

ICoPS2023Bosnia



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International Conference on Public Policy & Social Sciences 2023

13-15 September 2023

Organised by Faculty of Administrative Science & Policy Studies, Universiti Teknologi MARA (UiTM), Seremban Campus, Negeri Sembilan, Malaysia, and International University of Sarajevo (IUS), Bosnia and Herzegovina

Assessing Malaysian Health Care Reform

Mazlan Che Soh^{1,2*}, Suhaimi A. Samad¹, Radduan Yusof^{1,2}, Nur Zafifa Kamarunzaman^{1,2}

*Corresponding Author

¹ Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Malaysia ² Governance and Policy Study, Faculty of Administrative Science and Policy Studies, Universiti Teknologi MARA, Malaysia

mazlan3161@uitm.edu.my, suhaimi@uitm.edu.my, radduan@uitm.edu.my, nurzafifa@uitm.edu.my
Tel: 1st +6016-2095409

Abstract

This study assesses the healthcare reform in Malaysia since its independence. Previous studies and official reports on healthcare reform were analyzed through content analysis. The discussion starts with geographical and socioeconomic factors, then moves to the inception of the Malaysian Health Care System, focusing on the development of primary health system reform initiatives in the country. This paper illustrates the rigorous journey of system reform, emphasizing that political commitment and backing from stakeholders and citizens are vital for its success.

Keywords: Health Care Reform, Malaysia, Post-Independence

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1.0 Introduction

Health is a paramount sector, and efforts to bolster it consistently garner attention from governments worldwide. The World Health Organization (WHO) persistently urges member states to implement necessary reforms in their healthcare systems. This emphasis was notably evident during the 18th Meeting of Ministers of Health in Kathmandu, Nepal, from 23-25 August 2000, where the document "Health Care Reform" (WHO, 2000) was introduced. In this document, WHO defined health care reform as a sustained process of fundamental change in policies and institutional arrangements of the health sector, usually guided by the government. The process lays down a set of policy measures covering the four main core functions of the health system, viz., governance, provision, financing, and resource generation. It is aimed at improving the functioning and performance of the health sector and, ultimately, the health status of the population. Such reforms are advocated to ensure states can guarantee access, affordability, equity, and other health-related benefits. The primary objective is to ensure that every citizen receives optimal care. In this light, health sector reform is described as a continuous process of significant shifts in the policy and institutional frameworks of the health sector, typically orchestrated by the Government. This reform addresses equity, efficiency, quality, financing, and sustainability in healthcare delivery, setting priorities, refining policies, and reshaping the institutions responsible for policy execution.

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Over the past few decades, global health has seen remarkable improvements, marked by significant strides in life expectancy and healthcare accessibility (WHO, 2010a, 2010b). However, challenges persist, including limited coverage, health disparities, rising costs, and inefficiencies (Gupta, Clement, and Coady, 2012). Key challenges in healthcare reform encompass population growth, urbanization, the surge in non-communicable diseases (NCDs), costs, and more. As Gupta, Clement, and Coady (2012) noted, healthcare reform is intricate due to potential conflicts between reform objectives, such as advancing health outcomes while managing costs.

Despite the intricacies, governments globally are making concerted efforts to initiate healthcare reforms. Discussions on the health reform among others related to 10 years of reform in China by Yip et al. (2019), analysis on unintended consequences of reform in Korea by Kim (2023). The main objective of this article is to narratively discuss and highlight major reform in health care which took place in Malaysia since its independence. Besides that, this paper also aims to briefly evaluate the healthcare reforms implemented. The methodology for this article involves a content analysis of journals, reports from Malaysian ministries, government agencies, entities like MOH and EPU, and global organizations such as WHO. The article is structured into various sections, commencing with an introduction, an overview of Malaysia's geography and socioeconomic demographics, and then delving into the Malaysian Health Care System. The primary focus of the discussion will be on the evolution of significant health system reform initiatives in Malaysia.

2.0 Methodology

The qualitative aspect of this study aimed to gather insights into the history and reforms of Malaysian healthcare since its independence. A comprehensive examination was conducted through the qualitative analysis of documents, official statistics, records, journals, and books using content analysis techniques. This is, among others, 5 Year Malaysian Plan, the Ministry of Health annual report, the National Health and Morbidity Survey (NMHS), the publication titled Healthcare Reform: Healthier Future for Malaysia by the Malaysian Medical Association (MMA, 2022) and so forth. This research indicated that presenting the findings chronologically would enhance the audience's comprehension and interpretation of the results (Monico et al., 2020; Berends & Savic, 2017).

3.0 Malaysia: Geography and Socioeconomic Demographic

Malaysia, situated in Southeast Asia, lies between 1 and 7° North latitudes and 100° and 119° East longitudes. It spans an area of 329,758 square kilometres and is a member of the Association of Southeast Asian Nations (ASEAN). Positioned just north of the Equator, Malaysia is divided by the South China Sea into Peninsular Malaysia and East Malaysia (comprising the states of Sabah and Sarawak) (Maps of Malaysia, 2023; Merican & Yon, 2000). As a federal constitutional monarchy, Malaysia consists of a federation of 13 states and the federal territories of Kuala Lumpur (the capital city), Putrajaya (the federal administrative center), and Labuan (Maps of Malaysia, 2023; Merican & Yon, 2000). As of 2020, the country's population stands at an estimated 32.7 million, a slight increase from 32.5 million in 2019, reflecting an annual growth rate of 0.4%. This slowed population growth rate is attributed to decreased non-citizen numbers, from 3.1 million in 2019 to 3.0 million in 2020 (DOSM, 2020). Malaysia is celebrated for its multicultural fabric, with current demographics indicating 20.6 million (69.4%) Bumiputera, 6.9 million (23.2%) Chinese, 2.0 million (6.7%) Indians, and 215.6 thousand (0.7%) from other ethnicities. While Malaysia's economy has traditionally been driven by its abundant natural resources, it is progressively venturing into fields like science and technology, commerce, tourism, and medical tourism.

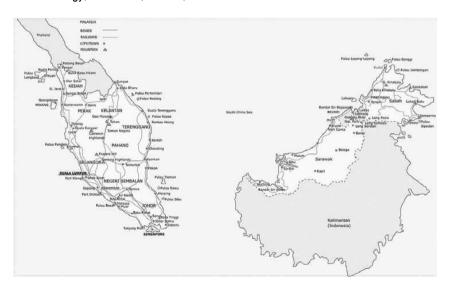


Figure 1: Map of Malaysia Source: Department of Statistics Malaysia, 2011

The Malaysian Government operates under a constitutional monarchy with a Prime Minister at the helm, utilizing a Parliamentary system. The Government is divided into three branches: the Executive, the Legislature, and the Judiciary. The Malaysian Parliament

consists of His Majesty Yang di-Pertuan Agong, the Senate (Upper House) with 70 members, and the House of Representatives (Lower House) with 222 members. Of the 70 senators, 44 are appointed by His Majesty Yang di-Pertuan Agong, while State legislatures elect the remaining 26. General elections for the Lower House's 222 members are mandated every five years. On the economic front, the labor force stood at 15.8 million in 2021, a slight increase from 15.7 million in 2020. Total employment in 2021 was 15.1 million, compared to 15.0 million in 2020. The unemployment rate rose marginally from 4.5% in 2020 to 4.6% in 2021. The nominal Gross Domestic Product (GDP) figures were RM 1,447.8 billion (2018), RM 1,512.7 billion (2019), RM 1,418.0 billion (2020), and RM 1,545.4 billion (2021). The real GDP growth rate was 4.8% in 2018, 4.4% in 2019, -5.5% in 2020, and 3.1% in 2021 (UPE, 2022).

The National Malaysia Health Morbidity Survey (NMHS) is the primary tool for assessing Malaysia's health status. Conducted every four years since 2011, the latest NMHS took place in 2019. The initial year of each cycle zeroes in on non-communicable diseases (NCD) and healthcare demand (HCD). In contrast, subsequent years address other priority areas identified by the Ministry of Health, Malaysia. 2019 marked a new NMHS cycle, emphasizing NCD, HCD, and additional topics as per stakeholder requests. This survey concentrated on three primary components: Non-Communicable Diseases, Healthcare Demand, and Sarawak Rural Health. Key findings revealed critical insights into Malaysia's healthcare landscape. Pertaining to NCDs, high blood sugar (diabetes), high blood pressure (hypertension), and high cholesterol are significant cardiovascular disease risk factors, the primary cause of death in Malaysia. Approximately 1.7 million Malaysians live with these three risk factors, while 3.4 million have two. One in five Malaysian adults has diabetes, equating to around 3.9 million individuals aged 18 and above. Additionally, three in ten Malaysians, or 6.4 million people, have hypertension, and four in ten adults, or eight million individuals, have elevated cholesterol levels. As of 2020, the life expectancy for males was 74.7 years, and for females, 78.8 years, with an average of 76.7 years, placing Malaysia 74th globally. The fertility rate in 2020 stood at 2.0%. Infant mortality was recorded at 5.2 deaths per 1,000 births, and under-five mortality was 6.1 deaths per 1,000 births (Worldmeter, 2020).

4.0 Malaysian Health Care System: An Overview

Historically, under British colonial rule, Malaysia inherited its health system from the British upon gaining independence in 1957. During that time, healthcare services were predominantly concentrated in urban regions. In its nascent stages, the Malaysian healthcare system adopted a three-tier primary care model conceptualized for the public sector in the late 1950s. This model comprised a health center, four sub-centers, and four midwife clinics associated with each sub-center. This tripartite system persisted from 1957 to 1970. However, in 1970, the sub-center tier was phased out, and midwife positions transitioned to community nurse clinics to offer a broader spectrum of care. From 1970 onwards, Malaysia has maintained a two-tier system, encompassing health and community clinics.

The Malaysian healthcare system is dual-faceted, with the three main providers being public organizations, private entities, and to a lesser extent, non-governmental organizations (NGOs) (Thomas, Beh & Nordin, 2011; Jaafar et al., 2013). Under the Malaysian Federal Constitution, the Ministry of Health (MOH) is the primary provider, financier, and regulator of health services. It is responsible for public health and the execution of health promotion (Thomas, Beh & Nordin, 2011). This encompasses all aspects of care, including prevention, promotion, treatment, and rehabilitation. The MOH's hierarchical structure spans federal, state, and district levels, promoting efficiency through decentralization.

Beyond the Ministry of Health, other governmental agencies bolster the MOH's efforts to protect public health. For instance, the Ministry of Higher Education oversees university or teaching hospitals and the training of technical health personnel, such as those at the University of Malaya, Universiti Kebangsaan Malaysia, University Teknologi MARA, and University Sains Malaysia, among others. The Ministry of Human Resources enforces regulations for the safety and health of industrial and estate plantation workers, overseeing estate hospitals. The Ministry of Defense provides health services for its personnel, their dependents, and local populations within its territories. The Ministry of Rural Development attends to the health of Aborigines through jungle medical posts and a dedicated hospital. Under the Ministry of Housing and Local Government, local authorities enforce specific health legislation in their jurisdictions.

The private sector is the second primary health service provider, with private hospitals and clinics proliferating, especially in urban regions. Over recent decades, the private sector's role in health care has expanded, complementing governmental initiatives. For instance, 1980 saw 50 private hospitals with 1,171 bed 13,186 beds and 2020 with 208 hospitals and 16,469 beds (MMA,2022). The increase was also obvious among registered private medical clinics, from 6,442 in 2010 to 7,988 in 2022 (MMA,2022).

Other healthcare contributors include traditional, complementary medicine practitioners and NGOs. Traditional, complementary medicine in Malaysia, encompassing Malay, Chinese, Ayurvedic, and other treatments, is widely accepted across rural and urban communities. NGOs, the final tier of health care providers, are typically voluntary and not-for-profit. Approximately 132 NGOs operate in Malaysia, many complimenting the MOH by offering alternative health care and treatments. Examples include the Malaysian Liver Foundation, the Malaysian AIDS Council, Cancerlink Foundation, and Hospis Malaysia. These NGOs often collaborate with organizations like the Pink Triangle Foundation, Pelangi, Prihatin, and the Prostar Club, which assist HIV/AIDS patients. Most NGOs augment the MOH's efforts, especially in areas beyond the Ministry's reach. Regular Annual Health Dialogues are conducted with active NGOs, various industries, professional groups, and the MOH to address diverse health issues.

5.0 Assessing Malaysian healthcare reform

The discussion assessing the Malaysian healthcare reform initiatives will be structured around several key health indicators. First, we will delve into the reform in health governance and organization. A significant shift in healthcare governance and organization occurred in the early 70s when Malaysia transitioned from a three-tier to a two-tier system. This change aimed to enhance the effectiveness and

efficiency of healthcare delivery. In terms of organization, the structure remains consistent, with the Ministry of Health as the primary healthcare provider, supported by several other ministries. Private healthcare providers are governed by The Private Health Care Facilities and Services Act 1998. Additionally, the Government continually updates and introduces new health-related legislation, such as the Mental Health Act 2001, Telemedicine Act 1997, Persons with Disabilities Act 2008, and regulations concerning pharmaceuticals, medical devices, and human resources.

Secondly, the Malaysian Government has been diligently working on reforms in healthcare financing. These reforms encompass exploring social health insurance schemes, enhancing efficiency in healthcare expenditure, and bolstering financial protection mechanisms. However, despite these efforts since the 1980s, the desired outcomes have not been achieved, even though numerous studies have been commissioned over the past 40 years. Policymakers' primary objective was to transition the existing hybrid system, where tax-funded public care coexists with predominantly out-of-pocket financed private care, into a unified insurance-based system, establishing a single-tier system. In 2009, the Government failed to realize this through "1Care for 1 Malaysia" (1 Care). A study by Croke et al. (2019) concluded that political sentiment was a significant barrier to the reform's success. Nevertheless, the Government has launched several successful initiatives, such as enhancing healthcare through the Employees Provident Fund (EPF) and the Social Security Organisation (SOCSO), and introducing the MySalam free insurance coverage. This initiative offers free financial protection and healthcare access to 6.8 million eligible lower-income individuals and those with severe illnesses (MySalam, 2023).

Thirdly, there is Universal Health Coverage (UHC). From 1957, when Malaysia gained independence, until the early 1980s, the primary health policy focused on extending essential health services to the entire population, especially the rural poor. Malaysia notably succeeded in this endeavor, achieving widespread access to primary healthcare. The 11th Malaysia Plan (2016-2020) underscored the Government's commitment to UHC, aiming to expedite efforts to ensure universal access to quality healthcare. This plan targeted underserved areas, aimed to boost the capacity of healthcare facilities and personnel, and emphasized community engagement to foster shared health responsibility (EPU, 2016). Another testament to the emphasis on UHC is the outpatient payment rate in government hospitals, which remains at RM1.00 (MOH, 2023). The former Prime Minister highlighted this during a speech at the Sri Aman Minor Specialist Hospital in Sarawak, noting it as one of the world's most affordable rates. The Najib administration also introduced UHC initiatives, such as the 1Malaysia Clinics. Launched in 2009, these clinics were established to offer affordable healthcare services in urban and rural areas, providing basic medical services and medications for a nominal fee.

Another important aspect of reform is in health Infrastructure. Since independence, the Malaysian Government has invested in expanding and upgrading the healthcare infrastructure. This includes the construction of new hospitals, upgrading existing facilities, and improving medical equipment and technology. These efforts enhance the capacity and quality of healthcare services. This can be seen from the statistics in Tables 1 and 2.

Table 1: Ministry of Health primary health care facilities, 1957-2016

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Health facilities	1957	1970	1980	1990	2000	2008	2016	
Community clinics	0	943	1509	1880	1924	1927	n/a	
Health clinics	0	224	725	708	947	897	2863	
	7	1167	2234	2588	2871	2824	2863	

Source: Ministry of Health

Table 2: Ministry of Health hospitals, 1960-2020

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	Hospitals	1960	1970	1980	1990	2000	2009	2020
	District hospitals	56	n/a	70	79	68	75	
	Large hospitals with	10	n/a	18	16	45	55	
	specialists							146
		66	72	88	95	113	120	146

Source: Ministry of Health

Another pivotal aspect of reform is Primary Healthcare. Malaysia has increasingly emphasized strengthening primary healthcare services. The Government has rolled out initiatives like the Family Doctor Concept, which champions comprehensive and continuous primary care. This strategy bolsters preventive care, facilitates early disease detection, and manages chronic diseases more effectively.

With the swift advancements in ICT, the digitization of health has become a focal point for the Malaysian Government. The Digital Health Initiatives aim to harness digital health technologies to refine healthcare delivery. The introduction of electronic medical records, telemedicine services, and health information exchange systems has optimized healthcare processes, elevated patient care coordination, and expanded access to healthcare services, especially in remote areas.

Human resources form a vital component of health systems, making reforms in this domain imperative. The Malaysian Government has augmented the number of medical schools and nursing programs to address the shortage of healthcare professionals. Concurrently, efforts are underway to ensure a balanced distribution of healthcare professionals, especially in rural locales, to guarantee equal access to healthcare services. The number of medical doctors has significantly increased, from 807 in 1970 to 20,192 in 2009 (MHSR, 2013). Proactive measures have been instituted to bolster the health human resources.

Furthermore, health promotion and disease prevention hold paramount importance. The Malaysian Government has actively championed healthy lifestyles and preventive healthcare measures. This includes campaigns to enlighten the public about non-communicable diseases, vaccination drives, and initiatives to combat risk factors like smoking and unhealthy eating habits.

Medical tourism has also emerged as a focal point of reform, especially post the Asian Financial Crisis of 1997. The Malaysian Healthcare Travel Council (MHTC), established under the Ministry of Tourism in 2011, has spurred private hospitals to partake in this

initiative. This is evident from the revenue generated from medical tourism, which soared from RM527 million in 2011 to RM1.7 billion in 2019 (MHTC, 2023). Additionally, medical tourist arrivals increased from 643,000 in 2011 to 1.2 million in 2019 (MHTC, 2023).

The commercialization of healthcare in Malaysia has also been noteworthy. The Government has incentivized the private sector to invest in healthcare. Consequently, entities like IHH Healthcare, Gleneagles, Sime Darby, Pantai, KPJ, and others have made significant investments. The number of hospitals has grown exponentially, from just a handful in the 70s to 209 in 2021 (Statista, 2023). The rise of private clinics, operated by General Practitioners (GPs), has been instrumental in delivering primary healthcare. For instance, in 2021, Malaysia boasted 7,355 private clinics (MOH, 2018). Privatization, initiated in the early 90s, has led to several key health support services managed by the private sector, including entities like Radicare, UEM Edgenta, Medivest, One Medicare, and Sedafiat. Health screenings for foreign workers are now overseen by FOMEMA (KKM, 2023). Figure 2 illustrates the timeline of Malaysian healthcare reform.

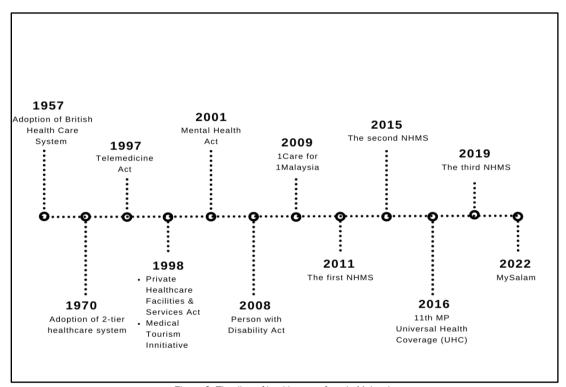


Figure 2: Timeline of healthcare reform in Malaysia

6.0 Conclusion

Despite concerted efforts to enhance healthcare accessibility, disparities in healthcare access and quality persist between urban and rural regions. There is a pressing need for more targeted interventions to bridge these disparities. Additionally, healthcare costs remain a hurdle for certain segments of the population, especially those dependent on private healthcare services. Persistent endeavors to ensure affordability and financial protection are imperative. Prioritizing enhancing healthcare service quality and efficiency, including curtailing waiting times and elevating patient experience, is essential. Sustained investment in healthcare infrastructure, medical technology, and the training and retention of healthcare professionals is vital to cater to the dynamic healthcare needs of the populace. The recent tabling of the anticipated Health White Paper in Parliament underscored the commitment to reforming Malaysian healthcare.

This policy paper delineates the overarching challenges and gaps in Malaysia's healthcare system and outlines the nation's health reform agenda for the forthcoming 15 years. The paper addresses a myriad of issues, including the rise in life expectancy at birth, heralding an aging nation; the surge in non-communicable and chronic diseases; the resurgence of old and emergence of new infectious diseases; the profound impact of mental health in Malaysia; the repercussions of climate change and biodiversity decline; and the inconsistent fee structures across hospitals and clinics nationwide. The document also highlights the extensive engagement with pertinent stakeholders, encompassing various ministries, agencies, the private sector, and non-governmental organizations, to gather insights on the challenges plaguing the country's healthcare system. As articulated in the paper, "Efforts proposed in the White Paper encompass systemic and structural changes." It further states, "Further details on the planning and implementation of the White Paper will be unveiled in the subsequent phase, post-Parliamentary approval." Dr. Zaliha Mustafa, the Minister of Health, remarked that once ratified, the policy paper would also concentrate on executing foundational tasks essential for developing the insurance scheme, including determining the apt contribution rate contingent upon a mandate (The New Straits Times, 2023). Among the main challenges and limitations in achieving this goal are political will as well as the need to seek the full support of the community. The government should seek cooperation from all parties to ensure the success of this reform. An effective communication plan should be developed to ensure that these efforts are not stunted in the middle of the road as before. In the context of this article, the limitation involves less indepth analysis, and it is suggested that a more critical and comprehensive analysis of healthcare reform in Malaysia can be done.

Acknowledgments

The researchers would like to thank the Ministry of Higher Education (MOHE) for funding this research under the Fundamental Research Grant Scheme FRGS) (FRGS/1/2021/220/UITM/02/6), and Universiti Teknologi MARA for providing the necessary support for its successful implementation. The author also extends gratitude to the Ministry of Health, Malaysia, for assistance in data collection and for providing information for this research.

Paper Contribution to Related Field of Study

This paper contributes to the field of Public Administration and Healthcare Policy

References

Cancerlink Foundation. (2023). [accessed 2023 July 6]. Available from: www.cancerlinkfoundation.org/.

Daim, N., Basyir, M., & Salehuddin, Q. (13 Jun 2023). Health White Paper details 15-year health reformation plan. The New Straits Time. https://api.nst.com.my/news/nation/2023/06/919708/health-white-paper-details-15-year-health-reformation-plan.

Economic Planning Unit. (2016). 11TH Malaysia Plan (2016-2020). Putrajaya.

Economic Planning Unit. (2022). The Malaysian Economic Figures 2022. [accessed at https://www.ekonomi.gov.my/sites/default/files/2022-08/MEIF2022.pdf on 4th July 2023

Gupta, S. Clements, B., & Coady, D. Clements, B., (2012)., The Challenge of Health Care Reform in Advanced and Emerging Economies In Coady, D., & Gupta, S. (Eds).. The Economics of public Health Care Reform in Advanced and Emerging Economies (pp3-23).. International Monetary Fund, Washington.

Hospis Malaysia. (2023). [accessed 2015 July 6]. Available from:www.hospismalaysia.org/.

International Monetary Fund. (2021). The IMF Approves Policy Reform and Funding Package to Better Support the Recovery of Low-Income Countries From the Pandemic. Press release dated July 22, 2021 and can be accessed at https://www.imf.org/en/News/Articles/2021/07/22/pr21222-imf-approves-policy-reforms-funding-package-support-low-income-countries-from-pandemic

Jaafar S, Noh KM, Muttalib KA, Othman NH, Healy J, Maskon K,et al. Malaysia health system review. Health Syst Transit 2013;3(1):1–103.

Kim, M. J. (2023). Unintended consequences of healthcare reform in South Korea: evidence from a regression discontinuity in time design. Health Research Policy and Systems, 21(1), 60.

Malaysian Liver Foundation. (2023). [accessed 2023 July 6]. Available from: www.liver.org.

Malaysian AIDS Foundation. (2023). [accessed 2023 July 6]. Available from: http://www.mac.org.my/v3.

Malaysia Healthcare Travel Council. (2023). Healthcare Traveller Statistics. [accessed2023 July 6]. Available from https://www.mhtc.org.my/statistics/

Makaysian Medical Association. (2022). Healthcare Reform: Healthier Future for Malaysia. MMA, Kuala Lumpur.

Maps of the World. Map of Malaysia (2023). [accessed 2023 July 6]. Available from: https://www.mapsofworld.com/malaysia/

Ministry of Health. (2023). Kadar Caj Fasiliti Kesihatan. Putrajaya.

Ministry of Health. (2018). Malaysian Health at Glance 2018. Putrajaya.

Ministry of Health. (2023). Caj Pesakit Luar. [accessed 2023 July 6]. Available from https://www.moh.gov.my/index.php/pages/view/160.

MySalam. (2023). Mengenai MySalam. [accessed 2023 July 6]. Available from https://www.mysalam.com.my/b40/info/?url=intro_BM.

National Health Morbidity Survey. 2020. Accessed at https://iptk.moh.gov.my/images/technical_report/2020/4_infographic_Booklet_NHMS_2019_-English.pdf?force_isolation=true&force_isolation=true on 4th July 2023.

Pelangi Foundation – Home for People Living with HIV / AIDS(PLWHA). (2023). [accessed 2023 July 6]. Available from: http://www.hati.my/children/pelangi-community-foundation/.

Pertubuhan Masyarakat Prihatin. (2006). One stop crisis centre for single mothers and orphans living with HIV/AIDS.

Pink Triangle Foundation – Community-based NGO Providing Information, Education and Care Services Relating to HIV/AIDS and Sexuality in Malaysia. 2023. [accessed 2023 July 6]. Available from: www.ptfmalaysia.org/

PROSTAR Club – Anti-AIDS Programme and Education Under the Healthy Programme Without AIDS for Youth. (2023). [accessed 2023 July 6]. Available from: http://www.hati.my/ support-groups/prostar-club-anti-aids-programme-education-healthy-programme-without-aids-youth/

Thomas, S., Beh, L., & Nordin, R. B. (2011). Health care delivery in Malaysia: changes, challenges and champions. Journal of public health in Africa, 2(2).

Worldmeter. (2020). Malaysian Demographics. Accessed at https://www.worldometers.info/demographics/malaysia-demographics/#tfr on 4th July 2023.

Yip, W., Fu, H., Chen, A. T., Zhai, T., Jian, W., Xu, R., ... & Chen, W. (2019). 10 years of health-care reform in China: progress and gaps in universal health coverage. *The Lancet*, 394(10204), 1192-1204.

World Bank (2022). Focus on Quality Key to Effective Health care Reform in Developing Nations. A press release dated May 11, 2022 and can be accessed at https://www.worldbank.org/en/news/press-release/2022/05/11/focus-on-quality-key-to-effective-healthcare-reform-in-developing-nations.

World Health Organisation. (2000). Health care Reform presented and endorsed at 18th Meeting of Ministers of Health in Kathmandu, Nepal from 23-25 August 2000. Geneva.

World Health Organisation. (2010a), World Health Statistics 2010 (Geneva).

World Health Organisation. (2010b). The World Health Report 2010—Health Systems: Improving Performance (Geneva).