

American University in Cairo

## AUC Knowledge Fountain

---

Theses and Dissertations

Student Research

---

Fall 1-15-2022

### Why Do Street-Level Bureaucrats Risk Themselves for Others? The Case of Public Health Care Workers in Egypt

Mohamed Adel Ahmed Eraky Moussa  
mohamed.eraky@aucegypt.edu

Follow this and additional works at: <https://fount.aucegypt.edu/etds>

---

#### Recommended Citation

##### APA Citation

Moussa, M. A. (2022). *Why Do Street-Level Bureaucrats Risk Themselves for Others? The Case of Public Health Care Workers in Egypt* [Master's Thesis, the American University in Cairo]. AUC Knowledge Fountain.

<https://fount.aucegypt.edu/etds/1722>

##### MLA Citation

Moussa, Mohamed Adel Ahmed Eraky. *Why Do Street-Level Bureaucrats Risk Themselves for Others? The Case of Public Health Care Workers in Egypt*. 2022. American University in Cairo, Master's Thesis. *AUC Knowledge Fountain*.

<https://fount.aucegypt.edu/etds/1722>

This Master's Thesis is brought to you for free and open access by the Student Research at AUC Knowledge Fountain. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of AUC Knowledge Fountain. For more information, please contact [mark.muehlhaeusler@aucegypt.edu](mailto:mark.muehlhaeusler@aucegypt.edu).

**The American University in Cairo**

**School of Global Affairs and Public Policy**

**WHY DO STREET-LEVEL BUREAUCRATS RISK THEMSELVES FOR  
OTHERS? THE CASE OF PUBLIC HEALTH CARE WORKERS IN  
EGYPT**

**A Thesis Submitted to the**

**Public Policy and Administration Department**

**in partial fulfillment of the requirements for the degree of**

**Master of Public Administration**

**By**

**Mohamed Adel Ahmed Eraky Moussa**

**Fall 21**

The American University in Cairo  
School of Global Affairs and Public Policy  
Department of Public Policy and Administration

WHY DO STREET-LEVEL BUREAUCRATS RISK THEMSELVES FOR OTHERS? THE  
CASE OF PUBLIC HEALTHCARE WORKERS IN EGYPT

Mohamed Adel Ahmed Eraky Moussa

Supervised by Professor Dr. Shahjahan Bhuiyan

ABSTRACT

The COVID-19 pandemic has shown how street-level bureaucrats play an essential role in working under tremendous psychological and physical pressure with limited resources. Healthcare workers are at the front lines to fight against the COVID-19 pandemic worldwide, and they are most vulnerable to infection and illness. Therefore, it is essential to identify the factors that enhance health care workers' motivation at the time of pandemics and determine their willingness to risk their lives for others. The current study covers a sample of public health care workers working in two central quarantine public hospitals in Egypt. It considers a range of administrative, physician, nurses, non-medical staff and managers who are the main focus of this research. A purposive sample of 40 participants was selected considering different specialties in order to develop a holistic picture of the relationship between the study variables from several viewpoints. This research relays on qualitative data conducted using a semi-structured in-depth interviews. The findings of the present study suggest that patriotism, a sense of responsibility, religious beliefs, public recognition, and appreciation are the most significant factors influencing health care workers as street-level bureaucrats to risk their lives for others during the COVID-19 pandemic. Moreover, the study results show that while good compensation packages, donations, and peer support boost the health care workers' motivation during their work in quarantine hospitals, the lack of organizational preparedness, and non-compliance with preventive measures by citizens are areas for improvements in order to obtain better outcomes. Recommendations based on the findings are; governments and health care organizations should promote sense of responsibility among health care workers, pay attention to public health care workers by presenting their success stories and appreciating their efforts across all media, create a positive working environment through enhancing helpful behavior and peer support throughout hard times such as the current pandemic; a well-designed disaster preparedness strategy should be in place to ensure that communities and health care organizations have a well-structured system to manage health care disasters effectively.

**Keywords:** Street Level Bureaucrats, Motivation, Health care workers

## Table of Contents

LIST OF FIGURES .....	v
LIST OF APPREVIATIONS .....	Vi
<b>CHAPTER ONE</b>	
<b>INTRODUCTION &amp; RESEARCH OVERVIEW .....</b>	<b>1</b>
1.1. INTRODUCTION.....	1
1.2. STATEMENT OF THE PROBLEM .....	2
1.2. RESEARCH QUESTIONS .....	3
1.3. SIGNIFICANCE OF THE STUDY .....	4
1.4. RESEARCH OUTLINE.....	4
<b>CHAPTER TWO</b>	
<b>LITERATURE REVIEW .....</b>	<b>5</b>
2.1. HEALTH CARE WORKERS AS STREET-LEVEL BUREAUCRATS .....	5
2.1.1. THEORIES OF STREET LEVEL BUREAUCRACY.....	5
2.1.2. ROLES OF SLBS .....	8
2.2. COVID-19 pandemic .....	10
2.2.1. COVID-19 pandemic as a crisis .....	10
2.2.2. Healthcare workers and COVID-19 .....	12
2.3. MOTIVATION .....	14
2.3.1. Motivators & De-Motivators .....	17
2.3.2. Motivational Determinants at the Individual Level in Healthcare Workers.....	18
2.3.3. Motivational Determinants at the Societal/Cultural Level in Healthcare Workers.....	18
2.3.4. Motivational Determinants at Organizational/Structural Level in Healthcare Workers.....	19
<b>CHAPTER THREE</b>	
<b>CONCEPTUAL FRAMEWORK AND METHODOLOGY .....</b>	<b>25</b>
3.1. CONCEPTUAL FRAMEWORK.....	25
3.2. RESEARCH METHODOLOGY .....	28
3.2.1. DESIGN .....	28
3.2.2. METHOD.....	29
3.2.3. SAMPLING.....	29
3.2.4. INTERVIEWING .....	30

3.2.5. DATA ANALYSIS.....	31
3.2.6. ETHICAL CONSIDERATIONS .....	31
3.2.7. LIMITATIONS OF THE STUDY.....	32
3.2.8. DELIMITATIONS OF THE STUDY .....	33
<b>CHAPTER FOUR</b>	
<b>FINDINGS AND DISCUSSION.....</b>	<b>34</b>
4.1. Factors influencing the willingness of health care workers to risk their lives for others .....	34
4.1.1. Patriotism and sense of responsibility.....	34
4.1.2. Religious beliefs.....	37
4.1.3. Public recognition and appreciation .....	39
4.2. Factors that boosted health care workers' motivation during Covid-19 pandemic .....	41
4.2.1. Good compensation packages .....	41
4.2.2. Donations .....	43
4.2.3. peer support .....	45
4.3. Demotivating factors influencing the productivity of health care workers during COVID-19 pandemic.....	47
4.3.1. Lack of organizational preparedness.....	47
4.3.2. Non-compliance with preventive measures by citizens.....	50
<b>CHAPTER FIVE</b>	
<b>CONCLUSION AND RECOMMENDATIONS.....</b>	<b>52</b>
5.1. CONCLUSION.....	52
5.2. RECOMMENDATIONS .....	55
REFERENCES.....	59
APPENDICES.....	73
APPENDIX A: INTERVIEW QUESTIONS.....	73
APPENDIX B: IRB APPROVAL .....	74
APPENDIX C: CONSENT FORM.....	75

## List of Figures

Figure 1: Conceptual research framework about the motivational factors and their leading behavioral outcomes.....	27
---	----

## List of abbreviations

COVID-19	Coronavirus Disease 2019
WHO	The World Health Organization
SLBs	Street-Level Bureaucrats
EAC	East African Community
GHO	Global Health Observatory
PTSD	Posttraumatic Stress Disorder
ICU	Intensive Care Unit
CHWs	Community Health Workers
PFA	Psychological First Aid

# Chapter One

## Introduction and Research Overview

### 1.1. Introduction

The Chinese Center for Disease Control and Prevention formally announced a new coronavirus as the causative pathogen of Coronavirus Disease 2019 (COVID-19) on January 8, 2020 (Lu et al., 2020). The novel COVID-19 pandemic began in Wuhan, China, in December 2019, and have since evolved into a mega public health crisis for China and the rest of the world (Kamal, 2020). On January 30, 2020, the World Health Organization (WHO) reported that this flare-up resulted in a general health crisis of global concern (Mahase, 2020), leading the organization to declare it as public health emergency.

Street-level bureaucrats (SLBs) are a specific category of employees who interact directly with people to provide many public services based on specific policies set by governments (Lipsky, 1980). In times of mega crises, such as the covid-19 pandemic, there is always a state of disorientation and dysfunction in fundamental values that significantly affect decisions because of the sudden increase in service demands under tremendous psychological and physical pressure with limited resources (Shigemura et al., 2015).

Healthcare workers are responsible for fighting against the COVID-19 pandemic worldwide, and they are most vulnerable to infection and illness. Hence, they are at the



greatest danger of contracting a life-threatening virus. Since the onset of the pandemic, personal protective equipment shortages aggravated the situation, increasing the feeling of anxiety, uncertainty, and frustration toward their health care organizations (Lai et al., 2020). During the COVID-19 pandemic till now, health care workers have interacted closely with grieving patients and families. As a result, they are exposed to their patients' deaths and the relatives' grief. In addition, when patients overflow the healthcare facility's capacity, doctors and nurses may have a little option but to prioritize the patients and think critically about who gets services and who does not (Emanuel et al., 2020).

The objective of the study is to identify the factors that enhance health care workers' motivation at the time of pandemics and determine their willingness to risk their lives for others. This study covers a sample of health care workers working in two central quarantine hospitals in Egypt. It considers a range of administrative, medical, and non-medical staff, and managers who are the main focus of this research. The participants work in different departments across the hospitals, with various duties and responsibilities based on each profession. Such variables highlight the study's findings regarding the elements that determine the health care workers' willingness to risk their lives for others and identify the factors that boost their motivation at work.

## **1.2. Statement of the Problem**

Healthcare professionals are responsible to fight against the COVID-19 pandemic, which has put enormous pressure and demand on healthcare services worldwide. Due to the lack of adequate resources and personal protective equipment, healthcare workers

are at a greater risk of infection. They are compelled to make critical decisions regarding the distribution of life-saving treatment. Coming from a nursing background, the researcher became interested in understanding why healthcare workers risk themselves for others and address the motivating and demotivating factors for them while working with COVID-19 patients.

From the researcher's point of view, despite different studies (for example, Brodtkin, 2021; Cohen & Golan-Nadir, 2020) conducted to address the crucial role of street-level bureaucrats, there are relatively few studies concerned with healthcare workers during the COVID-19 pandemic in Egypt. Moreover, most motivation studies examine the impact of motivation on employees' job satisfaction and their performance using a quantitative approach (Younes, 2012; Ebrahim et al., 2011; Leat & El-Kot, 2009; Ramlall, 2004; Tippet & Kluvers, 2009). However, the current study is conducted using a qualitative approach, which allows for a deeper understanding of how healthcare workers became motivated through very stressful working conditions as prevails with the COVID-19 pandemic. Accordingly, this research builds on earlier findings using various research approaches on the impact of motivation on healthcare workers as street-level bureaucrats.

### **1.3. Research Questions**

This study aims to understand why healthcare workers, as street-level bureaucrats, risk their lives for others in Egypt. The study also seeks to identify the factors that affect their motivation at work. Accordingly, this research addresses the following main questions:

- 1) What makes health care workers stay at their job during the current pandemic?

2) What are the factors behind the HCWs' motivation/demotivation at work?

#### **1.4. Significance of the Study**

This study provides an understanding of various aspects of street-level bureaucracy theory. It also focuses on the COVID-19 pandemic's effect on public healthcare workers in Egypt. The study's findings can help health care authorities and hospitals that are the focus of this study to develop a preparedness plan that can help them tackle any healthcare disaster such as the current pandemic. Furthermore, this study will help other researchers who are investigating the role street-level bureaucracy plays during the pandemic with evidence from Egypt.

The study's findings help explain why the Egyptian healthcare staff put their lives on the line for COVID-19 patients. It will also help to identify the factors that affect their motivation and enthusiasm at work with examples from two quarantine hospitals in Egypt.

#### **1.5. Research Outline**

In the following sections, Chapter 2 discusses health care workers as (SLBs) and focuses on the street-level bureaucracy theories. It also discusses the healthcare workers' response to the COVID-19 pandemic and identify why they risk themselves for others. Moreover, the different motivators and demotivators for healthcare workers as frontliners are examined. Afterward, Chapter 3 highlights details of the research methodology and the conceptual framework. Then Chapter 4 analyzes the findings and the discussion, and Chapter 5 presents the conclusions and recommendations.

# Chapter Two

## Literature Review

This chapter discusses the literature relevant to this study and it is divided into three thematic sections: health care workers as street-level bureaucrats, the COVID-19 pandemic's effect on HCWs, and their motivational factors. Lipsky defines SLBs as front-line workers who interact with the broader public on a day-to-day basis as a central part of their jobs as doctors, nurses, teachers, librarians, judges, and lawyers (Durose, 2020). The section on health care workers as SLBs focuses on the street-level bureaucracy theories, the reasons why people risk themselves for others, and finally, how HCWs respond to the demand for more and better service. The section on COVID-19 pandemic's effect on HCWs discusses the literature on the COVID-19 pandemic crisis's effect on SLBs. It also discusses the response of the health care workers to the pandemic. Finally, the section on healthcare workers' motivational factors looks at the literature addressing motivation and its importance for human resources. In addition, the section examines the different motivators and demotivators for healthcare workers.

### 2.1. Health care workers as street-level bureaucrats

#### 2.1.1. Theories of street-level bureaucracy

Street-level bureaucracy (SLB) is a sociological concept that tries to clarify the operational practices and convictions of public service employees in their daily duties, and the manners by which they sanction public arrangement in their routine work. It analyzes the working environment with special attention to the government assistance and training. The concept depends on the idea that public administrations address 'the coal mineshafts of government

assistance where the "hard, filthy and risky work" of the state' is finished (Cooper et al., 2015).

The belief that risk-taking might be deliberate and regular appears to be inadmissible to the psychometric methodology. Thus, in the sociological writing, the human being by nature is fearful in hazardous situations and attempts at avoiding situations that might be of danger to him/her (Lupton & Tulloch, 2002).

Biological altruism is considered one of the fundamental theories regarding why individuals endanger their lives for other people. In developmental science, an organic entity is said to act philanthropically when its conduct benefits others at the expense of itself (Biological Altruism, 2013). Different speculations examine the starting points of goodness, focusing on the belief that people have the organic potential to think often about the wellbeing of others.

The physical capability of SLBs to care for others is innate and evolves with experience and interactions with others (Cohen & Golan-Nadir, 2020). Furthermore, the desire to assist clients or serve society is not always sufficient. Helping often entails faith in the ability of a particular street-level bureaucrat to do so. Both organizational and environmental factors can influence one's willingness and ability to put one's life on the line for others. Indeed, according to Lipsky (1980), the distinguishing feature of street-level work is the interaction between employees and customers.

The conservation of resources theory, which states that people aim to build and defend what they value, could also explain such behavior of risking their lives for others. As a result, people want to maintain control over the resources required to achieve their goal of defending what they value. Individuals aim to create circumstances that will protect and promote their integrity (Cohen & Golan-nadir, 2020).

Even though there was little research on crisis effect on public service employees for years after the studies of Street-Level Bureaucracy (Lipsky 1980), Lipsky's examination arose regarding urban emergency in the US (Brodkin, 2021). Although Lipsky did not address the crisis as an exceptionally insightful concern, he mentioned how public service employees could become the focus of public displeasure in an emergency. The urban trouble, filled by racial and financial imbalance, just as political and monetary conditions, set requests on SLOs to improve in reacting to urgent social issues (Katznelson 1976). The street-level concept tried to clarify how huge public administrations responded at a time of crisis when there were other difficulties, such as a shortage of supplies and significant demand of better services (Brodkin, 2021).

Since there is lack of studies covering the Egyptian healthcare services during the current pandemic and why health care workers would risk their lives for others, we cannot make speculations dependent on the writing. This way, we explore this inquiry experimentally utilizing the concept of street-level administrators.

### 2.1.2. The Roles of SLBs

SLBs perform many duties and responsibilities from the exemplary implementer to policymaking (Meyers & Vorsanger, 2003; Lipsky, 2010; and Gofen, 2014) to other more explicit jobs, for example, being controllers or auditors of policies (Carter, 2017). According to Prottas (1978), one of the fundamental SLBs' jobs is the extensive handling of individuals during civil services. A more nuanced way to deal with Prottas' kin preparing job is portrayed in two primary responsibilities present in Lipsky's conceptualization of SLBs: customer handling and asset proportioning.

SLBs are in charge of handling customers, and hospital patients are considered customers of help (Alford & Speed, 2006), check resident qualification, transform residents into customers of assistance, and draw in with them through the arrangement of administrations. On the other hand, asset apportioning has to be implemented by SLBs' order to proportion the stock of administrations, which, in the public area, are often deficient in fulfilling a need (Maynard-Moody & Portillo, 2010).

The employees' preference to work in the public sector is a significant issue in public administration research. Different studies (Vandenabeele, 2008; Vandenabeele et al., 2004) addressed young people's eagerness to work in public instead of the private sector. Barsoum (2016) reveals a strong preference among Egyptian young people and job seekers to work in the public sector, with lower income than in the private sector, due to different factors such as social insurance, retirement pension, trust, and stability. Public service motivation is the desire to serve the public through governmental and public institutional

loyalty, civic duty commitment, and empathy to benefit society (Christensen and Whiting, 2009). According to Abdelmotaleb (2020), employees' willingness to serve the public in Egypt is boosted by an organization's social responsibility beliefs and practices, resulting in higher employee engagement and motivation.

According to Lipsky (1976, 1980), the duties of SLB in the policy formulation process are based on three related aspects of their position: high levels of prudence, self-governance from authoritative power, and the extreme constraints on staff hierarchical assets. SLBs create strategies to permit the arrangement of public administrations within the rules, regulations, and requests of their associations, service users, and their very own qualities and assets (Durose, 2007). These strategies include adjusting objectives, proportioning their administrations, rethinking, or restricting the client base to be served, affirming needs, and for the most part creating rehearses that allow them to deal with the work they are needed to do (Lipsky, 2010).

Moreover, Lipsky (1980) claims that SLBs play a vital role in shaping public policies through their day-to-day work and how they deal with stress to accomplish their job effectively (Durose, 2007).

In times of significant crisis, like the COVID-19 pandemic, there is always a state of disorientation and dysfunction in the fundamental values that significantly affect decisions. In addition, there may be a scarcity of resources that would increase the risk of infection among health care workers. The COVID-19 pandemic has shown how SLBs play an



essential role under tremendous psychological and physical pressure with limited resources (Meza et al., 2021).

### **2.2.1. COVID-19 pandemic as a crisis**

In August 2021, 209,876,613 people were infected by COVID-19 worldwide, bringing about 4,400,284 deaths, according to WHO Dashboard (WHO, 2021). Precautionary measures have been suggested and implemented by governments (Ferguson et al. 2020), and nations worldwide have carried out techniques to moderate the harm brought about by this pandemic (Anderson et al., 2020). Medical care teams who work in the forefront worldwide are constantly, running the most severe danger of getting tainted and contaminating others in their nearby climate—in the clinic, at home—or any place they go. Each physician, nurse, radiation therapist, emergency clinic janitor, and safety officer confront the danger of COVID-19 disease (Dy & Rabajante, 2020).

Emergencies and disasters such as the COVID-19 pandemic may change the components of the ordinary conditions through a sudden increase in requests (for example, a flood of COVID-19 patients with limited resources) for providing services to patients and hence affecting the HCWs' motivation. This in turn impacts the casual dynamic (for instance, diminishing or limiting the board observation and control, expanding public consideration/affectability, and additionally heightening reasonable or political concerns). Such sudden and considerable changes will probably disturb everyday routines in manners that are essential for emergency responses (Brodkin, 2021).

Emergencies have not gotten a lot of interest in the field of street-level studies, leaving unanswered inquiries concerning whether crises could influence street-level conduct and

institutional operations in recognizable, critical, and various ways different from those speculated to happen in everyday situations. Consequently, a worldwide pandemic has a method of gathering more attention to the role of SLBS in such a crisis. As street level organizations (SLOs) explore the pandemic's cutting edges, the time has come to think about their role in an emergency (Brodkin, 2021).

From a street-level perspective, the crisis is rarely referred to as a contextual construct, and, in accordance, the implications of the situation for street-level implementation are understudied (exceptions include, for example, Stivers 2007; McAdams and Stough 2011; Henderson 2014; Dunlop et al. 2020). Yet exceptional destabilizing situations, crises in general, and the COVID-19 pandemic in particular, inherently disrupt ordinary day-to-day street-level implementation (Gofen & Lotta, 2021).

In particular, as the cutting edge of public help conveyance informal occasions, street level administration, by definition, fills in as the wilderness of government reaction to emergencies and crises emerge. Moreover, the grounded proficient situation of SLBs (Hupe & Hill, 2007; Loyens & Harrits, 2019) as "information specialists" is subverted because their detailed information, abilities, and judgment become old in the unforeseen, quick-changing conditions and the recently arising chances innate to crises (Gofen & Lotta, 2021).

SLBs' competencies during conventional occasions are supplanted with the absence of direction, data, and experience during emergencies (Stivers, 2007; McAdams & Stough, 2011; Henderson, 2014; Alcadipani et al., 2020; Dunlop et al., 2020; Nagesh &

Chakraborty, 2020). In conclusion, COVID-19 and resulting new rules and regulations caused serious impediments on SLBs' close collaboration with the customers, which characterizes street-level execution and is regularly fundamental for on-the-ground administration conveyance (Gofen & Lotta, 2021).

### **2.2.2 Healthcare workers and COVID-19**

The health workforce is critical to a health system's essential functionality, although it is sometimes ignored as a significant component of system upgrades (Hongoro & Mcpake, 2004). Health worker shortages are an undesirable trend that is wreaking havoc on a variety of healthcare systems. There is a lack of literature and information on preventing the rapid deterioration of human resources for health, particularly in developing nations (Astrom & Nassir, 2009). In the 2006, the WHO report entitled *Working Together for Health*, 57 countries were reported to have a severe shortage of health workers (WHO, 2006). According to the WHO's Global Health Observatory (GHO), a global demand for 17 million additional competent health workers was identified in 2018. The African region, according to WHO, has both the highest disease burden and the lowest density of health workers, with 2.2 health workers per 1000 healthcare professionals (WHO, 2016). According to a WHO assessment from 2006, 36 member states, including some from the East African Community (EAC), had and currently have a significant lack of human resources for health. The health labor deficit impedes the performance and quality of healthcare, resulting in sub-optimal health system functionality (Muthuri et al., 2020). According to Borghi et al., (2018), the ability of a health system to provide quality healthcare amid the current workforce is partly dependent on the motivation of healthcare employees.

Before the current pandemic, working in health care was difficult compared to any other industry due to the physical and psychological suffering among health care providers worldwide (Ruiz-Fernández et al., 2021). They manage different patients daily with varying health conditions that require a very high degree of physical fitness, focus, and sustained mental effort. Moreover, studies (Rodrigues et al., 2018) showed the negative psychological impact such as stress and burnout they suffer from due to the many emotions of patients and their relatives. During the COVID-19 pandemic, it was observed that there were additional psychological burdens on healthcare providers, which were not limited to the duration of hospital work, but also extended to post-working hours (Ruiz-Fernández et al., 2021).

The pandemic of COVID-19 has sparked a global health crisis unlike any other in recent history. As a result, some countries have developed governmental strategies to restrict the spread of the disease, reduce the number of deaths, and relieve the social and economic problems resulting from the crisis. The implementation of these policies necessitates the participation of frontline staff from various fields such as health, social services, education, and national security. These personnel, often known as street-level bureaucrats, are critical participants in the fight against the pandemic since they directly touch the public and must provide emergency services (Lima-Silva et al., 2021).

Although health care workers play a significant role to battle this pandemic all over the world, they suffer from stress and many psychological problems due to the reasons

mentioned above. There were reports of several mental disorders such as depression, tension, post-traumatic stress disorder, and irritation in those working in health care isolation settings (Kang et al., 2020). Thus, health care workers anticipate trust, self-governance, social acknowledgment, self-guideline, and monetary help of their wellbeing framework for the entire exercise of their duties (da Silva & Barbosa, 2021).

In the context of what has been mentioned, it is imperative to know that the historical backdrop of humanity is set apart by enormous episodes and plagues as destructive as the current COVID-19, with wrecking results on the physical and mental wellbeing of the HCWs on such pandemics. For instance, at least 10 % of Canadian and Chinese health care professionals who worked during SARS-CoV-1 in 2003 have reported an increment in the degree of stress, with mental issues enduring as long as three years after the epidemic, with an emphasis on the specific side effects such as headache, difficulty in breathing, burnout, uneasiness, Post-traumatic Stress Disorder (PTSD), dread of the future, flare-ups, and wretchedness (El-Hage et al., 2020; Zaka et al., 2020; Wu et al., 2020; Blake et al., 2020). Therefore, this study aims to understand the impact that COVID-19 is having on the medical team in the ICU environment, as well as to reveal which proposals are being made to mitigate the clinical and psychological impacts that this group experiences.

### **2.3. Motivation:**

One of the most significant aspects influencing employee behavior and performance is motivation. Motivation is defined as something that energizes people to make a move, which is related to the individual's decisions as a feature of their objective situated conduct.

In the working environment, motivation can be defined as a person's level of eagerness to apply and keep an exertion towards accomplishing objectives (Franco et al., 2002). Motivation is a mental cycle and a value-based interaction that arises from the cooperation among people and their workplace, and it is anything but a perplexing idea and is controlled by factors at different levels. (Thu, Wilson & McDonald, 2015).

Intrinsic and extrinsic motivation are the two types of motivation. Intrinsic motivation happens when an individual is driven by interest and fulfillment accomplishing the actual work; however, extrinsic motivation is the point at which an individual is driven by the outside results of doing a specific job (Gagné & Deci, 2005). There are numerous hypotheses on human motivation, with the most widely recognized being Maslow's Hierarchy of Needs.

Job satisfaction is intimately tied to motivation, which helps employees stay at their employment for extended periods. Retention of health professionals saves the health system financially by reducing the costs of recruiting, hiring, and training new employees and reducing the possibility of unfilled positions. Given the existing shortage of competent health workers in many nations, the loss of any health worker—especially doctors and nurses—has a significant impact on the health care system because keeping health employees happy and motivated helps in maintaining the seamless operation of the entire health system (Luoma, 2006).

Lack of motivation harms individual health care workers' performance. Motivation is

considered a significant but sophisticated effect on health care workers' performance. The motivation of health care personnel to utilize their resources in executing their jobs is linked to service delivery, quality, efficiency, and equity. Bennett (1999) identifies two aspects of the internal motivation process, the "will do" aspect involves establishing conformity between personal goals and the organization's goals (goal setting) and the "can-do" element consists of the extent that individual resources are mobilized to achieve joint goals. This is reliant on employees' perceptions of their abilities and the resources available in the workplace. Staff motivation is a fundamental but often overlooked aspect of healthcare's poor quality and accessibility, particularly in developing countries. More broadly, in low- and middle-income countries, the multidimensional interaction of the social context on health care worker motivation and performance has been overlooked in studies (Thu et al., 2015).

Developing nations should develop methods to safeguard their healthcare systems while acknowledging that healthcare employees are independent actors with rights. A growing number of studies are looking into the relationship between compensation, enthusiasm, and health professional retention in developing countries (Adzei & Antiga, 2012; Khalid & Nawab, 2018). To allow governments to adjust policies to ease the current human resource challenges, it is necessary to describe what impacts health workers. A need for research that will aid policymakers in managing human resources for health has been highlighted (Thu et al., 2015).

### 2.3.1. Motivators and de-motivators

While motivators are accelerators, which include variables that encourage healthcare personnel to do a better job, demotivators are obstacles to motivation, and they are factors whose presence in health care facilities causes motivation to be reduced or eliminated (Gagne & Deci, 2005). Motivators and demotivators could be intrinsic or external factors that influence motivation. Factors that spark an individual's innate interest and satisfaction in doing the work itself are among the intrinsic motivational determinants of healthcare workers. On the other hand, extrinsic motivational determinants for healthcare professionals entail capturing characteristics connected to an individual being motivated by the external values of doing a task (Muthuri, Senkubuge & Hongoro, 2020).

Health professionals require enough assistance and support from governments and communities to boost their productivity and stay engaged in these difficult times (Brahmi et al., 2020). A study for healthcare workers in Indonesia revealed that during the COVID-19 outbreak, family support is the critical factor motivating healthcare workers to deliver health care services. As a result, it is essential to allow healthcare workers to interact with and congregate with families to provide mutual support. Suppose meeting with family members is not possible. In that case, each family member must regularly interact by encouraging and motivating health personnel to cope with the COVID-19 pandemic in a psychologically healthy manner. Nonetheless, solid professional collaboration, efficient preventive measures, and a positive attitude when dealing with the epidemic contribute to stress reduction (Muthuri et al., 2020).



### **2.3.2. Motivational Determinants at the Individual Level in Healthcare Workers**

Altruism, or the willingness to help others, was the most commonly reported individual driver of motivation among healthcare employees in the EAC (Muthuri et al., 2020). Achieving professionalism, as evidenced by a professional work ethic, attachment, and professional pride in one's job as a healthcare worker is a major motivator for health workers (Leonard & Masatu, 2010). A possibility to understand and seek health-promoting knowledge for personal and community improvement through education motivated healthcare practitioners. The number of years in a current position as a healthcare professional was a predictor of management and performance elements determinant of motivation. The more experience community health workers (CHWs) had, the more motivated they said they were (Winn et al., 2018).

### **2.3.3. Motivational Determinants at the Societal/Cultural Level in Healthcare Workers**

The social elements that influence the motivation of healthcare personnel are referred to as societal or cultural determinants of motivation. Clients, family, and community appreciation, encouragement, support, recognition, and respect were some of healthcare workers' motivational sociocultural factors (Muthuri et al., 2020). The positive response, combined with recognition, fueled healthcare professionals' desire to continue working, even as volunteers (Strachan et al., 2015). Healthcare workers were motivated by the opportunity to learn about, meet, and share health-related knowledge and skills with the

community in the health facility as a mentor. A sense of duty, a desire for healthy behavior modification, and a dedication to the community and public health were frequently cited as reasons for wanting to learn and share information (Kok et al., 2018).

Client expectations and unrealistic demands; lack of understanding or awareness of the role of healthcare workers, especially in life-or-death situations; receiving complaints from clients; and being disrespected or undervalued by clients and community are all reported as demotivating societal level determinants (Franco et al., 2002).

#### **2.3.4. Motivational Determinants at Organizational/Structural Level in Healthcare Workers**

In the case of East Africa, the social and physical environment of the workplace were found as drivers of healthcare professionals' motivation. Healthy professional connections with peers, innovative leaders, and supportive, devoted managers and executives were some factors of healthcare professionals' motivation in the organizational social environment. (Musunguzi et al., 2017; Winn et al., 2018). In health facilities, an intellectually stimulating setting was an absent and desired driver of healthcare employees' motivation. Demotivators reported in numerous studies included the organization's (health facility) physical environment, or rather the lack of a properly operational physical environment, which included no clean water, no electricity, and inadequate furniture, among other things (Zinnen et al., 2002).

The workload was a factor to understand the level of motivation of health care workers.

The capacity to manage one's workload resulted in increased motivation, but the contrary is also true (Ojakaa et al., 2014). Studies revealed that several health facilities reported heavy, unmanageable workloads due to extensive administrative work, working overtime, overwhelming responsibility, and a shortage of staff (Muthuri et al., 2020). Workload sharing, support, and team spirit were mentioned as motivating factors and solutions to workload-related problems. Moreover, there is a strong relationship between workload and motivation. According to a study in Tanzania, healthcare personnel in medium-sized health facilities were more motivated than those in large health facilities as the workload at the medium-sized health facilities was lower than the large facilities (Siril et al., 2011).

Training opportunities (or a lack thereof) were among the most crucial organizational level predictors of motivation among East African healthcare personnel (Musinguzi et al., 2017 & Winn et al., 2018). Workers in the health care sector expressed a willingness to participate in on-the-job learning, workshops, seminars, refresher courses, and ongoing training. The training was seen as a way to get access to knowledge, experience, and resources, as well as to improve skill utilization and hope for new job prospects (for CHWs) or promotion (Banek et al., 2011; Greenspan et al., 2013). However, due to a lack of management coordination, favoritism, and unfairness, some research found limited access to educational programs or inadequate training opportunities (Mbilinyi et al., 2011; Mugo et al., 2018).

The shortage or lack of critical medical supplies and equipment (such as gloves, syringes, cotton, medication) have been described as demotivating factors (Zinnen et al., 2002; Kaye et al., 2018; Mubyazi et al., 2012). Lack of ambition to hire additional specialists,

transportation issues, low employment security, especially in the private sector when compared to the public sector, low motivation among colleagues was caused by a lack of forms of identification (such as a license, badge, and uniform), as well as challenges with accommodation and housing are also considered significant demotivating factors for health care workers (Muthuri et al., 2020). Among healthcare employees, monetary support was a major motivating factor which include requests for fair and timely payment of salaries, allowances, bonuses, compensation, and performance-based financing plans (Winn et al., 2018; Zinnen et al., 2002). Studies pointed out that the greater the payment of healthcare personnel, the more motivated they were to provide high-quality care (Sato et al., 2017; Chandler et al., 2009). However, in a study in Rwanda, monetary drivers were ranked lower on the list of motivators than non-monetary determinants (Chin-Quee et al., 2015).

However, financial demotivators such as a lack of income, reward (financial or non-financial, such as airtime, bicycles, etc.), discrimination in allowances/per diems/salary, and a low wage were also mentioned in various studies (Prytherch et al., 2012 & Kaye et al., 2018). As a result, healthcare personnel have turned to alternative income sources, such as farming, private sector work, or receiving bribes from patients. Concerning the healthcare system's and facilities' service schemes, the lack of job description or adherence to job description and the need for clear career progression or promotion procedures were reported as determinants of healthcare workers' motivation (Kaye et al., 2018). The need for support and better management was reported as a desired determinant of motivation through improved coordination and support of healthcare workers within health systems; and the ability to strike a good work-life balance was cited as a motivating factor in switching from practice to clinical research (Daniels et al., 2013).

According to some studies (Chen et al., 2020), many employees felt the need for uninterrupted relaxation in a secure setting rather than psychological assistance. This has been accomplished in an Emergency Department by enlarging non-clinical staff restroom and adding mindfulness and yoga programs that allow for social distancing during covid-19 pandemic (Poonian et al., 2020).

For the training and education, Poonian et al., (2020) recommend that relevant training be continued throughout the pandemic to preserve worker resilience. Moreover, COVID-19-specific skills drills should be held regularly with live broadcast to individuals who cannot attend in person.

Peer supporters during the COVID-19 crisis, providing psychological first aid (PFA) by appropriately trained staff is crucial. PFA is a set of basic principles for helping people who have been influenced by a crisis or traumatic incident to recover naturally. The COVID-19 pandemic's preliminary phase has enabled the training of additional peer supporters to provide PFA within Emergency Department (Poonian et al., 2020).

The social and physical surroundings of the workplace were cited as influences of healthcare professionals' motivation (Mugo et al., 2018). Healthy professional connections with colleagues, transformative leaders, and supportive, devoted supervisors and management were some factors of healthcare professionals' motivation in the organizational social environment (Chin-Quee et al., 2015). In health facilities, an

intellectually stimulating setting was missing and sought determinant of healthcare workers' motivation. Demotivators reported in numerous studies were the organization's (health facility) physical environment, or rather the lack of a properly operational physical environment, defined by no clean water, no electricity, and inadequate furniture. In addition, the workload played a significant role in motivating health care workers as the capacity to manage one's workload led to an increased motivation; nevertheless, the contrary is also true. Researchers discovered that numerous health facilities reported severe, unmanageable workloads (Muthuri et al., 2020).

There are various reasons why health care personnel stay motivated and choose to continue in their jobs. A diverse collection of social, professional, and economic factors affects motivation. In general, if health professionals believe they are successful and working well, they will be motivated and display job satisfaction. Motivation and job satisfaction are influenced by various factors such as solid career advancement, fair salary, and good working and living conditions. Robust human resources procedures within a health system can help ensure that the correct motivational variables are in place at sufficient levels to keep health employees satisfied (Deussom et al., 2012).

Maintaining a positive working connection might help one stay motivated. According to research (Engeda et al., 2014), nurses in Ethiopia reported higher job satisfaction when they thought they had more autonomy in making decisions about patient care. Problems with professional advancement, remuneration, and working/living conditions are other reasons why health workers become unmotivated. Career advancement is often characterized as the ability to specialize in a particular specialty or advance through the ranks of health care professionals. Moreover, many doctors working in rural locations in South Africa

complained about being unable to access online training classes to develop a specialization (Engeda et al., 2014).

It is also critical to ensure that health workers feel safe at work to maintain motivation, productivity, and desire to stay at work. This involves issues such as supplying clean water to health workers, ensuring that workers have enough safety equipment supplies and are adequately educated to handle chemicals, and so on. Furthermore, making simple changes to the physical environment, such as improving equipment ergonomics and reducing the heavy lifting required from health workers, reduces absenteeism (Deussom et al., 2012).

Although plenty of studies address the concept of street-level bureaucracy and roles of SLBs, the reason for risking their lives for others has not been studied mainly during health crises like the current pandemic. Thus, the goals of the present study are to understand why health care workers risk themselves for others and to address factors that enhance their motivation during the pandemic

## Chapter Three

### Conceptual Framework and Methodology

#### 3.1. Conceptual Framework

SLBs are the first responders when disasters strike, and their effort becomes more crucial and apparent during these times (Brodkin, 2021). As a consequence of the current pandemic, it is essential to consider the role of healthcare employees as crisis responders and examine how they perform in these unusual circumstances. According to Cohen and Golan-Nadir (2020), three elements determine street-level bureaucrats' willingness to sacrifice their lives for their customers: individual traits, work experience, and contact with the surrounding environment.

SLBs have always been at the center of disasters. Frontline personnel usually create unofficial practices over time to handle multiple priorities of their work under conditions of limited time, knowledge, and resources (Lipsky 1980). Although Lipsky does not examine the crisis as a separate analytic topic, he highlights that SLBs might become targets of public outrage (Brodkin, 2021).

Several organizations have recently expressed an increased interest in improving managerial and organizational processes to improve employee productivity and boost their motivation (Sandhya & Kumar, 2011). The characteristics of motivated and unmotivated personnel are identified by Ramlall (2004) as employees who are unmotivated and put minimal effort into their jobs, have a high turnover rate, create low-quality work, and continuously look for ways to get out of work. On the other hand, motivated employees are more innovative, productive, hard workers, and have a



positive attitude.

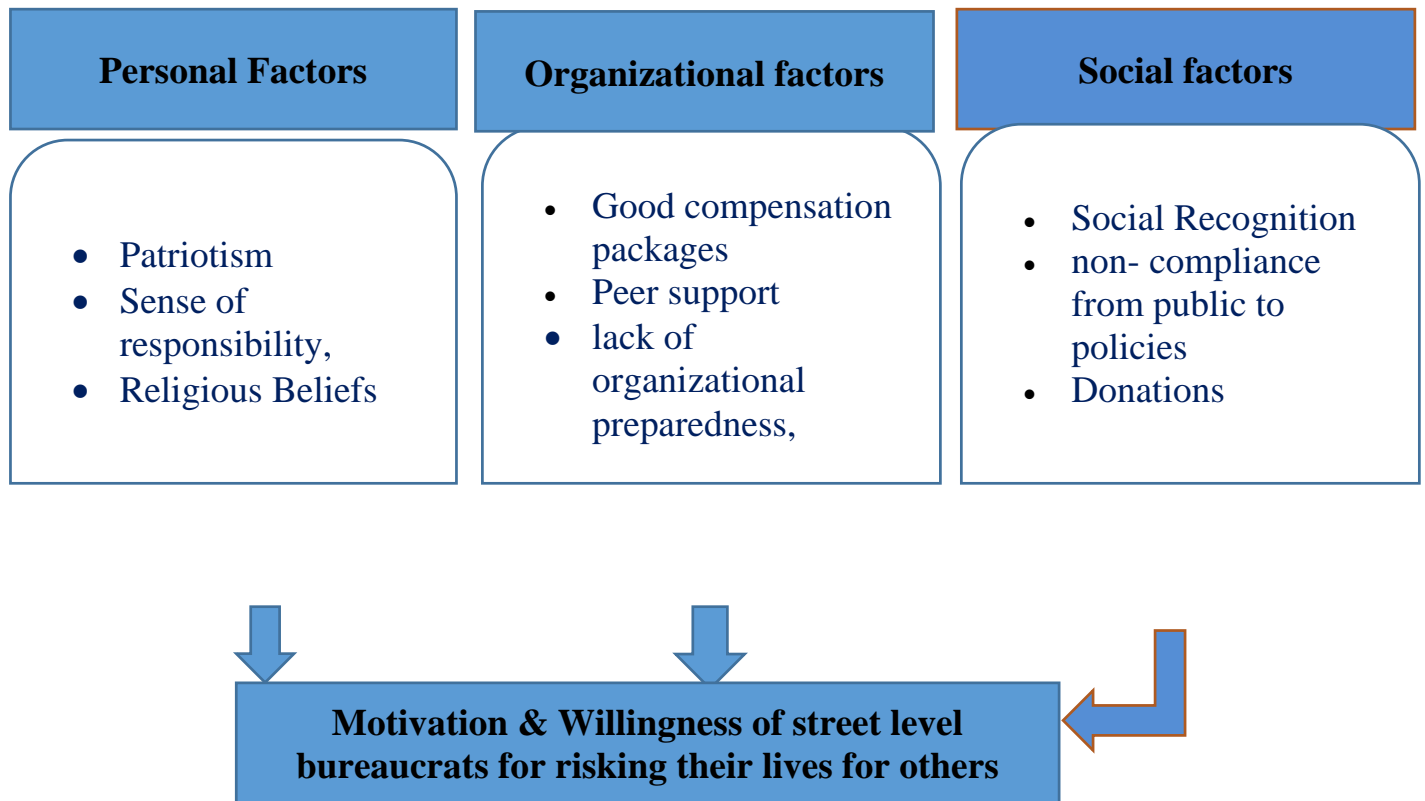
Previous research (Chin-Quee et al., 2015) highlighted internal factors such as appreciation, accomplishment, promotion, and job challenge and external factors such as working environment, institutional frameworks, salary, and benefits as factors that boost employees' motivation at work. The current study aims to examine the factors that influence the Egyptian health care worker's motivation to serve COVID-19 patients and why they tend to risk themselves for others during the pandemic times.

Accordingly, the following section is divided into three main areas:

1. Factors that influence the willingness of health care workers to risk their lives for others during a pandemic: patriotism and sense of responsibility, religious beliefs, and social recognition.
2. Factors that boosted their motivation such as good compensation packages, donations, and peer support.
3. The demotivating factors are lack of organizational preparedness and non-compliance with preventive measures by citizens.

Each of the above main clusters consists of sub-categories that will be assessed in detail throughout this study. This research will help identify the impact of each factor on the Egyptian health care workers and assist the health care sector in Egypt to identify the most impactful motivational factor, which will help them increase productivity, engagement and enhance HCWs performance in quarantine hospitals.

**Figure 1: Conceptual research framework about the motivational factors and their leading behavioral outcomes.**



**Source: Author’s conceptualization based on the literature review**

It is evident from figure (1) that motivation & willingness of street level bureaucrats for risking their lives for others are distributed in three main domains personal, organizational and social factors. While religious beliefs, sense of responsibility, good compensation, donation and peer support positively impacting health care workers’ motivation and increasing their willingness to risk their lives for others, the lack of organizational preparedness and the non-compliance of the general public regarding precautionary policies leads to a decrease in SLBs’ motivation during pandemic times.

## **3.2. Research Methodology**

### **3.2.1. Design:**

This research is designed to study the factors that influence the Egyptian health care worker's motivation as SLBs and why they tend to risk themselves for others. This research focuses on health care workers at quarantine hospitals in Egypt. The researcher selected the research sample based on his professional networks. The study takes into account both female and male employees, with varied years of experience. The participants are all employed in various departments at quarantine hospitals.

A semi-structured in-depth interview was conducted with a range of administrative, medical, non-medical staff, and managers in two quarantine hospitals to gain comprehensive data/information about why health care workers were willing to risk themselves for patients as well as to highlight factors influencing employees' motivation and satisfaction level. Accordingly, a purposeful sampling technique was used to identify selected individuals. Mack et al. (2005) report that the adoption of lengthy interviews is suggested, mainly when gathering information for interpretive research. Before beginning each interview, the interviewer should be offered information about the study's nature and all details should be clarified to each participant, as stated in the interview consent form (Mack et al., 2005). However, all subjects were asked the same set of questions. Going through this method ensured standardization as much as the comparability of answers. The current study analyzed the factors behind individuals' motivation, especially in such situation of COVID-19, and how organizations can improve the workers' performance and increase job satisfaction within the health care

organizations in such a pandemic.

### **3.2.2. Methods:**

This research relies on qualitative data to assess why health care workers are willing to risk themselves for patients and highlight factors influencing employees' motivation and satisfaction level. As Marshall and Rossman (2006) clarify, qualitative research provides a deeper understanding of the perspectives of those who participated in the study, allowing all factors, reasons, and variables that influenced their willingness to risk themselves for others and their motivation to be assessed. Qualitative research is an inductive, open-ended approach that relies on perspective data rather than numerical data. Its aim is understanding rather than generalizing across persons and settings (Marshall & Rossman, 2006).

The research analyzed the reasons for the willingness of health care workers to risk their lives for others and the factors that influence their motivation, and how they can be used to improve the street-level bureaucrats' performance during the pandemic.

### **3.2.3. Sampling**

A sample of 40 participants was selected by using a purposive sampling technique. Purposive sampling was utilized to allow self-selection, which includes representatives of cases presenting themselves to be studied (Marshall & Rossman, 2006). Some preset criteria for inclusion were tailored based on a group of items linked to the study's objective. The selection criteria were: all participants should be working in one of the two quarantine governmental hospitals, and a balance between male and female staff was considered with about 60 % of the participants males and 40% females. Also, the researcher considered samples from each

department to develop a holistic picture of the relationship between the study variables from several viewpoints.

All the participants were adults between 21 and 55 years of age and all volunteered to be part of the study. They served in specialized governmental hospitals before they were allocated to work in the centralized quarantine hospitals. Ten out of 40 participants were physicians, 17 of them were staff nurses, and the rest serve as administrative and logistics support in the studied hospitals. Their average years of experience varied from three to sixteen years. The majority of the participants had a background in emergency and intensive care departments.

#### **3.2.4. Interviewing**

The interviews were conducted between May, June, and July 2020. They varied between telephone and online interviews due to the COVID-19 situation. The interview lasted between 20-30 minutes. The informed consent was provided to participants before the interview to ensure confidentiality and anonymity. Participation in the study was voluntary. All participants were informed before interviewing them regarding the research topic and purpose, and they gave their approval in the informed consent. However, they did not sign the consent form for the reasons mentioned earlier. Based on their acceptance of the informed consent, their privacy was maintained throughout the study.

Purposive sampling was used to allow self-selection, including samples of cases presenting themselves to be studied (Marshall & Rossman, 2006). The effective interview techniques discussed by Mack et al. (2005) were used in these interviews. To ensure that all information

is recorded for successful analysis, all interviews were transcribed immediately after interviews. That allowed for maintaining the correct meanings of participants' responses. The data was anonymized, and the actual names were not used in the study. By asking the same preset questions to all the participants, the reliability was confirmed. That assures consistency and standardization within the research. The validity was maintained through the alliance of the interview questions to theoretical frameworks.

### **3.2.5. Data Analysis**

Thematic analysis was used to analyze these interviews. As illustrated by Marshall and Rossman (2006), thematic analysis allows the researcher to identify, research, and report the outlines of meaning from a set of qualitative data. Data should be systematically identified and the purpose and general descriptions of experiences within a specific context are then analyzed. This thematic analysis consists of several steps, starting with familiarizing the data based on several transcripts to record initial ideas. The second step focuses on constructing an initial thematic framework that includes grouping the participants' views and experiences. The third step involves indexing and sorting the data to enable viewing all responses of the same theme as a whole. The initial codes were generated from the interviews to help in identifying the content of repeated patterns. The fourth step is reviewing the coherence of data extracts to amend labels, which come after the generalization, the explanation, and the classification of data into categories based on each theme.

### **3.2.6. Ethical Considerations**

Interviews were held between May and July 2021 after obtaining the approval of the Institutional Review Board (IRB). To ensure an ethical framework, participation was entirely

voluntary. Before conducting the interview, all participants were informed regarding the research topic and purpose. Also, all data was used only for research purposes. To ensure voluntary participation, the informed consent was communicated to the participants orally and recorded as they could not sign due to the COVID-19 quarantine. Participants' privacy was maintained throughout the research as the data were anonymized, and no real names were included in the study to avoid harming the participants. The interviews' transcripts were kept confidential. They will be saved for three years as per the IRB policy. Also, the result was analyzed and interpreted by the researcher (Babbie, 2010).

### **3.2.7. Limitation of the study**

This study has several limitations. For instance, it covers only participants from two quarantine hospitals in Egypt. Also, the interviews were conducted through Zoom or by phone due to the COVID-19 epidemic that forces quarantine and prevents face-to-face interviews. This represented a challenge for the researcher to get more insights from the participants. Moreover, some participants were not comfortable sharing data related to demotivating factors for them, although they were all informed that their data would remain confidential.

The limitations mentioned above will allow future studies to look at a more extensive range of healthcare personnel to get more insights into the reasons for risking health care workers' lives for others at the pandemic and identify factors that boosted their motivation at work. Further research will help examine the other variables that affect health care workers' willingness' to risk themselves, as street-level bureaucrats, for others during disasters such as the covid-19 pandemic.

### **3.2.8. Delimitation of the study**

The collected data only covered a limited number of healthcare workers who has been selected based on the researcher's professional networks and focused on two quarantine hospitals in Egypt. Also, the researcher used the qualitative research method, not a combination of the qualitative and quantitative methods. Therefore, the result cannot be generalized.



## Chapter Four

### Findings and Discussion

This study aims to examine factors influencing the Egyptian health care worker's motivation (as street-level bureaucrats) and why they tend to risk themselves for others during the COVID-19 pandemic. Accordingly, the following section is divided into three main sections. First, factors influencing the willingness of health care workers to risk their lives for others during the pandemics: patriotism and sense of responsibility, religious beliefs, and public recognition and appreciation. Second, factors boosting their motivation during the pandemic including good compensation packages, donations, and peer support. Finally, the demotivating factors are the lack of organizational preparedness and the non-compliance with preventive measures by citizens.

#### **4.1 Factors that influence the willingness of health care workers to risk their lives for others**

##### **4.1.1. Patriotism and sense of responsibility**

Scholars have claimed that differences in street-level bureaucrats' coping methods, particularly within similar organizational and environmental situations, are related to individual policy-relevant beliefs. (Baviskar & Winter, 2017). Overall, the majority of participants (85 %) stated that they are willing to risk themselves for patients as part of their duties and responsibilities. They also reported that they used to work under physical and psychological stress, but they never experience such a hard time before.

According to (Cohen & Golan-Nadir, 2020), SLBs appear to try hard to earn respect from their patients for their work and themselves. They can become well-known and appreciated as a result of their efforts to improve their working environment. (Kaler & Watkins, 2001). Indeed, most

participants stated that they risk their lives because of their sense of responsibility and patriotism toward the country and the patients. The following interview with one of the participants who work as an intensive care consultant for more than 20 years sheds light on the impact of his sense of responsibility to the country on risking himself for others. He stated:

*My sense of responsibility for the country where I lived and learned makes it essential to sacrifice myself to pay back despite any consequences. This is a hard time for everyone, and we must cooperate for the safety of this country.*

*(Interviewee 2, May 2021)*

Furthermore, one of the participants claimed that his responsibility toward serving people and society is the primary reason behind risking himself for others. He stated:

*We live in a different kind of war against this hidden enemy, we all like soldiers, and we must perform our tasks for the safety of others.*

*(Interviewee 14, May 2021)*

From the interviewee's perspective, a strong belief in the sense of responsibility was the primary reason for risking their lives. In support of other research, Cohen &Golan-Nadir (2020) indicate that feeling of responsibility influences how employees go about their daily lives and strive to fulfill their goals. As we grow older, our duties become more apparent - responsibilities to ourselves, families, friends, community, and society. It is critical to have a sense of personal responsibility in life. It's only natural to take charge of our lives and learn to bear the burden of responsibility and blame when things go wrong. We should complete tasks that have been assigned to us, whether for our own advantage or for the benefit of others (Cohen &Golan-Nadir 2020) .

Furthermore, in this regards, one of the participants stated:

*If everyone evades their responsibility, all those patients will not*

*find anyone to manage their cases, exacerbating the crisis.*

*(Interviewee 17, June 2021)*

From the participant's perspective, all health care workers should work together to overcome the pandemic to tackle this crisis with the least possible loss. Thus, it is clear from the participant's opinion that his sense of responsibility towards his community is the primary driver of his desire to sacrifice himself for others in the common interest of all.

This is also consistent with the opinion of many participants who claimed that all professions have some of the expected risks, and working in the medical field is not an exception. They are fully aware of workplace hazards and injuries they might have because of their chosen career (interviewees 10, 18, 23, and 29). One of those participants said:

*Police officers, soldiers, engineers, and workers might be exposed to workplace injuries. We should follow use preventive tools and do our work with honor.*

*(Interviewee 33, July 2021)*

It is also clear from this participant's comment that health care workers understand the potential risks or workplace injuries they might have, and worries from workplace injuries should not impede their professional duties and responsibilities toward societies. The participants focused on the importance of follow preset guidelines that aims to protect them while working with patients.

Moreover, the majority of participants also reported that patriotism is one of the essential factors that leads them to risk themselves for others (interviewee 2, 6, 8, 12, 19, 22, and 31). One of the participants said:

*I feel very proud to serve the patients and our society in such a hard time. We owe a lot to this country, and this is our responsibility to help our community during such a global pandemic.*

*(Interviewee 31, July 2021)*

The interviewee's comment showed how patriotism and love to one's own country is a significant pillar for health care workers' desire to protect their societies against this pandemic, and this is agreed to Cohen &Golan-Nadir (2020) who stated that street-level bureaucrats' beliefs and goals of defending their great country and people facilitate their willingness to run into danger to protect what they value.

In the noted context, the participants' comments showed that a sense of responsibility among health care workers was one of the primary reasons they risk their lives for others in the current pandemic.

#### **4.1.2. Religious beliefs**

According to Ali (1988) and Al-Owaihan (2008), a strong Islamic work ethic fosters a great sense of intrinsic delight when individuals work hard and generously in their career life so that others can gain.. People with a solid Islamic work ethic should be inspired to go out of their way to help coworkers accomplish their job requirements because they experience positive emotions when doing so. (Hobfoll and Shirom 2000). As a result, people who have high Islamic ethical principles shows helping behavior since their beliefs boost the personal satisfaction they get from it. (Ryan and Deci 2000).

Most participants mentioned the Islamic religious belief to help others as a primary factor to risk their lives while managing COVID-19 patients. Basu-Zharku (2011) identify that religion benefits strength an individual by connecting them to a community and with a higher power thus, provide psychological stability. Health care workers could use this capacity to empower people to help individuals afflicted with an illness or encourage a healthy lifestyle.

The Quran and hadith are the primary references for all Muslims shaping their religious values and beliefs (Ahmad & Ahad, 2021). The majority of the participants (60 %) relies on Quran and Hadith for their beliefs to help patients. One of the participants said

*I'm sacrificing myself to save those injured as I believe that whoever saved a soul should be regarded as though he had saved all humanity.*

*(Interviewee 6, May 2021)*

The interviewee's comment illustrates how her Islamic beliefs to help others were the main reason behind risking her life for covid-19 patients. Also, one of our participants sheds light on his religious convictions as the main driver in helping others. He stated that:

*Helping patients and the needy are deeply rooted in our Islamic values, I have exceptional technical skills to treat patients, and thus I should risk myself for those patients.*

*(Interviewee 28, July 2021)*

Furthermore, many participants stated that they have chosen their profession independently and know that they might be exposed to infections or any work injury from the beginning of their career path. Still, one of the main reasons behind choosing their jobs was their desire to help others while they are sick or injured. They also said that exposure to infectious diseases is one of the expected threats, but they are doing their jobs because of their core values of religion to help sick people. (Interviewee 4, 6, 9, 15, and 29).

Frontline personnel may replace prevalent routines with behaviors that convey moral views in emergencies with a high moral valence and enhanced discretion. (Lipsky 2020). This would be similar to what one of the participants mentioned that she had violated the policy many times to help others because of her beliefs that helping others. At the same time, they are sick is a must without any regulations. She stated:

*At the beginning of the pandemic, we were not allowed to treat or help patients outside a pre-designed area for checking them. Still, I often went to the patients in front of the hospital to help them, violating the rules and regulations because I felt we should help people without boundaries during a crisis.*

*(Interviewee 26, June 2021)*

#### **4.1.3. Public recognition and appreciation**

Another critical factor that many participants have reported as a primary reason behind risking their lives for others is public recognition and appreciation. According to Kaler & Watkins (2001), SLBs seem to try hard to earn respect from their clients for their work and themselves. They can become appreciated as a result of their efforts to improve their working environment.

Three of the interviewees (interviewees 10, 21, and 26) focused on the social support and community recognition they gained during the COVID -19 pandemic as one of the reasons affect their willingness to risk their lives to serve patients. In addition, one of the participants mentioned that he had never felt such pride about what he is doing like what he thought during the pandemic. He stated:

*I suffered from physical assault and disrespect from some patients and their families during my working hours at the emergency department. However, the situation changed dramatically after the COVID-19 pandemic. All patients, relatives, and even my peers have become very supportive and grateful for what I am doing, and this was enough to risk myself for all of them.*

*(Interviewee 17, June 2021)*

From the interviewee's perspective, the COVID-19 pandemic sheds light on the importance of health care professions in our societies. Cohen &Golan-Nadir (2020) stated that one of the leading causes behind risking street-level bureaucrats' lives for others is their desire to be respected and acknowledged. Professional and financial aspirations may be included in these self-interests.

Abdullah et al (2016) concluded that people who feel valued are more positive about themselves and their ability to contribute, which is a good outcome and motivation for employees. One of the participants focused on feeling appreciated and recognized by the public for improving his productivity during the management of COVID-19 patients. He stated

*I was impressed by the social support and recognition for what we do. I liked the slogan "Egypt's white Army, "and I feel that I have to do my job as a soldier and risk myself for my country.*

*(Interviewee 14, May 2021)*

From the participant's comments, public recognition and appreciation during unprecedented global pandemics are primary reasons for taking risks for others. The "Egypt's white Army slogan has been reported by many interviewees as a reflection of how people appreciate their efforts during Egypt's battle against the pandemic. Such public support and recognition make risking themselves to protect and serve others patriotic duty.

#### **4.2. Factors that boosted health care workers' motivation during Covid-19 pandemic**

Motivation in any workplace is defined as an employee's degree of eagerness to apply and keep up an exertion towards organizational objectives and mission. Self-inspiration at work is an inside preparedness in which an employee gets a specific boost from the surrounding environment (rewards, feedback, directives, and consequences of previous efforts) in addition to certain internal motives (Bennett & Franco, 1999). Communicable diseases outbreaks, such as the COVID-19 pandemic, and other public health crises, create mental discomfort and anxiety among health care workers, who serve as the virus's first line of defense. Such a pandemic would undoubtedly influence team performance, and policymakers need to understand what makes health care workers motivated at the time of pandemic (Windarwati et al., 2021).

The results of our study revealed three main factors that boost health care workers' motivation during their work at quarantine hospitals: monetary reward, donations, and peer support.

##### **4.2.1. Good compensation packages**

The reward system, which includes financial and non-financial incentives, is a critical component of employee motivation (Giubilini & Savulescu, 2021). While salary, bonuses, allowances, and any other monetary awards are considered financial rewards, there are also different non-financial rewards such as extended vacation time, gift cards, and free use to facilities (Miry, 2021).



In the context of what has mentioned above, most participants also reported different types of rewards and good compensations as the main pillar for keeping them motivated at work. One participant, who works as a staff nurse, focused on financial rewards and bonuses as an essential motive while working with COVID-19 patients. He said:

*After working in a quarantine hospital with Covid-19 patients, I got a salary increase and bonuses, which at times reached more than three times what I was receiving under normal working conditions. This salary increase played a significant role in motivating me while working with patients.*

*(Interviewee 16, June 2021)*

On the other hand, one of the participants focused on the impact of the monetary remunerating on her motivation while dealing with infected patients, she said:

*To be honest, my work with COVID-19 patients was mandatory by the hospital administration. Still, after having these unexpected financial rewards compared to what I was getting, I became more motivated to work in quarantine hospitals, and I even asked to work overtime.*

*(Interviewee 23, June 2021)*

From the participants' comments, it is clear that the monetary compensation was one of the most important motivators for the health care workers during the pandemic, even as some of them asked to work for additional hours to have a greater financial return. In addition, some of the participants claimed that this salary increase was associated with reducing their working hours. One of the interviewees stated:

*I used to work 26 days a month before the COVID-19 pandemic, and I only get four days off in each / month. Still, after the pandemic, the workdays became only 15 days/month with double salary, which was the main reason behind our motivation while working quarantine hospitals.*

*(Interviewee 29, June 2021)*

The interviewee shed light on a policy that motivated healthcare workers in quarantine hospitals, as they are getting more rest with a higher salary than what they used to have in normal working conditions. In addition, some participants highlighted the free PCR test, which they used to do every two working weeks, as a primary factor of making them motivated during their work ( Interviewees 5,8,14 and 32 ), they were worried to transmit infection to their families, thus the free PCR test assured them and consequently made them motivated . This expensive test, whose cost was between 2000 to 3000 L.E, was done completely free of charge, which was one of the motives for health care workers in quarantine hospitals.

In support of other research, Giubilini & Savulescu (2021) argued that, regardless of whether health care workers have a professional obligation to deliver such risky management, the additional salary increase/bonuses are justifiable. He added that compensation for risk would identify a variety of ethical requirements, including retaining the freedom to decide which risks to accept, ensuring fair working conditions by avoiding exploitation, and ensuring an effective healthcare system in pandemic crisis.

#### **4.2.2. Donations**

Because of this sudden and widespread pandemic worldwide, hospitals and health care organizations suffered from a lack of supplies and preventive tools, especially at the beginning of the crisis. This shortage had a negative impact on health care workers, forcing them to save personal protective equipment or reuse it for long periods, which may threaten their safety. Consequently, cash and in-kind donations from businessmen, large companies, and the community contribution during the crisis came as a great motivator for all health care workers in Egypt.

One of the participants, who works in the senior management of a quarantine hospital, pointed out the importance of community contribution through donations in raising preparedness and motivating the medical team during the pandemic. He said:

*I've been working in this hospital since the beginning of the pandemic. All the medical team members have been suffering from a lack of personal protective tools and a lot of medical supplies, especially with the onset of the pandemic in Egypt. Still, we have received substantial donations in cash and in-kind from some businessmen and large companies that helped us significantly during the crisis.*

*(Interviewee 2, May 2021)*

Concerning community contribution, one participant pointed out that contributions of citizens, even with a simple issue, had a positive impact on their motivation at work. He said

*A nearby fast-food restaurant was keen to provide free meals to all the staff to recognize their efforts during the corona pandemic. This simple thing had a very significant impact on me and my colleagues.*

*(Interviewee 28, May 2021)*

The participant's comment sheds light on the feeling of the medical care team towards the individual's contributions to express their gratitude for the vital role they play, which has undoubtedly played a significant role in motivating them. In addition, many interviewees reported that telecom companies donated free internet services and free calls in appreciation of their efforts during the fight against this pandemic. Many transport companies also offered us special offers during the transition to and from the hospital, which positively impacted them (interviewees 16, 19, 34, and 39).

From the interviewees' comments, it is clear that donations played a significant role in motivating workers in the medical sector during the Corona pandemic.

### **4.2.3. Peer support**

Organizational behavior research indicates the significant impact of employee activities that help their colleagues achieve organizational goals (Tang et al., 2008). Employees who go out of their way to assist their members in the successful execution of their jobs are engaging in organizational behavior that enhances not only peer performance but also organizational effectiveness and staff satisfaction (De Clercq et al., 2019).

Many participants agreed on the importance of their cooperation and support to each other in overcoming the crisis. They reported that such support might be during the periods of operation within the hospital and beyond workplace sittings. To illustrate, some participants emphasized the importance of their colleagues' support during working periods and its positive impact on them continuing to work with enthusiasm (Interviewee 5,9,16, and 28). One participant who works as a porter said:

*Everyone was cooperative and supportive to treat patients. Doctors and nurses used to help me in my duties whenever I need help. This is constantly pushing me to do my best to combat this pandemic.*

*(Interviewee 16, June 2021)*

The interviewee's comment highlights the positive impact because of his co-workers' support in performing tasks assigned to him. He mentioned several situations where doctors and nurses helped him, such as transferring medical supplies between different departments in quarantine hospitals. This reflects the significant role of helping behavior and peer support on employee's enthusiasm and motivation.

In addition, one of the staff nurses mentioned that her co-workers had always helped her perform her duties and that she was also doing so, which contributed significantly to the full completion of the work. She said:

*As a staff nurse working in a quarantine hospital, everyone was responsible for providing nursing care to a certain number of patients. However, we used to help each other regardless of the assignment; such spirit was one of the main motives to execute our regular tasks and duties successfully.*

*(Interviewee 35, July 2021)*

The interviewee's experience showed the contribution of helping behavior and peer support to motivate healthcare workers during the COVID-19 pandemic. In support of other research, nada (2014) indicates that because employees spend more time at work than home, a healthy work environment and relationship between employees could be the most effective motivators.

On the other hand, many interviewees focused on the impact of psychological support provided by their colleagues during their working hours on motivating them to execute their jobs successfully (interviewees 1, 6, 13, and 24). One of the participants who works as a staff nurse since the beginning of the epidemic stressed the significant impact of the psychological support she got from her co-workers on her to execute her job successfully. She said:

*We work under very stressful circumstances which harm our psychological state, I used to cry a lot after my daily shifts when I remember patients' suffering. Still, my peers have supported me who helped me get out of this poor psychological status.*

*(Interviewee 17, July 2021)*

The interviewee's comment highlighted the significant role of psychological support between HCWs on their well-being and organizational effectiveness. Also, other studies (De Clercq et al., 2019) showed that employees that engage in cooperative and supporting behaviors boost peer performance, enhance team productivity, and enjoy greater levels of relationship satisfaction. (Hoption 2016).

### **4.3. Demotivating factors influencing the productivity of health care workers during COVID-19 pandemic**

Overall, most participants (60%) did not mention major concerns that affected their passion for risking themselves for patients during the pandemic. However, other participants (40%) highlighted areas of improvement to be considered: lack of organizational preparedness, non-compliance with preventive measures by citizens.

#### **4.3.1. Lack of organizational preparedness**

The COVID-19 virus rapidly spread throughout the world. Governments suffered from poor management of the pandemic because they had little time to prepare. Communities all around the globe were encouraged to stay as close to their homes as possible, avoid gatherings, wash their hands often, and wearing masks in closed areas (Sheppard & Thomas, 2020).

The inability of both international and national health authorities to avoid millions of morbidities and hundreds of thousands of deaths is the primary rationale for countries' poor pandemic management. Even the procedures put in place to deal with the disaster impacted negatively on the world's economy. The systems and techniques that have permitted global health development are breaking under mounting challenges and appear to be outmatched in the face of new threats. Health systems all across the world are at risk of becoming obsolete (Kamel, 2020).

Concerns about the level of preparedness within healthcare organizations, such as lack of coordination, an inadequate supply of PPE , and other resources needed to minimize the risk of infection, have been raised all over the world since the beginning of COVID-19 pandemic. Some participants reported their worries regarding flawed preparedness plans and constant policy change at the pandemic's beginning. One of the participants who works as a cleaning staff said:

*Another reason behind my demotivation is the lack of coordination between the infection control department and our supervisor. They have contradicted policies that we should implement, and I did not know whom I should follow.*

*(Interviewee 21, June 2021)*

The interviewee's comment highlighted that constant and rapid changes in the policies issued by the infection control department, made him confused about the proper techniques he should follow in quarantine hospital. He wished for more arrangement and coordination between different stakeholders regarding the policies the employees should follow.

In addition, some of the participants mentioned a lack of continuous training and education regarding the infection control measures as one of the demotivating factors that influence their productivity at work (Interviewee 7, 13, 21, and 24). One of the participants who works as a staff nurse said:

*At the beginning of the pandemic, we expected intensive and continuous training from the infection control department on different important topics and instructions regarding taking standard precautions while managing COVID-19 patients, but this didn't implement. I think training sessions weren't enough and the methodology of training should be improved.*

(Interviewee 24, July 2021)

The interviewee's comment sheds light on the importance of a comprehensive preparedness plan from the infection control department that should include practical and comprehensive courses about how to use personal protective equipment properly and many other essential policies.

On the other hand, some of the participants who provided direct patients care to COVID-19 patients focused on the shortage of PPE as a weakness of the organizational preparedness plan to the pandemic, which negatively affected their productivity (interviewee 2, 17, 35 and 38). One of them stated:

*Because of the rapid spread of the COVID-19 pandemic in Egypt, we suffered from a severe shortage of personal protective equipment. Sometimes we reused our masks for more than one working day, which put us in a risky condition, and thus affect our performance at work. The concerned authorities should have made better preparations to provide sufficient personal protective supplies for health care workers.*

(Interviewee 35, July 2021)

Regarding technical practices, the interviewee focused on the poor preparedness plan to provide sufficient PPE supplies for health care workers during their duty. This had a negative impact on their motivation at work as they might be afraid of getting infected. Also, other studies (Kamel, 2020) showed that countries with well-functioning health care systems are better prepared to adapt to and recover from health care disasters. Risks to one's health are an expensive and growing global issue. Economic collapse, political instability, and societal shatters are more likely to happen when healthcare facilities fail to reduce hazards and adapt to changes. Thus, if health care organizations and policymakers are willing to have a good preparedness plan, they should examine the current practices carefully and address its weaknesses for better outcomes in any disaster like the current situation.



#### 4.3.2. Non-compliance with preventive measures by citizens

On the other hand, participants in the current study reported that people's non-compliance to the preventive measures during the pandemic was one of the primary reasons to affect them negatively indirectly. Since the COVID-19 pandemic rapidly spread worldwide, government officials administered a range of preventative measures, from helpful advice to enforceable directives. People were encouraged to stay home, avoid public gatherings, wash their hands often, and wear masks in enclosed areas. (Sheppard & Thomas, 2020).

However, citizens' apparent non-compliance status toward these preventive measures negatively affected the infection rate, especially at the beginning of the pandemic (Wang et al., 2021). There were various reasons for not taking preventative measures seriously by people, such as lack of belief in their importance and their belief in their right of autonomy to refuse it. Refusal to follow guidelines appeared to be associated with statements of distrust in government and authority, as well as mixed messages on recommendations (Sheppard & Thomas, 2020).

Many participants explained the negative impact of citizens' lack of awareness and commitment to precautionary measures on their enthusiasm at work (Interviewee 3, 12, and 29).one of them said:

*When we were suffering from whole bed occupations at the hospital, citizens were not committed to preventive measures such as social distancing and wearing masks, which was very frustrating.*

(Interviewee 12, May 2021)

Moreover, one of the interviewees focused on the poor compliance of people toward the precautionary measures and instructions given by the WHO. He stated:

*Despite the ongoing awareness-raising campaigns aimed at reducing the number of patients, many citizens were not committed to implementing these preventive measures, which contributed to the transmission of infection to a massive number of patients.*

(Interviewee 29, July 2021)

The participants' comments confirm the negative impact of citizens' non-compliance with preventive measures on health care workers and the inability of the health system to bear this massive number of patients.

## Chapter Five

### Conclusion and Recommendations

#### 5.1. Conclusion

The objective of the current study is to examine the factors influencing the motivation of Egyptian health care workers as SLBs and why they tend to risk themselves for others during the COVID-19 pandemic. The study addresses factors that influence the willingness of health care workers to risk their lives for others during the pandemic and highlights different reasons for their motivation and demotivation while working in quarantine hospitals in Egypt.

The COVID-19 pandemic has had very negative consequences on our societies. Therefore, it is incumbent on all governments and decision-makers to identify all the challenges health care workers face while their serving infected patients and try to help them overcome obstacles that may hinder them in the course of their duty as street-level bureaucrat.

Although working in the health care field is usually associated with some risks, the COVID-19 pandemic represent a real threat to all health care workers in the studied quarantine hospitals. The many infected patients, the lack of PPE, and the very stressful working conditions represent a real challenge to all health care workers who manage COVID-19 patients.

The findings of the present study suggest that patriotism, a sense of responsibility, religious beliefs, public recognition, and appreciation are the most significant factors influencing health care workers as SLBs to risk their lives for others during the COVID-19 pandemic. Moreover, the study results show that while good compensation packages, donations, and peer support boost the health care workers' motivation during their work in quarantine hospitals, the lack of organizational preparedness, and non-compliance with preventive measures by citizens are areas for improvements in order to obtain better outcomes.

Overall, healthcare employees have stated that they are willing to put their lives on the line for others as part of their profession. The findings demonstrate that this willingness of SLBs cannot be attributed to one specific dominant factor but to a combination of three major elements of a sense of responsibility, religious beliefs, and public recognition.

Furthermore, the answer to the second research question about factors enhancing health care workers' motivation as they manage to COVID-19 patients in quarantine hospitals, is good compensation packages, donations, and peer support. One of the study's significant contributions is the substantial impact of monetary remunerating and good compensation packages on health care workers' motivation. In contrast, the findings of our study revealed that different forms of compensation, such as monetary compensation with reduce working hours and regular free PCR Tests, played a significant role in inducing them during the pandemic.

Moreover, the findings of other studies show that cash and in-kind donations from businessmen, companies, and the community have served as a great motivator for all health care workers in Egypt during the crisis. The rapid and sudden spread of the COVID-19 virus worldwide has been one of the main reasons for the severe shortage of all personal protective equipment and supplies among health care organizations. Hence, the donations have effectively contributed to providing a safe working environment for health care workers.

Another interesting finding has been linked to peer support as an excellent motivator for health care workers during the COVID-19 pandemic. The COVID-19 outbreak is one of the world's most traumatic events in recent history. This crisis poses a significant threat to the population's social, economic, and, most importantly, psychological resources. Healthcare professionals are the most vulnerable category for threats. The persistent spread of the virus, lack of adequate rest, the constant danger of infection, workload, lack of medical protective equipment, and frequent separation from family are all variables that can increase the long-term risk of acute mental health issues in healthcare professionals who work in quarantine hospitals. In such hard times, this study shows the positive impact of behavior assistance and peer support on motivating them as they manage COVID-19 patients in quarantine hospitals.

On the contrary, the findings of other studies demonstrate that citizens' inadequate institutional preparedness and their non-compliance with preventive measures are the major demotivating factors influencing the productivity of health care workers during the COVID-19 pandemic. There are many concerns about the level of preparedness within healthcare organizations, such as lack of coordination between stakeholders, inadequate supply of personal protective equipment (PPE), and lack of continuous training and education regarding the infection control measures. Also, this study revealed that people's lack of awareness and commitment to precautionary measures represents a significant demotivating factor among health care workers during the pandemic.

## **5.2. Recommendations**

Despite the decline in the number of COVID-19 infected patients in many countries, we cannot confirm the confinement of the pandemic, and there are still many fears that would threaten health systems all over the world. Therefore, it has become necessary to understand factors that influence the willingness of SLBs to risk their lives for others during the pandemic and to highlight factors that boost their motivation during a pandemic. Based on the analysis and findings of this study, the following are recommendations that governments, decision-makers can adopt, and health care authorities to bolster health care workers' motivation during a pandemic or any similar health care disaster.

First, a well-designed disaster preparedness strategy should be in place to ensure that communities and health care organizations have a well-structured system, human resources, processes, policies, and procedures they need to manage health care disasters effectively, limit their negative impact, and respond more quickly.

This plan should be designed by government and local authorities to ensure the following: -

- Establishing a crisis management team that includes at least one expert from each relevant profession.
- There should be a central monitoring of bed occupancy status across the country.
- There should be only one entity to receive all forms of donations and then redistribute them to the hospitals most in need according to the situation.
- Adequate budget set should be allocated to ensure that all necessary materials and supplies are available, as well as the constant flow of personal protective equipment.
- There should be continuous training programs and capacity building for all health care workers to improve their skills and knowledge regarding how to manage infected patients in such a pandemic
- Health care systems should investigate the feasibility of their current processes and practices in emergency situations in order to prevent any negative consequences of health disasters

- There should be ongoing review of health policies and instructions to the media by experts during any health care disaster such as the COVID-19 pandemic.

Second, since the population lacks awareness and commitment to the preventive measures that limit the spread of the pandemic, it has become necessary to have rigorous policies and laws issued by the government and the executive authorities to control these unfair practices during health disasters. Also, there should be wide awareness campaigns for citizens about the seriousness of this pandemic and how to limit its spread through all media communication channels.

Third, governments and health care organizations should promote a sense of responsibility among health care workers who work in quarantine hospitals. This should start with respecting health care workers' right to autonomy by deciding to work in quarantine hospitals as voluntary rather than mandatory, because health care workers do have no professional obligation to risk their lives for others. Also, there should be a physical and psychological medical screening for all health care workers to identify the potential front-liners who have the required skills to work in highly stressful environments

Fourth, the government and all concerned parties must pay attention to the public health care workers struggle against this pandemic by presenting their success stories and appreciating their efforts across all media. This tribute and appreciation to health care workers will have both current and future benefits. For now, this recognition will be a



significant motivation for all healthcare personnel to provide the best service to the patients. This honor is an essential pillar for preparing many honorable models in the field of health care.

Fifth, Quarantine hospital managers and team leaders should create a positive working environment through enhancing helpful behavior and peer support throughout hard times such as the current pandemic. This can be implemented through being a role model in helping others, constantly supporting group activities, establishing a trustworthy atmosphere, and organizing regular group therapy discussions regarding sharing knowledge, thoughts, values, and beliefs.

Sixth, medical and non-medical personal working in quarantine hospitals should be reimbursed for the enormous increased risks of infections while caring for Covid-19 patients. Different forms of compensation such as monetary rewarding, travel/meal/housing allowance, vacations, bonuses, and free PCR tests should be implemented.

## References

- Abdelmotaleb, M. (2020). The moderating and mediating role of public service motivation between organization's social responsibility and employee engagement: evidence from Egyptian public hospitals. *International Review of Public Administration*, 25(3), 207-223.
- Abdullah, N., Shonubi, O. A., Hashim, R., & Hamid, N. (2016). Recognition and appreciation and its psychological effect on job satisfaction and performance in a Malaysia IT company: systematic review. *IOSR Journal of Humanities and Social Science*, 21(9), 47-55.
- Adzei, F. A., & Atinga, R. A. (2012). Motivation and retention of health workers in Ghana's district hospitals: addressing the critical issues. *Journal of health organization and management*.
- Ahmad, Z., & Ahad, A. (2021). COVID-19: A study of Islamic and scientific perspectives. *Theology and Science*, 19(1), 32-41.
- Alcadipani, R., Cabral, S., Fernandes, A., & Lotta, G. (2020). Street-level bureaucrats under COVID-19: Police officers' responses in constrained settings. *Administrative Theory & Praxis*, 42(3), 394-403.
- Alford, J., & Speed, R. (2006). Client focus in regulatory agencies: Oxymoron or opportunity?. *Public Management Review*, 8(2), 313-331.
- Ali, A. (1988). Scaling an Islamic work ethic. *The Journal of Social Psychology*, 128(5), 575-583.
- Ali, A. J., & Al-Owaihian, A. (2008). Islamic work ethic: a critical review. *Cross cultural management: An international Journal*.

Anderson, R. M., Heesterbeek, H., Klinkenberg, D., & Hollingsworth, T. D. (2020). How will country-based mitigation measures influence the course of the COVID-19 epidemic?. *The lancet*, 395(10228), 931-934.

Arrow, K. J. (1965). Criteria for social investment. *Water Resources Research*, 1(1), 1-8.

Babbie, E. (2010). *The practice of social research*, Twelfth edition. In Wadsworth, Cengage Learning.

Åstrøm, A. N., & Nasir, E. F. (2009). Predicting intention to treat HIV-infected patients among Tanzanian and Sudanese medical and dental students using the theory of planned behaviour-a cross sectional study. *BMC health services research*, 9(1), 1-8.

Banek, K., Nankabirwa, J., Maiteki-Sebuguzi, C., DiLiberto, D., Taaka, L., Chandler, C. I., & Staedke, S. G. (2015). Community case management of malaria: exploring support, capacity and motivation of community medicine distributors in Uganda. *Health policy and planning*, 30(4), 451-461.

Barsoum, G. (2016). The public sector as the employer of choice among youth in Egypt: The relevance of public service motivation theory. *International Journal of Public Administration*, 39(3), 205-215.

Basu-Zharku, I. O. (2011). The influence of religion on health. *Inquiries Journal*, 3(01).

Baviskar, S., & Winter, S. C. (2017). Street-level bureaucrats as individual policymakers: The relationship between attitudes and coping behavior toward vulnerable children and youth. *International Public Management Journal*, 20(2), 316-353.

Beck, U., Giddens, A., & Lash, S. (1994). *The reinvention of politics: Towards a theory of reflexive modernization*.

Bennett S, and Franco LM, Public Sector Health Worker Motivation and Health Sector Reform: A Conceptual Framework. Major Applied Research 5, Technical Paper 1.

Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc. January 1999.

Bennett, S., Franco, L. M., Kanfer, R., & Stubblebine, P. (1999). Major Applied Research 5, Technical Paper 1. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc.

Biological Altruism. (2013). Stanford encyclopedia of philosophy. Retrieved from <https://plato.stanford.edu/entries/altruism-biological/>

Blake, H., Bermingham, F., Johnson, G., & Tabner, A. (2020). Mitigating the psychological impact of COVID-19 on healthcare workers: a digital learning package. *International journal of environmental research and public health*, 17(9), 2997.

Borghi, J., Lohmann, J., Dale, E., Meheus, F., Goudge, J., Oboirien, K., & Kuwawenaruwa, A. (2018). How to do (or not to do)... Measuring health worker motivation in surveys in low-and middle-income countries. *Health policy and planning*, 33(2), 192-203.

Brahmi, N., Singh, P., Sohal, M., & Sawhney, R. S. (2020). Psychological trauma among the healthcare professionals dealing with COVID-19. *Asian Journal of Psychiatry*, 54, 102241.

Brodkin, E. Z. (2021). street-level organizations at the front lines of crises. *Journal of Comparative Policy Analysis: Research and Practice*, 23(1), 16-29.

Brodkin, E. Z. (2021). street-level organizations at the front lines of crises. *Journal of Comparative Policy Analysis: Research and Practice*, 23(1), 16-29.

Brodkin, E. Z. (2021). street-level organizations at the front lines of crises. *Journal of Comparative Policy Analysis: Research and Practice*, 23(1), 16-29.

- Carter, D. P. (2017). Role perceptions and attitudes toward discretion at a decentralized regulatory frontline: The case of organic inspectors. *Regulation & Governance*, 11(4), 353-367.
- Chandler, C. I., Chonya, S., Mtei, F., Reyburn, H., & Whitty, C. J. (2009). Motivation, money and respect: a mixed-method study of Tanzanian non-physician clinicians. *Social science & medicine*, 68(11), 2078-2088.
- Chen, Q., Liang, M., Li, Y., Guo, J., Fei, D., Wang, L., & Zhang, Z. (2020). Mental health care for medical staff in China during the COVID-19 outbreak. *The Lancet Psychiatry*, 7(4), e15-e16.
- Chin-Quee, D., Mugeni, C., Nkunda, D., Uwizeye, M. R., Stockton, L. L., & Wesson, J. (2015). Balancing workload, motivation and job satisfaction in Rwanda: assessing the effect of adding family planning service provision to community health worker duties. *Reproductive health*, 13(1), 1-7.
- Cohen, N., & Golan-Nadir, N. (2020). Why do street-level bureaucrats risk themselves for others? The case of Israeli police officers. *Australian Journal of Public Administration*, 79(4), 480-494.
- Cooper, M. J., Sornalingam, S., & O'Donnell, C. (2015). Street-level bureaucracy: an underused theoretical model for general practice?. *British Journal of General Practice*, 65(636), 376-377.
- Christensen, R. K., & Whiting, S. W. (2009). Employee evaluations in the public sector: Public service motivation, task, and citizenship behaviors. *Korean Journal of Policy Studies*, 23.
- da Silva, F. C. T., & Barbosa, C. P. (2021). The impact of the COVID-19 pandemic in an intensive care unit (ICU): Psychiatric symptoms in healthcare professionals. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 110, 110299.

- Daniels, J., Nduati, R., & Farquhar, C. (2013). Kenyan women medical doctors and their motivations to pursue international research training. *Education for health*, 26(2), 89.
- De Clercq, D., Rahman, Z., & Haq, I. U. (2019). Explaining helping behavior in the workplace: The interactive effect of family-to-work conflict and Islamic work ethic. *Journal of Business Ethics*, 155(4), 1167-1177.
- Deussom, R., Jaskiewicz, W., Dwyer, S., & Tulenko, K. (2012). Holding health workers accountable: governance approaches to reducing absenteeism. *Technical Brief*, 3.
- Dunlop, C. A., Ongaro, E., & Baker, K. (2020). Researching COVID-19: A research agenda for public policy and administration scholars. *Public Policy and Administration*, 35(4), 365-383.
- Durose, C. (2007). Beyond 'street level bureaucrats': Re-interpreting the role of front line public sector workers. *Critical policy analysis*, 1(2), 217-234.
- Dy, L. F., & Rabajante, J. F. (2020). A COVID-19 infection risk model for frontline health care workers. *Network Modeling Analysis in Health Informatics and Bioinformatics*, 9(1), 1-13.
- El-Hage, W., Hingray, C., Lemogne, C., Yroni, A., Brunault, P., Bienvenu, T., ... & Aouizerate, B. (2020). Health professionals facing the coronavirus disease 2019 (COVID-19) pandemic: What are the mental health risks?. *Encephale*, S73-S80.
- Emanuel, E. J., Persad, G., Upshur, R., Thome, B., Parker, M., Glickman, A., ... & Phillips, J. P. (2020). Fair allocation of scarce medical resources in the time of Covid-19.

- Engeda, E. H., Birhanu, A. M., & Alene, K. A. (2014). Intent to stay in the nursing profession and associated factors among nurses working in Amhara Regional State Referral Hospitals, Ethiopia. *BMC nursing*, 13(1), 1-8.
- Farhad Ebrahim et al. (2011). A Study of influential factors on employees' motivation for participating in the in-service training courses based on modified expectancy theory. *International Business Management*, 2(1), 157–169.
- Ferguson, N. M., Laydon, D., Nedjati-Gilani, G., Imai, N., Ainslie, K., Baguelin, M., ... & Hinsley, W. (2020). Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. Imperial College COVID-19 Response Team. Imperial College COVID-19 Response Team, 20.
- Franco, L. M., Bennett, S., & Kanfer, R. (2002). Health sector reform and public sector health worker motivation: a conceptual framework. *Social science & medicine*, 54(8), 1255-1266.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational behavior*, 26(4), 331-362.
- Giubilini, A., & Savulescu, J. (2021). Stopping exploitation: Properly remunerating healthcare workers for risk in the COVID-19 pandemic. *Bioethics*, 35(4), 372-379.
- Gofen, A. (2014). Mind the gap: Dimensions and influence of street-level divergence. *Journal of Public Administration Research and Theory*, 24(2), 473-493.
- Greenspan, J. A., McMahon, S. A., Chebet, J. J., Mpunga, M., Urassa, D. P., & Winch, P. J. (2013). Sources of community health worker motivation: a qualitative study in Morogoro Region, Tanzania. *Human resources for health*, 11(1), 1-12.
- Harrits, G. S. (2019). Street-level bureaucracy research and professionalism. In *Research handbook on street-level bureaucracy*. Edward Elgar Publishing.

- Henderson, A. C. (2014). The critical role of street-level bureaucrats in disaster and crisis response. *Handbook of critical incident analysis*, 210-245.
- Hobfoll, S. E., Shirom, A., & Golembiewski, R. (2000). Conservation of resources theory. *Handbook of organizational behavior*, 57-81.
- Hongoro, C., & McPake, B. (2004). How to bridge the gap in human resources for health. *The Lancet*, 364(9443), 1451-1456.
- Hoption, C. (2016). The double-edged sword of helping behavior in leader-follower dyads. *Leadership & Organization Development Journal*.
- Hupe, P., & Hill, M. (2007). Street-Level bureaucracy and public accountability. *Public administration*, 85(2), 279-299.
- Kaler, A., & Watkins, S. C. (2001). Disobedient distributors: Street-level bureaucrats and would-be patrons in community-based family planning programs in rural Kenya. *Studies in family planning*, 32(3), 254-269.
- Kamel, M. I. (2020). A view of the health services after COVID-19: an Egyptian perspective. *Alexandria Journal of Medicine*, 56(1), 118-129.
- Kang, L., Ma, S., Chen, M., Yang, J., Wang, Y., Li, R., ... & Liu, Z. (2020). Impact on mental health and perceptions of psychological care among medical and nursing staff in Wuhan during the 2019 novel coronavirus disease outbreak: A cross-sectional study. *Brain, behavior, and immunity*, 87, 11-17.
- Katznelson, I. (1976). The crisis of the capitalist city: Urban politics and social control. *Theoretical perspectives on urban politics*, 214-229.



- Kaye, D., Mwanika, A., & Sewankambo, N. (2010). Influence of the training experience of Makerere University medical and nursing graduates on willingness and competence to work in rural health facilities.
- Khalid, K., & Nawab, S. (2018). Employee participation and employee retention in view of compensation. *SAGE Open*, 8(4), 2158244018810067.
- Kok, M. C., Vallières, F., Tulloch, O., Kumar, M. B., Kea, A. Z., Karuga, R., ... & Taegtmeier, M. (2018). Does supportive supervision enhance community health worker motivation? A mixed-methods study in four African countries. *Health policy and planning*, 33(9), 988-998.
- Kotzee, T., & Couper, I. (2006). What interventions do South African qualified doctors think will retain them in rural hospitals of the Limpopo province of South Africa?.
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., ... & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA network open*, 3(3), e203976-e203976.
- Leat, M., & El-Kot, G. (2009). Interpersonal trust at work, intrinsic motivation, work-related tension and satisfaction in Egypt. *International Journal of Workplace Health Management*, 2(2), 180–194.
- Leonard, K. L., & Masatu, M. C. (2010). Professionalism and the know-do gap: Exploring intrinsic motivation among health workers in Tanzania. *Health economics*, 19(12), 1461-1477.
- Lima-Silva, F., Sandim, T. L., Magri, G. M., & Lotta, G. (2020). Street-level bureaucracy in the pandemic: the perception of frontline social workers on policy implementation. *Revista de Administração Pública*, 54, 1458-1471.
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public service*. Russell Sage Foundation.

- Loyens, K., & Maesschalck, J. (2010). Toward a theoretical framework for ethical decision making of street-level bureaucracy: Existing models reconsidered. *Administration & Society*, 42(1), 66-100.
- Lu, R., Zhao, X., Li, J., Niu, P., Yang, B., Wu, H., ... & Tan, W. (2020). Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *The lancet*, 395(10224), 565-574.
- Luoma, M. (2006). Increasing the motivation of health care workers. *Capacity Project Technical Brief*, 7.
- Lupton, D., & Tulloch, J. (2002). 'Life would be pretty dull without risk': voluntary risk-taking and its pleasures. *Health, risk & society*, 4(2), 113-124.
- Mack, N. et al. (2005). *Qualitative research methods: A data collector's field guide*.
- Mahase, E. (2020). China coronavirus: WHO declares international emergency as death toll exceeds 200. *BMJ: British Medical Journal (Online)*, 368.
- Marshall, C., & Rossman, G. (2006). *Designing qualitative research*. Thousands Oaks, Calif. : Sage Publications, [2006].
- Maynard-Moody, S., & Portillo, S. (2010). Street-level bureaucracy theory. In *The Oxford handbook of American bureaucracy*.
- Mbilinyi, D., Daniel, M. L., & Lie, G. T. (2011). Health worker motivation in the context of HIV care and treatment challenges in Mbeya Region, Tanzania: a qualitative study. *BMC health services research*, 11(1), 1-8.

- McAdams Ducey, E., & Stough, L. M. (2011). Exploring the support role of special education teachers after Hurricane Ike: Children with significant disabilities. *Journal of family issues*, 32(10), 1325-1345.
- Meyers, M. K., Vorsanger, S., Peters, B. G., & Pierre, J. (2007). Street-level bureaucrats and the implementation of public policy. *The handbook of public administration*, 153-163.
- Meza, O., Pérez-Chiqués, E., Campos, S. A., & Varela, S. Against the COVID-19 Pandemic: Analyzing Role Changes of Healthcare Street-Level Bureaucrats in.
- Miry, N. S. (2021). Factors That Influence Nonprofit Sector Employees' Motivation: A Case Study from Egypt.
- Mubyazi, G. M., Bloch, P., Byskov, J., Magnussen, P., Bygbjerg, I. C., & Hansen, K. S. (2012). Supply-related drivers of staff motivation for providing intermittent preventive treatment of malaria during pregnancy in Tanzania: evidence from two rural districts. *Malaria journal*, 11(1), 1-14.
- Mugo, N. S., Dibley, M. J., Damundu, E. Y., & Alam, A. (2018). Barriers faced by the health workers to deliver maternal care services and their perceptions of the factors preventing their clients from receiving the services: a qualitative study in South Sudan. *Maternal and child health journal*, 22(11), 1598-1606.
- Musinguzi, C., Rutebemberwa, E., Namale, L., & Dahal, A. (2017). 203: The Relationship between Leadership Styles and Health Worker Motivation, Teamwork and Job Satisfaction in Health Facilities in Uganda. *BMJ Open*, 7(Suppl 1), bmjopen-2016.
- Muthuri, R. N. D. K., Senkubuge, F., & Hongoro, C. (2020, June). Determinants of motivation among healthcare workers in the East African Community between 2009–2019: a systematic review. In *Healthcare* (Vol. 8, No. 2, p. 164). Multidisciplinary Digital Publishing Institute.

Nagesh, S., & Chakraborty, S. (2020). Saving the frontline health workforce amidst the COVID-19 crisis: Challenges and recommendations. *Journal of global health*, 10(1).

Ojakaa, D., Olango, S., & Jarvis, J. (2014). Factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. *Human resources for health*, 12(1), 1-13.

Poonian, J., Walsham, N., Kilner, T., Bradbury, E., Brooks, K., & West, E. (2020). Managing healthcare worker well-being in an Australian emergency department during the COVID-19 pandemic. *Emergency Medicine Australasia*, 32(4), 700-702.

Prottas, J. M. (1978). The power of the street-level bureaucrat in public service bureaucracies. *Urban Affairs Quarterly*, 13(3), 285-312.

Prytherch, H., Kakoko, D. C., Leshabari, M., Sauerborn, R., & Marx, M. (2012). Maternal and newborn healthcare providers in rural Tanzania: in-depth interviews exploring influences on motivation, performance and job satisfaction.

Ramlall, S. (2004). A review of employee motivation theories and their implications for employee retention within organizations. In *Journal of American Academy of Business* (Vol. 5, Issue 1/2).

Rodrigues, H., Cobucci, R., Oliveira, A., Cabral, J. V., Medeiros, L., Gurgel, K., ... & Gonçalves, A. K. (2018). Burnout syndrome among medical residents: A systematic review and meta-analysis. *PloS one*, 13(11), e0206840.

Ruiz-Fernández, M. D., Ramos-Pichardo, J. D., Ibáñez-Masero, O., Cabrera-Troya, J., Carmona-Rega, M. I., & Ortega-Galán, Á. M. (2020). Compassion fatigue, burnout, compassion satisfaction and perceived stress in healthcare professionals during the COVID-19 health crisis in Spain. *Journal of clinical nursing*, 29(21-22), 4321-4330.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American psychologist*, 55(1), 68.
- Sandhya, K., & Pradeep Kumar, D. (2011). Employee retention by motivation. *Indian Journal of Science and Technology*, 4(12).
- Sato, M., Maufi, D., Mwingira, U. J., Leshabari, M. T., Ohnishi, M., & Honda, S. (2017). Measuring three aspects of motivation among health workers at primary level health facilities in rural Tanzania. *PloS one*, 12(5), e0176973.
- Sheppard, J., & Thomas, C. B. (2021). Community pharmacists and communication in the time of COVID-19: Applying the health belief model. *Research in Social and Administrative Pharmacy*, 17(1), 1984-1987.
- Shigemura, J., Ursano, R. J., Kurosawa, M., Morganstein, J. C., & Benedek, D. M. (2020). Understanding the traumatic experiences of healthcare workers responding to the COVID-19 pandemic. *Nursing & Health Sciences*.
- Simner, M. L. (1971). Newborn's response to the cry of another infant. *Developmental psychology*, 5(1), 136.
- Siril, H., Hirschhorn, L. R., Hawkins, C., Garcia, M. E., Li, M. S., Ismail, S., ... & Kaaya, S. (2011). Stress, motivation, and professional satisfaction among health care workers in HIV care and treatment centers in urban Tanzania: A cross-sectional study. *East African journal of public health*, 8(1), 17.
- Stivers, C. (2007). "So poor and so black": hurricane Katrina, public administration, and the issue of race. *Public administration review*, 67, 48-56.
- Strachan, D. L., Källander, K., Nakirunda, M., Ndima, S., Muiambo, A., & Hill, Z. (2015). Using theory and formative research to design interventions to improve community

health worker motivation, retention and performance in Mozambique and Uganda. *Human resources for health*, 13(1), 1-13.

Tang, T. L. P., Sutarso, T., Davis, G. M. T. W., Dolinski, D., Ibrahim, A. H. S., & Wagner, S. L. (2008). To help or not to help? The Good Samaritan Effect and the love of money on helping behavior. *Journal of Business Ethics*, 82(4), 865-887.

Thu, N. T. H., Wilson, A., & McDonald, F. (2015). Motivation or demotivation of health workers providing maternal health services in rural areas in Vietnam: findings from a mixed-methods study. *Human resources for health*, 13(1), 1-11.

Tippet, J., & Kluvers, R. (2009). Employee rewards and motivation in non profit organisations: Case study from Australia. *International Journal of Business and Management*, 4(3), 7-14.

Vandenabeele, W. (2008). Government calling: Public service motivation as an element in selecting government as an employer of choice. *Public administration*, 86(4), 1089-1105.

Vandenabeele, W., Hondeghem, A., & Steen, T. (2004). The civil service as an employer of choice in Belgium: How work orientations influence the attractiveness of public employment. *Review of public personnel administration*, 24(4), 319-333.

Wang, D., Marmo-Roman, S., Krase, K., & Phanord, L. (2021). Compliance with preventative measures during the COVID-19 pandemic in the USA and Canada: Results from an online survey. *Social Work in Health Care*, 1-16.

Willis-Shattuck, M., Bidwell, P., Thomas, S., Wyness, L., Blaauw, D., & Ditlopo, P. (2008). Motivation and retention of health workers in developing countries: a systematic review. *BMC health services research*, 8(1), 1-8.

Winn, L. K., Lesser, A., Menya, D., Baumgartner, J. N., Kirui, J. K., Saran, I., & Prudhomme-O'Meara, W. (2018). Motivation and satisfaction among community

health workers administering rapid diagnostic tests for malaria in Western Kenya. *Journal of global health*, 8(1).

Windarwati, H. D., Ati, N. A. L., Paraswati, M. D., Ilmy, S. K., Supianto, A. A., Rizzal, A. F., ... & Supriati, L. (2021). Stressor, coping mechanism, and motivation among health care workers in dealing with stress due to the COVID-19 pandemic in Indonesia. *Asian journal of psychiatry*, 56, 102470.

World Health Organization. (2006). *The world health report 2006: working together for health*. World Health Organization.

World Health Organization. (2016). *Health workforce requirements for universal health coverage and the sustainable development goals*. (human resources for health observer, 17).

Wu, W., Zhang, Y., Wang, P., Zhang, L., Wang, G., Lei, G., ... & Luo, M. (2020). Psychological stress of medical staffs during outbreak of COVID-19 and adjustment strategy. *Journal of medical virology*, 92(10), 1962-1970.

Younes, M. (2012). *Job satisfaction and work performance: A case study of the American University in Cairo*.

Zaka, A., Shamloo, S. E., Fiorente, P., & Tafuri, A. (2020). COVID-19 pandemic as a watershed moment: A call for systematic psychological health care for frontline medical staff.

Zinnen, V., Paul, E., Mwisongo, A., Nyato, D., & Robert, A. (2012). Motivation of human resources for health: a case study at rural district level in Tanzania. *The International journal of health planning and management*, 27(4), 327-347.

## Appendices

### Appendix A: Interview questions

Objective: Collecting general information about the participants:

- What is your current job?
- What are your roles and responsibilities?
- How long have you been in this job?

Objective: Collecting general information about the organization:

- What is your organization type?
- For how long it serves community?
- How many employees in that organization?

Objective: Assessing participants' motivators as a street level bureaucrat

- What motivates you to work as a front liner?
- Tell me more about it.

Objective: Assessing the influence of COVID19 pandemic on motivation:

- Why you choose to risk yourself for others during the current pandemic?
- What did you not like about working as a street level bureaucrat?
- Was there anything that you appreciated during such a pandemic?

Objective: Assessing the work environment effect during COVID 19 pandemic:

- What is your impression about your organization dealing with such a disaster?
- Did you work in such an environment before? Tell me more about it



## Appendix B: IRB approval

CASE #2020-2021-111



To: Mohamed Eraky  
Cc: Menna Abdelhameed  
From: Atta Gebril, Chair of the IRB  
Date: May 5, 2021  
Re: IRB approval

This is to inform you that I reviewed your revised research proposal entitled "Why do street-level bureaucrats risk themselves for others: Egyptian health care workers' perspectives during covid 19 pandemic?" and determined that it required consultation with the IRB under the "expedited" category. As you are aware, the members of the IRB suggested certain revisions to the original proposal, but your new version addresses these concerns successfully. The revised proposal used appropriate procedures to minimize risks to human subjects and that adequate provision was made for confidentiality and data anonymity of participants in any published record. I believe you will also make adequate provision for obtaining informed consent of the participants.

This approval letter was issued under the assumption that you have not started data collection for your research project. Any data collected before receiving this letter could not be used since this is a violation of the IRB policy.

Please note that IRB approval does not automatically ensure approval by CAPMAS, an Egyptian government agency responsible for approving some types of off-campus research. CAPMAS issues are handled at AUC by the office of the University Counsellor, Dr. Ashraf Hatem. The IRB is not in a position to offer any opinion on CAPMAS issues, and takes no responsibility for obtaining CAPMAS approval.

This approval is valid for only one year. In case you have not finished data collection within a year, you need to apply for an extension.

Thank you and good luck.

Dr. Atta Gebril  
IRB chair, The American University in Cairo  
2046 HUSS Building  
T: 02-26151919  
Email: [agebril@aucegypt.edu](mailto:agebril@aucegypt.edu)



Institutional Review Board  
The American University in Cairo  
AUC Avenue, P.O. Box 74  
New Cairo 11835, Egypt.  
tel 20.2.2615.1000  
fax 20.2.27957565  
Email: [aucirb@aucegypt.edu](mailto:aucirb@aucegypt.edu)

## Appendix C: Consent Form



### Documentation of Informed Consent for Participation in Research Study

**Project Title:** [WHY DO STREET-LEVEL BUREAUCRATS RISK THEMSELVES FOR OTHERS? THE CASE OF PUBLIC HEALTH CARE WORKERS IN EGYPT?]

**Principal Investigator:**

Mohamed Adel Ahmed Eraky Moussa

Email: [Mohamed.eraky@aucegypt.edu](mailto:Mohamed.eraky@aucegypt.edu)

Tel: +201002803328

\*You are being asked to participate in a research study about why do street-level bureaucrats risk themselves for others: Egyptian health care workers' perspectives during covid-19 pandemic?

The purpose of the research is designed to study the factors that influence the Egyptian health care worker's motivation as a street-level bureaucrats and why they tend to risk themselves for others during covid-19 pandemic

The findings may be *published, presented, or both*.

The expected duration of your participation is between 20-30 minutes.

The procedures of the research will be as follows, the profile of interviewees will ask about participant's age, gender, department, years of experience, educational level and employment level. Also, it will contain the organization profile that check the organization type, years on community and number of its employees. The interview will last between 20-30 minutes. The informed consent will be provided to participants ensuring confidentiality, also, the data obtained. Purposive sampling will be used, relying on the position in the organization. Participation will be entirely voluntary. All participants will be informed before interviewing them regarding the research topic, purpose should give their approval to the informed consent; however, they could not sign if an online interview will be conducted through zoom or by phone due to the COVID-19 epidemic that prevents most of face-to-face interviews. Based on their acceptance of the informed consent, their privacy will be maintained throughout the study. The data will be confidential and the actual names will not be used in the research.

\*There *will not be* certain risks or discomforts associated with this research.

\*There *will be* benefits to you from this research. We will shed the light on factors that enhance employees' performance during covid-19 pandemic

\*The information you provide for purposes of this research *is confidential*.

\**Questions about the research, my rights, or research-related injuries should be directed to (Mohamed Adel Ahmed Eraky Moussa) at (01002803328).*

\*Participation in this study is voluntary. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or the loss of benefits to which you are otherwise entitled.

Signature \_\_\_\_\_

Printed Name \_\_\_\_\_

Date \_\_\_\_\_