

# CHALLENGES OF THE HOSPITAL MANAGEMENT IN THE ERA OF COVID-19

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**Abstract** - Besides the obvious risk for the each person health, the SARS-CoV-2 virus puts a lot of pressure on functioning the health care system, on all levels. The purpose of this paper is to examine the level of hospital health care. Paper determines critical factors and challenges of functioning hospital as well as hospital management. Understanding the effects of COVID-19 pandemic on different features of hospital management is the basis for developing approaches and measures for recovering and improving health care and economic performance of hospitals. Paper provides summary of the experiences in hospital management in the era of COVID-19 and it enables understanding possible effects which help policymakers/management to develop approaches for improving hospital management performance.

**Keywords** - COVID-19, Hospital Management.

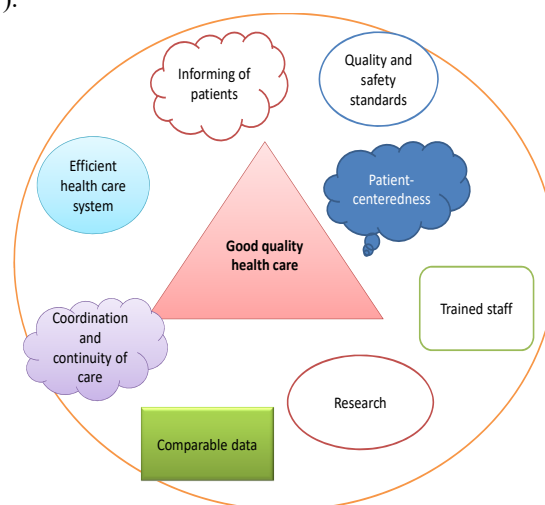
## I. INTRODUCTION

Pursuant to the World Health Organisation's definition from 1946, health is described as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (Grunewald and Vaidean, 2010). Therefore, health should be perceived as a multifaceted term since it is a basis of social and economic survival and sustained development of an individual, a nation and of the world in its entirety (Ostojić et al., 2015). Health is a basic social value and the health care system has an important role in providing access to health care services for all members of the society in order for them to have equal possibilities of maintaining health. Moreover, the organisation and effective functioning of the health care system of a certain country is considered to be a key element of a wider sustainable development strategy (Ostojić et al., 2015).

In the last two decades, there have been a few epidemics, such as SARS, Ebola, and now COVID-19 (Deloitte, 2021). COVID-19 health crisis may become a generation-defining moment for hospital healthcare (Garg and Wray, 2020).

Undoubtedly that COVID-19 outbreak will disrupt previously hospital management practices for an undetermined period (Weiss et al., 2020). Namely, besides the obvious risk for the each person health, the SARS-CoV-2 virus puts a lot of pressure on functioning the health care system, on all levels. Not the only patients with the SARS-CoV-2 virus are in danger, but also all patients having other diseases and being dependent on the hospital health care. The purpose of this paper is to examine the level of hospital health care. Different groups of impacts or challenges can be defined, having in mind hospital health care: (1) providing health care services to the patients with the SARS-CoV-2 virus; (2) providing

health care services to the patients with other diseases dependent on the hospital health care services and ensuring health safety; (3) ensuring health safety of the hospital staff and (4) ensuring the scope of hospital health care services and the level of quality. A good quality health care system has certain features, which should be taken into account while creating activities and measures for the efficient hospital management in the era of COVID-19 (Figure 1).



**Figure 1. Good quality health care system**  
Source: Ostojić et al. (2015).

In order to deal with challenges brought by COVID-19 in a proper manner, ensuring the scope and the quality of hospital health care and safety of the staff, hospital management has to answer and implement critical measures.

Paper is divided into three parts. After the first, introductory part, the second part refers to literature review, definition and analysis of potential challenges for the hospital management, while facing with

COVID-19. Third part brings the conclusion of the paper.

## II. ANALYSIS AND DISCUSSION

The COVID -19 pandemic tested the resilience of health systems worldwide (Plagg et al., 2021). It is a complex global public health crisis presenting clinical, organisational and system-wide challenges (Kringos et al., 2020). World Health Organization assists national stakeholders with developing a structured approach to their response, one of the examples are “COVID-19 Clinical management, Living guidance” from 2021. Namely, COVID-19 represents severe challenge to each hospital nationwide, from emergency management capacity to the ability to reserve and distribute supplies (Deloitte, 2021). Undoubtedly, hospitals and other medical institutions face unprecedented financial pressure as for example elective procedures and surgeons are delayed or cancelled (Marc et al., 2021).

Conducted analysis and discussion can be divided into three different areas of hospital management. The one dealing with patients and staff safety, the one dealing with supply chain challenges and the one focusing on coordination among management of the hospital and the need for agility and fast decision making.

### 2.1. Upgrading level of protection for healthcare professionals and patients

Following measures can contribute upgrading the level of protection of healthcare professionals and patients: (1) enhancing access control and (2) upgrading hospital infection control (Deloitte, 2021). Features of these measures are explained in further text.

Most hospitals are facing the risk and challenge of taking care of regular patients (Weiss et al., 2020). Findings of some researches in 2020 imply that short term patients neglect their acute and chronic disease problem. There is significant decrease in emergency room admissions and even higher decrease in outpatient clinic referrals (Rosenbaum, 2020). This situation in longer period of time can have substantial effect on the society and economy. This challenge can be minimised by implementing clear and sound safety protocols in the hospitals, and with sound communication of these protocols. Explanations and communications via all possible channels is very important for patients, to feel safe and secure to seek health care services if they are in need.

For example, hospitals introduced strict separation of departments dealing with COVID-19 patients, as well as equipment, staff, etc. From the aspect of safety, protocols on admitting patients in the hospitals which

must ensure separation of COVID-19 patients is of highest importance. For this purpose, all patients must go through triage, either in emergency room or in preadmission clinic (Weiss et al., 2020).

Also, the increase in the use of telemedicine can be critical. Generally, application of information and communication technology (ICT) may positively influence achievement of four general groups of objectives (OECD, 2010): (1) improvement of quality and efficiency of health care; (2) decrease in operational costs of clinical services; (3) decrease in administrative costs and (4) enabling of creation of new forms of protection. Introduction of e-health is an important precondition for satisfying the increasing demand, quality of health care services and extension of the existing capacity of health systems (Ostojić et al., 2015).

The priority is to provide the best possible care by using available resources. Telemedicine enables fast access to the common and distant medical expertise by way of information and telecommunication technology, irrespective of the location of the patient or needed information. Telemedicine also enables access to information and health services in case of lack of knowledge, information or inaccessibility of service providers at certain locations. It includes a wide range of services and products, and the most frequently mentioned ones are tele-consultations, provision of second opinions, tele-education, distant monitoring of the patient's condition, information exchange by electronic post, faster and easier communication among physicians and between physicians and patients (Ostojić, et al., 2015).

Telemedicine has been used as an alternative to minimize in-person exposure to the coronavirus (Sun et al., 2021). Increase in the telemedicine services can minimise the need for personal contact with patients. However, one should be aware that telemedicine services cannot replace entirely personal contacts with patients. Conclusively, hospitals should promote and enhance primary community diagnosis and treatment through telemedicine (Deloitte, 2021). Inkster et al. (2020) agree that during the COVID-19 crisis, internet medical services have become a major route for accessing remote care. Sun et al. (2021) predict that it is unlikely that care delivery will fully return to the pre-COVID form.

All hospitals, departments, whether is about day-care or long-term care have their scheduling systems. In the era of COVID-19, these scheduling systems should be revised and adapted in a way that number of patients at the same time, especially in the day-care units is minimized and safety protocols can be obeyed, on both sides – hospital staff and patients. It is more challengeable in long-term care units, but these units should also pay attention to reorganisation

and re-scheduling in a way they minimise patient to patient interaction (Weiss et al., 2020).

Patients scheduled for surgeons, procedures, etc., should be tested for the COVID-19 prior entrance to the hospital. Testing is very important for the staff, especially the ones taking care of the infected patients, hardest cases.

## 2.2. Supply chains disturbance

COVID-19 illustrates that many entities are not fully aware of the vulnerability of their supply chain relationships to global shocks (Deloitte, 2020). Medical institutions are not the exception. Hospitals may face shortages of urgently needed medical supplies and the inability of upstream supply chains to respond promptly to their needs (Deloitte, 2021).

In fact, due to disturbances caused by the COVID-19, Deloitte (2020) proposes a new supply chain model, which will support much more supply chain agility and resiliency.

Undoubtedly, COVID-19 cause shortages for hospitals in different material, medicines and equipment, all over the world. In order to avoid these situations, some propose at least three months period of planning of supplies for key supplies (for example Weiss et al., 2020). It should consider long term contract with suppliers of key supplies, as well as to use a selection of products, not a single product in order to be safe if one product supply chain disrupts.

## 2.3. Improvement in emergency management system

According to Deloitte (2021), the purpose of establishing an emergency management system in healthcare is to prevent and react to emergencies effectively. In order to do so all four key phases of the management system should be taken into account (Figure 2).



Figure 2. Phases of the management system  
Source: Deloitte (2021).

Regular management coordination in the situation of crisis are of great importance, via all possible

channels. If organised physically, all safety standards should be obeyed (distance, masks, etc.). Tele-meetings are also good option, from the point of the risk of getting infected and from the point of quicker and less time consuming organisation and attending the meeting. Besides regular meetings, online/phone groups should be created in order to share information 24/7 (including weekends, holidays, etc.) in real time.

It is necessary to ensure participants on these coordination represent all relevant stakeholders involved in the contribution of the hospital management during the crisis. Of course, depending on the specific issues, ad-hock participants should be invited too (Weiss et al., 2020).

Special attention should be put into establishing an emergency system and risk management team (Deloitte, 2021).

Marc et al. (2021) suggest that the ability to respond to a crisis requires leaders to develop organizational plans that focus on their patients nad employees' best interest.

Finally, Garg et al. (2020) propose different strategies, depending upon the domain (Table 1).

| Domains        | Strategies                         |
|----------------|------------------------------------|
| Communications | Ensure two-way communication       |
|                | Centralize email communication     |
|                | Use a consistent format            |
|                | Keep it personal                   |
|                | Create a communications repository |
|                | Use novel modes of communication   |
| Staffing       | Be aware of the workload           |
|                | Ask for help                       |
|                | Ration your most valuable resource |
|                | Create "operational champions"     |
| Wellness       | Create a time to reflect           |
|                | Acknowledge burnout openly         |
|                | Celebrate your victories           |

Table 1. Hospital medicine management strategies during the COVID-19 pandemic  
Source: Garg and Wray (2020).

Also, of no less importance, is to conduct detailed analysis of the weaknesses and strengths that have been revealed during this crisis, as e lesson for future, to be more prepared if possible (Castro-Conde et al., 2021).

### III. CONCLUSION

No matter pandemic circumstances, hospitals should aim to maintain the scope and the quality of its health care services to the all patients. A great responsibility is on the hospital management in achieving these objectives. From the analysis and discussion, several recommendations for the increase of the effectiveness of hospital management in the COVID-19 pandemic situation:

1. Safety standards and protocols should be created and implemented (social distance, patients wearing masks all the time, testing prior admitting to the hospital, etc.)
2. Clear communication/explanations on implemented safety standards in the hospitals using electronic, written and social media
3. Promotion of hospital health care safety in order patients seek for necessary care on time
4. Extension and promotion of telemedicine services with the awareness that these services cannot replace personal contact in total
5. Organisation and scheduling system which will minimise number of patients at the same time in the day-care units
6. Organisation and scheduling system which will minimise patient to patient interaction in the long-term hospital units
7. Regular management coordination and making decision process more agile and faster
8. Continuous monitoring and reporting on epidemiological situation in the hospital and fast reactions to changes.

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