WISDOM DEVELOPMENT FOR LIVING WITH CORONAVIRUS DISEASE2019 (COVID-19) AND THE PEST MODEL IN PRAWET DISTRICT AREA BANGKOK METROPOLITAN VILASINEE

Vilasinee Jintalikhitdee[1],*and Shayut Pavapanunkul[2]

[1,2] College of Politics and Government, Suan Sunandha Rajabhat University, ThailandEmail: [1,*]vilasinee.ji@ssru.ac.th, [2]shayut.pa@ssru.ac.th

Abstract.

Coronavirus disease 2019 (COVID-19) began to apparent at the end of 2019 and as yet there is a lack of understanding how people living with coronavirus disease 2019 (COVID-19). At this point, time is the best time to explore how people living with it. So, this research aims to seek wisdom development for living with coronavirus disease 2019 (COVID-19) in the case study area, Prawet District, Bangkok Metropolitan, Thailand. Theoretically, it was quantitative research by using the grounded theory Delphi technique (two rounds) for the results data gathered of Delphi consensus from 18 purposive key informants with three group experts from local organization and relevance, doctors and nurses, including volunteers, local leaders, and rescue foundation officer. Data analysis was employed in-depth interviews, a rating questionnaire, the PEST model and descriptive statistics, including median interquartileranged (IR). The research results are to be pursed with the PEST model related to the Delphi consensus to be available of wisdom development for living with coronavirus disease 2019 (COVID-19). Consequently, these results led wisdom development of the PEST Model called "wisdom development" of the PEST Model approach value-based of the health risk assessment index system for living with coronavirus disease 2019 (COVID-19). Finally, this model linked towards wisdom development for living with coronavirus disease 2019 (COVID-19) in Prawet District, Bangkok Metropolitan, Thailand.

Keywords: Wisdom Development, Health System Governance, Health Governance Financing, The PEST Model

*Corresponding author

Introduction

All over the world, people are panicking over the global pandemic of coronavirus disease 2019 (COVID-19) and still don't understand how to living with it. In addition, even little research or previous studies are not widespread, and think that such a terrible epidemic will occur, only currently, there are only dealing with COVID-19 army in the same way since the Spanish flu era such as keeping social distancing, wear a protective mask, eat hot food with a medium spoon, wash your hands often, including giving alcohol whenever you touch something etc. During the global epidemic, there are efforts to discovery wisdom to get rid of the COVID-19 to stop the epidemic in all public and private organizations at all levels, both internationally and each country.

Fortunately, research into living with COVID-19 by the National Institute for Health Research (NIHR hereinafter referred to as NIHR)(Maxwell, 2020) will be useful to the public or national governance strategic plans, and generating intelligence as wisdom development, including implementing policy of health systems governance. Meanwhile, World HealthOrganization (WHO) moving closer to

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

living with COVID-19 requires the needed Health System Governance and Financing (HGF: hereinafter referred to as HGF) in the area of wisdom development. It can be applied to Health System Governance (HSG: hereinafter referred to as HSG) and leadership, focusing particularly on governance for Universal Health Coverage (UHC: hereinafter referred to as UHC).

By these previous viewpoints also reveals a PEST analysis process. To cope with the principles or dimensions that are believed to constitute it as tools for assessing wisdom development into living with COVID-19. Likewise, it could be part of orientate to improve HSG in both the public sector and private sector governance work streams. It illustrateengaging in all activities that are associated with leadership and HGF, including a plan of action as well.

Relative to the reason of HGF's support in collaboration with regional, country offices and also local organizations we are seek to address areas that add value to governance for results actions in the area of HSG. Dealing with Prawet District, Bangkok Metropolitan, is one of the 50 district of Bangkok Metropolitan, this district is an effective coping and coping strategy forliving with COVID-19 as the best case study. Although this district is closer to industrial factories and services to support Suvarnabhumi Airport. In addition, it is very interestingsince the start of the COVID-19 outbreak, it is the only one district where no infected people have been found. Even after the proactive screening, people infected from nearby communities began to enter the area. The Prawet district has put in place good governance management in the area and the community, for example, providing knowledge and advice onhow to maintain yourself at home or home isolation. As well as strictly complying with personal hygiene protection measures in the family and community. Therefore, with all of the above section, we conducted review of relevant literature to provide a research framework for the qualitative research method. Finally, in the connection with the objectives of this research,it can be seen that all of the above mentioned prompted us to seek wisdom development for living with coronavirus disease 2019 (COVID-19) in the case study area, Prawet District, Bangkok Metropolitan, Thailand.

Review of Relevant Literature

Health System Governance: Definitions, Frameworks & Scope

The literature on health system governance can be found that draw on the dimensions of governance according to various international institutions (Table 1)

More narrowly, a body of framework and scope concept relating to there is also a literatureon governance of the previous international institutions that to consist of the HSG to accomplish the strategic goals and objectives of the work plan wisdom development consistedof these followings components: (Phyllida *et al*., 2002; Sameen *et al*., 2009)

1) Formulating policy and strategic plans.

2) Generating intelligence as wisdom development of information and analysis for degreeof decision-making.

3) Implementing policy and design of HSG, power and responsibilities, regulation and standard setting, incentives, check and balances.

4) Collaboration and coalition-building particular components of the health system e.g., human resources, health system financing, health service delivery-or to the system as a whole.

5) Linked towards dimensions of governance according to various international institutions (Table 1).

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

Table 1: Dimensions of Governance According to Various International Institutions

World Bank Institute (Worldwide governance indicators)	- Voice and accountability - Political stability and absence of violence - Government effectiveness	- Regulatory quality - Rule of law - Control of corruption
United Nations	- Participation - Rule of law - Transparency - Responsiveness - Consensus orientation	- Equity - Effectiveness and efficiency - Accountability - Strategic Vision
Overseas Development Institute/World governance assessment	- Participation - Fairness - Decency	- Accountability - Transparency - Efficiency
Mo Ibrahim Foundation /Ibrahim index of African governance	- Safety and rule of law - Participation and human rights	- Sustainable economic - Human development

Source: C. Baez-Camargo, and E. Jacobs, 2011. (Claudia & Eelco, 2011)

Relative to these above components work together on the governance of international health institutions rather than the overall health system refers to the oversight and accountability a settlements, including degree for decision making for both health public and private sector governance and interventions designed to improve governance of health sector institutions are combined with assessment, advice and capacity building on wisdom development. They encompass or include (Sameen *et al*., 2009; William & Pablo, 2008;World Health Organization, 2005; World Health Organization, 2011).

1) Health systems governance frameworks and tools, it is also developing tools for decision-making.

2) Tools for community decision making, it is also developing tools for health needs assessment, strategic planning financial planning and budgeting, human resource development, service design, service quality and safety, stakeholder engagement, monitoring progress plans and results (Health Systems 20/20, 2012).

3) Three pillars of development of governance practices are leadership, management and governance principles and capacities, it is developing tools for health system governance model and to support mining health initiative (The World Bank, 1988).

4) In relation to mining health initiative, it is developing an assessment framework is support for better practice and capacity strengthening for development to improve health outcomes of approach to the action plan of health systems governance and financing10 that describe in the next section.

Plan of Action Activities Mapped Governance Initiatives (David et al, 2012).

The last section about HSG showed that this approach relates to using the four aggregated health

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

system governance to accomplish the strategic goals and objectives of the wisdom development as work plan development described in the previous section and applying to this section that used to an associated plan of action activities mapped governance initiatives (Daniel & Aart, 2008). We illustrate in Table 2.

Table 2: Plan of Action Activities Mapped Governance Initiatives

Leadership and Wisdom Development of Governance Action Activities	Proposed Health Systems Governance (HSG) and Health Governance Financing (HGF)
1. Formulating policy and strategic plans	1. Supporting community to develop implement andreview a. Bridging national health policies, strategies andplan of action activities b. Community governance strategies plans of action activities c. Health financing strategies & plans of actionactivities
2. Generating intelligence as wisdom development of information and analysis for degree of decision making	a. Supporting communities governance to generate and use data for HSG on health budgets and expenditure b. Supporting capability building, database, technical for health care, and HGF policy support
3. Implementing policy and design of HSG and HGF	
4. Collaboration and coalition-building particularcomponents of the HSG	a. Partnership s with civil society geronto society and transparency effectiveness in information database, technical for health care and HGF policy supports b. Generating intelligence as wisdom development referred to governance initiatives to promote strengthening plans of action activities ofoverall health policy in communities c. The activities listed in 4 leadership and wisdomdevelopment of governance actions the goal is to also strengthen the role of government, including community governance in setting the right directions dealing with HSG to help communities' health care develop strategies and plan of actions for indicators of coverage and impact that should be assessment HSG and HGF (Daniel & Aart, 2008).

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

The PEST Model Support in Collaboration with Wisdom Development Would CoverHSG and HGF

The challenge of living with COVID-19 is for all of the previous components in the previous section to come together in a way that the community control and manages, with the goal of moving closer wisdom development to HSG and HGF for overall health plans and strategies and for strengthening health governance and leadership. So the PEST analysis process can be proposes the following activities in collaboration with HSG, HGF and plan of action activities mapped governance initiatives (Hattingh, 1988; Jean-Paul, 2020) (Figure 1).

From Figure 1, it is related to all above section, which could be operated:

1. Review of the PEST will have to deal with formulating policy and strategic plans.

2. The adaptation leadership and wisdom development of governance action activities. We purpose the focus of HSG and HGF perspective.

3. Strengthening the leadership and wisdom development of governance action activities relationship to HSG and HGF assessment and support for living with COVID-19 by helping policy designers produce more adaptable designs of public or governmental sector design14 and perspective on democratic governance as well (Jean-Paul, 2020). More clearly, and narrowly, the health system governance consisted HSG and HGF undertaken with the objective to protect and promote the health of the people. This concept involves dimensions ofgovernance according to various international institutions (Claudia & Eelco, 2011; Shayut, 2022; Shayut & Nasaran, 2018; Ritwatthanavanich *et al*., 2021).

4. Generating intelligence as wisdom development of information and analysis for degree of decision making.

Methods

This research is qualitative research conducted by using the Grounded Theory Delphi technique, was developed by Päivärinta *et al*., 2011, involving two rounds (Ulrike *et al*., 2020), which took place between September 2021 and July 2022 consisted of in-depth interviews and rating questionnaire according to the classical Delphi technique. The Delphi expert consensus from 18 experts as the key informants from Macmillan's Table criteria by Thomas T. Macmillan in the 1971 (Table 3).

Next, relative to the Delphi expert consensus come from 18 purposive experts as the key informants with three groups consisting of the Prawet District organization as a government agencies group, relevant doctors and nurses group, and relevance to this research group from local leaders, resource foundation officers, and volunteers, selected through purposive sampling. The selection criteria based on I. Ilya *et al*., 2015 were as follows 1) expert in health care, local community decision-makers, 2) position concern both clinical and nonclinical sector, 3) experience more than 3-5 years and practical, academic, research area ofexperience (Adapted from Renata *et al*., 2011). The Delphi consensus was assessed by the descriptive statistics including Median and Interquartile Range (IR).

Notes. Ethics, ethical approval for the study was granted by with Thailand's ethics of data projection regulations the consensus process in corporate a two-round interviews method including triangulation which took place between data was analyzed by the descriptive statistics were Median and Interquartile Ranger (IR).

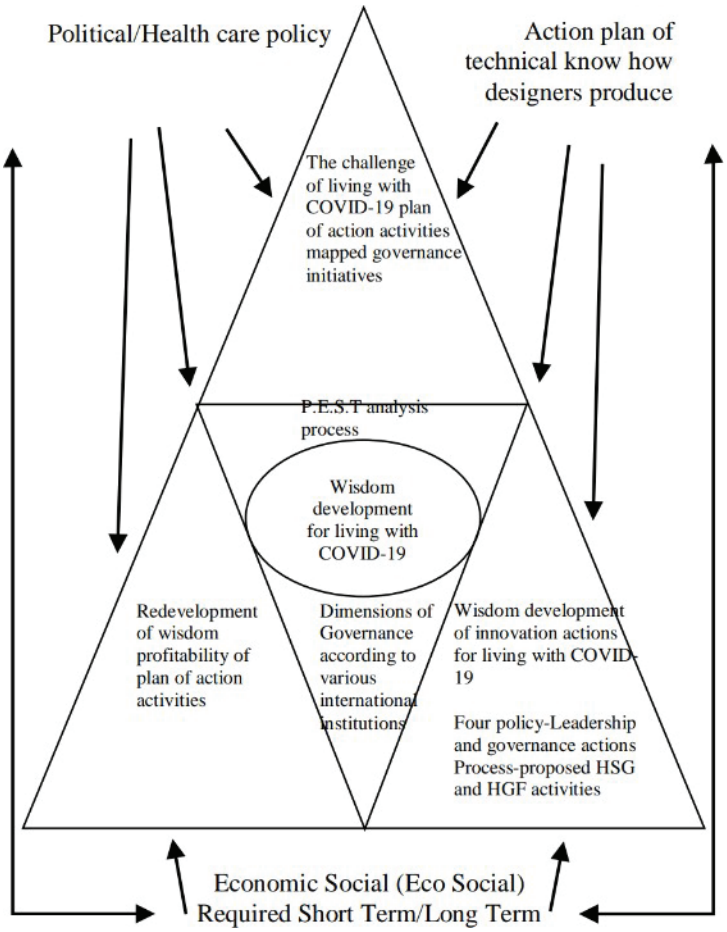
Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

Result And Discussion
Delphi Round 1

In Delphi round 1 the wisdom development to assess the impact of action plan of HSG and HGF reached consensus in round 1 were included in the questionnaire of the round 2.Combined with PEST analysis process and the suggestions of the experts from triangulationof these previous results as followings:

The challenge of living with COVID-19 that draw on leadership and wisdom development of governance action activities. It was associated with three pillars of development of governance practices were leadership proposed HSG and HGF strategies & plans of governance action activities9,11 in the long term not only short term for living with COVID-19 (after COVID-19 outbreak or as long COVID-19) (Applied to Polyakova &Mirza, 2015; Bassey & Arzizeh, 2012; Thomas, 2017).

Figure 1: The PEST model support in collarboration with HSG, HGF and plan of action activities mapped governance initiatives



Source: Jean-Paul, 1996; Cowan, 2012; Kathryn & Martha, 2011; David & Aiden, 2004; Mark & Jean, 2008;Michael, 2006.

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

Table 3: The Determination of Expert's Selection Based on Error Rate is Acceptable

Number of Experts	Error Level	Error Reduced Unit Constant
1 - 5	1.02 - 0.70	0.50
5 - 9	0.70 - 0.58	0.12
9 - 13	0.58 - 0.54	0.04
13 - 17	0.50 - 0.48	0.04
17 - 21	0.48 - 0.46	0.02
21 - 28	0.46 - 0.44	0.02

Source: Macmillan, 1971

Wisdom development of plan of action activities mapped governance initiatives. Thus, this design thinking is modified to suit the actual condition in wisdom profitability of leadership and wisdom development of governance action activities. But the suggestion of theexperts about plan of four action activities mapped governance initiatives it is unclear which indicators can be used to assess the actual health condition. Especially, the health risk assessment index system was developed for the redevelopment of wisdom profitability of planof action activities related to HSG and HGF. The experts suggested that wisdom development refers to practical wisdom related to action plan activities or plan of action activities of this research. Further, they were pointed out wisdom that can help to not just survive a crisis applied to COVID-19 pandemic, but also to grow from it applied to living with COVID-19. Finally, when this research use wisdom development must translate a plan of action activities mapped governance into value-based indicators.

Value-based indicators (Yolima *et al*., 2022)

1. The focus should be on analyzing gaps for value infected or patients outcome, notjust lowering costs, but there must be based on results of the most effective way.

2. Value based indicators are driven by value-based health care, quality, improvementand infected or patient satisfaction (Elizabeth & Sarah, 2020).

3. Creating value-based indicators of the health risk assessment on redefining healthcare results should be widely regional and local available on just nationally (OECD, 2001).

4. High quality of HSG and HGF should be moving to value-based of localgovernance before the regional or national level (Giguère, 2001).

5. Operation risk assessment of COVID-19 showed the overall impact on health productsupply chains such as all pharmaceuticals, long-lasting insecticidal nets, diagnostics, and freight and logistics (The global fund, November 2021).

Delphi Round 2

After Delphi round 1 there is wisdom development that draws on the plan of action activities mapped governance which indicators of the health risk assessment HSG and HGF. Itwas related to value-based indicators on result and assessment of the overall impact ofCOVID-19 on health product supply chains. In Delphi round 2, experts have a high concentration on indicators in round 1 at all level, indicating that expert to take care of agreement with the Delphi consensus. Therefore, the correspondence ends.

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

Combined withthe expert's consensus and after triangulation, the health risk assessment index system for value is based on wisdom development indicators. These indicators should be used to understand and assessment of wisdom development for living with COVID-19 was formed, which includes the PREST model, exactly. This model was the original results of this research. Relative to this unique concept was developed to extension of the PEST model to PREST model. Thus, two rounds of the Delphi process as final results are shown in Figure 2 with the relevant PEST of the research theme that all experts reached a consensus agreement.

Final Results and Discussion of Two Rounds of Delphi Consensus

The two-round Delphi study and discussion, including expert triangulation are showed thefinal results and discussion of the research that presented in an original concept called "the PREST model". This model is an extension of the development of the PEST model that consists of political/regulatory value-based, eco-social/socio-economic, and technological value-based. Interrelated to the PEST model, by adding R-redevelopment of wisdom profitability derived from the research result and discussion to be included in the PESTmodel. Thus it becoming a PREST model as shown in Figure 2.

Conclusions

Eventually, connected form the results and discussion of this study. The conclusion willbe interesting and useful in terms of new knowledge and can be applied in practice.

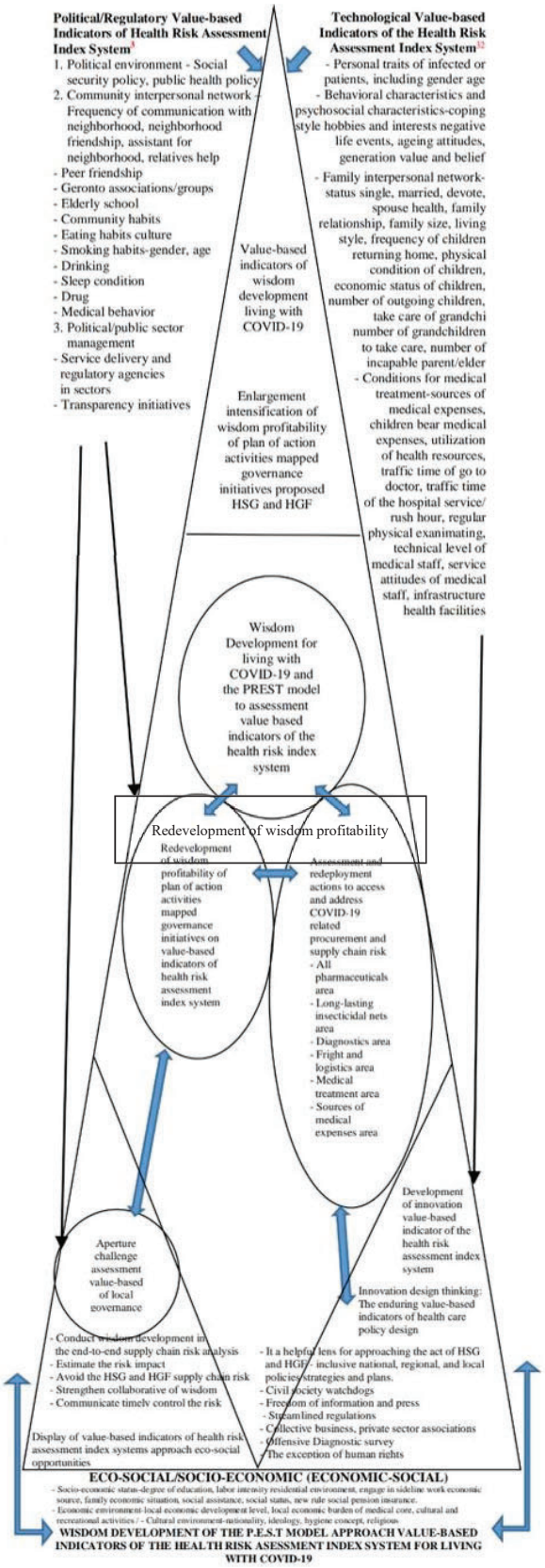
The recommending indicators of this study can be utilized as a guideline for further studies. Moreover, the Prawet District can be used to design a health care policy for living with COVID-19 based on the PREST model appose value-based indicators to create qualityof life (Ruchir *et al*., 2022; Ruchir & Patrick, 2022), and public health service delivery(Ruchir & Patrick, 2022), including geronto society can be promoted as well.

Acknowledgment

The authors would like to thank you Collage of Politics and Government, Suan Sunandha Rajabhat University, Thailand, are for all of the supports.

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

Figure 2: The PEST model of wisdom development for living with coronavirus disease 2019 (COVID-19).



Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

References

Amanda, C. and Jonathan, C. (2018). The twin faces of public sector design. *Governance*, vol.32, no. 1, pp. 5-21.

Bassey, E.B. and Arzizeh, T.T. (2012). Expensed human resources cost and its influence on corporate productivity: A study of selected companies in Nigeria. *Global Journal of Management and Business Research*, vol. 12(5), pp. 84-91.

Claudia, B.C. and Eelco, J. (2011). A framework to assess governance of health systems inlow income countries, *Governance Basel Institute on Governance*, no. 10, pp. 1-22.

Cowan, J., (2012). *Integrating design thinking practices into the public sector*, Hubert H. Humphrey School of Public Affair.

Daniel, K. and Aart, K. (2008). Governance indicators: Where are we, where should we be going?. *The World Bank Research Observer*, vol. 23, no. 1, pp. 1-30.

David, L.W. and Aiden, R.V., (2004). *Policy analysis: Concept and practice upper saddle river*, Prentice-Hall.

David, V.M., Matthias, W., Vivian, L., Catherine, M.J. and Maggie, D., (2012). *Intersectoral governance for health in all policies: Structures, actions and experiences*, World Health Organization.

Elizabeth, T., Scott, W. and Sarah, O. (2020). Defining and implementing value-based health care: A strategic framework. *Academic Medicine*, vol. 95, no. 5, pp. 682-685.

Giguère, S. (2001). Local governance and partnership: A summary of the finding of the OECD study on local partnership, Paris: Co-operative Action Programme on Local Economic and Employment Development

Hattingh, J.J., (1988). *Goverrntal relations: An introduction*, University of South Africa. Health Systems 20/20., (2012). *The health system assessment approach: A how-to manual:*

Version 2.0, The U.S. Agency for International Development.

Ilya, I., Jakub, V. and Peter, K. (2015). Multi-criteria decision analysis for supporting the selection of medical devices under uncertainty, *European Journal of Operational Research*, vol. 247(1), pp. 216-228.

James, G.M. and Johan, P.O., (1995). *Democratic governance*, New York, Free Press.

Jean-Paul, L. (1996). Measuring the international environment impact on corporate marketing and strategy: the PREST model. *16th IMP Conference*, Bath, UK.

Kathryn, S.Q. and Martha, S.F. (2011). Boundaries and Inclusive Public Management. *Public Management Research Association Conference*, June 1-3, 2011, Syracuse, NewYork, pp. 1-33.

Macmillan, T.T. (1971). The delphi technique, *ERIC Clearinghouse*, pp. 1-24.

Mark, M. and Jean, H. (2008). Innovations in governance. *Public Management Review*, vol. 10(9) , pp. 3-20.

Maxwell, E. (October 2020). National Institute for Health Research. Living with Covid19: A dynamic review of the evidence around ongoing Covid19 symptoms (often called long

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

COVID), National Institute for Health Research, [Online]. Available: https://evidence.nihr.ac.uk/themedreview/living-with-covid19/

Michael, M. (2006). Collaborative public management: Assessing what we know and how we know it. *Public Administration Review*, vol. 66, pp. 33-43.

OECD. (2001). Local partnership for better governance, Organisation for Economic Co-operation and Development. [Online]. Available: https://www.oecd.org/regional/leed/localpartnershipforbettergovernance.htm

Päivärinta, T., Pekkola, S. and Moe, C.E. (2011). Grounding Theory from Delphi Studies. *Proceedings of the International Conference on Information Systems*, ICIS 2011, Shanghai, China, pp. 1-14.

Phyllida, T., Dominique, E., Philip, D. and Abdelhay, M. (2002). Towards better stewardship:concepts and critical issues, Evidence and information for policy, *World Health Organization*, Geneva, pp. 1-19.

Polyakova, O. and Mirza, M. (2015). Perceived service quality models: Are they still relevant?. *The Marketing Review*, vol. 15, no. 1, pp. 59-82.

Renata, P.M., Rafaella, P.M., Fernanda, C.F., Adriana, S.C.de.A., Emanuella, S.J. and Emilia,C.de.C. (2011). Criteria for selection of experts for validation studies of nursing phenomena, *Rev Rene, Fortaleza*, vol. 12, no. 2, pp. 424-431.

Ritwatthanavanich, N., Benjawan, K. And Pavapanunkul, S. (2021). Performance of theinnovation-passion model for post Covid-19 entrepreneurs, *Utopía y Praxis Latinoamericana*, vol. 26, no. Esp. 2, pp. 123-135.

Ruchir, A. and Patrick, G. (2022). What drives innovation? Lessons from COVIS-19 R & D.
Journal of Health Economics, vol. 28, pp. 1-27.

Ruchir, A., Jeremy, F., Gita, G., Richard, H. and Peter, S. (2022). *A Global strategy to manage the long-term risks of COVID-19*, IMF Working Paper, International Monetary Fund.

Sameen, S., Tayyeb, I.M., Sania, N., David, H.P., Belgacem, S., Khalif, M.B. and Mohamed,
A.J. (2009). Framework for assessing governance of the health system in developing countries: Gateway to good governance, *Health Policy*, vol. 90, no. 1, pp. 13-25.

Shayut P., (2022). *SNG: The next normal avatar model led local governance for living with Coronavirus Disease 2019 (COVID-19) of communities in Prawet District area Bangkok metropolitan*, Suan Sunandha Rajabhat University, Thailand.

Shayut, P. and Nasaran, M. (2018). Currently, labelled innovation model of public sector innovation and the public design thinking process are rooted in innovating public administration. *Journal of Asian Administration and Management Review*, vol. 1, no. 1, pp. 43-57.

The global fund., (November 2021). COVID-19 impact on health product supply: Assessmentand recommendation. The global fund. [Online]. pp. 1-3. Available: https://www.theglobalfund.org/media/9440/psm_covid-19impactonsupplychainlogistics_report_en.pdf

The World Bank., (1988). *Assessing aid: what works, what doesn't and why, A World BankPolicy Research Report*, Oxford University Press.

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.

Thomas, A.D. (2017). Innovation development in service firms: A three-model perspective. *International Journal of Services and Operations Management*, vol. 28, no. 1, pp. 64-80.

Ulrike, S., Stefan, S. and Jürgen, R. (2020). Lessons learned from a two-round Delphi- based scenario study. *MethodsX*, vol. 8, pp. 1-17.

William, D.S. and Pablo, G., (2008). *Governing mandatory health insurance: Learning from Experience*, Washington DC. World Bank.

World Health Organization., (2005). *Resolution WHA 58.33 sustainable health financing, universal coverage and social health insurance*, Fifty-Eighth session of the World HealthAssembly.

World Health Organization., (2011). 2011 *World Health Assembly Resolution WHA 64.9, "Sustainable health financing structures and universal coverage"*, The World Health Report 2010, In Sixty-Fourth World Health Assembly, Geneva, 16-24 May 2011.

Yolima, C.G., Maisa, O., Carolina, W., Joseph, C., Alexandre, C., Maria, G.S.M, Pascal, K., Samuel, K., Valerie, K., Virginie, L.G., Dominik, M., Matteo, M., Barbara, P.J., Simona, S., Jan, H, and Tanja, S. (2022). The roadmap for implementing value-based healthcare inEuropean university hospitals-consensus report and recommendation. *Value in Health*, vol. 25, no. 7, pp. 1148-1156.

Copyright © 2023 by The 2023 International Conference on Creativity, Management, Education, Technology and Sciences.