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Indonesia's Universal Healthcare System: How the Failure of Its Program Facilitates a Market for Clinical Trials

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INDONESIA'S UNIVERSAL HEALTHCARE SYSTEM: HOW THE FAILURE OF ITS PROGRAM FACILITATES A MARKET FOR CLINICAL TRIALS

Dominique Manzolillo

I. INTRODUCTION

It is undisputed that with technological advancements, the world as we know it has become more globalized.[1] This has allowed individuals from different parts of the world to easily connect with each other, especially those who might not have otherwise been able to; it has also allowed countries to advance in various endeavors.[2] However, globalization has not resolved all of the world's complex issues.[3] In fact, it may be argued that globalization has added to pre-existing complex issues, which, in a sense, has created an almost new variety.[4] Although there are numerous topics that may be discussed, a topic which prominently displays the nuances of globalization is clinical trials.[5]

Within the past few decades, scientists and medical professionals have increasingly conducted research regarding new scientific breakthroughs.[6] Since globalization has created this access, researchers have been able to specifically choose international locations in which they are able to conduct their desired research.[7] Some of these locations allow for certain research to be more viable since some areas are more prone to diseases or illnesses than other locations.[8] For example, diseases such as malaria or dengue fever are more prevalent in developing countries.[9] By conducting research that addresses such illnesses, researchers can address lack of treatment options in these areas as well as preventative or proactive care for areas that are not prone to these diseases.[10] However, many clinical trials are conducted in developing countries, despite the research, because it is more cost-effective. Most of the time, they provide these citizens with access to health care they might not otherwise have.[11]

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[1] *Globalization*, NAT'L GEOGRAPHIC, https://www.nationalgeographic.org/encyclopedia/globalization/ (last visited Sept. 25, 2019).

[2] *Id.*

[3] Mike Collins, *The Pros and Cons of Globalization*, FORBES (May 6, 2015, 3:06 PM), https://www.forbes.com/sites/mikecollins/2015/05/06/the-pros-and-cons-of-globalization/#.

[4] *Id.*

[5] *See* Ricard Eccard da Silva et al., *Globalization of Clinical Trials: Ethical and Regulatory Implications*, 3 INT. J. CLINICAL TRIALS 1, 1 (2016); *see also* Seth W. Glickman et al., *Ethical and Scientific Implications of the Globalization of Clinical Research*, 360 NEW ENG. J. MED. 816, 816 (2009).

[6] *See* Eccard da Silva et al., *supra* note 5, at 2.

[7] Glickman et al., *supra* note 5.

[8] Glickman et al., *supra* note 5, at 819.

[9] *See* Minh Joo Yi, *The Most Common Diseases in Indonesia*, BORGEN PROJECT (July 28, 2017), https://borgenproject.org/common-diseases-in-indonesia/.

[10] *See What We Do: Discovery & Translational Sciences Strategy Overview*, BILL & MELINDA GATES FOUND., http://www.gatesfouridation.org/What-We-Do/Global-Health/Discovery-and-Translational-Sciences (last visited Sept. 25, 2019).

[11] *See* Glickman et al., *supra* note 5, at 819.

Although this concept seems relatively straight forward, it contains a number of ethical and legal challenges that affect clinical trials.[12] This is due primarily to complex regulations and the lack of enforcement of regulations, which has led to reduced protections of human rights.[13] This article discusses this issue directly, specifically within the context of Indonesia. Part II discusses the laws that govern research conducted in Indonesia, and Part III examines universal healthcare systems in other parts of the world. Part IV compares Indonesia's healthcare system to other universal healthcare systems and shows the faults within Indonesia's program. Part V states the guidelines clinical trials must meet in order to conduct a study within Indonesia, and Part VI presents a solution. Finally, Part VII concludes the paper.

II. EVOLUTION OF INDONESIAN HEALTH CARE LAW AND CURRENT INDONESIAN LAW GOVERNING CLINICAL TRIALS

The continent of Asia has been an ideal destination for most pharmaceutical companies to conduct clinical trials, which makes it one of the fastest-growing pharmaceutical markets in the world.[14] Unlike other destinations, Asian countries present a diverse population, as well as a spectrum of illnesses and diseases native to these areas.[15] With a population of nearly 4.5 billion people, this creates an opportunity for sponsors to conduct clinical trials on potentially limitless subjects and to rarely encounter undue issues.[16] Moreover, conducting clinical trials within Asian countries tends to be viewed as a cost effective alternative in comparison to Western markets.[17] In 2014, it was reported that it could cost a pharmaceutical company an estimated $2.6 billion dollars to research, develop, and market a new drug domestically.[18] However, since similar materials can be found outside of the United States at significantly lower prices, pharmaceutical companies are not only able to develop a new drug, but can "achieve greater innovation."[19] Thus, outsourcing research allows pharmaceutical companies to develop improved drugs while maintaining financial integrity.[20]

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[12] *See* Glickman et al., *supra* note 5, at 818.

[13] Glickman et al., *supra* note 5, at 818.

[14] Ali Sheraz et al., *Challenges of Conducting Clinical Trials in Asia*, 4 INT J. CLIN. TRIALS 194, 194 (2018).

[15] *Id.*

[16] *Id.*

[17] *See id.* at 195; Mo Dezfuli, *Outsourcing Clinical Trials Outside the US*, 6 PHARM. REGUL. AFFAIRS: OPEN ACCESS 1, 1 (2017), https://www.omicsonline.org/open-access/outsourcing-clinical-trials-outside-of-the-us-2167-7689-1000194.php?aid=93519 ("The high cost of clinical trials forces sponsors and investigators to budget more, and they seek ways to have a return on their investments. Pharmaceutical companies apply a variety of strategies to improve the efficacy of drug development, aiming to reduce their costs. In an attempt to improve and reduce both mass and fixed costs, many pharmaceutical companies have downsized internal staff and turned to outsourcing their strategies.").

[18] Dezfuli, *supra* note 17.

[19] *See* Dezfuli, *supra* note 17, at 1-2. Outsourcing has traditionally been used as a tactical measure to relieve capacity deficits and gain access to research experience. The significant reason that companies apply this technique is due to the lower costs and perceived quality that these third-party contractors have. Typically, finding participants to engage in research and hiring researchers is very costly in a domestic sense, while utilizing them abroad is less expensive.

[20] *See* Dezfuli, *supra* note 17, at 2.

INDONESIA'S UNIVERSAL HEALTHCARE SYSTEM: HOW THE FAILURE OF ITS PROGRAM FACILITATES A MARKET FOR CLINICAL TRIALS

Pharmaceutical companies have chosen Indonesia as a primary location to conduct clinical trials.[21] Indonesia currently has a population greater than 240 million people composed of various ethnic groups.[22] Due to its large population and cultural aspects, Indonesia's leading health concerns include tuberculosis, lower respiratory infections, diarrhea, and non-communicable illnesses, such as lung and liver cancer.[23] Indonesia has become a more attractive location to conduct clinical trials because it possesses a diverse variety of individuals and a multitude of diseases to research.[24] Although it is evident why pharmaceutical companies want to conduct research within Indonesia, it is rarely addressed why citizens are inclined to participate. In order to understand this, Indonesia's healthcare system as a whole must be examined.

A. The Development of Indonesia's Healthcare System

After Indonesia gained its independence from the Dutch in 1945, the first president of Indonesia, Sukarno, attempted to publicize some private hospitals by "nationalizing" them.[25] By doing so, the entire healthcare system began to transition from the private to public sector.[26] However, due to the country's recent liberation, the government could only provide limited health subsidies, which resulted in a severe resource shortage.[27]

In 1965, after the New Order came to power, the administration began to re-focus Indonesia's social welfare system.[28] Instead of providing social welfare for all, the New Order decided to improve Indonesia's social welfare only for its civil servants, military members, and workers who were considered critical components of the economy.[29] Until 2015, medical care for the majority of Indonesia's population was largely left to the individual with "minimal

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[21] Yodi Mahendradhata et al., *The Republic of Indonesia Health System Review*, 7 HEALTH SYS. IN TRANSITION i, xxvi (2017), https://apps.who.int/iris/bitstream/handle/10665/254716/9789290225164-eng.pdf.

[22] *Id.* at 1.

[23] *See id.* at 13-15 (referencing figure 1.4, table 1.4, and table 1.5). By understanding these tables, it can be inferred that certain cultural values and practices directly correlate to certain primary illnesses found in Indonesia. *See also* Rina Agustina et al., *Universal Health Coverage in Indonesia: Concept, Progress and Challenges*, LANCET 81-82 (Dec. 19, 2018), https://www.thelancet.com/action/showPdf?pii=S0140-6736%2818%2931647-7 ("In relation to non-communicable diseases, smoking warrants special attention in Indonesia because the country has among the highest prevalence of smoking in the world, with 34% overall prevalence in adults, and 65% in adult men. Higher prevalence of smoking is seen in people living in poverty, thereby increasing their vulnerability. Tobacco use in Indonesia, as shown elsewhere, is highly associated with chronic diseases, including cancer, lung disease, and cardiovascular disease, and can affect the risk of tuberculosis infection and mortality.").

[24] *See* Mahendradhata et al., *supra* note 21, at 13-15.

[25] *See* Mahendradhata et al., *supra* note 21, at 22; Willard A. Hanna, *Sukarno: President of Indonesia*, BRITANNICA https://www.britannica.com/biography/Sukarno (last updated June 17, 2020).

[26] *See* Mahendradhata et al., *supra* note at 21, at 22.

[27] *See* Mahendradhata et al., *supra* note 21, at 22.

[28] Asep Suryahadi et. al., *Expanding Social Security in Indonesia: The Processes and Challenges*, 6 (UN Rsch. Inst. for Soc. Dev., Working Paper 2014-14), https://herususetyodotcom.files.wordpress.com/2017/10/639-en-expanding-social-security-in-indonesia-the-processes-and-challenges.pdf.

[29] *See* Mahendradhata et al., *supra* note 21, at 22 (referencing social welfare to include not only a social security scheme, but also a contributory health insurance component) [hereinafter referring to civil servants, military personnel and formal workers as "civil servants"].

government funding."[30] At the same time, the wealthier class of Indonesia's society began to demand more private, luxurious services to be offered separate from local hospitals.[31] This caused the government to form hospitals primarily as "for-profit limited corporations."[32] Even though hospitals were developing, fund shortages continued to hinder health services.[33] A small number of Indonesians who were considered non-civil servants were able to obtain private insurance in order to help with any medical care.[34] However, since at least half of the population was in poverty, obtaining private insurance was hardly an option.[35] It was then realized that the "out-of-pocket expense" was the primary means of receiving health care within the state.[36]

Although these financing methods continued, Indonesia became severely affected by the Asian financial crisis in the late 1990s.[37] As a result, poverty and political unsteadiness increased.[38] The New Order regime recognized this economic downward shift and began to enforce a series of social security programs, known as Jaring Pengaman Sosial ("JPS"), to help rehabilitate the effects of this crisis.[39] JPS initially established a health system that aimed to help non-civil servants and those in poverty.[40] There were four types of healthcare programs provided to the Indonesian people.[41] "Jamkesmas targeted poor [and] near poor groups with coverage of 87 million individuals. Similarly, there were other schemes for civil servants (Askes/Asabri), formal sector employees (Jamsostek) and provincial regions (Jamkesda)."[42]

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[30] *See* Mahendradhata et al., *supra* note 21, at 23.

[31] *See* Mahendradhata et al., *supra* note 21, at 23.

[32] *See* Mahendradhata et al., *supra* note 21, at 23.

[33] *See* Mahendradhata et al., *supra* note 21, at 23.

[34] *See* Mahendradhata et al., *supra* note 21, at 23 ("Insurance for health remained restricted to civil servants, military personnel and formal labor or private financing using a small number of private insurance providers. The out-of-pocket payment became one of the most significant portions of total health expenditure.").

[35] *See* Mahendradhata et al., *supra* note 21, at 23.

[36] *See* Mahendradhata et al., *supra* note 21, at 23; Virginia Wiseman et al., *An Evaluation of Health Systems Equity in Indonesia: Study Protocol*, INT'L J. FOR EQUITY IN HEALTH (Sept. 12, 2018), https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-018-0822-0.

[37] *See Asian Financial Crisis in Indonesia*, INDON. INVESTMENTS, https://www.indonesia-investments.com/culture/economy/asian-financial-crisis/item246 (last visited Nov. 6, 2019) ("The Asian Financial Crisis began on July 2, 1997 when the Thai government, burdened with a huge foreign debt, decided to float it's baht after currency speculators had been attacking the country's foreign exchange reserves."). Ultimately, this affected other Asian countries. Foreign investors began to lose confidence in Asian markets and began to discard Asian currencies and assets.

[38] *See id.*; Mahendradhata et al., *supra* note 21, at 23.

[39] *See History and Evolution of Social Assistance in Indonesia, Social Assistance Program and Public Expenditure Review*, WORLD BANK 10 (2012), http://documents1.worldbank.org/curated/en/618431468041436313/pdf/NonAsciiFileName0.pdf.

[40] *See* Sudarno Sumarto et al., *Designs and Implementation of Indonesian Social Safety Net Program*, DEVELOPING ECONOMIES 3, 5 (2002), https://www.ide.go.jp/library/English/Publish/Periodicals/De/pdf/02_01_01.pdf.

[41] *See* Denis Garand et al., *Performance Evaluation Framework for Government-Sponsored Health Insurance Programmes*, MICRO INS. NETWORK 34 (Aug. 29, 2017), https://www.microinsurancenetwork.org/sites/default/files/Health%20Background%20paper_0.pdf.

[42] *See id.*

However, as the Indonesian government decentralized in 2001, it seemed as if the health system began to revert back to old patterns.[43] Budgets for health care began to present an evident shortage, resulting in an overall disruption within the system.[44] Disease began to spread and nearly more than half of the population was affected by non-communicable illnesses.[45] By 2013, it was clear that something needed to be done.[46] The government decided that it would be beneficial to adopt universal health care so that every individual can have some form of access to health care.[47] Within one year, Indonesia adopted a new system through which all four of the existing healthcare schemes were integrated.[48]

Although many countries have adopted similar universal health care systems, Indonesia wanted to adopt a system that it could claim entirely its own.[49] It developed the National Health Insurance System ("NHIS"), which the Social Security Agency for Health ("SSAH") administers.[50] Even though the SSAH holds a public service duty, its administrators are private sector employees with the ability to collect NHIS funds and to enforce employer and employee contributions.[51] Furthermore, the SSAH has required all Indonesian residents to enroll in the NHIS, even if the individual does not have pre-existing illnesses or concerns.[52] As a result, the SSAH has created this program to be "a contribution-based social protection mechanism, where there are people who contribute for their own coverage and people whose contributions are covered by the state."[53] Whether an individual is required to pay the NHIS premium is dependent upon if the individual is considered in poverty, near poverty, or disabled.[54] As of March 2017, Indonesia successfully reduced its poverty rates from

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[43] *See* Hasbullah Thabrany, *Politics of National Health Insurance of Indonesia: A New Era of Universal Coverage*, CTR. FOR HEALTH ECON. & POL'Y STUD., UNIV. INDON. 5 (July 23, 2008), https://www.un.org/en/ecosoc/newfunct/pdf/thabrany-nhip-program%20and%20politic-indonesia.pdf; Mahendradhata et al., *supra* note 21, at 28, 65.

[44] *See* Mahendradhata et al., *supra* note 21, at 146.

[45] *See* Agustina et al., *supra* note 23, at 75 (stating that there are roughly 1 million, new, tuberculosis cases per year and since 2005, there was a 63% increase in the number of diabetes).

[46] *See* Agustina et al., *supra* note 23, at 75 (referencing that by 2013 about half of the population did not have access to health care, and thus could not adequately combat spreading diseases).

[47] *See* Agustina et al., *supra* note 23, at 75; *Universal Health Coverage*, WHO, https://www.who.int/healthsystems/universal_health_coverage/en# (last visited Oct. 18, 2020) (defining Universal Health Coverage as a system that "ensur[es] that all people have access to needed health services including prevention, promotion, treatment, rehabilitation and palliation of sufficient quality to be effective while also ensuring that the use of these services does not expose the user to financial hardship").

[48] *See* Agustina et al., *supra* note 23, at 75; Garand et al., *supra* note 41.

[49] *See* Agustina et al., *supra* note 23, at 86; Ade Prastyani, *Who'll Pay for Indonesia's National Health Insurance*, NEW MANDALA (Feb. 28, 2019), https://www.newmandala.org/wholl-pay-for-indonesias-national-health-insurance/ (referencing that it is the largest Universal Health Coverage scheme that plans to cover nearly all of Indonesia's 267 million people).

[50] *See* Agustina et al., *supra* note 23, at 86.

[51] *See* Agustina et al., *supra* note 23, at 88.

[52] *See* Agustina et al., *supra* note 23, at 88.

[53] Prastyani, *supra* note 49.

[54] *See* Agustina et al., *supra* note 23, at 88-89 ("The SSAH includes two types of memberships with three sources of funding: contributing members, who are further subdivided into self-employed individuals and families; formal sector employees, employers and their family members, and retirees; and non-contributing members,

approximately 40% to about 10%.[55] Moreover, only about 20% of Indonesians are considered near poverty and about 4% of Indonesia's population are disabled.[56] Thus, there is an estimated 34% of Indonesians who are not required to contribute to the NHIS.[57]

On the other hand, nearly 66% of Indonesia's population, comprised of Indonesia's working sector, is responsible for contribution towards the NHIS.[58] The contributing working sector of Indonesia's population is further divided into two sub-categories: (1) formal, salaried workers; and (2) informal, non-salaried workers.[59] Benefitting formal workers, the SSAH allows employers to automatically opt-in their employees, which requires each employer to pay for at least "80% of their employees' contributions."[60] This policy relieves an individual from entirely self-managing their income so that the proper amount of funds are allocated to the NHIS.[61] However, this convenience does not exist for informal workers.[62] Instead, self-enrollment is required.[63] Even though a majority of Indonesia's workforce is comprised of informal workers, there is a persistent issue of low self-enrollment, which, consequentially, is an issue of not paying the required premium.[64] These individuals are known as the "missing middle."[65] In order to understand why "the missing middle" is a persistent issue within the state, one must first understand how funding is collected for the NHIS program.

When the term "universal healthcare" is used, it is assumed that funding is collected as part of federal or state taxes.[66] Then, from those taxes, money is allocated towards the universal healthcare system.[67] Typically, this is how universal healthcare operates in countries

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which comprise people who are living in poverty those living in near poverty, and those who are disable, for whom contributions must be paid by the Government of Indonesia.").

[55] *See* Agustina et al., *supra* note 23, at 89 (referencing that as of 2017, Indonesia's poverty rate was approximately 40% of its population); *The World Bank in Indonesia*, WORLD BANK, https://www.worldbank.org/en/country/indonesia/overview (last updated Sep. 25, 2019).

[56] *See The World Bank in Indonesia*, *supra* note 55 (stating that 20.19% of the entire population "remains vulnerable of falling into poverty"); Monash Business School, *Disability in Indonesia: What Can We Learn from the Data?*, AUSTL. INDON. P'SHIP FOR ECON. GOVERNANCE i (Aug. 2017) https://www.monash.edu/__data/assets/pdf_file/0003/1107138/Disability-in-Indonesia.pdf.

[57] *See* Agustina et al., *supra* note 23, at 89; *The World Bank in Indonesia*, *supra* note 55; Monash Business School, *supra* note 56, at 15 (inferring from the provided data that the current estimated total of non-contributors to the NHIS is about 34% of Indonesia's population).

[58] *See* Agustina et al., *supra* note 23, at 94; Monash Business School, *supra* note 56, at 15 (inferring from the provided data that the current estimated total of contributors to the NHIS is about 66% of Indonesia's population).

[59] Prastyani, *supra* note 49.

[60] Prastyani, *supra* note 49.

[61] *See generally* Prastyani, *supra* note 49.

[62] Prastyani, *supra* note 49.

[63] Prastyani, *supra* note 49.

[64] *See* Prastyani, *supra* note 49 (stating that informal workers comprise about 60% of Indonesia's workforce or about 73 million workers). However, only 31 million workers are enrolled. Thus, there are 40 million informal workers not enrolled in NHIS.

[65] *Indonesia's Social Protection System Needs to Reach the "Missing Middle"*, OECD, https://www.oecd.org/fr/dev/indonesia-social-protection-system-needs-to-reach-the-missing-middle.htm (last visited Oct. 1, 2020).

[66] Anna H. Glenngard, *The Swedish Health Care System*, LUND UNIV. SCH. ECON. & MGMT., https://international.commonwealthfund.org/countries/sweden/ (last visited Nov. 18, 2019).

[67] *Id.*

with successful universal healthcare systems.[68] However, this is not the case in Indonesia.[69] For those in poverty, near poverty, or who are disabled, a fixed monthly premium of roughly $1.75 USD is contributed by the central government from general taxation.[70] These individuals have access to Class 3 hospital beds in publicly funded hospitals and some selected private hospitals.[71] Informal workers have a fixed monthly premium contribution ranging from $2.30 to $5.40 USD.[72] These individuals have access to "Class 2 and Class 3 hospital beds in public hospitals and selected private hospitals based on the premium paid."[73] For formal workers, contributions are calculated based on an individual's monthly salary.[74] Originally, the Ministry of Health ("MoH") capped formal workers' potential premiums at rupiah ("Rp") 4.725 million.[75] However, in 2016, the MoH decided to increase the NHIS capped premium amount to Rp 8 million.[76] Although this increase allows for more funds to be collected and allocated towards Indonesia's healthcare program, an underlying issue is still present for these formal workers. Formal workers are not subjected to a true progressive tax system.[77] Rather, formal workers are subjected to a tax that closely resembles the tax system found in the United States.[78] This premium increase ultimately means that "a mid-level employee with a salary of Rp 8 million per month will have the same size contribution as an executive who is paid Rp 50 million per month."[79]

The Indonesian government has implemented regulations in an effort to control these issues. Passed in 2018, one regulation instructs public institutions to avoid providing services

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[68] Chris Slaybaugh, *International Healthcare Systems: The US Versus the World*, AXENE HEALTH PARTNERS, https://axenehp.com/international-healthcare-systems-us-versus-world/ (last visited Oct. 1, 2020).

[69] *See* Garand et al., *supra* note 41.

[70] *See* Garand et al., *supra* note 41; Anita Rachman, *Indonesia's Health-Care Program Struggles with its Own Success*, WALL ST. J. (Oct. 7, 2015), https://www.wsj.com/articles/indonesias-health-care-program-struggles-with-its-own-success-1444260768; Niyi Awofeso et al., *Exploring Indonesia's "low hospital bed utilization-low bed occupancy-high disease burden,"* 2 J. HOSP. ADMIN. 49, 51 (2013) ("Hospital beds are classified into four categories in Indonesia. Class 1 includes beds where extensive specialist medical services plus extensive sub-specialists are available. Class 2 includes former but only limited sub-specialists. Class 3 beds have a minimum of four basic specialist medical services, while Class 4 provides basic medical facilities.").

[71] *See* Garand et al., *supra* note 41.

[72] *See* Garand et al., *supra* note 41.

[73] *See* Garand et al., *supra* note 41.

[74] *See* Prastyani, *supra* note 49.

[75] *See* Prastyani, *supra* note 49; *Currency Converter*, XE, https://www.xe.com/currencyconverter/convert/?Amount=1&From=IDR&To=USD (last visited Nov. 6, 2019) (inferring that 4.725 million rupiah is about $300).

[76] *See generally* Prastyani, *supra* note 49.

[77] *See generally* Prastyani, *supra* note 49.

[78] Thomas Piketty & Emmanuel Saez, *How Progressive is the U.S. Federal Tax System? A Historical and International Perspective*, 21 J. ECON. PERSPECTIVES 3, 3 (2007) (stating that the United States does not have a true progressive tax system, but rather a variation of a progressive tax system). Eventually, for those situated within the wealthy class, there is a cut-off point. Thus, the individuals that are just able to make that tax bracket will be subjected to the same tax that of the ultra-wealthy.; TAX POLICY CENTER: URBAN INSTITUTE & BROOKINGS CENTER, *Are Federal Taxes Progressive*, https://www.taxpolicycenter.org/briefing-book/are-federal-taxes-progressive (last visited Dec. 29, 2020) ("Not all taxes within the federal system are equally progressive. Some federal taxes are regressive, as they make up a larger percentage of income for lower-income than for higher-income households.")

[79] *See* Prastyani, *supra* note 49.

to those who have not paid the premium.[80] This includes denying passport renewals and denying the issuance of an individual's driver's license.[81] The government also announced a plan to increase premium payments in hopes to bridge this gap.[82] This has primarily transferred the burden of funding onto those informal workers, who abide by the regulation, and onto formal workers.[83]

B. Relevant Issues Within NHIS

By raising the premium, the Indonesian government created a severe disadvantage for certain informal and formal workers.[84] Although the Indonesian government intended to create a successful universal health care program, it is clear that this program is far from perfect. By placing the costs of the program onto a fraction of the population, the NHIS program is now in a deficit.[85] Thus, there is potential for this program to eventually end and force the state to revert to previous health care systems.

Nevertheless, there are methods that could provide funding to the universal healthcare program. Although the NHIS program taxes the Indonesian people as a source for funding, the Indonesian government hardly taxes certain corporations that contribute to medical concerns found within Indonesia, such as tobacco companies.[86] Many large tobacco corporations create their tobacco fields in Indonesia.[87] Therefore, smoking has become engrained in Indonesian culture and has led to serious health concerns, such as lung cancer.[88] Although it has been discussed that the Indonesian government may participate in the World Health Organization's Framework Convention on Tobacco Control ("FCTC"), Indonesia has yet to take an active stance.[89] If Indonesia were to raise taxes on these corporations as a source for the NHIS program, it could potentially relieve thousands of people from carrying the financial burden of funding the entire healthcare program.

There are other problematic issues with the program. First, the healthcare system is designed to provide accessible healthcare to *citizens* of Indonesia.[90] While at first glance it seems that the system treats all Indonesian people equally, it does not. As part of the Indonesian

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[80] Shotaro Tani & Ismi Damayanti, *Indonesia Struggles to Pay for Huge Universal Health Care Program*, NIKKEI ASIA (Aug. 14, 2019), https://asia.nikkei.com/Economy/Indonesia-struggles-to-pay-for-huge-universal-health-care-program.

[81] *Id.*

[82] *Id.*

[83] *See generally* Prastyani, *supra* note 49.

[84] *See generally* Prastyani, *supra* note 49 (inferring that by forcing individuals who earn a significantly lesser salary than executives to pay for the same premium amount places those individuals at a disadvantage).

[85] *See* Mahendradhata et al., *supra* note 21, at 236; Agustina et al., *supra* note 23, at 93, 96-97; Prastyani, *supra* note 49.

[86] *See* Mahendradhata et al., *supra* note 21, at 196; Agustina et al., *supra* note 23, at 82; Prastyani, *supra* note 49.

[87] Siwage Sharma Negara, *Commentary: The Power of Big Tobacco and Indonesia's Massive Smoking Problem*, CHANNEL NEWS ASIA (Sept. 26, 2019), https://www.channelnewsasia.com/news/commentary/big-tobacco-indonesia-smoking-problem-cigarettes-tax-raise-11940462.

[88] *Id.*

[89] *Id.*

[90] Elizabeth Pisani et al., *Indonesia's Road to Universal Health Coverage: A Political Journey*, 32 OXFORD J. HEALTH POL'Y & PLANN. 267, 267 (2017).

Constitution, the state only recognizes several religions out of the hundreds found within the world, including Islam, Catholicism, Protestantism, Buddhism, Hinduism, and Confucianism.[91] Since Indonesia is comprised of millions of individuals, including some indigenous tribes, there are many religions practiced that do not conform to the several listed in the Constitution.[92] The people of Indonesia are required to recognize one of these religions or face penalties.[93] Due to the lack of recognition, many Indonesians are unable to, or refuse to, participate within government functions unless they convert or renounce their unrecognized religion.[94] This is problematic for several reasons. First, since these individuals are not recognized by the Indonesian government, many are unable to receive necessary government documents, such as passports, without declaring one of the several of the recognized religions as their own.[95] Second, due to the lack of recognition, employment opportunities have been restricted for many, potentially adding to the nation's unemployment problem.[96] Third, these individuals are unable to receive the promised accessible healthcare since they choose not to conform to an official recognized religion.[97] Thus, an entire population of Indonesian people are left untreated and unable to afford essential medical care.

Another issue with the healthcare program is related to the geographical locations of hospitals. The country of Indonesia consists of a collection of islands.[98] However, "rural poverty is rife in the country's remote eastern islands, which also have some of the country's

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[91] U.S. Dep't of State, Bureau of Democracy, H.R. and Lab., Indonesia 2018 International Religious Freedom Report 1, 3 (2018) [hereinafter 2018 Religious Freedom Report].

[92] Marcel Thee, *Surviving Indonesia as an Atheist When the Country is Built on Rigid Religious Traditions and Policies*, SOUTH CHINA MORNING POST (Oct. 3, 2019), https://www.scmp.com/lifestyle/article/3031261/surviving-indonesia-atheist-when-country-built-rigid-religious-traditions; *Religion in Indonesia*, INDON. INVESTMENTS, https://www.indonesia-investments.com/culture/religion/item69 (last visited Dec. 29, 2019).

[93] *See* Tom Allard & Jessica Damiana, *Indonesian Court Recognizes Native Religions in Landmark Ruling*, REUTERS (Nov. 7, 2017, 7:02 AM), https://www.reuters.com/article/us-indonesia-religion/indonesian-court-recognizes-native-religions-in-landmark-ruling-idUSKBN1D71J2 (stating that the court recommended a seventh category for the government to recognize and list on documents called "believers of the faith"); Joe Cochrane, *Indonesia's Ancient Beliefs Win in Court, but Devotees Still Feel Ostracized*, N.Y. TIMES (Apr. 14, 2018), https://www.nytimes.com/2018/04/14/world/asia/indonesia-religious-freedom-.html (discussing that an Indonesian court found that religions outside of the six listed religions in the Indonesian Constitution should be recognized, but the Indonesian government has yet to actively change the law to recognize these other religions); Thee, *supra* note 92 (discussing how atheists in Indonesia live in secrecy due to it being outlawed within the country).

[94] *Religion in Indonesia*, *supra* note 92.

[95] *Religion in Indonesia*, *supra* note 92 (stating that it is mandated law for individuals to list their [recognized] religion on government documents, such as passports).

[96] Thee, *supra* note 92.

[97] *Religion in Indonesia*, *supra* note 92 (inferring that if these individuals are not recognized by the government due to their religious beliefs, then they would be unable to take part in official government functions); *Indonesia: Ahmadiya Community Threatened*, HUM. RTS. WATCH (Jan. 16, 2016, 9:55 PM), https://www.hrw.org/news/2016/01/16/indonesia-ahmadiyah-community-threatened ("Official ID cards are necessary to complete basic tasks including opening bank accounts, registering births, and obtaining government-subsidized healthcare.").

[98] *Indonesia Facts and Figures*, EMBASSY INDON. https://www.embassyofindonesia.org/index.php/basic-facts/ (last visited Jan. 2, 2020).

highest rates of disease."[99] Even if individuals are enrolled in this program, it is possible they remain unable to receive treatment.[100] Moreover, if these individuals are unable to afford travel accommodations in lieu of not living near an active hospital or medical facility, then this further prohibits individuals from having accessible healthcare, as promised by the program.[101] More importantly, due to the unsuccessful nature of the NHIS, the relevancy and benefit of participating in clinical trials continues to prevail.[102]

III. UNIVERSAL HEALTHCARE IN OTHER COUNTRIES

In order to better understand the prevailing issues within the NHIS, other successful universal healthcare systems may be used as a guide.

A. Canada's Universal Healthcare System—Its History

Prior to World War II, Canada's healthcare system was predominately private, meaning the individual was responsible for obtaining insurance through private companies.[103] In 1947, Canada developed a healthcare system based on need rather than an individual's ability to pay.[104] The government of Saskatchewan, one of Canada's provinces, implemented a province-wide universal hospital care plan, funded through an annual premium.[105] Within six years, statistics demonstrated that more than 800,000 people were covered and more individuals could be medically treated for their health concerns.[106] This hospital plan was the first step towards a comprehensive insurance program for the Canadian people.[107]

By 1962, the Saskatchewan government reformed the hospital care plan by introducing a universal, provincial medical insurance plan.[108] This plan differed from the former

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[99] *Indonesia's Universal Health Care Goals*, OXFORD BUS. GRP., https://oxfordbusinessgroup.com/overview/indonesias-universal-health-care-goals (last visited Jan. 2, 2020).

[100] *Id.*

[101] *See id.*

[102] *See* Marlinang Diarta Siburian et al., *The Progression of Clinical Trials in Indonesia: An Observational Study of Records from Clinical Trials Registries Databases*, 4 GLOB. HEALTH J. 87, 90 (2020). *See generally* Lauren Razavi, *Indonesia's Universal Health Scheme: One Year On, What's the Verdict?*, GUARDIAN (May 15, 2015, 5:17 PM), https://www.theguardian.com/global-development-professionals-network/2015/may/15/indonesias-universal-healthcare-insurance-verdict.

[103] *Canada's Healthcare System*, GOV'T CAN. (Sept. 17, 2019), https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html#a1.

[104] Danielle Martin et al., *Canada's Universal Health-Care System: Achieving its Potential*, 391 CANADA'S GLOB. LEADERSHIP ON HEALTH 1718, 1718 (Feb. 23, 2018).

[105] *See Canada's Healthcare System*, *supra* note 103 ("Having already provided provincial funding for the health needs of the indigent, the blind and single mothers in 1945-1946, the government of Tommy Douglas proceeded to develop a province-wide plan that used the 900 municipalities to enroll all citizens in the plan.").

[106] *See The Saskatchewan Hospital Services Plan*, CANADIAN MUSEUM HIST. (Apr. 21, 2010), https://www.historymuseum.ca/cmc/exhibitions/hist/medicare/medic-4h05e.html ("Statistics that had been generated since its introduction in 1947 clearly demonstrated that increasing the number of available hospital beds also increased the rate of occupancy. Many of the new beds were occupied by mothers and their newborns, and a large proportion of the remainder by the elderly.").

[107] *See id.*

[108] *See* Martin et al., *supra* note 104, at 1720.

hospital care plan mainly by insuring procedures conducted outside of hospitals.[109] Following this new universal healthcare plan, the federal government began to support and take initiative in the creation of a universal healthcare system.[110] Enacted in 1966, the Medical Care Act was born.[111] The initial design created a provincial cost-sharing system[112] by supporting half of the territorial and provincial costs related to medical services rendered outside of hospitals.[113] However, with the realization that each province's population differs considerably, this cost-sharing system was replaced by a block fund system in 1977.[114] Established by the Federal-Provincial Fiscal Arrangements and Established Programs Financing Act of 1977,[115] this block fund system used a "mixture of cash and tax points."[116] By utilizing tax points as part of the system, Canada's federal government was able to reduce its overall tax rates, while allowing provincial and territorial governments to increase their taxes.[117] Although the raise in provincial and territorial taxes did not seem ideal at first glance, it allowed these governments to maintain the flexibility to invest in healthcare according to each province and territory's needs.[118]

Ultimately, through the enactment of the Federal-Provincial Fiscal Arrangements and Established Programs Financing Act of 1977, the Canada Health Act was passed in 1984.[119] This federal legislation replaced the previous Acts regarding hospital and medical insurance, and "consolidated their principles by establishing criteria on portability, accessibility,

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[109] *See Canada's Healthcare System*, *supra* note 103.

[110] *See* John A. Boan, *Medicare*, ENCYCLOPEDIA SASKATCHEWAN, https://esask.uregina.ca/entry/medicare.jsp (last visited Oct. 14, 2020). *See generally The Medical Care Act, 1966*, CANADIAN MUSEUM HIST. (Apr. 21, 2010), https://www.historymuseum.ca/cmc/exhibitions/hist/medicare/medic-5h23e.html.

[111] Carolyn Hughes Tuohy, *What's Canadian about Medicare? A Comparative Perspective on Health Policy*, NCBI (May 2018), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6044263/.

[112] *See id.*

[113] *See Canada's Healthcare System*, *supra* note 103 (stating that the Medical Care Act of 1966 created a cost-sharing system); *Cost Sharing*, HEALTHCARE.GOV, https://www.healthcare.gov/glossary/cost-sharing/ (last visited Jan. 6, 2020) (defining "cost sharing" as "the share of costs covered by your insurance that you pay out of your own pocket," which can include deductibles, coinsurance, copayments, and, in some instances, premiums); Raisa Berlin Deber, *Health Care Reform: Lessons from Canada*, AM. J. PUB. HEALTH (Jan. 2003), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447685/.

[114] *See* Deber, *supra* note 113; *Canada's Healthcare System*, *supra* note 103 (stating that the Medical Care Act of 1966 was replaced by the Federal- Provincial Fiscal Arrangements and Established Programs Financing Act of 1977); Bill Gardner, *Block Grant Funding of Public Health Insurance: the Canadian Example*, INCIDENTAL ECONOMIST (Apr. 7, 2017), https://theincidentaleconomist.com/wordpress/block-grant-funding-of-public-health-insurance-the-canadian-example/.

[115] *See Canada's Healthcare System*, *supra* note 103 (defining "block fund" as a "sum of money provided from one level of government to another for a specific purpose").

[116] *See* Deber, *supra* note 113.

[117] *See* Deber, *supra* note 113.

[118] *See Canada's Healthcare System*, *supra* note 103.

[119] *See* Boan, *supra* note 110; Deber, *supra* note 113.

universality, comprehensiveness, and public administration."[120] Although some modifications have followed, this legislation created Canada's universal healthcare system as known today.[121]

B. Canada's Present Universal Healthcare

In addition to the Canada Health Act, Canada's universal healthcare system is largely a product of the Canadian Constitution,[122] which divides responsibility between the federal government and the provincial and territorial governments.[123] Generally, the provincial and territorial governments are responsible for providing healthcare services to its citizens.[124] The Canadian federal government is also responsible for certain groups of individuals, such as First Nations–individuals living on reserves—and eligible veterans.[125] Due to this shared responsibility, Canada's universal healthcare system is largely financed "with general revenue raised through federal, provincial and territorial taxation, such as personal and corporate taxes, sales taxes, payroll levies, and other revenue."[126]

Even though the Canada Health Act establishes shared financial and medical responsibility amongst federal and provincial governments, each province and territory must meet certain requirements in order to receive the federal funds.[127] These include the administration of health insurance plans, planning and funding, and establishment of fee schedules with medical professionals.[128] One of the most important requirements that must be met is determining which services are "medically necessary," and, thus, should be covered by Canada's universal healthcare.[129] Although the Canada Health Act mainly covers services

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[120] *See Canada's Healthcare System*, *supra* note 103 ("The five Canada Health Act principles provide for: (1) Public Administration- the provincial and territorial plans must be administered and operated on a non-profit basis by a public authority accountable to the provincial or territorial government; (2) Comprehensiveness- the provincial and territorial plans must insure all medically necessary services provided by hospitals, medical practitioners and dentists working within a hospital setting; (3) Universality-the provincial and territorial plans must entitle all insured persons to health insurance coverage on uniform terms and conditions; (4) Accessibility- the provincial and territorial plans must provide all insured persons reasonable access to medically necessary hospital and physician services without financial or other barriers; (5) Portability- the provincial and territorial plans must cover all insured persons when they move to another province or territory within Canada and when they travel abroad. The provinces and territories have some limits on coverage for services provided outside Canada and may require prior approval for non-emergency services delivered outside their jurisdiction.").

[121] *See Canada Health Act*, GOV'T CAN. (Feb. 24, 2020), https://www.canada.ca/en/health-canada/services/health-care-system/canada-health-care-system-medicare/canada-health-act.html.

[122] *See Canada's Healthcare System*, *supra* note 103.

[123] *See Canada's Healthcare System*, *supra* note 103.

[124] Jeff Morrison, *Health Care in Canada and the Role of the Federal Government: What's Your Take?*, CANADIAN PHARMACIST J. (July 2013), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3734916/.

[125] *See Canada's Healthcare System*, *supra* note 103 (stating that the federal government is also responsible for the following members: Inuit; serving members of the Canadian Armed Forces; federal penitentiaries inmates; and some refugee groups).

[126] *See Canada's Healthcare System*, *supra* note 103 (stating that "other revenue" may be derived from provinces charging its citizens a healthcare premium).

[127] *See Canada Health Act*, *supra* note 121.

[128] *See Canada's Healthcare System*, *supra* note 103.

[129] *Fact Sheet: The Canada Health Act*, CANADIAN NURSES ASS'N 1 (June 2000), https://www.cna-aiic.ca/~/media/cna/page-content/pdf-en/fs01_canada_health_act_june_2000_e.pdf [hereinafter *Canada Health*

administered within the hospital, it does not explicitly define which of these services are medically necessary.[130] Rather, as part of the Act's comprehensiveness, each provincial and territorial government holds the ability to determine which services are medically necessary within its jurisdiction.[131] Nevertheless, there are few exceptions in which provincial and territorial governments may provide coverage for services rendered outside of hospital care, which typically apply to low-income residents and senior citizens.[132] Therefore, if medical services are not received through hospital care or through one of the exceptions listed in the Canada Health Act, then individuals are responsible for the costs of such services.[133]

C. Structure of Canada's Universal Healthcare

Canada's universal healthcare system "is best described as an interlocking set of ten provincial and three territorial health systems," known as Medicare,[134] because an individual's residence determines which healthcare system applies to their medical needs.[135] Residents of these provinces and territories often turn to primary healthcare services first.[136] Primary healthcare services include treatments for common diseases and injuries, emergency services, referrals to other hospitals and specialists, primary mental health care, palliative and end-of-life care, health promotion, child development, maternity care, and rehabilitation services.[137] Additionally, the Canada Health Act coordinates the "continuity and ease" of health care services for patients "across the health care system when more specialized services are needed (e.g., from specialists or in hospitals)."[138]

If a Canadian is referred to a specialist, hospital, or a long-term care facility, these services are referred to as secondary health care services.[139] Similar to other countries with universal healthcare that only cover primary health care services and some secondary services, most secondary health care services in Canada are not covered by universal healthcare.[140] However, this does not mean that *all* secondary healthcare services are not covered by the Canada Health Act.[141] Whether secondary health care services are covered by Canada's

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Act Fact Sheet]; *see also Canada Health Act – Frequently Asked Questions*, GOV'T OF CAN. (Oct. 20, 2011), https://www.canada.ca/en/health-canada/services/health-care-system/canada-health-care-system-medicare/canada-health-act-frequently-asked-questions.html#a3 [hereinafter *Canada Health Act FAQ*].

[130] *Canada Health Act Fact Sheet*, *supra* note 129; *see also Canada Health Act FAQ*, *supra* note 129.

[131] *See* Canada Health Act, R.S.C. 1985, c C-6; *see also Canada Health Act FAQ*, *supra* note 129.

[132] *See Canada's Healthcare System*, *supra* note 103 (including pharmaceuticals prescribed outside of the hospital, ambulance costs, dental, vision, and hearing care).

[133] *See Canada Health Act FAQ*, *supra* note 129.

[134] *See Canada's Healthcare System*, *supra* note 103.

[135] *See* Canada Health Act, R.S.C. 1985, c C-6; *see also Canada Health Act FAQ*, *supra* note 129.

[136] *See* Canada Health Act, R.S.C. 1985, c C-6.

[137] *See Canada's Healthcare System*, *supra* note 103.

[138] *See Canada's Healthcare System*, *supra* note 103.

[139] *See Canada's Healthcare System*, *supra* note 103.

[140] *See* Canada Health Act, R.S.C. 1985, c C-6.

[141] *See id.*

universal health care depends upon each province and territory's determination of medically necessary treatments.[142]

Each province and territory may provide coverage to certain residents for services not generally covered.[143] However, if an individual does not qualify for the coverage provided by the province or territory, then the individual is responsible for payment of the service(s) received.[144]

D. How Much Do the Canadian People Pay for Universal Healthcare?

Expenditures for Canada's universal healthcare system vary according to the province and territory.[145] Such variations are largely due to the varying tax brackets found within each province or territory, which factors in the necessary medical services and demographics of each province and territory.[146] Further, such variations often creates some discrepancies regarding information about an individual's tax rate for universal healthcare.[147] Since Canada has a progressive tax system, an individual's tax rate depends upon the individual's annual income.[148] This means "the more money you make, the more income taxes you pay."[149] Nevertheless, since there is no "'dedicated' health insurance tax," it is uncertain what percentage of taxes for each province and territory is devoted to healthcare expenditures.[150] What is certain, however, is Canada's total health care expenditures as a percentage of GDP from all provinces and territories.[151] In 2010, Canada's universal healthcare expenditures was estimated to be 11.7% of Canada's GDP.[152] This estimate is composed of 65% of provincial and territorial government funding, 4% from direct federal delivery of services, 1% from municipal governments, 1% from social security funds, and 30% from the private sector.[153]

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[142] *See id.*

[143] *See id.*

[144] *See id.*

[145] *See Canada's Healthcare System*, *supra* note 103.

[146] *See Canada's Healthcare System*, *supra* note 103.

[147] *See Canada's Healthcare System*, *supra* note 103. *See generally* Milagros Palacios et al., *The Price of Public Health Care*, FRASER RSCH 1-2, 7 (Aug. 2016), https://www.fraserinstitute.org/sites/default/files/price-of-public-health-care-insurance-2016.pdf.

[148] Ester Bloom, *Canadians may pay more taxes than Americans, but here's what they get for their money*, CNBC (Aug. 7, 2017), https://www.cnbc.com/2017/08/07/canadians-may-pay-more-taxes-than-americans-but-theres-a-catch.html; *The Tax System in Canada*, DYNAMIC FUNDS, https://dynamic.ca/eng/snapshots/newcomer/newcomer_taxsystem.html (last visited Sept. 18, 2020) ("The amount of your income that you pay in taxes is expressed as a percentage and goes up in steps, or 'brackets'").

[149] *See The Tax System in Canada*, *supra* note 148; .

[150] Palacios et al., *supra* note 147, at 2.

[151] *See Canada's Healthcare System*, *supra* note 103.

[152] *See Canada's Healthcare System*, *supra* note 103.

[153] *See Canada's Healthcare System*, *supra* note 103 (referencing figure "Total Health Expenditures by Source of Finance, 2010 Forecast").

IV. COMPARING INDONESIA AND CANADA'S HEALTHCARE SYSTEMS

It is apparent that the concepts of Indonesia and Canada's healthcare systems are fundamentally the same.[154] Both systems intend to provide essential medical services and care to each of the country's residents.[155] Despite each country's ideas and efforts, only Canada is known to have a successful universal healthcare system.[156] Canada's success may be attributed to the shared differences found in the structure and function of both countries' systems.[157]

The first noticeable difference between these two healthcare systems is the enrollment of individuals. In Canada, nearly every resident is enrolled in the universal healthcare program.[158] Not only does Canada's healthcare system include Canadian citizens, but Canada's Medicare also covers First Nation individuals and some refugees.[159] Medicare in Canada is viewed as a fundamental element of what it means to be a "Canadian," and any negative change to this program would result in a "change to the nature of Canada."[160] In contrast, Indonesians do not share the same support for the NHIS.[161] Even though enrollment has risen to about 221.6 million people out of 272.14 million people in 2019, many continue to elect not to enroll. This leaves about 50.54 million people susceptible to controllable and preventable diseases.[162] A contributing factor to this non-enrollment is the refusal of the Indonesian government to recognize the various religions associated with many of Indonesia's indigenous tribes.[163] Within the Indonesian Constitution, only several religions are recognized, despite the various religions practiced by Indonesians.[164] Due to this lack of recognition and suppression, many do

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[154] *Compare generally Canada Health Act*, *supra* note 121 *with* Agustina et. al., *supra* note 23, at 96 *and* Prastyani, *supra* note 49.

[155] *Compare generally Canada Health Act*, *supra* note 103 *with* Agustina et. al., *supra* note 23, at 96 *and* Prastyani, *supra* note 49.

[156] *See* Agustina et al., *supra* note 23, at 96; *Canada's Healthcare System*, *supra* note 103; Prastyani, *supra* note 49.

[157] *See* Agustina et al., *supra* note 23, at 96; *Canada Health Act*, *supra* note 121; Prastyani, *supra* note 49.

[158] *See generally Canada's Healthcare System*, *supra* note 103.

[159] *Canada's Healthcare System*, *supra* note 103.

[160] Amanda Coletta, *Canada's Health-Care System is a Point of National Pride. But a Study Shows its Risk of Becoming Outdated*, WASH. POST (Feb. 23, 2018), https://www.washingtonpost.com/news/worldviews/wp/2018/02/23/canadas-health-care-system-is-a-point-of-national-pride-but-a-study-shows-it-might-be-stalled/.

[161] *See Deloitte Indonesia Perspectives*, DELOITTE 11 (Sept. 2019), https://www2.deloitte.com/content/dam/Deloitte/id/Documents/about-deloitte/id-about-dip-edition-1-full-en-sep2019.pdf; Prastyani, *supra* note 49.

[162] *See Deloitte Indonesia Perspectives*, *supra* note 162, at 9, 11; *Indonesia Population 2020*, WORLD POPULATION REV. (Sept. 27, 2020), http://worldpopulationreview.com/countries/indonesia-population/ (inferring the provided amount through the supported information).

[163] *See Religion in Indonesia*, *supra* note 92; 2018 Religious Freedom Report, *supra* note 91. *See generally* Alfitri, *Religion and Constitutional Practices in Indonesia: How Far Should the State Intervene in the Administration of Islam?*, 13 ASIAN J. COMP. L. 2, 389-413 (2018) (stating that only Islam, Catholicism, Hinduism, Buddhism, Protestantism, and Confucianism are recognized within the Indonesian Constitution).

[164] *See* Alfitri, *supra* note 164, at 390; *Religion in Indonesia*, *supra* note 92; Thee, *supra* note 92; 2018 Religious Freedom Report, *supra* note 91.

not participate in various government functions,[165] causing many of these individuals not to participate in Indonesia's healthcare program.[166] Unlike Canada, Indonesia's healthcare system is not essential to the meaning of being "Indonesian."[167]

The second noticeable difference between these two healthcare systems is the care individuals receive.[168] In Canada, essentially any service that is deemed medically necessary is covered by universal health care.[169] Similarly, Indonesia's healthcare program offers coverage for services deemed medically necessary.[170] However, it does not offer an evolving evaluation of medically necessary treatments nor allows for coverage of particular treatments in certain parts of the country.[171] Even though Indonesia is a collection of islands, with some islands hosting their own medical issues, the medical issues covered by the healthcare system are the issues most common to the collective whole.[172] Moreover, there is not a hospital or medical facility easily accessible on each island.[173] Even if there is a medical facility accessible on one of Indonesia's many islands, and the individual does participate in the NHIS, many are unable to afford transportation expenses in order to receive treatment.[174] Since this can be a far–and expensive–distance for some to travel, depending on which island they are from, many are unable to receive the proper medical services they were promised when enrolling in the NHIS.[175] This has created a disproportionate, unattainable, and unfortunate reality for some Indonesian people.[176]

Another point to be made in regards to the care Indonesians receive as part of the NHIS is the difference in facilities.[177] In Canada, any individual is able to receive care from any hospital or medical facility.[178] This is not true in Indonesia.[179] Instead, the hospital system is divided up between different classes: Class 1 hospitals, Class 2 hospitals, and Class 3 hospitals.[180] Admittance into these different class facilities is dependent upon the individual's class bracket (i.e. impoverished, middle class, etc.).[181] Since more than half of the country may only be admitted into a Class 2 or Class 3 facility, this could potentially create longer wait times

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[165] *See* Alfitri, *supra* note 164, at 390-91; Thee, *supra* note 92; 2018 Religious Freedom Report, *supra* note 91, at 1, 3, 13.

[166] *See* 2018 Religious Freedom Report, *supra* note 91, at 1, 3, 13. *See generally* Alfitri, *supra* note 164, at 391.

[167] *See* Pisani et al., *supra* note 90; Prastyani, *supra* note 49; Agustina et al., *supra* note 23, at 86.

[168] *See Canada's Healthcare System*, *supra* note 103; Prastyani, *supra* note 49; Agustina et al., *supra* note 23, at 81.

[169] *See* Canada Health Act, R.S.C. 1985, c C-6 (ranging from emergency surgery to *any* medical service deemed necessary by a certain province or territory).

[170] *See* Prastyani, *supra* note 49; Agustina et al., *supra* note 23, at 78.

[171] *See* Prastyani, *supra* note 49; Agustina et al., *supra* note 23, at 84.

[172] *See Indonesia's Universal Health Care Goals*, *supra* note 99; *Indonesia Facts and Figures*, *supra* note 98; Agustina et al., *supra* note 23, at 75.

[173] *See Indonesia's Universal Health Care Goals*, *supra* note 99; *Indonesia Facts and Figures*, *supra* note 98.

[174] *See Indonesia's Universal Health Care Goals*, *supra* note 99; *Indonesia Facts and Figures*, *supra* note 98.

[175] *See* Prastyani, *supra* note 49.

[176] *See* Prastyani, *supra* note 49.

[177] *See* Garand et al., *supra* note 41, at 34; *Canada's Healthcare System*, *supra* note 103; Prastyani, *supra* note 49; Agustina et al, *supra* note 23, at 89.

[178] *See Canada's Healthcare System*, *supra* note 103.

[179] *See* Prastyani, *supra* note 49; Agustina et al, *supra* note 23, at 88.

[180] *See* Garand et al., *supra* note 41, at 35; Agustina et al, *supra* note 23, at 85.

[181] *See* Garand et al., *supra* note 41, at 34.

and increase resource shortages for these facilities.[182] Not only are some unable to physically receive treatment due to their residence, but even if they are able to receive treatment, these individuals might be susceptible to overworked and under resourced medical professionals.[183] When viewing these distinguishable differences in relation to other countries with successful universal healthcare systems, it is ironic to claim that Indonesia provides universal healthcare to its people.

The third noticeable, and most prominent, difference between Indonesia and Canada's universal healthcare systems is the way funds are collected.[184] In Canada, each province and territory is responsible for funding universal healthcare.[185] Although the Canadian federal government does supplement some of the collected funds, it is the local government of each province and territory that holds the primary responsibility for raising funds.[186] Generally, funds are collected through Canada's progressive tax system–meaning the more each resident makes, the more each resident pays in taxes.[187] Even though it may seem that the tax percentages implemented within Canada are insurmountably high, they are issued by the governments of each province and territory.[188] Thus, there is an assumption that residents of these provinces and territories pay an amount deemed reasonable in proportion to the services found in each province or territory.[189]

This is not the case in Indonesia.[190] The primary source of NHIS funding is through a fixed premium imposed upon almost every financially capable individual regardless of the individual's annual salary.[191] This premium ranges from $2.30 USD to almost $6 USD.[192] This could mean that individuals making Rp 12 million per year will be accountable for the same premium rate as another individuals making Rp 50 million per year.[193] Accordingly, this program disproportionately burdens individuals who receive a significantly lower wage than

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[182] *See* Garand et al., *supra* note 41, at 34.

[183] *See* Garand et al., *supra* note 41, at 34.

[184] *See Canada's Healthcare System*, *supra* note 103; Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[185] *See Canada's Healthcare System*, *supra* note 103.

[186] *See Canada's Healthcare System*, *supra* note 103.

[187] *See Canada's Healthcare System*, *supra* note 103.

[188] *See Canada's Healthcare System*, *supra* note 103.

[189] *See generally* Charles Lammam et al., *Comparing Government and Private Sector Compensation in* Canada, FRASER INST. i, iii-vi (2015), https://www.fraserinstitute.org/sites/default/files/comparing-government-and-private-sector-compensation-in-canada.pdf (discussing how public sector employees may receive a lower salary and receive additional benefits, whereas private sector employees may receive a higher salary but not receive the same additional benefits as public sector employees); *Minimum Wage by Province*, RETAIL COUNCIL CAN. (2020), https://www.retailcouncil.org/resources/quick-facts/minimum-wage-by-province/ (indicating the minimum hourly wage in each province and date effective).

[190] *See* Prastyani, *supra* note 49; Tani & Damayanti, *supra* note 80. *See generally* Agustina et al., *supra* note 23.

[191] *See* Prastyani, *supra* note 49 (referencing how informal workers, and some formal workers, in Indonesia have a fixed monthly premium they must meet in order to remain a member of JKB). *See generally* Agustina et al., *supra* note 23.

[192] *See generally* Agustina et al., *supra* note 23.

[193] *See Indonesia Minimum Wage Rate 2020*, MINIMUM-WAGE.ORG (2020), https://www.minimum-wage.org/international/Indonesia (stating that the lowest minimum wage in Indonesia is Rp 1.1million per month, or $82 USD, and the highest is Rp 3.1 million per month, or $232 USD); Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

others.[194] Since nearly half of the people in Indonesia are not responsible for contributing to the NHIS, the burden of funding the program rests on the other half of the population, who can afford to support the program.[195] A prominent reason for this relates back to the requested monthly premiums.[196] Statistics have shown that only 53% of individuals within this segment pay the requested and required monthly premiums.[197] Therefore, there is a significantly low number of individuals who financially support the NHIS, which has contributed to Indonesia's deficit.[198]

From the stated differences above, it is clear why Indonesia's universal healthcare system contains shortcomings. Consequentially, since the NHIS does not, in fact, provide healthcare for all of Indonesia's residents (despite its intentions), it allows for clinical trials to continue as the main, and sometimes only, source of healthcare for some Indonesians.[199]

V. INDONESIA LAW GOVERNING CLINICAL TRIALS

In order to properly conduct a clinical trial in Indonesia, the research is typically approved by the Drug and Food Supervisory Board, formally known as Badan Pengawas Obat dan Makanan ("BPOM").[200] The BPOM will only approve a study if it meets the requirements of BPOM Regulation 21.[201] The main features of this legislation include:

> (1) Not all clinical trials require approval from the BPOM. Only pre-marketing studies need to receive prior approval from the BPOM, and once approval is received, the study will only be allowed to operate for a given period of time. If more time is needed, the researchers must apply for an extension;[202]
>
> (2) Test products must be equipped with preliminary safety data and equipment relevant to the research, and each subject must receive informed consent about their participation;[203]
>
> (3) Studies must operate in accordance with the Cara Uji Klinik yang Baik ("CUKB"), a Good Clinical Trial Practice regulation overseen by the

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[194] *See Indonesia Minimum Wage Rate 2020*, *supra* note 194; Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[195] *See* Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[196] *See* Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[197] *See* Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[198] *See* Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[199] *See generally* Agustina et al., *supra* note 23.

[200] Cahyani Endahayu & Reagen L. Mokodompit, *Clinical Trials Handbook: Asia Pacific*, BAKER MCKENZIE, https://www.bakermckenzie.com/-/media/files/insight/publications/2019/healthcare/ap/dsc125067_clinical-trials-handbook--indonesia.pdf?la=en (last visited Nov. 6, 2019).

[201] *Id.*

[202] *Id.* (stating that only a post-marketing clinical trial may not receive prior approval by the BPOM). Such extension takes into consideration a post-marketing clinical trial is completed using products previously tested in a pre-marketing clinical trial, thus already approved for research by the BPOM at a previous date.

[203] *Id.*

BPOM. During the clinical trial, the BPOM will inspect each trial in order to confirm CUKB compliance;[204] and

(4) BPOM Regulation 21 only applies to clinical trials of select products including drugs, herbal medicine, health supplement, processed foods and cosmetics.[205]

There are certain procedural requirements that must be fulfilled for clinical trials to be conducted in Indonesia.[206] First, a researcher must submit all necessary information and documents to the Indonesian bureaucracy.[207] Next, the trial will need to receive approval from the ethics committee, [208] which is primarily comprised of scientific professionals, as well as non-scientific professionals, who oversee the rights and safety of the trial subjects.[209] When a clinical trial meets the criteria mentioned above, the trial may be conducted in Indonesia.[210] These requirements are not strenuous, as long as the clinical trial receives authorization from the BPOM and is undertaken ethically, the trial will be allowed to test Indonesian citizens.

VI. SOLUTION

The NHIS undeniably has its faults.[211] While the Indonesian government aimed to create a unique universal healthcare system, this goal is untenable as it currently stands.[212] However, by modifying the system and introducing remedies that rectify some of the system's present dilemmas, the Indonesian healthcare system may survive.

First, Indonesia should amend its National Constitution to incorporate and recognize *all* religions that coexist within Indonesia.[213] The Constitution currently recognizes six belief systems, claiming that individuals have the freedom of religion to believe in whichever religion they choose, even though the government does not recognize any belief system not listed in the Constitution.[214] If the Indonesian government amends its Constitution to incorporate *all* religions, not only is it likely that more Indonesians will enroll in the universal healthcare program, but it could create a potential avenue to additional sources of funding.[215]

Second, Indonesia's healthcare system should incorporate a progressive tax system. Although it may seem appropriate to charge a fixed premium since it is easier to regulate how

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[204] *Id.*

[205] *Id.*

[206] *Id.*

[207] *Id.*

[208] *Id.*

[209] *Id.*

[210] *Id.*

[211] *See* Piketty & Saez, *supra* note 78, at 22; Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[212] *See* Piketty & Saez, *supra* note 78, at 9-10; Prastyani, *supra* note 49. *See generally* Agustina et al., *supra* note 23.

[213] *See* 2018 Religious Freedom Report, *supra* note 91.

[214] 2018 Religious Freedom Report, *supra* note 91, at 1, 3, 6-7; Alfitri, *supra* note 164, at 407.

[215] *See* 2018 Religious Freedom Report, *supra* note 91, at 7; Alfitri, *supra* note 164, at 412.

funds are allocated, this creates a disproportionate economic situation,[216] as evidenced in situations when two individuals are required to pay the same premium even though one of them makes double the salary than the other.[217] Separately, while obtaining adequate funding for the healthcare system is a priority, this must be balanced against an individual's earnings since high premiums place an undue financial burden on individuals and discourage enrollment.[218] Not only could this discourage individuals from enrolling in the NHIS, it could also cause some individuals to be financially unable to enroll in the program altogether.

Third, the hospital-class system should be abandoned. By limiting which hospitals and facilities participants of the NHIS can visit, the healthcare system creates an unnecessary inefficiency that could be avoided.[219] Instead, a policy similar to Canada's, where any hospital and medical facility is accessible for participants to go to for their medical needs, should be adopted.[220] The current geographic situation that places most of the medical facilities in and around main cities with some facilities located in remote locations should be remodeled to relocate some medical facilities to locations easily accessible to participants.[221] This would significantly reduce the travel expenses for some participants while also providing many with the opportunity to treat their medical needs.

VII. CONCLUSION

Although the Indonesian government aimed to create a healthcare system that provides accessible medical services and coverage to all of its residents, it is clear that this is unattainable without modifications. The NHIS's faults continue to allow many people to remain without healthcare. Thus, those who require healthcare services are left relying on clinical trials, which do not necessarily treat all medical concerns, nor guarantee treatment of an individual's medical problems. To rid this reliance on clinical trials, the NHIS needs to be modified with the proposed amendments. This will encourage individuals to make an autonomous choice, rather than relying on clinical trials.

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[216] MAX LAWSON ET. AL., PUBLIC GOOD OR PRIVATE WEALTH? 53 (Oxfam GB ed., 2019).

[217] *Id.* at 62.

[218] *Id.* at 24.

[219] Awofeso et. al., *supra* note 70, at 51-52.

[220] *See Canada's Healthcare System*, *supra* note 103.

[221] Awofeso et. al., *supra* note 70.