Advances in Economics, Business and Management Research, volume 209
Proceedings of the International Conference on Public Organization (ICONPO 2021)

Effective Governance for Healthcare Administration in Pakistan Public Hospitals

Ahmad Martadha B Mohamed, PhD[1,*], Dawood Nawaz, PhD[2]

[1] *Professor at School of Government, University Utara Malaysia, Sintok Kedah, 06010, Malaysia*
[2] *Associate Lecturer at Department of Public Administration, The Islamia University of Bahawalpur, Pakistan*
[*]*Corresponding author. Email: martadha@uum.edu.my*

ABSTRACT
Covid-19 pandemic is a significant risk that compels hospital administrators to manage in an agile manner. Good governance requires hospitals to react in an active and effective oversight to manage the crisis in a new normal governance environment. This study, therefore, aims to examine the influence of accountability, equity, responsiveness, and transparency on how well public healthcare hospitals in Pakistan deal with the crisis. The data were collected from 247 patients of public healthcare hospitals of Multan district, Pakistan using systematic random sampling. The collected data were analyzed using structural equation modeling (SEM) with the help of Smart PLS 3.2.7. The results of the analysis showed that equity, responsiveness, and transparency have a significant impact on the health outcomes of patients. However, accountability appears to be an insignificant influencer to health outcomes. The results of the analysis can be helpful to hospital administrators, policy-makers, and hospital boards to implement clear roles, sound structures, and transparent processes to ensure sustainable good governance practices. The current environment provides a good opportunity for all actors in the healthcare industry to reflect the old practices and slowly makes a transition to apply best governance practices in the current wave of covid-19 crisis that we are currently facing.

Keywords: *Covid-19, Good Governance, Hospital Administrators, Health Outcomes, Public Hospitals, Pakistan.*

1. INTRODUCTION

Good governance is considered the main element of a better health system[1]. Governance involves activities in which society organizes itself to get the goals collectively. Good governance is a necessary element to promote and ensure accountability, equity, fairness, justice, responsiveness and transparency within the healthcare administration [2]. According to[3], public sector departments can be effective when they act transparently, responsibly, and accountable to all stakeholders. In line with the current situation, health administrators have been under due pressure to deliver their services effectively and efficiently especially when there is growing accountability demand by the general public [2].

The World Health Organization (WHO) postulates that a good healthcare system takes place when "government in every country plays a vital role in ensuring the country's health system achieves the required standard which includes providing a better quality of life for the citizen as well as a health system that comprises all organizations, institutions, and resources devoted to producing health actions". Health actions, meanwhile, can be defined as "any effort, whether in personal health care, public health services or through inter-sectorial initiatives, in which its primary purpose is to promote, restore, maintain or improve health" [4].

Covid-19 is considered a global pandemic by the World Health Organization on March 11, 2020 [5]. This pandemic has ravaged the economy as well as the social structure of many countries. Many people are badly affected by this pandemic. Because of the Covid-19 virus,

Copyright © 2022 The Authors. Published by Atlantis Press International B.V.
This is an open access article distributed under the CC BY-NC 4.0 license -http://creativecommons.org/licenses/by-nc/4.0/.

more than 3.37 million peoples have died worldwide and about 19,617 people died in Pakistan. There are currently 880,000 confirmed cases reported in Pakistan till May 17, 2020. With very high infection rates and moderately high mortality, naturally, individuals become concerned with Covid-19. There is a fear of contact with people who may be infected with Covid-19. Unluckily, fear in itself can increase the risk of disease [6]. The rise of Covid-19 and the nature of its epidemic have caused global fears. Other infectious diseases have also seen a significant rise in cases worldwide. This can also lead to other psychological problems including discrimination, stigma, and deprivation [7]. The high levels of fear, individuals are unable to think rationally and clear when responding to Covid-19 because of the high level of fear[2].

According to [8], the present treatment of the global issue of Covid-19 that focuses primarily on infection control, effective vaccination, and treatment have tended to sideline other side effects of the virus. The psycho-social aspects also need to be considered thoroughly[9]. However, countries around the world have shifted the focus to the containment of the disease by emphasizing measures to prevent spread in the general population. This phenomenon has alienated the ever present danger of psycho-social related illness [10]. Such complex, threatening, and unprecedented situation have left the psycho-social wellbeing needs of general public unaddressed. Many countries have seen the rise of psycho-social related illness such as depression, suicide, and mental health during this pandemic [9].

The crisis in the healthcare administration caused by the Covid-19 epidemic had badly affected a large portion of the population in many countries [11]. It is still unclear how healthcare administration has to deal with this pandemic situation of Covid-19. The phenomenon is not only widespread throughout the world, but unfortunately the method of mitigating the crisis has also been inconsistent in many countries [12]. Some countries prove to be successful in instituting certain protocols to deal with the pandemic, while the situation in certain developing countries such as India and Indonesia continue to experience worsening conditions. Further, [13] stated that this pandemic situation comes with information that is unclear, incomplete, and confusing. Consequently, the nature of our incomplete understanding of this unprecedented phenomenon associated with the Covid-19 means that there is a need for complete information before the right intervention is being implemented.

Globally, our ability to address equity challenges in health has improved significantly over the past decades. However, persistent disparities in health access, quality of services and outcomes remain. In many developing countries, peoples and those in low socioeconomic groups are still the most disadvantaged. The current pandemic has made matter worse when poor people are more likely than the middle income and above to be affected by the virus and die because of the infection. Because of that, many governments have mandated the heath ministries to take a bold approach to address healthy inequities that delivers tangible changes to healthcare system. One of the ways in which inequities is being addressed is to develop an approach that operates on a repeating cycle based around deepening the understanding of equity gaps, shifting thinking about where priorities for investment of time and resources should lie, followed by increasing direct action to address [3]. There are only a few shreds of evidence that have shown the relationship between equity and health outcomes (or any important determinants). However, there is some support for a significant link between equity and patient outcomes [14]. Further, [15] stated that health policy must take into consideration how healthcare policies can contribute towards the wider equity objectives in the development of health outcomes. According to [16] argue that publicly available information about health status and outcomes gives opportunity to the patients to select the health professionals based on their professional performance about quality healthcare with their own choice.

According to the study conducted by the [17], there is a great need to change the old structure of the healthcare sector and bring possible reforms in the healthcare sector of Pakistan. They further explained that children and women still have the most to lose in Pakistan because women have a 1 in 80 chance of dying of maternal health causes during reproductive life. Moreover, compared to other South Asian countries, Pakistan currently lags in immunization coverage, contraceptive use, and infant and child mortality rates. Thus, there is a great need to bring equity and make a response to the healthcare sector.

The study carried out by [18] suggested that making an explicit effort to provide equity-oriented health care (EOHC) in primary healthcare contexts may improve the health outcomes of the patients over time. The study has used longitudinal data from a cohort of 395 patients facing significant health and social inequities. The study further demonstrated that patients who experienced more EOHC had greater comfort and confidence in the healthcare services they received, which led to higher levels of confidence in their ability to manage and prevent health problems. Consecutively, higher confidence levels strongly predicted the improvements in depressive symptoms, PTSD symptoms, and quality of life.

In addition to equity, [19] conducted a qualitative study on the relationship between accountability and health outcomes of the hospitals located in India through the in-depth interviews and focus group discussion. The

study found out that the lack of accountability in the healthcare system is becoming the main cause of maternal inequities and death. The findings further revealed that the social accountability mechanisms influence the structural determinants like policy and women's status, governance, health beliefs, and the intermediary determinants like maternal healthcare system, accessibility, quality of the healthcare services and delivery system, availability, and social capital. However, problems in healthcare systems such as unclear accountability methods, unaccountable and negligence behavior of healthcare administration and providers resulted in the failure to ensure the accessibility and functioning of obstetric care services at different levels of healthcare facilities.

According to the study conducted by [20], there is no well-established mechanism at the local level to discuss accountability in the healthcare sector and manage the health outcomes in the healthcare sector. Thus there is a need to propose the accountability model for the development of the healthcare sector and stakeholders of the healthcare system to ensure quality healthcare as well as affordable services. This, in essence, means that accountable healthcare administration would contribute to a sustainable healthcare system.

Furthermore, the studies focused on responsiveness have documented that satisfied patients tend to adhere to recommended courses of treatment and return for required follow-up visits. Moreover, satisfied patients were more likely to develop a more profound and long-lasting relationship with their medical provider, leading to improved compliance, continuity of care and, ultimately, better health outcomes[14].

According to [2] presented an exploration of different models for understanding the association between healthcare services, health outcomes and health system's responsiveness with the help of multiple regression. In this regard, cross-sectional analyses of different healthcare status and healthcare service coverage rates were explored with the help of various health outcomes determinants and the healthcare system's responsiveness indicators across 57 countries. The study results indicated that responsiveness was systematically associated with poorer health outcomes and healthcare services coverage. Moreover, with respect to levels of inequality in healthcare, the indicator of responsiveness experienced by the unhealthy poor groups in the population was statistically significant for regressions on measles vaccination inequalities between rich and poor.

In addition to that, the study carried out by [21] concluded that measures to promote transparency in making decisions are necessary to safeguard population health outcomes. Merit-based recruitment of health workers is an essential foundation of healthcare systems, a guarantor of improved health outcomes and proven transparency in the public healthcare sector. The past studies revealed that transparency in the healthcare sector is a significant problem in some countries. However, more empirical research on transparency and health outcomes is needed at the country level to enable and strengthen the healthcare sector with effective solutions to the various healthcare sector problems. Moreover, international organizations such as the WHO and national governments should ensure transparency in the healthcare sector for achieving the desired health outcomes.

The study conducted by [2] indicated that an increase in the quality of transparency could be an effective tool to improve the healthcare sector. However, to achieve the desired health outcomes, there are specific tools needed to be used correctly in the healthcare sector. Moreover, the study further discussed that healthcare system information needs to be made publicly available, targeted at patient populations whose choices can be influenced, and accompanied by complementary policy interventions to incentivize suitable patient, provider, and payer behavior.

This paper has contributed to the current literature in three ways. Firstly, the current study expanded the literature which focuses on the issues of health outcomes among the patients of the Pakistan public hospitals during the pandemic situation of Covid-19. Secondly, this study has investigated the role of effective governance (accountability, equity, responsiveness, and transparency) in the healthcare administration of Pakistan public hospitals to achieve health outcomes during the pandemic situation of Covid-19. Thirdly, this research is different from the past researches because this research has used quantitative techniques for conducting this research and collected the data from the patients to investigate the effective governance of healthcare administration of Pakistan public hospitals.

2. MATERIALS AND METHOD

The current study has adopted quantitative research techniques to investigate the relationship between effective governance and health outcomes.

2.1. Research Framework

The framework of this research shows the direct relationship between the independent variables (accountability, equity, responsiveness, transparency) and dependent variables (health outcomes).

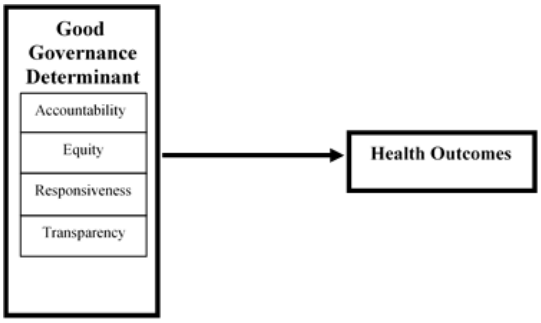

Figure 1 Research Framework of the Study

2.2. Instruments

The questionnaires for this study were adapted from the prior studies. There were two sections of the questionnaire; the first consists of the demographic information of the respondents while the second consists of the main variables. The 10 items of accountability were adapted from the study conducted by Cleare (2011), 8 items of equity from the WHO Report (2000), 8 items of responsiveness from the WHO report (2000), 10 items of transparency from the Barbazza & Tello (2014); Rawlins (2008), and 24 items of health outcomes were adapted from the WHO World Health Statistics report (2018).

2.3. Data Collection Procedure

Probability proportionate sampling was used for the data collection. Both indoor and outdoor patients were surveyed with the consent of the healthcare administration of public hospitals. A total of 500 self-administered questionnaires were distributed to patients of public hospitals located in Multan (Pakistan), and 290 questionnaires were returned out of 500. In the data analysis process, 21 questionnaires were rejected due to the incomplete and several missing data per case, and 22 responses were discarded as being outliers. Finally, 247 questionnaires were retained for further analysis.

3. RESULT AND DISCUSSION

Table 1 shows the demographic profile of the responses of this study which includes the types of hospitals, age, gender, residence, employment status, and health status of the respondents.

Table 1 Respondents Demographic Profile (n=247)

Demographic Characteristics	Frequency	Percentage
Types of Hospitals		
Tertiary care and Teaching Hospital	98	39.7
District Headquarter Hospital	48	19.4
Tehsil Headquarter Hospital	44	17.8
Rural Health Center	24	9.7
Basic Health Unit	33	13.4
Age		
25 or below	31	12.6
26-35	86	34.8
36-50	96	38.9
51 and above	34	13.8
Gender		
Male	131	53.1
Female	110	44.5
Non-specified	6	2.4
Residence		
Urban	102	41.3
Rural	145	58.7
Employment Status		
Public Servant	27	10.9
Private Job Holder	67	27.1
Businessman/woman	14	5.7
Laborer	84	34.0
Unemployed	48	19.4
Others	7	2.8
Health Status		
Healthy	42	17.0
Physical Illness	137	55.5
Psychological Illness	32	13.0
Common Disease	36	14.6

In regard to data analysis, SPSS and PLS-SEM were used to test the relationship between the variables of this study. Specifically, structural and measurement models were run with the help of PLS-SEM. Two step-approach as suggested by Anderson and Gerbing (1988) was used to investigate the relationship among the variables; (i) to test the construct's reliability and validity, the measurement model was run, (ii) and to test the relationship between hypotheses, the structural model was run after ensuring the constructs reliability.

Table 2 Descriptive Statistics for Variables (n=247)

Constructs	Mean	Std. Dev.
Health Outcomes	3.4616	0.8536
Accountability	3.5151	0.8014
Equity	3.5880	0.8053
Responsiveness	3.6706	0.7558
Transparency	3.5045	0.8305

Table 2 above shows the descriptive analysis of the data. The mean value for health outcomes is 3.4616 and it shows moderate response. For accountability, the mean value is 3.5151 and it also shows moderate response. Further, the mean value of equity is 3.5880 and it also indicates moderate response. The responsiveness has a

3.6706 mean value and it also shows moderate response. Finally, transparency has a 3.5045 mean value which also shows a moderate response. Thus it is concluded that respondents indicated moderate response towards all variables in this study.

For this study, the CFA technique was used to check all items of proposed variables, and items with low factor loading were removed from the model. The validity and reliability of the constructs were assessed with the help of criteria proposed by Fornell and Larcker (1981) which was also used by Nawaz and Mohamed (2020) in their study. The results of the measurement model showed that the composite reliability value is higher than 0.70 and the constructs can be considered as an "acceptable construct validity" because the AVE value is higher than 0.50 (see Table 3 below).

Table 3 Measurement Model (n=247)

Latent Constructs and Items	Loadings	Composite Reliability	Average Variance Extracted (AVE)
ACC1	0.816		
ACC3	0.675	0.843	0.522
ACC5	0.824		
ACC4	0.611		
ACC5	0.661		
EQU1	0.477		
EQU2	0.786		
EQU3	0.836	0.855	0.503
EQU5	0.608		
EQU6	0.712		
EQU7	0.772		
RES2	0.622		
RES3	0.744		
RES4	0.786		
RES5	0.667	0.894	0.515
RES6	0.788		
RES7	0.725		
RES8	0.718		
RES9	0.677		
TRAN1	0.769		
TRAN2	0.683		
TRAN3	0.702		
TRAN4	0.670	0.882	0.518
TRAN5	0.775		
TRAN8	0.807		
TRAN10	0.610		
HO3	0.646		
HO7	0.729		
HO8	0.779		
HO9	0.634		
HO10	0.683		
HO11	0.770		
HO14	0.719		
HO17	0.706	0.912	0.509
HO19	0.735		
HO21	0.717		

The results of both validity and reliability tests indicated that all constructs of the study have shown an "adequate level of Cronbach's alpha and Average Variance Extracted (AVE)". The measurement model shows that the AVE value for Health Outcomes (HC) is 0.509, 0.522 is for Accountability (ACC), 0.503 is for Equity (EQU), 0.515 is for Responsiveness (RES), and 0.518 is for the Transparency (TRAN), which show that the AVE value for all the constructs is higher than 0.50. In addition, the reliability of all constructs is also higher than 0.70 as suggested by Fornell and Larker (1981). The results of the measurement model have revealed that all of the constructs are quite reliable for hypothesis testing as shown in table 3.

Table 4 Structural Model Assessment (Full Model) (Patients)(n=247)

Hypotheses	Relationship	Beta	SE	T-value	Sig.
1	ACC → HO	0.034	0.0401	0.8227	0.4107
2	EQU → HO	0.233	0.0492	4.7601	0.0000
3	RES → HO	0.146	0.0493	2.8769	0.0040
4	TRAN → HO	0.581	0.0581	10.0147	0.0000

At the outset, hypothesis 1 predicted that accountability is negatively related to health outcomes among the patients. The result of the data analysis revealed an insignificant relationship between accountability and health outcomes ($\beta = 0.034$, $t = 0.8227$, $p > 0.05$), which does not support the earlier assumption.

While hypothesis 2 predicted that equity is positively related to health outcomes among the patients. The result of the data analysis revealed a significant relationship between equity and health outcomes ($\beta = 0.233$, $t = 4.7601$, $p < 0.05$), supporting Hypothesis 2 in the patient's analysis.

Hypothesis 3 predicted that responsiveness is positively related to health outcomes among the patients. The result of the data analysis indicated a significant relationship between responsiveness and health outcomes ($\beta = 0.146$, $t = 2.8769$, $p < 0.05$), supporting Hypothesis 3 in the patient's analysis.

Hypothesis 4 predicted that transparency is positively related to health outcomes among the patients. As shown in Table 5.30 and Figure 5.26, a significant relationship exists between transparency and health outcomes ($\beta = 0.581$, $t = 10.0137$, $p < 0.05$), indicating support for Hypothesis 4 in the patient's analysis.

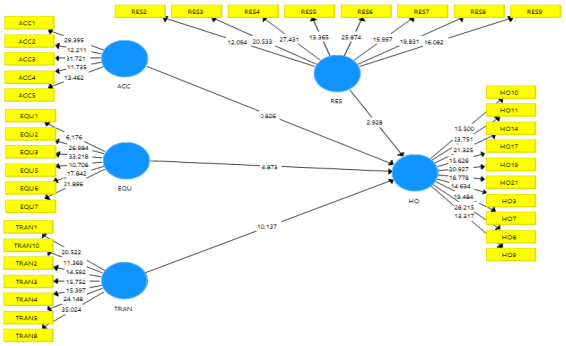

Figure 2 Hypothesis Testing Results

4. CONCLUSION

There is considerable evidence, both internationally and in Pakistan, of significant inequalities in health between socioeconomic groups, ethnic groups, and people living in different geographical regions and males and females (Acheson 1998; Howden-Chapman and Tobias 2000). Research indicates that the poorer you are, the worse your health. In some countries with a colonial history, indigenous people have poorer health than others. In America, a significantly large number of covid-19 positive patients are coming from poor background. This situation is also similar in other developing countries like Indonesia and India.

The WHO regional office for Europe has also established a program on determinants of health outcomes in health to examine issues of poverty and health, with reference to several vulnerable groups. Many countries also take a global initiative on equity and responsiveness in health and health care in to focus the attention of governments and international agencies on health outcomes. In light of recent pandemics, many countries have also embarked on a new method for measuring health disparities, looking at overall differences between healthy and sick ungrouped individuals within a country rather than comparing health across predetermined social groups. Despite efforts, inequitable health outcomes remain pervasive.

Inequalities in health are unfair and unjust. They are also not natural because they are the result of social and economic policy and practices. Therefore, inequalities in health are avoidable and should be addressed urgently (Woodward and Kawachi 2000) (Ministry of Health 2021). The disparities in outcomes for different social groups, be they ethnic or high deprivation need to be explored in-depth beyond a deficit theory explaining why these disparities exist. The health sector should not hesitate to draw on its collective resources to resolve differences in health outcomes.

5Additionally, this study has also managed to analyze how good governance determinants (accountability, equity, responsiveness, transparency) influence health outcomes of public hospitals in Pakistan. While there have been many studies examining the underlying causes of health outcomes of public healthcare hospitals, however, the present study addresses the theoretical gap by incorporating good governance determinants (accountability, equity, responsiveness, transparency) as significant independent variables. Moreover, the theoretical framework of this study has also added to the domain of good governance theory in the context of healthcare by examining the influence of the good governance determinants on health outcomes.

In addition to the theoretical contributions, the results from this study provide some important practical implications to public as well as private healthcare hospitals, regulatory or governing bodies, policy makers, stakeholders, and government and non-government initiatives. The results suggest that Pakistan has some way to go in ensuring a health system that provides equitable population health outcomes. It could learn from other countries approaches, especially how hospital administrators practice agile governance to ensure accountable, equitable, responsive, and transparent services to covid-19 patients. The economic cost of not addressing health outcomes is high, and far reaching. As COVID-19 continues to ravage the global economy, setting forth the path to a new normal becomes a necessity. As an unprecedented health crisis, it has been a litmus test of sorts for hospital administrators to challenge the efficacy of conventional governance approaches while giving rise to interactive models like "agile governance." The success of some countries in combating COVID-19 showcased the viability of agile governance in mitigating the pandemic by harnessing the available resources. Therefore, it is paramount that hospital administrators focus on agile governance as the hallmark of a good strategy to address time-sensitive issues such as covid-19 crisis in order to reach concrete solutions to navigate the current health crisis.

REFERENCES

[1] S. Mehta and S. Kant Sharma, "'Where Do We Go From Here? Viewing Corporate Social Responsibility through a Sustainability Lens'. Where Do We Go From Here? Viewing Corporate Social Responsibility through a Sustainability Lens," 2012. [Online]. Available: https://www.researchgate.net/publication/235695928

[2] J. Fox and L. D. (Lloyd D. Brown, The struggle for accountability : the World Bank, NGOs, and grassroots movements. MIT Press, 1998.

[3] "McGill University-Art History and Communication Studies-COMS 683 Media, Activism and Social Change Course description." [Online]. Available: http://journalism.nyu.edu/pubzone/weblogs/pressthink/2006/06/27/ppl_frmr.html

[4] E. Cusumano and F. Bell, "Guilt by association? The criminalisation of sea rescue NGOs in Italian media," Journal of Ethnic and Migration Studies, vol. 47, no. 19, pp. 4285–4307, 2021, doi: 10.1080/1369183X.2021.1935815.

[5] M. J. Kushin and M. Yamamoto, "Did social media really matter? college students' use of online media and political decision making in the 2008 election," Mass Communication and Society, vol. 13, no. 5, pp. 608–630, 2010, doi: 10.1080/15205436.2010.516863.

[6] M. Ioachimescu-Voinea, "National Security Exceptions in the WTO – A Carte Blanche for Protectionism ? Part I – Introduction , Negotiating history of Art . XXI of GATT , Russia – Traffic in Transit Panel ` s Report," Law Review, vol. X, no. 2, pp. 12–42, 2019.

[7] R. M. Giusto, The "economy of beauty and culture". routes for the integrated sustainable enhancement of the internal areas of alta irpinia, vol. 178 SIST. Springer International Publishing, 2021. doi: 10.1007/978-3-030-48279-4_14.

[8] T. W. Luke, "Corporate Social Responsibility: An Uneasy Merger of Sustainability and Development," Sustainable Development, vol. 21, no. 2, pp. 83–91, Mar. 2013, doi: 10.1002/sd.1558.

[9] P. M. F. Coelho, P. A. P. Correia, and I. G. Medina, "Social media: A new way of public and political communication in digital media," International Journal of Interactive Mobile Technologies, vol. 11, no. 6, pp. 150–157, 2017, doi: 10.3991/ijim.v11i6.6876.

[10] A. B. Carroll, "Corporate social responsibility: Evolution of a definitional construct," Business and Society, vol. 38, no. 3, pp. 268–295, 1999, doi: 10.1177/000765039903800303.

[11] J. de Man et al., "Disentangling depression in Belgian higher education students amidst the first COVID-19 lockdown (April-May 2020)," Archives of Public Health, vol. 79, no. 1, pp. 1–10, 2021, doi: 10.1186/s13690-020-00522-y.

[12] A. Shah, Local governance in developing countries. Washington, D.C: The World Bank, 2006.

[13] "2018 Corporate-NGO Partnerships Barometer Introduction 3." [Online]. Available: www.candeadvisory.com/barometer

[14] J. W. Selsky and B. Parker, "Cross-sector partnerships to address social issues: Challenges to theory and practice," Journal of Management, vol. 31, no. 6. pp. 849–873, Dec. 2005. doi: 10.1177/0149206305279601.

[15] E. Esa and N. A. M. Ghazali, "Corporate social responsibility and corporate governance in Malaysian government-linked companies," Corporate Governance (Bingley), vol. 12, no. 3, pp. 292–305, Jun. 2012, doi: 10.1108/14720701211234564.

[16] "A-New-Risk-Assessment-Approach-for-Occupational-Health-and-Safety-ApplicationsAdvances-in-Intelligent-Systems-and-Computing".

[17] A. S. Weber, R. Turjoman, Y. Shaheen, F. al Sayyed, M. J. Hwang, and F. Malick, "Systematic thematic review of e-health research in the Gulf Cooperation Council (Arabian Gulf): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and United Arab Emirates," Journal of Telemedicine and Telecare, vol. 23, no. 4, pp. 452–459, 2017, doi: 10.1177/1357633X16647894.

[18] N. I. Studies, "the Qatar Health System: Challenges and Opportunities," Network Intelligence Studies, vol. V, no. 9 (1/2017), pp. 47–56, 2017.

[19] R. J. D. Vergara, P. J. D. Sarmiento, and J. D. N. Lagman, "Building public trust: a response to COVID-19 vaccine hesitancy predicament," Journal of Public Health, pp. 1–2, 2021, doi: 10.1093/pubmed/fdaa282.

[20] S. Mishra and D. Suar, "Does corporate social responsibility influence firm performance of Indian companies?," Journal of Business Ethics, vol. 95, no. 4, pp. 571–601, 2010, doi: 10.1007/s10551-010-0441-1.

[21] M. Eriksson, "Lessons for Crisis Communication on Social Media: A Systematic Review of What Research Tells the Practice," International Journal of Strategic Communication, vol. 12, no. 5, pp. 526–551, Oct. 2018, doi: 10.1080/1553118X.2018.1510405

[22]