representatives of the structural subdivisions of the Ministry of Health reacted, focusing on providing clarifications regarding citizens' appeals and legal consultations. At the same time, in Canada, for example, it is noted that with the introduction of clinical protocols and the standardization of clinical care, there has been a parallel decrease in the professionalism of physicians. Armstrong, (2002) notes that the emergence of external "decision support" mechanisms (e.g., clinical manuals) has led to a reorientation of individual accountability professionals toward more standardized approaches to health care delivery.

As patients increasingly criticize the work of health professionals, the latter increasingly use strategies to maintain their professionalism. In various studies, there is an implicit conflict between professionals' attempts to depersonalize and standardize the resolution of complaints and the perception of patients, where professionals tried to avoid personal guilt and mutual blame. This raises serious concerns that the current increase in citizen appeals to some extent contributes to the depersonalization of the complaint process, preventing individual resolution. This juxtaposition of individual and system-wide understandings of safety and error is reflected in the work of Reason's "systems approach" to safety, where various health care organizations are understood as complex systems exposed to risk in which blame cannot be placed on a single individual (Reason, 2000).

The last known studies on patient complaints were reported in high-income countries, indicating that the results may not be applicable to low- and middle-income countries (Gurung et al., 2017). Due to the limited scope and wide range of included studies (for example, the Swedish studies were limited to the patient perspective; the New Zealand study only considered the opinions of professionals), valid generalizations about differences between countries or medical institutions are not possible. Sattar et al., (2021) promoted interdisciplinary collaboration to ensure the validity of the results for a wider audience.

The conducted analysis of work with patient complaints suggests that in the future it is necessary to introduce a culture of positive attitude to complaints, encouraging and welcoming them, as well as studying complaints to improve the provision of medical services (National Health Service of Scotland, 2012; Parliamentary and Health Ombudsman, 2014). We present factors that facilitate and hinder the successful implementation of patient grievance processes that can be used to design new cultural change programs. For future grievance procedures to be successful, they must be seen as a personal decision and the improvement of the health care system as the final outcome of the grievance process.

#### 5. CONCLUSION

The analysis of citizens' appeals (complaints) over the past 10 years allows us to conclude that complaints are indeed an important source of information and reflect existing defects in the health care system, especially during its reformation. Analysis of the main

causes of medical errors that have occurred can become material for substantiating management decisions related to the structural and functional restructuring of the health care industry. In the future, in order to improve the health of the population, the entire field of health care should work in two directions: The first - aimed at the prevention of diseases and popularization of a healthy lifestyle, the second - at measures aimed at improving the diagnosis and treatment of diseases that have already arisen.

### Acknowledgement

The authors are grateful to the Chernivtsi Public Health Center, the Chernivtsi Regional Information and Analytical Center for Medical Statistics, Engineering and Pharmaceutical Support of Regional Health Institutions and the Chernivtsi Oncology Center.

### Author Contributions

All the authors contributed evenly with regards to data collecting, analysis, drafting and proofreading the final draft.

### Ethical approval

The study acquired the ethical approval from the Commission on Biomedical Ethics for compliance with moral and legal rules of medical research of Bukovynian State Medical University of the Ministry of Health of Ukraine (letter number Nr. 2 from 18.02.2021-project number 0120U102625).

### Funding

This study has not received any external funding.

### Conflict of interest

The authors declare that there is no conflict of interests.

### Data and materials availability

All data sets collected during this study are available upon reasonable request from the corresponding author.

## REFERENCES AND NOTES

1. Armstrong D. Clinical autonomy, individual and collective: The problem of changing doctors' behavior. *Soc Sci Med* 2002; 55(10):1771-7. doi: 10.1016/s0277-9536(01)00309-4
2. Beaupert F, Carney T, Chiarella M, Walton M, Bennett B, Kelly P, Pierce S. Regulating healthcare complaints: A literature review. *Int J Health Care Qual Assur* 2014; 27:505–18. doi: 10.1108/IJHCQA-05-2013-0053
3. Bodenheimer T. Coordinating care-a perilous journey through the health care system. *N Engl J Med* 2008; 358:1064–71.
4. Carini E, Villani L, Pezzullo AM, Gentili A, Barbara A, Ricciardi W, Boccia S. The Impact of Digital Patient Portals on Health Outcomes, System Efficiency and Patient Attitudes: Updated Systematic Literature Review. *J Med Internet Res* 2021; 23(9):e26189. doi: 10.2196/26189
5. Entwistle VA, Mc-Caughan D, Watt IS, Birks Y, Hall J, Peat M, Williams B, Wright J; Patient Involvement in Patient Safety group. Speaking up about safety concerns: Multi-setting qualitative study of patients' views and experiences. *Qual Saf Health Care* 2010; 19:e33. doi: 10.1136/qshc.2009.039743
6. Exworthy M, Wilkinson EK, Mc-Coll A, Moore M, Roderick P, Smith H, Gabbay J. The role of performance indicators in changing the autonomy of the general practice profession in the UK. *Soc Sci Med* 2003; 56(7):1493-504. doi: 10.1016/s0277-9536(02)00151-x
7. Gillespie A, Reader TW. The Healthcare Complaints Analysis Tool: Development and reliability testing of a method for service monitoring and organizational learning. *BMJ Qual Saf* 2016; 25(12):937-946. doi: 10.1136/bmjqs-2015-004596
8. Guest RS, Baser R, Li Y, Scardino PT, Brown AE, Kissane DW. Cancer surgeons' distress and well-being, II: Modifiable factors and the potential for organizational interventions. *Ann Surg Oncol* 2011; 18:1236–1242. doi: 10.1245/s10434-011-1623-5
9. Gurung G, Derrett S, Gold R, Hill PC. Why users of services do not complain and do not have voices: A study of mixed methods in the system of primary health care in rural areas of Nepal. *BMC Health Serv Res* 2017; 17:81.
10. Hanganu B, Iorga M, Muraru ID, Ioan BG. Reasons for and facilitating factors of medical malpractice complaints. What can be done to prevent them? *Medicina (Kaunas)* 2020; 56:259. doi: 10.3390/medicina56060259
11. Hastings SE, Armitage GD, Mallinson S, Jackson K, Suter E. Exploring the relationship between governance mechanisms

- in healthcare and health workforce outcomes: A systematic review. *BMC Health Serv Res* 2014; 14:479. doi: 10.1186/1472-6963-14-479.
12. Maroon JC. Catastrophic cardiovascular complications from medical malpractice stress syndrome. *J Neurosurg* 2019; 130:2081–2085. doi: 10.3171/2019
  13. Murff HJ, France DJ, Blackford J, Grogan EL, Yu C, Speroff T, Pichert JW, Hickson GB. Relationship between patient complaints and surgical complications. *Qual Saf Health Care* 2006; 15(1):13-6. doi: 10.1136/qshc.2005.013847
  14. Naderifar M, Goli H, Ghaljaie F. Snowball sampling: A purposeful method of sampling in qualitative research. *Stride Dev Med Educ* 2017; 14:e67670. doi: 10.5812/sdme.67670
  15. National Health Service of Scotland. Can i help you a guide to handling and learning from feedback, comments or complaints about NHS health services. Edinburgh: Scottish Government 2012.
  16. Okuyama A, Wagner C, Bijnen B. Speaking up for patient safety by hospital-based health care professionals: A literature review. *BMC Health Serv Res* 2014; 14:61. doi: 10.1186/1472-6963-14-619
  17. Parliamentary and Health Ombudsman, Local Government Ombudsman, Healthwatch England. My expectations regarding expressions of concern and mourning. London: Parliamentary and Health Service Ombudsman 2014.
  18. Pukk-Harenstam K, Ask J, Brommels M, Thor J, Penaloza RV, Gaffney FA. Analysis of 23 364 patient-generated, physician-reviewed malpractice claims from a non-tort, blame-free, national patient insurance system: Lessons learned from Sweden. *Qual Saf Health Care* 2008; 17(4):259-63. doi: 10.1136/qshc.2007.022897
  19. Reader TW, Gillespie A, Roberts J. Patient complaints in healthcare systems: A systematic review and coding taxonomy. *BMJ Qual Saf* 2014; 23:678–89. doi: 10.1136/bmjqs-2013-002437
  20. Reason J. Human error: Models and management. *BMJ* 2000; 320(7237):768-70. doi: 10.1136/bmj.320.7237.768
  21. Renkema E, Broekhuis M, Ahaus K. Conditions that influence the impact of malpractice litigation risk on physicians' behavior regarding patient safety. *BMC Health Serv Res* 2014; 14:38. doi: 10.1186/1472-6963-14-38
  22. Runciman W, Hibbert P, Thomson R, Schaaf TV, Sherman H, Lewalle P. Towards an International Classification for Patient Safety: Key concepts and terms. *Int J Qual Health Care* 2009; 21(1):18-26. doi: 10.1093/intqhc/mzn057
  23. Runciman WB, Baker GR, Michel P, Dovey S, Lilford RJ, Jensen N, Flin R, Weeks WB, Lewalle P, Larizgoitia I, Bates D; Methods & Measures Working Group of the World Health Organization World Alliance for Patient Safety. Tracing the foundations of a conceptual framework for a patient safety ontology. *Qual Saf Health Care* 2010; 19(6):e56. doi: 10.1136/qshc.2009.035147
  24. Sattar R, Lawton R, Panagioti M, Johnson J. Meta-ethnography in healthcare research: A guide to using a meta-ethnographic approach for literature synthesis. *BMC Health Serv Res* 2021; 21(1):50. doi: 10.1186/s12913-020-06049-w
  25. Scott DAH, Grant SM. A meta-ethnography of the facilitators and barriers to successful implementation of patient complaints processes in health-care settings. *Health Expect* 2018; 21(2):508-517. doi: 10.1111/hex.12645
  26. Sheaff R, Sibbald B, Campbell S, Roland M, Marshall M, Pickard S, Gask L, Rogers A, Halliwell S. Soft governance and attitudes to clinical quality in English general practice. *J Health Serv Res Policy* 2004; 9(3):132-8. doi: 10.1258/1355819041403295
  27. World Alliance for Patient Safety Drafting Group; Sherman H, Castro G, Fletcher M; World Alliance for Patient Safety; Hatlie M, Hibbert P, Jakob R, Koss R, Lewalle P, Loeb J, Perneger T, Runciman W, Thomson R, Van Der Schaaf T, Virtanen M. Towards an International Classification for Patient Safety: The conceptual framework. *Int J Qual Health Care* 2009; 21(1):2-8. doi: 10.1093/intqhc/mzn054