Corruption in the health care sector: A persistent threat to European health systems

Alejandro Gonzalez-Aquines[1, 2] https://orcid.org/0000-0002-9377-6494
Bassam Y. Mohamed[1, 2] https://orcid.org/0000-0001-9672-2793
Iwona Kowalska-Bobko[1] https://orcid.org/0000-0003-3728-2323

[1] Institute of Public Health, Faculty of Health Science, Jagiellonian University, Krakow, Poland
[2] School of Health and Related Research, The University of Sheffield, Sheffield, UK

Address for correspondence: Dr. MPH. Alejandro Gonzalez-Aquines, Instytut Zdrowia Publicznego, Skawińska 8, 31–066 Kraków, a.gonzalez.aquines@student.uj.edu.pl

Abstract

Corruption is commonly defined as the abuse of entrusted power for private gain. It is estimated that over 500 USD billion are lost every year due to corruption and that a 1-point change in the control of corruption indicator measured by the World Bank increases life expectancy by 0.44 years and reduces under-five mortality by 4.6 per 1,000 infants. Despite its global prevalence and critical impact on public and private services, corruption in the healthcare sector remains understudied. The present report aims to expand the knowledge on the paramount need to tackle corruption in healthcare by identifying the actors in the health system at risk to involving in corrupt practices, followed by defining health corruption from the governmental, non-governmental organisations, and societal perspectives, together with describing relevant corruption indicators from countries from the WHO European region. To conclude, this report presents a set of proposals and recommendations to address corruption in the healthcare sector.

Key words: corruption, fraud, health care, health systems, Europe

Słowa kluczowe: korupcja, oszustwo, opieka zdrowotna, systemy zdrowotne, Europa

Introduction

Corruption is defined as the abuse of entrusted power for private gain [1]. In the context of health systems, corruption can be presented in different forms; for instance, during the bribery for the approval or denial of health policies, demanding unjustified reimbursements by physicians, or manipulating drug trials' information [2]. Therefore, corruption in the healthcare sector, or health corruption, takes diverse faces depending on where it is held, what is involved, and who is involved.

The impact of health corruption goes beyond economic performance and includes health outcomes. A study by Lio and Lee demonstrated that improving 1-point on the control of corruption indicator measured by the World Bank increases life expectancy by 0.44 years and decreases under-5 mortality by 2.67 per 100,000 [3]. Moreover, it is estimated that banning corruption would result in savings of over 500 USD billion in healthcare worldwide [4].

Despite these numbers, corruption prevails in health systems mainly due to the information asymmetry among the system's actors, referring that few participants have more information than others, which puts them in a more advantageous position to make decisions [5].

Further opportunities to get involved in corruption in the healthcare sector emerge during a health crisis, as evidenced in the COVID-19 pandemic and the Ebola outbreak in 2014. For instance, during the present pandemic, there have been reports on bribery for the acquisition of medical supplies and fraudulent COVID-19 tests in countries like the United Kingdom (UK) and Slovakia [6, 7, while during the Ebola outbreak, it was found that the government from Sierra Leone misused donations from global alliances; both cases led to a more significant infection risk of the population and essential workers [8]. These examples highlight that regardless of a country's income level, corruption is present, especially during health crises.

The main challenge to tackle corruption in the healthcare sector starts with defining what should be considered a corrupt practice, which widely depends on societies' historical and cultural characteristics. Western European (WE) and Central-Eastern European (CEE) countries have contrasting historical backgrounds that have determined the structure and organisation of their health systems. This polarity and other cultural factors are also involved in how health corruption is presented in their health systems. For instance, Stepurko et al [9]. demonstrated a discrepancy between what is socially considered a corrupt practice in post-communist countries. In their study, a significant proportion (66.8%) considered informal payments a corrupt practice, while 40.3% considered gifts to physicians and medical staff similar to corruption. Contrastingly, WE countries like the UK and the Netherlands differ in the public perception of corruption in healthcare with only 15% and 27% of the population, respectively, considering health corruption is widespread in their country, and less than 25% (23% in the UK and 18% in the Netherlands) thinking it is acceptable to give gifts to obtain a benefit from the public administration [10].

Studying corruption in the healthcare sector of WE and CEE demands a systematic and contextualised approach. The present report aims to expand the understanding on how to tackle corruption in the health systems of European countries by 1) identifying the actors of health systems; 2) defining health corruption from the governmental, non-governmental organisations, and societal perspectives; and 3) providing a descriptive analysis of relevant corruption indicators from these countries. Finally, this report presents a set of recommendations to address corruption in the healthcare sector.

Actors of the healthcare sector

Identifying the actors involved in health systems and their interactions provides a starting point to understand health corruption. Health systems work interdependently with other sectors to achieve three goals: 1) improve the population's health, 2) achieve responsiveness for improvement of the non-health dimensions of the population, and 3) provide adequate financing and financial risk protection for households [11]. To achieve these goals, health systems require efficient and effective management of the resources among all of its actors, which could be accomplished through good governance – the process that involves governments and stakeholders to achieve the health systems' goals [12].

Five main actors can be identified in a health system: 1) patients, 2) providers, 3) payers, 4) government, and 5) suppliers [13]. However, these main actors are further divided due to the centralised or decentralised managerial functions, use of resources and policy-making process [14]. Also, the structure of the provision of healthcare is organised in primary, secondary, and tertiary care services with its respective diversity of health (paediatrics, obstetrics, surgery, among others) and non-health (finances, human resources, cleaners, etc.) related departments. Supranational

organisations like the European Union also have a role in health systems by providing regulations or funding to governments and healthcare providers. Finally, the provision of healthcare services is usually led by managers, who constitute a key actor as their decisions impact the availability of resources required to provide healthcare. These actors and their interactions are illustrated in Figure 1.

From all the interactions illustrated in Figure 1, there is a particular interest in the ones related to the procurement of health care goods. It is estimated that only the procurement of pharmaceuticals accounts for 25 to 50% of all public health spending; [15 thus, demanding greater attention to identify and tackle corrupt practices. Another issue of interest is regarding suppliers, particularly in health crises like the COVID-19 pandemic. During the current pandemic, there have been corruption cases in the procurement process in WE and CEE countries. For instance, in the United Kingdom, 3.5 million testing kits were paid directly without a tendering procedure [7]; in Slovakia, a government official bought tests at 15-times more than their original price and received bribery for the deal [16].

In addition to identifying the actors in health systems that could be participants in health corruption, it is also essential to know how they might get involved to formulate the appropriate policies or regulations to limit the spread of corruption. A study performed by Transparency International (TI) described a list of corrupt practices in health systems [17]. Table 1 mentions some of these practices according to the leading actor involved.

Providing an overview of who is part of health systems allows a better understanding of how and where corruption in the health care sector could occur. However, it is equally important to consider what practices are perceived as linked to corruption, addressed in the following section.

Definition of health corruption from different perspectives

Several institutions, including governmental authorities (related to the rule of law) and non-governmental organisations (e.g., Transparency International), define health corruption. However, as mentioned previously, the meaning of health corruption might differ among societies. It is utterly relevant to take these discrepancies into account to elaborate policies to tackle health corruption, mainly because citizens play a critical role as victims and offenders. This section presents how health corruption is defined from three different perspectives: government, non-governmental organisations, and societies.

Governments' perspective

The European Commission (EC) defines corruption as "the abuse of power for private gain" and considers corruption an enabler for crime, creating uncertainty, slowing processes, and imposing additional costs to health systems [10]. Moreover, the Study on Corruption in the Healthcare Sector by the EC describes six types of health corruption:
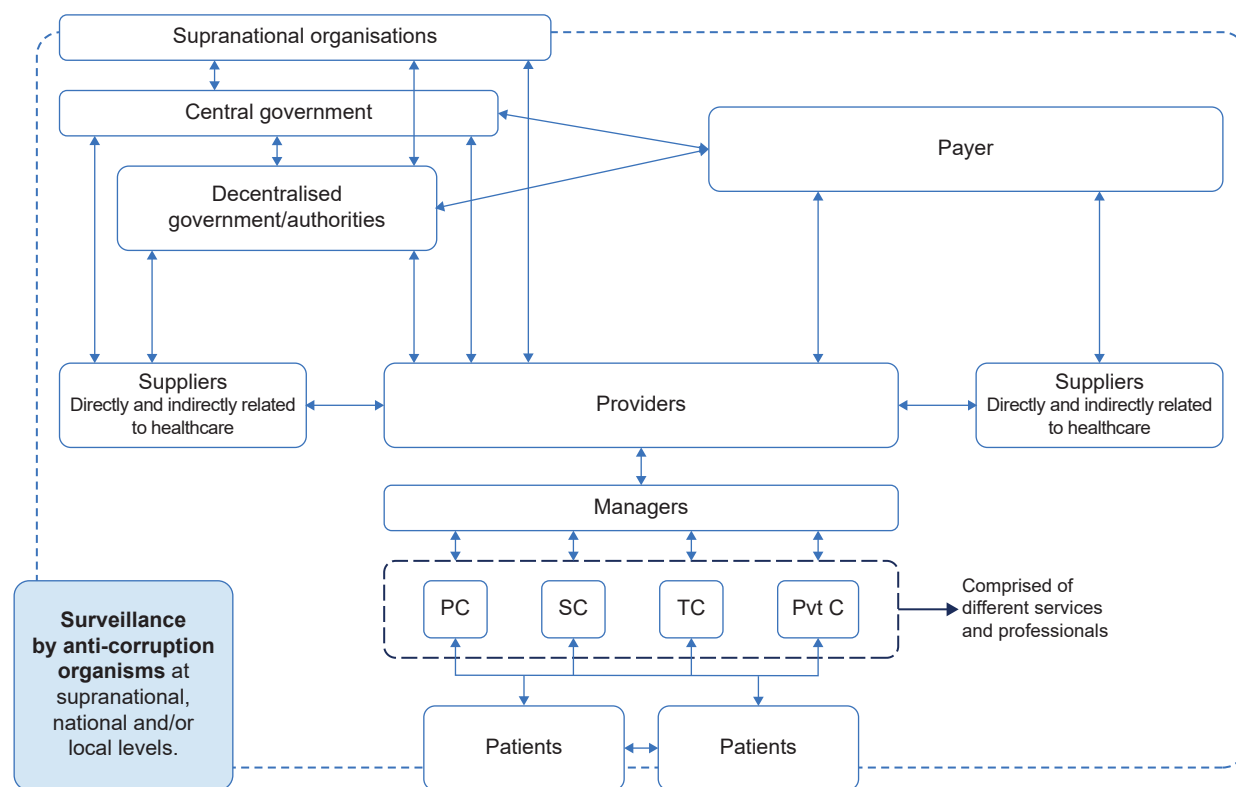
PC: primary care, SC: secondary care, TC: tertiary care, Pvt C: private care.

Figure 1. Interactions between actors related to the healthcare sector
Source: prepared by the authors.

Actor	Example of corrupt practices
Patients	• Patient organisations or professional associations demand or accept gifts and favours from a supplier in return for an advantage • Unofficial, under-the-table payments from patients to healthcare providers in return for receiving healthcare services
Providers	• Unnecessary referrals and procedures • Private use of public products, equipment, facilities or time • Overcharging for services or providing inferior services • Favouritism (preferential service or better treatment to specific groups at the expense of the wider population)
Payers	• Political influence and bribes in resource allocation • Unnecessary or ineffective purchases • Misuse of national and donor funds
Government	• Political interference in the definition of health policy and bribes in market regulation, insurance packages, etc. • Officials provide unwarranted certification to a health facility due to personal or political connections with the facility operators or the receipt of improper inducements • Procurement officials fix the bidding process to pre-determine the winner
Suppliers	• Bribes to manipulate procurement and monitoring process • Unnecessary or ineffective purchases • Preferential selection of contractor for private gain

Table 1. Actors of the health system and examples of corrupt practices
Source: adapted from Transparency International [17].

1) bribery in medical service delivery, 2) procurement corruption, 3) improper marketing relations, 4) misuse of (high) level position, 5) undue reimbursement claims, 6) fraud and embezzlement of medicines and medical devices [18]. Following this classification, the report describes a series of practices within each typology (Table 2).

European countries also have their definitions regarding corruption in the health care sector, often by listing a series of practices involved in corruption. For instance, WE countries like the UK and the Netherlands outline specific offences as corruption, such as bribery or misconduct in public office or use terms such as fraud, extortion, abuse of a position of authority or coercion to refer to corrupt practices [19, 20]. Similarly, CEE countries, like Poland, define specific activities as corruption, such as bribery, and clearly states that the bribe could be a material or personal benefit; [21] while the Penal Code in Slovakia criminalises different types of corruption, including extortion, bribery, conflicts of interest, facilitation payments, giving and receiving gifts and money laundering [22].

Non-governmental organisations' perspective

The leading organisation studying the effects of health corruption is TI. Although the organisation analyses corruption in different sectors, including private and public, it

has a specific chapter for health corruption. Comprehensive research was developed by the TI Pharmaceuticals and Healthcare Programme (PHP), in which the organisation classified corruption into eight categories presented in Table 3 [17].

This classification covers the same elements as the ones presented in Table 2; however, it includes a specific category for corruption at the governance of health systems and describes how corruption at this level would be presented as implementing policies that will have a negative, cascading effect throughout the system. Further, the full report mentions that the type of corruption in this category is the capture of health policy, defined as "powerful individuals, companies or groups use corruption to influence policies to benefit their private interests" [17]. Including the definitions and categories of non-governmental organisations like TI provide opportunities to take a more holistic approach to implement the right policies against corruption in the healthcare sector.

Societies' perspective

Despite these classifications and types of health corruption, context should not be taken out of the equation when defining health corruption as historical events that influence the behaviour and traditions of present societies. The results

Corrupt practice	Subtypes
Bribery in medical service delivery	• Access to healthcare • Preferential treatment • Better quality of healthcare • False sick leave statements
Procurement corruption	• Pre-bidding: corruptive needs assessment • Pre-bidding: circumvention of tender procedures • Pre-bidding: tailored tendering • Bidding: bribery and kickbacks during the bid evaluation • Bidding: favouritism • Bidding: collusion and/or market division in bidding • Post-bidding: false invoicing • Post-bidding: changing contract agreements
Improper marketing relations and regulations	• Direct prescription influencing (quid-pro-quo deals) • Indirect prescription influencing (creation of loyalty) • Undue positive list promotion • Authorisation of medicines and certification of medical devices
Misuse of (high) level positions	• Revolving door corruption • Regulatory state capture • Trading in influence • Conflict of interest • Favouritism and nepotism
Undue reimbursement claims	• "Upcoding" (reimbursement of maximum tariffs) • Reimbursement of unnecessary treatments • Reimbursement non-delivered treatments
Fraud and embezzlement of medicines and medical devices	• Sale of public or prepaid medicines for private gain • Sale of counterfeit medicines • Use of publicly owned or financed devices or facilities for private gain

Table 2. Typologies of health corruption according to the Study on Health Corruption by the European Commission
Source: European Commission [18].

Category	Description of its impact
Health system governance	Distorted policies and legislation will negatively affect public health goals and have a cascading effect throughout the health system
Health system regulation	Regulation implemented to protect patients from the dangers of healthcare services and treatments can be exploited by individuals, companies and groups
Research and development	Corruption in research and development can lead to unsafe or ineffective products entering the health system and medical knowledge being compromised
Marketing	The improper marketing of products in the healthcare sector can lead to the use of inappropriate products and unnecessary treatments
Procurement	Corruption in procurement can lead to the purchase of obsolete, dangerous, ineffective, or undelivered products, facilities and services
Product distribution and storage	During distribution and storage genuine products may be stolen and falsified, substandard and re-packaged products can enter the health system
Financial and workforce management	The theft of healthcare funds and corruption in the management of healthcare providers will limit the quality of healthcare services delivered to patients
Delivery of healthcare services	Any type of corruption during the delivery of a healthcare service will directly impact on the quality and level of care offered to patients by healthcare providers

Table 3. Categories of corruption in the healthcare sector according to Transparency International
Source: Petkov et al. [17].

from the Eurobarometer on Corruption by the European Commission clearly illustrate how societies can contrastingly interpret the same situation across European countries [23]. A good example is drawn from the question "If you wanted to get something from the public administration or a public service, to what extent do you think is acceptable to do a favour?" from which CEE countries like Slovakia and Hungary scored the highest with 68% and 60%, respectively. WE countries like the UK (22%) and Germany (21%) reported values almost three times lower than their CEE peers. Similar results were shown when asking if giving a gift was acceptable (Hungary 61%, Slovakia 50%, UK 23%, and Germany 16%) or when asking if giving money was acceptable (Hungary 39%, Slovakia 29%, UK 22%, and Germany 21%) [23].

Defining corruption in the healthcare sector remains a challenge for policymakers and researchers studying this issue. Nonetheless, this section provided a more detailed view from three different perspectives. It is crucial that when addressing health corruption, context should be considered not to justify acts but to implement the right actions with the right message to governments and societies. The following section complements the information from the actors and definitions by exploring the performance of ten selected European countries in indicators related to corruption in public and private sectors, including health care.

Evaluation of corruption indicators

Corruption indicators aim to evaluate the state of corruption in a given country through various methodologies. Despite no specific indicators on health corruption, the healthcare sector's corruption is not isolated from the national level of corruption. International organisations like TI, the World Bank, and the World Justice Project have made substantial efforts to describe how corruption looks in different countries. Therefore, this section will present selected indicators from each of these organisations and benchmark the results from a number of European countries – Germany, France, Croatia, Russia, Netherlands, Poland, Slovakia, United Kingdom, Belarus, and Sweden. The selected indicators are the corruption perception index (CPI), the rule of law index, the control of corruption, and the global corruption barometer.

Corruption Perception Index

The CPI is an indicator measured by TI; it reflects the perceived levels of corruption in the public sector and integrates the results from multiple sources and society members. The CPI aims to provide a general perception of the level of corruption in the public sector; it uses a scale from 0 to 100, with 100 representing that the country is free of corruption and 0 meaning that the country is highly corrupt [24]. Figure 2 describes the trend of CPI in the ten selected European countries from 2000 to 2010.

Despite scoring high in the CPI (Figure 2), some high-income countries like Sweden, the UK, and the Netherlands, experienced an increase in the levels of perception of corruption from 2000 to 2020, decreasing up to 10 points in the UK. In contrast, Poland, Slovakia, Belarus and Croatia, who scored low in general, successfully improved the perception of corruption and increased 6 to 15 points from 2000 to 2020. During the same period, Germany and France experienced a slight decline in the perception of corruption. The worst performer, despite some recent achievement, was Russia that scored 30 in their 2020 outcome.
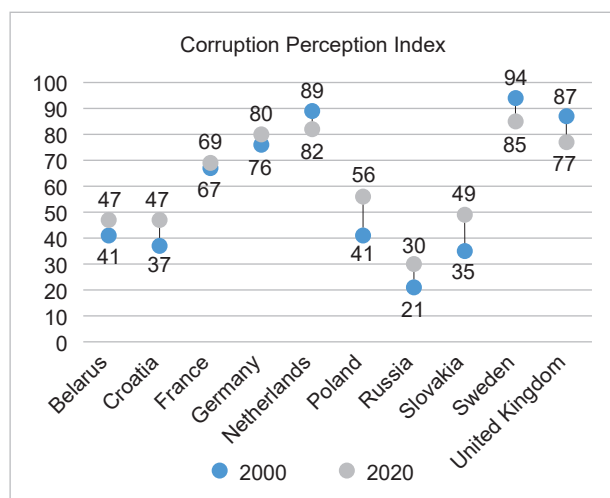
Figure 2. Corruption Perception Index from selected countries in 2000 and 2020. The index is scored from 0 to 100; the closer to zero, the higher the perception of corruption
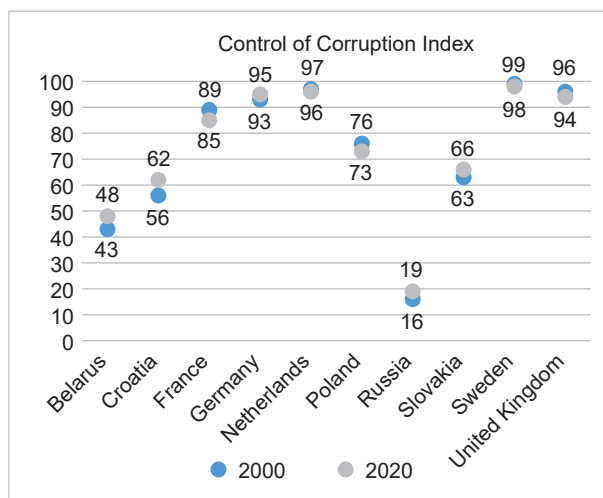
Source: Transparency International [24].

Figure 3. The trend of Control of Corruption Index from selected countries. The index is scored from 0 to 100; the closer to zero, the lower the control of corruption.

Source: The World Bank [25].

Control of corruption

The World Bank reports control of corruption indicator as one of the six dimensions of governance. Control of Corruption captures perceptions of the extent to which public power is exercised for private gain, including petty and grand forms of corruption and "capture" of the state by elites and private interests. This indicator results from a summary of data collected from four sources of data: i) surveys of households and firms, ii) commercial business information providers, iii) non-governmental organisations, and iv) public sector organisations. The control of corruption index is reported in percentile rank ranging from 0 to 100, with higher values meaning better outcomes [25].

According to this indicator, Sweden, Netherlands, Germany, and the UK sustained their low levels of corruption with scores exceeding 92 in their measures from 2000 and 2020. The most significant drops were observed in France (from 89 in 2000 to 85 in 2020) and Poland (from 76 in 2000 to 73 in 2020). The rest of the selected countries experienced better control of corruption levels; however, in Russia, the control of corruption remains a significant problem as the country reported scores lower than 20. Figure 3 illustrates the countries' performance and changes from 2000 to 2020.

Rule of Law Index – absence of corruption

The World Justice Project is an independent organisation working to advance the rule of law worldwide. The Rule of Law Index measures how the rule of law is experienced and perceived via household surveys, legal practitioners and expert opinions worldwide. One of the eight factors included to score the Rule of Law Index is the absence of corruption which considers three forms

of corruption: bribery, improper influence by public or private interests, and misappropriation of public funds or other resources. The index score ranges from 0 to 1, with 1 indicating the strongest adherence to the rule of law, thus, a lower prevalence of corruption [26].

Figure 4 shows similar results as the control of corruption index with Sweden, Netherlands, Germany, and the United Kingdom reporting the best performance with 0.91, 0.89, 0.83, and 0.82 in 2020, respectively. Again, Russia, Belarus, Slovakia and Croatia had the lowest values.

The Global Corruption Barometer

The Global Corruption Barometer (GCB) is another indicator measured by Transparency International that measures the perception of the corruption level within countries but also the experience of it, giving a more in-depth reflection of the corruption within countries. In 2020, the GCB surveyed more than 40,000 people in 27 countries across Europe. The GCB revealed that approximately 28% of people pay a bribe or use a personal connection to access public services, such as health care or education. Although just six per cent of people paid a bribe for health care, about one-third of EU residents depend on personal connections to get medical care [27].

This survey showed that 19 to 41% of people in the selected ten countries feel that corruption increased in the previous 12 months and that their governments are doing little to tackle this problem. Further, the GCB showed that between 1 to14% of users of public services from the ten included countries paid a bribe to get a service in the previous 12 months; Poland, Slovakia, and Croatia recording the highest rates (10%, 11%, and 14%, respectively). Sextortion, when sex becomes the currency of the bribe and people are coerced into engaging in sexual acts in exchange for essential services, was also prevalent in

Rule of Law Index – absence of corruption
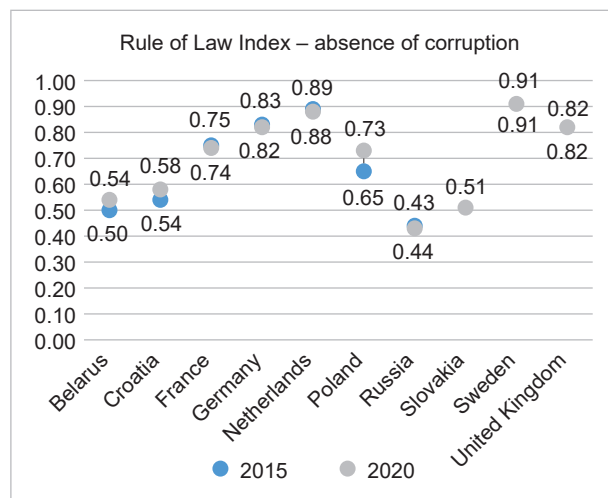
● 2015　　● 2020

Figure 4. Trend of the absence of corruption factor within the Rule of Law Index from selected countries. The index is scored from 0 to 1; the closer to zero, the lower the adherence to the rule of law

Source: The World Bank [25].

Poland and Croatia, where 10% or more have experienced it directly or know someone who has.

This section presented the results from different corruption indicators in the public and private sectors, including health care, from 10 European countries. The trends in the performance from 2000, or 2015 in the case of the rule of law index, illustrate the presence and level of corruption across these countries. Although countries like France, Germany, Sweden, the Netherlands, and the UK reported better performance than CEE countries, the comparison with their previous scores showed a decline in most of the indicators in their most recent evaluation. On the other hand, CEE countries performed better than their previous results, nonetheless remaining alarmingly low.

▇ Recommendations

A series of recommendations could be formulated based on the present report. Firstly, there is an urgent need to clearly understand corruption in health systems by proposing a standard definition agreed among the five main actors participating in the system. This would allow a better comprehension of what practices could be considered corrupt while increasing the awareness among the actors. Secondly, there should be a more transparent and accountable procurement process. Strategies like Open Contracting for Health are good alternatives to increase accessibility to information across all society members and have proven to be successful even in low- and middle-income countries [28]. Thirdly, a specific indicator for corruption in health care needs to be created. The available indicators provide a general idea of the dimension of the problem; however, it remains unknown what the real impact of corruption in health systems is. Generating a specific indicator to measure health corruption would allow governments to identify the processes and actors engaging in corrupt practices, facilitating the formulation of regulations and policies to prevent these practices. Lastly, all these recommendations must take a whole-of-government and whole-of-society approach to be effective; excluding key stakeholders from any of these actions would risk the probability of success.

▇ Conclusions

Corruption in the health care sector is prevalent among European countries, representing a threat to their health systems. The multiple actors involved in delivering care to patients and populations highlights the vulnerability of this sector to allow corrupt practices to occur. Moreover, the different perspectives of what is and what is not considered corruption in health care are a challenge that needs to be tackled by governments and societies to create a shared understanding of health corruption. Further, the lack of an indicator of corruption in health systems limits the capacity to measure the magnitude of the problem. While health corruption is still a problem in countries regardless of their level of income, solutions like open contracting for health are sprouting around the globe, giving hope that this problem's negative impact on health and economies can be solved.

References

1. Transparency International [Internet], *What is Corruption?*, https://www.transparency.org/en/what-is-corruption (accessed: 15.11.2021).
2. Jain A., Nundy S., Abbasi K., *Corruption: Medicine's Dirty Open Secret*, "British Medical Journal" 2014; 348: 1–2, doi: 10.1136/bmj.g4184.
3. Lio M.C., Lee M.H., *Corruption Costs Lives: A Cross-Country Study Using an IV Approach*, "International Journal of Health Planning and Management" 2016; 31 (2): 175–90, doi: 10.1002/hpm.2305.
4. Fulton R.L., *The Ignored Pandemic*, "Journal of Global Oral Health" 2018; 1 (1): 13–16, doi: 10.25259/JGOH-15-2019.
5. Mascarenhas O.A.J., Kesavan R., Bernacchi M.D., *On Reducing Information Asymmetry in US. Health Care*, "Health Mark Qarterly" 2013; 30 (4): 379–98, doi: 10.1080/07359683.2013.847338.
6. Kajetána Kičuru obvinili z korupcie, zasahovala u neho NAKA. Denník N [Internet], https://dennikn.sk/1863356/u-byvaleho-sefa-statnych-hmotnych-rezerv-kicuru-zasahuje-naka/?ref=tit1 (accessed: 15.11.2021).
7. Kohler J.C., Wright T., *The Urgent Need for Transparent and Accountable Procurement of Medicine and Medical Supplies in Times of COVID-19 Pandemic*, "Journal of Pharmaceutical Policy and Practice" 2020; 13 (1): 1–4.
8. Dupuy K., Divjak B., *Ebola and Corruption: Overcoming Critical Governance Challenges in a Crisis Situation*, U4 Anti-corruption Resource Centre; March: 2015.

9. Stepurko T., Pavlova M., Gryga I., Groot W., *Informal Payments for Health Care Services – Corruption or Gratitude ? A Study on Public Attitudes, Perceptions and Opinions in Six Central and Eastern European Countries*, "Communist and Post-Communist Studies" 2013; 46 (4): 419–431, doi: 10.1016/j.postcomstud.2013.08.004.

10. European Commission. Corruption [Internet]. 2020, https://ec.europa.eu/home-affairs/what-we-do/policies/organized-crime-and-human-trafficking/corruption_en (accessed: 15.11.2021).

11. Murray C., Frenk J., *A WHO Framework for Health System Performance Assessment*, World Health Organization; 1999, https://apps.who.int/iris/bitstream/handle/10665/66267/a68870.pdf (accessed: 10.01.2021).

12. World Health Organization [Internet]. Governance, https://www.who.int/healthsystems/topics/stewardship/en/ (accessed: 15.11.2021).

13. Savedoff W.D., Hussmann K., Sparrow M.K., Prevenslik-Takeda L., *The Causes of Corruption in the Health Sector*, "Global Corruption Report" 2006; 2017: 3–24.

14. Rondinelli D.A., Nellis J.R., Cheema G.S., *Decentralisation in Developing Countries: A Review of Recent Experience*, Washington, DC: World Bank Staff Work Paper; 1983. SPW581, https://documents.worldbank.org/curated/en/868391468740679709/Decentralization-in-developing-countries-a-review-of-recent-experience (accessed: 15.11.2021).

15. Onwujekwe O. et al., *Corruption in the Procurement of Pharmaceuticals in Anglophone Sub-Saharan Africa: A Scoping Literature Review*, October 2020.

16. Kajetána Kičuru obvinili z korupcie, zasahovala u neho NAKA. Denník N [Internet], https://dennikn.sk/1863356/u-byvaleho-sefa-statnych-hmotnych-rezerv-kicuru-zasahuje-naka/?ref=tit1 (accessed: 20.11.2021).

17. Petkov M., Cohen D., Jones P., Goodall M., *Diagnosing Corruption in Healthcare*. Berlin (Germany): Transparency International; 2016, https://www.transparency.org.uk/publications/diagnosing-corruption-healthcare (accessed: 20.11.2021).

18. European Commission (Luxembourg: Publications Office of the European Union). Study on Corruption in the Healthcare Sector; 2013. Report No. HOME/2011/ISEC/PR/047-A2, https://ec.europa.eu/home-affairs/sites/default/files/what-is-new/news/news/docs/20131219_study_on_corruption_in_the_healthcare_sector_en.pdf (accessed: 20.11.2021).

19. HM Government [Internet]. Anti-Corruption Strategy 2017–2022; 2017, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/893046/6.5128_Anti-Corruption_Strategy_Year1_Update_v7_WEB.PDF (accessed: 16.11.2021).

20. Netherlands Criminal Code; 1985, https://www.ejtn.eu/PageFiles/6533/2014%20seminars/Omsenie/WetboekvanStrafrecht_ENG_PV.pdf (accessed: 18.11.2021).

21. Konopka T, Randzio-Sajkowska K., *The Anti-Bribery and Anti-Corruption Review: Poland*, The Law Reviews; 2021, https://thelawreviews.co.uk/title/the-anti-bribery-and-anti-corruption-review/poland (accessed: 20.11.2021).

22. Risk and Compliance Portal. Corruption in Slovakia. Slovakia Corruption Report & Profile, https://www.ganintegrity.com/portal/country-profiles/slovakia/ (accessed: 20.11.2021).

23. European Commission. Special Eurobarometer 364: Corruption; 2014, https://ec.europa.eu/public_opinion/index_en.htm%5Cnhttp://ec.europa.eu/public_opinion/archives/ebs/ebs_364_en.pdf (accessed: 18.11.2021).

24. Transparency International. Corruption Perceptions Index 2021 [Internet], https://www.transparency.org/en/cpi/2021 (accessed: 15.11.2021).

25. The World Bank. World Governance Indicators [Internet], https://info.worldbank.org/governance/wgi/ (accessed: 15.11.2021).

26. Kaufmann D., Kraay A., Mastruzzi M., *The Worldwide Governance Indicators: Methodology and Analytical Issues*, "Hague Journal on the Rule of Law" 2011; 3 (2): 220–246, doi: 10.1017/S1876404511200046.

27. Kukutschka R.M.B., *Global Corruption Barometer European Union 2021: Citizens' Views and Experiences of Corruption* [Internet]. 2021: 1–76, https://www.transparency.org/en/publications/gcb-european-union-2021 (accessed: 15.11.2021).

28. Transparency International, *Open Contracting for Health Final Evaluation Summary Transparency International Global Health Programme*, 2021: 1–17, https://ti-health.org/content/open-contracting-for-health-final-evaluation-summary/ (accessed: 15.11.2021).