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Health Care as Commons: An Indigenous Approach to Universal Health Coverage

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Abstract

Modern health care systems of today are predominantly derived from Western models and are either state owned or under private ownership. Government, through their health policies, generally aim to facilitate access for the majority of the population through the design of their health systems. However, there are communities, such as Indigenous peoples, who do not necessarily fall under the formal protection of state systems. Throughout history, these societies have developed different ways to provide health care to its population. These health care systems are held and managed under different property regimes with their attendant advantages and disadvantages. This article investigates the gaps in health coverage among Indigenous peoples using the Malaysian Indigenous peoples as a case study. It conceptually examines a commons approach to health care systems through a study of the traditional health care system of indigenous peoples and suggests how such an approach can help close this gap in the remaining gaps of universal health coverage.

Keywords

universal health coverage, Indigenous peoples, commons, Malaysia, Orang Asli

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Health Care as Commons: An Indigenous Approach to Universal Health Coverage

The United Nations' State of the World's Indigenous Peoples report clearly documents the stark disparities in health between Indigenous peoples and the national population of many countries (United Nations, 2009) including within developed countries where health care services are comparatively of a higher standard. For example, infant mortality among Indigenous people in Australia is 3 times that of the non-Indigenous population, while in New Zealand it is 1.5 times higher. This same pattern is evident between Indigenous and non-Indigenous populations in the Americas, from North America to Latin America. Globally, Indigenous peoples carry a higher burden of diseases such as malaria, tuberculosis, HIV/AIDS, cardiovascular diseases, respiratory diseases, and diabetes compared with non-Indigenous peoples. Modern day diseases like diabetes have become a major health problem for Indigenous populations due to externally induced changes to diet, environment, economy, and lifestyle. Worldwide, Indigenous populations still battle with poor nutrition whether they are in developed, developing, or less developed countries. In Australia, 12.4% of Aboriginal women give birth to low birth weight children compared to 6.2% of non-Aboriginal women (Better Health Channel, 2012); in Malaysia, various studies show that between 50 - 80% of Orang Asli Indigenous children were undernourished (Idrus, 2013); in El Salvador, 40% of Indigenous children under 5 years were malnourished compared with 23% of non-Indigenous children (United Nations, 2009). One of the reasons for this poor state of health among Indigenous peoples is lack of access to adequate health care. Causes include inadequate state financing, geographical distance or isolation, high out-of-pocket expenses, lower quality of services, and culturally inappropriate or insensitive methods (United Nations, 2009).

The Background to Universal Health Coverage

Universal health coverage has been proposed as a systems solution to the challenges in access to health care. The core aims of universal health coverage (World Health Assembly, 2005) are to achieve better access to adequate health care for all and to ensure that available health care is affordable. This is defined by the World Health Organisation (WHO) as a health care system that ensures all people obtain the health services they need without suffering financial hardship when paying for them (WHO, 2012). Universal health coverage relies on a strong, efficient, and well-run health system that meets priority needs through people-centred, integrated care: One that is affordable, provides access to essential medicines and technology, and has sufficient capacity of well-trained motivated health workers (WHO, 2012).

The concept of universal health coverage is not new. Historical studies of the progression of public health show how the provision of health related and health care services grew both in the extent of coverage as well as in the range of services. Whether this growth came about because of the progressive increase in knowledge, science, and technology as implied in George Rosen's (1993) grand narrative or due to changing socio-economic and political structures defining relationships between classes, social structures, and states as articulated by Porter (1999), the result has been improvements in the health of populations, particularly since the mid-nineteenth century (McKeown & Record, 1962).

These narratives portray the progress of health improvement as a coherent whole. However, health care systems across different societies, communities, or states often evolved independently. As interaction and influence between states increased during the Renaissance period, shared knowledge gave rise to common approaches that formed the basis for a modern health care system. The rise of modern nation states with the often used case studies of Germany, Britain, and the United States

(Bump, 2010; Porter, 1999; Rosen, 1993) shows the various paths used in the attempt to meet the ideal of providing health care for all citizens. After the Second World War, with the formation of international bodies in the United Nations and the World Health Organization, universal health coverage found its ultimate expression in the unanimous consensus achieved by the Alma Ata Declaration (Rifkin & Walt, 1986).

Historically, studies on health systems have had a Western orientation focusing on Sweden, France, Germany, Britain, and the Progressive movement in the United States. Less is known about the evolution of health care systems of non-Western societies. Chinese and Indian societies, for instance, have had distinct systems of structuring health care for populations that were under the protection of the state (Hillier, Jewell, Worcester, & Kane, 1983; Mishra, Singh, & Dagenais, 2001). Virtually undocumented are the histories of health care systems of non-state societies; those societies or communities that for various reasons live and function outside the formal political structures of the state (Scott, 2010). These non-state societies are often considered inferior with limited historical records, which may contribute to little more than “exotic” anthropological value. Most Indigenous communities fall under the definition of non-state societies (Benjamin & Chou, 2002) and have a history of marginalisation.

Challenges to Universal Health Coverage in Indigenous Populations

Recent discourses on the approaches to improving universal health coverage give primacy to the need for optimal financing models¹ (Holst & Brandrup-Lukanow, 2005; WHO, 2010). While financing is a critical aspect of ensuring universal health coverage, it is also clear that the absence of appropriate infrastructure, qualified and culturally sensitive personnel, supportive socio-economic and policy environments, and adequate implementing structures combine to undermine universal health coverage.

In Southeast Asia, for example, Thailand, which is often cited in international reports (WHO, 2010) for successfully providing universal health coverage still falls short of providing access to minority tribal groups (Hamilton, 2002; Sricharoen, Buchenrieder, & Dufhues, 2008). Large numbers of hill-tribe households are not even accorded citizenship status by the state, thereby excluding them from government health subsidies (Hu, 2009). National policy environments need to synchronize with health policy in order for universal health coverage to work.

Since the public policy making process is a profoundly political process and not a linear analytical problem-solving one (Walt, 1996), national health policies emulate the goals, priorities, and biases of the state, which may not necessarily contribute altruistically to health improvement alone. Some examples are colonial Britain’s use of health services to draw the Orang Asli away from communist influence during the Malayan Emergency from 1948 to 1960 (Bedford, 2009), South Africa during the apartheid era used health policies as part of its effort to maintain the dominance of its White population (McIntyre & Gilson, 2002), and Mexico used health services in its counter-insurgency effort to suppress the Zapatista rebellion in Chiapas (Farmer & Gastineau, 2005).

¹ Optimal financing models refer to methods of raising money to pay for health care services. Due to the rising cost of providing health care services as a result of larger and ageing populations, governments are increasingly looking to methods other than general taxation. Social health insurance, private health insurance, privatizing services, or increasing user fees are various methods used but each has their advantages and disadvantages. Finding an optimal model for each country that balances between equity, efficiency, effectiveness, and sustainability is the challenge.

With such an array of challenges, is universal health coverage in its current form adequate to ensure access to quality health care for Indigenous peoples? To this question we will now turn using the Orang Asli, an Indigenous people of Malaysia, as a case study.

The Malaysian Indigenous People

The Orang Asli are the Indigenous peoples of Peninsular Malaysia, officially classified by the state into 3 main groups and sub-divided further into 18 ethnic sub-groups. Numbering just 178,197 (Department of Aboriginal Development, 2012) or 0.6% of Malaysia's population of 28.3 million (Department of Statistics, 2010), the Orang Asli are the oldest population group recorded to inhabit the Peninsula (Zainuddin, 2012). The Orang Asli is not a homogenous group. However, they share similarities in factors requisite among Indigenous people: that is self-identification as a distinct group, historical experience of vulnerability, dislocation and exploitation, a long connection with the region, close cultural affinity with the land or territory, and non-dominance in the affairs of the state (Kingsbury, 1998). Archaeological, anthropological, and genetic evidence suggests that the three main Orang Asli groups—Negrito, Senoi, and Aboriginal Malay—have pre-histories that go back as far as 10,000 years (Dentan, Endicott, Gomes, & Hooker, 1997). The earliest state systems in the Peninsula were Indianised kingdoms dating back about 1,800 years ago and Orang Asli contacts with these populations and traders from further afield were limited to trading forest products (Nicholas, 2000). Mostly, they lived in the forested upland interiors, isolated from the reach of national politics. With the establishment of Malay Kingdoms in the second millennium, the Orang Asli were subjected to intense slavery (Andaya, 1984; Clifford, 1989; Endicott, 1983; Gullick, 1987; Mikluho-Maclay, 1878; Swettenham, 1880). Passing references by traders, explorers, missionaries, and later anthropological studies dating from mid-nineteenth century, give a glimpse of how Orang Asli societies were organised. In spite of the heterogeneity of the communities, a number of features were common across the groups. These were:

- (a) Small to medium sized bands of kinship related households (Dentan et al., 1997), which enabled them to exploit ecological resources in a sustainable fashion, provided protection from state control, and facilitated flight when there was a perceived threat (Scott, 2010).
- (b) Egalitarian social structures, particularly within the Negrito and Senoi groups (Dentan et al., 1997; Lye, 2002), but less so with the Aboriginal Malay groups (Nicholas, 2000). The structure supported the sharing of knowledge and skills among band members to ensure group survival.
- (c) Most of their livelihoods and daily needs were derived from their natural environment—the sea for the coastal groups and the forests for those in the hinterland (Nicholas, 2000). The forest was a source of nourishment, household, building and trading materials, medicines, and leisure (Colfer, 2008; Vinceti, Eyzaguirre, & Johns, 2008).
- (d) Land and natural resources were held communally to allow every member of a community access to vital resources (Vinceti et al., 2008).
- (e) Communities maintained some interaction with the state but remained largely outside the control of the state (Benjamin & Chou, 2002). It has been argued that this particular feature relates to the history of slavery (Endicott, 1983).

Organisation and social structures that ensured the availability and accessibility to basic resources for nourishment, shelter, social, and health needs coupled with limited wants played a key role in enabling bands not only to survive but also to thrive in difficult ecological conditions (Mies & Bennholdt-Thomsen, 1999; Sahlins, 1974). The population of the Orang Asli in the 1947 Census Report stood at 34,737 from a total population of 4.9 million (Del Tufo, 1949) or 0.7% of Malaya's population. A year later, the Communist insurgency war in Malaya triggered a concerted effort by the state to isolate the Indigenous people from communist influence. This led to a series of development programs, which included the provision of health services as part of its counter-insurgency strategy (Bedford, 2009; Nicholas & Baer, 2007). There is now a hospital dedicated solely for the health of Orang Asli, free medical treatment at government health facilities, and dedicated mobile health units that provide mother-and-child health services, malaria screening, vector control, and ambulance services.

Notwithstanding the economic development of Malaysia over the past five decades since its independence in 1957, the Orang Asli have, to a large extent, remained isolated from the advantages brought through economic development. Similar to Indigenous peoples worldwide, disparities are evident in almost every sector. Compared with the 1947 Census, the Orang Asli share of the population has in fact decreased from 0.7% to 0.6% of the total population. Official statistics in 2008 to 2009 indicated that 33% of Orang Asli were "hard-core" poor compared with the national average of 0.7% (Department of Statistics, 2010; Idrus, 2013). The proportion categorised as "poor" was 50% in 2009 (Economic Planning Unit, 2010) but the poverty incidence is likely much higher due to the lower poverty line income used with Orang Asli compared to the national standard (Idrus, 2013). In education, school attrition in the first 6 years of formal education for Orang Asli children attending the Malaysian public school system was reported at 43.9% in 2003 while only 6 out of 100 completed up to 11 years of formal education (Nicholas, 2010).

One of the most contested areas between the Orang Asli and the state is in land rights and the natural resources that come with it. In a 2013 report published by the Human Rights Commission of Malaysia (SUHAKAM, 2013), there were 287 cases of disputes pertaining to land rights that pitted the Orang Asli against state land development schemes, dams, national parks, logging, commercial plantations, and settlers. For the Orang Asli, land and its environment is fundamental to the social, cultural, spiritual, and economic systems. From the land, they derive their food, medicines, fuel, and building materials. In addition, it shapes their governance systems, spiritual beliefs (Nicholas, Yok Chopil, & Sabak, 2003) and, as this article will show, their health care system. Hence, the loss of land and its resources has severe impacts on the life and identity of this community.

The Malaysian Health Care System and Orang Asli Health

Malaysia too has made remarkable progress in the standard population health indicators since achieving independence in 1957. Life expectancy at birth has risen from 56 years and 58 years for males and females respectively to 71 and 76 years respectively in 2005. The crude death rate (CDR) per 1,000 population declined from 12.4 in 1957 to 4.5 in 2002 and maternal mortality rates per 1,000 live births fell from 3.2 in 1957 to 0.3 in 2004 (Sirajoon & Hematram, 2008). The progress has been achieved with a relatively low expenditure on health care. Between the years 2004 to 2011, health care expenditure averaged 3.95% of GDP of which slightly less than half was public expenditure (World Bank, 2013).

Human resources for health coverage from both public and private sectors are in the ratio of 1:758 for doctors and 1:345 for nurses while, with respect to infrastructure, the state owns and runs 140

hospitals, 1,025 health clinics and 1,831 community clinics (Ministry of Health, 2013) under a state property regime. In addition to static health care facilities, the state has mobile clinics to provide primary health care for communities such as Indigenous peoples living in remote locations. If complications arise, patients are sent to tertiary level facilities located in major urban centres. All these were achieved with an optimal expenditure on health provision. Malaysia's total health expenditure was 4.75% of GDP, well within the recommended 4% to 5% by WHO for the Asia-Pacific region (Chua & Cheah, 2012). These achievements are remarkable compared to countries such as Ghana, which also became independent in 1957 (Mayhew & Adjei, 2004).

Malaysia's health care system is a mix of public and private services with the state owned and publicly funded health care system catering to the majority of its citizens. However, since the 1980s, the government has been reducing its role in the provision of services and ceding over initiatives to a for-profit private sector made up chiefly of large publicly-listed companies (Chee & Barraclough, 2007). In fact beginning in 2004, the private sector has overtaken government spending on health with the former accounting for 53.8% of expenditures (Chua & Cheah, 2012). Another effect of the privatization policy is the draining of public medical personnel to the private sector due to the higher monetary rewards (Ramesh, 2007) leaving the public health care sector with reduced quality services.

For-profit private sector health care services cater to the affluent rather than the poorer and more inaccessible sections of society given that these have little profit potential. Owned and run under a private property regime, private health care services go where the money is; hence, they tend to be located in large urban centres where the wealthy reside. While there are not-for-profit private health care services in Malaysia, their number is small and coverage is limited. It is left to the state then to provide these services on reduced budgets and personnel.

Despite the reduced resources and privatization challenges, Malaysia's public health care system has done commendably well in moving towards universal health coverage with 93% of the population living within 5 kilometres of a health care facility; rural primary health care is provided free of charge while urban public health clinics and hospitals levy only modest charges on the population (Ramesh, 2007).

However, in common with the global pattern, national level achievements in providing health care mask significant health disparities for Indigenous peoples. The Orang Asli carry a larger burden of diseases like tuberculosis, malaria, and leprosy compared with the national population. The crude death rate, infant mortality, and maternal mortality rates were also higher than the national average (Baer, 1999; Nicholas & Baer, 2007). Even basic health needs like nutrition remain unmet as malnutrition and undernourishment continue to plague a large proportion of the community (Khor & Zalilah, 2008; Osman & Zaleha, 1995; Saibul et al., 2009; Shashikala, Kandiah, Zalilah, & Khor, 2005).

National health policy and its implementation are a reflection of the state's goals, priorities, and biases. For Indigenous peoples, communities that have historically been non-state societies that state societies tend to view them as uncivilized, barbaric, backward (Nicholas, 1996; Scott, 2010) that need to be lifted out of their condition and brought under the "civilizing" tutelage of the state. This orientation is reflected in public policy that establishes how the Malaysian state relates with its Indigenous peoples groups. In the 2009 country report of the UN Human Rights Council, this policy is described in the following manner:

The most significant challenge which besets Malaysia is lifting indigenous groups from *backwardness* [italics added for emphasis] and assimilating them into mainstream society. In line with this, Malaysia has developed comprehensive policies and strategies for the development of indigenous groups which focuses on uplifting the status and quality of life of the indigenous community via socioeconomic programmes. (United Nations, 2008, p. 16 para 4.97)

Socioeconomic programmes here would include health care services, which the state is morally and legally under international conventions obliged² to provide. The result of such orientation in policy manifests itself in health policy and practices towards the Orang Asli exemplified in the following documented incidents in health matters:

- In 2010, Dr. Shelvaa Pillai, a physician at the Gombak hospital, went public with allegations of negligence and mismanagement at the hospital that was setup exclusively for Orang Asli health treatment since the Malayan Emergency (Alhadjri, 2011; Idrus, 2013).
- In 2004, Tasik Chini, a natural fresh water lake, was found to be heavily contaminated with E. coli, causing rashes and diarrhoea among the Orang Asli living in villages along the lake. The government immediately blamed the contamination on the Orang Asli and suggested that they be resettled. A study later found that the contamination was due to a local tourist resort and a national service camp sited by the lakeside (Nicholas & Baer, 2007; “Pollution killing Tasik Chini,” 2004; “Scattered Orang Asli to be resettled in one village,” 2004).
- In 1997, two Jah Hut Orang Asli children died from an overdose of anti-malarial drugs wrongly administered by health department personal. The government denied it was at fault and instead accused the parents of negligence. Subsequently, a coroner’s inquiry found that it was indeed an overdose of anti-malarial drugs but no health official was held accountable. This was the fourth documented incident (Aziz, 1997; Baer, 1999; Nicholas & Baer, 2007; Ruslaini, 2000).
- In 1996, when a study revealed that 60% of mothers who died during home births were Orang Asli, the government immediately placed expectant mothers in newly set up Alternative Birthing Centres located in public hospitals from up to a month or more before the delivery date and forbade home births (“Encouraging women to give births in hospitals,” 1996; Nicholas & Baer, 2007). The expectant mother was required to wait out her time in these centres—some up to three months.

The dominating power of the state over this traditionally non-state society is now expressed in paternalism and authoritarianism. Health policy and public health care services owned by the state are delivered to the Orang Asli without the participation of the community, purportedly for “their own good” and when something goes wrong, it is due to their “backwardness”. Considering Malaysia’s achievements in reducing poverty and bringing health care services to a high level of

² Malaysia has ratified the Convention to Eliminate Discrimination Against Women (CEDAW) and the Convention on the Rights of the Child (CRC) but not the Universal Declaration on Human Rights (UDHR) or International Convention on Economic, Social and Cultural Rights (ICESCR) (United Nations, 1979, 1989, 1948, 1966, respectively).

coverage since independence in 1957, this failure to address the needs of a group that make up less than 1% of the country's population indicate that the policy and implementation environment of its one-size-fits-all system of organising universal health coverage has been less than effective in reaching the Orang Asli. For a non-state society like the Orang Asli, a third way of holding resources—common property regimes—may be needed to achieve the goals of universal health coverage.

The Concept of “Commons”

The term “the commons” provides a generic description of common-pool resources – cultural and natural resources—shared by all members of a community or society. In many traditional societies, a commons approach or “common property regimes” govern shared lands, water sources, public property and social protection systems (Platteau, 1991; Swallow, 1997) and ensures that resources are accessible to all members of the community. This is in contrast with state property regimes and private property regimes where ownership is limited to the state in the former and to an individual entity in the latter. Recent applications of common property regimes also cover knowledge systems such as the internet and open access software (Brin, 1995; Ostrom & Hess, 2007; Ostrom & Hess, 2011). There remain communities in many low and middle-income countries where the commons approach remains of core relevance to the way the society functions. These communities are often ones that are marginalised due to ethnicity, geography, development, political alignment, or socio-economic status and commonly suffer persistently poorer health outcomes. They also present the greatest challenges to achieving universal health coverage within state owned health care systems.

Health Care as Common-Right

The accepted working definition of health by the WHO is a “state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity” (WHO, 1946). Such a definition of health has clear connections with basic human rights and this has resulted in recent years in an increasing momentum towards a rights-based approach to health (Gruskin, Grodin, Marks, & Annas, 2005; Smith-Nonini, 2006) as it is recognised that the right to health cannot be separated from human rights (Kirby, 1999; Leary, 1994; Toebes, 1999; Tomasevski, 2012). This was recognised and set out in a number of international legal instruments: the Universal Declaration on Human Rights (UDHR), Article 25:1 in 1948 (United Nations, 1948) and the International Convention on Economic, Social and Cultural Rights (ICESCR), Article 12 in 1966 (United Nations, 1966). This was subsequently reinforced for specific segments of the population by the Convention to Eliminate Discrimination Against Women (CEDAW), Article 12 in 1979 (United Nations, 1979) and the Convention on the Rights of the Child (CRC), Article 6 in 1989 (United Nations, 1989). The right to health is accorded to all people even if it is a *de jure* right and not always *de facto*, as not all governments have signed onto these international instruments. The right to health is not limited to the provision of health care services but encompasses other conditions—civil, political, economic, social, and cultural (Gruskin & Tarantola, 2005)—that make “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” possible (United Nations, 1996, ICESCR Article 12). It is in a sense a “common-right” accorded for all.

For Indigenous groups who face significant health disparities, operationalizing this common-right to health is a focus for WHO as seen in its World Health Assembly resolutions 54.16, 53.10, 51.24, 50.31, 49.26, 48.24 and 47.27 (World Health Assembly, 2001). Key to delivering this common-right to health is health care systems that are setup in various forms in each country. WHO defines a health care system as all the activities whose primary purpose is to promote, restore, or maintain

health (WHO, 2000) and it is a country's health care system that determines the success or failure of universal health coverage.

Health Care System as a Common-Pool Resource

The idea that health has economic value is certainly recognised and acknowledged in the Social Determinants of Health report (WHO, 2008) and by the International Labour Organisation (ILO, 2007): Investments in health bring economic returns. Good health is good for the economy (Sachs, 2001). To an extent, in today's market economy, what passes as good health has been commoditised and packaged into something that can be bought and sold, as evidenced by the privatised medical services market, the diet and fitness market, and the pharmaceutical market, to generate revenue.

In this light, a health care system may be considered as a common-pool resource in so far as it is an economic resource that safeguards a population's health and where those of the population are accorded certain rights of access. A common-pool resource consists of two components: a resource system or stock facility and a flow of resource units or benefits from the resource system (E. Ostrom, 2000). The resource system of a modern health care system is made up of hospital buildings and attendant infrastructure, medical and supporting equipment, medicines, personnel and their skills, medical and health knowledge, all of which are tangible or intangible resources. The flow of resource units from a health care system is made up of the various health care services to the population.

Two attributes that economists usually associate with common-pool resources are: (1) the difficulty of excluding people from using the resource, and (2) that its use by an individual subtracts from what is available for others (E. Ostrom, Gardner, & Walker, 1994; V. Ostrom & Ostrom, 1977). Health care, particularly a public health care system, certainly displays these attributes. First, it is difficult insofar that it is unacceptable to exclude or discriminate against individuals or segments of the population from using the services by virtue of the "common-right" they have to health as enshrined in the international instruments. States are obliged to ensure that these rights are respected, protected, and fulfilled even if they do not often succeed. Second, due to the finite nature of resources and multiple demands on it, competing for a share of resources such as finances allocated to the health sector, trained personnel to provide services, time to attend to patients, availability of equipment or medicines, mean the subtractibility³ of these resources has limits.

Conceptualizing a Commons Health Care System

Traditionally, in studies that review property regimes, the function that has been emphasized is the economic function. This is true even in reviewing common property regimes where the foremost studies predominantly emphasize this from the angle of the potential in economic development. And so, the track record of it being successful in that function has been uneven and frequently contested (Hardin, 1968), even more so as economic systems have moved from subsistence to capitalist.

However, in recognising a common property regime's specific function in social protection rather than economic growth, then mitigating health risk and maintaining good health as critical components of social protection (Hormansdorfer, 2009) suggest that common property regimes are

³ Subtractibility refers to the degree to which the use of a portion of the resource shrinks the supply that remains for others (FAO, n.d.). E. Ostrom and colleagues (1994) use the example of how a person's use of a weather forecast does not subtract from its availability to others; hence, it is limitless. However, a person's use of a fishery subtracts from its availability to others because there are limits to how much fish can be extracted before a fishery is exhausted.

an important aspect of holding and organising a health care system. This approach has not received much attention except in a few scholarly papers (Smith-Nonini, 2006; Smith-Nonini & Bell, 2011) and is equally contested (Lewis, 2004) as with the rest of the commons debate. One possible reason is because there has been even less investigation into actual cases of health care systems organised under a common property regimes but instead re-conceptualizations of health care systems that are under private or state property regimes. It can be compared to trying to fit a square peg into a round hole. To determine efficacy and limitations, a conceptualization based on an actual example of a commons health care system is needed.

Orang Asli Traditional Health Care System as a Commons Health Care System

The Orang Asli traditional health care system is possibly more integrated than the modern health care system: The people's concept of health linked individual and communal ill health to social, cultural, spiritual, and environmental factors (Nicholas & Baer, 2007). While these linkages had been evident for some time in public health circles, it was only in the past few decades that the interconnectedness of these factors gained traction in the medical field, particularly with the publishing of the Social Determinants of Health report (WHO, 2008). That the Orang Asli did not require busloads of highly qualified personnel or millions of dollars to come to that conclusion and organise their health care system accordingly suggests lessons we need to learn.

A number of anthropological studies have documented the Orang Asli's health concepts, practices, and factor links (Dentan, 1968; Endicott, 1979; Gianno, 1986; Hood, 1978; Howell, 1989; Roseman, 1993; Skeat & Blagden, 1906; Wazir-Jahan, 1981). While these studies are valuable, they will only be explored here from the commons angle.

According to E. Ostrom (1990), there are eight design principles that contribute toward a successful common property regime. While not all are found in every common property regime, the absence or presence of a design principle poses questions about how it affects the long-term integrity and sustainability of a common property regime. The design principles Ostrom postulates are:

- (a) Clearly defined boundaries;
- (b) Rules in use are well matched to local needs and conditions;
- (c) Individuals affected by the operational rules can participate in modifying the rules;
- (d) A system for self-monitoring members' behaviour is established;
- (e) A graduated system of sanctions is available;
- (f) Community members have access to low-cost conflict-resolution mechanisms;
- (g) The right of community members to devise their own rules is respected by external authorities.

And in the case of common property regimes that are parts of a larger system:

- (h) Nested enterprises – appropriation, provision, monitoring, enforcement, conflict resolution, and governance activities are organized in a nested structure with multiple layers of activities.

There are three features nested in the Orang Asli traditional health care system that makes it a common-pool resource held and managed in a common property regime—a commons health care system.

Feature 1: Natural resource base. First, is the natural resource base—the tropical rainforest—from which the Orang Asli obtain their sustenance, medicinal plants, and which is their spiritual and cultural foci. In itself, forest systems are a widely recognised a common-pool resource with various examples of successful management under common property regimes (Arnold, 1998; FAO, n.d.; E. Ostrom, 1990; Pagdee, Kim, & Daugherty, 2006). Orang Asli view forest resources and the land on which the forest grow as being communally held. Land is regarded as a living entity and a band exercises rights to regulate and use it yet no individual has permanent ownership of it but only usufruct rights. Resources from the natural forests are accessible to anyone from the band. However, crops that are planted by individuals belong to the specific individual and his or her household (Lim, 1997; Nicholas et al., 2003).

Items key to Orang Asli health that are obtained from the tropical rainforest are medicinal plants, which are accessible to all members of the band in their territory. Food sources such as meat and vegetables come from both cultivated and natural sources, the former harvestable only by the owners or with the owner's consent, while the latter accessible again to all from that band. A study by Samuel and colleagues (2010) identified 62 species of plants used for medicinal purposes by one Orang Asli community while an earlier study by Dunn (1975) identified 104 fruit species alone that are harvested in another community from forest and forest swiddens. Without this natural resource base, the Orang Asli traditional health care system could not exist since duplicating this ecosystem is not possible.

Feature 2: Knowledge base. The ability to use and manage a natural resource base, whether for medicinal, nutritional, shelter, spiritual, or cultural purposes, comes from a community's knowledge repository that has been accumulated over generations. This constitutes the second feature of the Orang Asli traditional health care system: the indigenous or traditional knowledge base that underpins the system. Indigenous knowledge, like the natural resource systems held and used by an Indigenous people, is central to the maintenance of its identity (Posey & Dutfield, 1996). It is an identity that is visibly community-oriented, communal, and with roles, reciprocities, and obligations of the individual to the band and vice versa.

Many Indigenous communities like that of the Orang Asli hold their Indigenous knowledge in common (Joranson, 2008) enabling it to be open and accessible to anyone in a band interested to learn to acquire the necessary skills needed to survive. It is in the survival in a specific environmental niche that Indigenous knowledge becomes a resource that equips the band to obtain food, water, shelter, medicinal products, work and tend the land, maintain social ties and the health of the band, negotiate spiritual and cultural rules, in addition to accumulating and passing on the knowledge on to the next generation so that it too will survive and develop.

With a largely egalitarian social structure in small band sizes, surviving in such an environment requires a communal effort and so the knowledge that is needed to do that is shared and managed jointly. The more members who share the necessary information and skills for survival, the more the band is able to thrive. Knowledge then is non-subtractive in that one person's ability to use it does not compromise another's.

This common access to knowledge, however, does not mean every member will put into practice all available knowledge. Factors like gender, age group, or lineage will influence utilization of knowledge in order to fulfil different roles in the social setup of a band; however, it is accessible to all band members if they are interested to learn. A person's knowledge of health and health treatment is determined more by personal attentiveness rather than say gender, while children gain this knowledge through observation and instruction by following the adults in a band.

Not only is knowledge held in common, but also it is generated and used in common through the participation of every band member in the acts of learning and decision-making. It is self-organised through collective-action and self-governance by a band. Communal decision-making is the norm in Orang Asli communities with band members' collectively deciphering and providing information and knowledge in order for decisions and actions to be made that affect the band. Some examples of this include decisions about opening up rice swiddens (Nicholas et al., 2003), moving the village to another location, marriage, death, and issues dealing with external or state authorities.

This method of holding and using knowledge by Indigenous peoples like the Orang Asli is increasingly being understood and recognised through a growing body of studies into the concept of knowledge as a commons (Hess & Ostrom, 2006; Joranson, 2008; Kranich, 2004; Stiglitz, 2007). In a knowledge commons, knowledge is jointly used and managed by groups, cumulatively building on past knowledge and accessible to all in the group and at times beyond. It is self-organised and is non-subtractive unlike other common-pool resources (Hess & Ostrom, 2006).

Feature 3: Social protection base. The third feature in the Orang Asli traditional health care system that makes it a commons health care system is its social protection function. The United Nations (2000) defined social protection as:

A set of public and private policies and programmes undertaken by societies in response to various contingencies to offset the absence or substantial reduction of income from work; to provide assistance to families with children as well as provide people with basic health care and housing. (p. 4)

This is underpinned by:

Fundamental values concerning acceptable levels and security of access to income, livelihood, employment, health and education services, nutrition and shelter. (United Nations, 2000, p. 4)

In the subsistence context from which traditional Orang Asli society originated, livelihoods were not income based so income and employment security were not relevant but instead centred on obtaining food, water, and other materials for subsistence needs. Traditional social protection then consists of guaranteed sustenance, care, and health treatment for kin who are ill, incapacitated, disabled, too young, or too old to meet his or her own livelihood needs (Baer, 1999; Colfer, 2008). This is achieved through risks pooling when band members who are healthy or appropriately skilled provide those services embedded within social customs of reciprocity, kinship obligation, and cultural sanctions.

These customs are transmitted orally and through practice and are a shared resource, utilized and owned jointly as in a common property regime for the benefit of the band. Through habitual usage, they become an un-codified form of rules and precedents not unlike common law (Thompson,

1993), practiced in common by band members. The communal nature of these social customs helps ensure a band's survival through mutual guarantee of basic health and survival needs met within the capacity level of a band and a common understanding of what constitutes the rights of band members.

Traditional social protection as practiced in the Orang Asli community thus played similar functions as social health insurance, patient care, and after care services in a modern health care system plus welfare assistance in a social welfare system. It is a non-state equivalent of public or private policies and programmes of a state society and its interpretation of who should receive social protection—equity—and how it is best implemented—efficiency.

Summary of Features

From these three features, the first two reveal that the Orang Asli traditional health care system consists of two common property regime systems in itself—natural resource and knowledge—while the third—social protection—has a clear communal focus. The Orang Asli traditional health care system appears to reflect the common property regime design principles that E. Ostrom (1990) postulated. Clearly defined boundaries encompass the right to access medicinal products within a band's territory, to receive instruction of the knowledge needed to use medicinal products and provide health treatment, and to receive social protection is generally confined to band members and kin. The rules in use are well matched to local needs and conditions; rules for the use of medicinal products from the forest follow the same rules that govern other natural resource use. The Indigenous knowledge that informs the rules is unique to this community being historically isolated geographically and specific to the environment while social protection functions are unique to the Orang Asli community based on local social customs. Individuals affected by the operational rules can participate in modifying the rules and community members have access to low-cost conflict-resolution mechanisms. The egalitarian structure of bands allows every member to participate in decision-making even when differences of opinion occur over a wide range of issues including health matters. The un-codified nature of social customs allows room for variations in interpretation and negotiation to take place (Thompson, 1993) until conflict is resolved and consensus is reached. A system for self-monitoring members' behaviour is established and a graduated system of sanctions is available; small band sizes and the egalitarian structure of Orang Asli communities allow ease of monitoring another member's actions. Sanctions come in the form of cultural and spiritual sanctions or taboos that influence health behaviour and health treatment. The right of community members to devise their own rules is respected by external authorities; in the past, the Orang Asli's geographical isolation and non-state status allowed them the freedom to devise their own rules for resource usage without interference from the state. However, with the dominance of the state and its policies and practices, Orang Asli traditional health care is being undermined directly by health authorities who discourage certain traditional health practices, and indirectly through the loss of its natural resource and knowledge base and the erosion of traditional social protection due to the increasing individualization of Orang Asli society, resulting in a decline of the community's traditional health care system.

Conclusion and Policy Implications

One of the aims of this article has been to show that an alternate way of holding and managing a health care system exist in a common property regime as compared to the dominant models of public, private, or public-private ownership. The case study of the Orang Asli traditional health care system is of a working example of a commons health care system and because of similarities in socio-

economic organisation with other Indigenous peoples groups worldwide suggest that the common property regime path to organising health care may be more widespread than what one would suppose. It is a system that empowers communities with ownership and control, and prioritizes equity and social protection. Within the limits of its medical technology, the case study shows it is a workable system that brings health care benefits to the entire community.

Indigenous peoples groups like the Orang Asli who were predominantly non-state societies still face critical health issues despite state-led or state-owned efforts at universal health coverage due to conflicting state or private property regime functions, and the politics of policy-making and implementation. If universal health coverage is to fulfil its goals among such groups, alternate pathways that put the community in control and empower members will be needed. One such pathway is the commons health care system expressed in traditional health care systems. By recognising, supporting, and strengthening these systems as part of universal health coverage efforts, we move away from depending solely on a state-centred, one-size-fits-all approach that has fallen short in addressing indigenous people's health needs.

What this means in policy terms for the health care needs of the Orang Asli community and indeed other Indigenous communities is that:

- (a) The forest and the land that nurtures these ecosystems—the natural resource base—and the rights to it need to be recognised and protected in national laws and enforced justly by the state. The Orang Asli, as with many Indigenous peoples around the world, are denied ownership and in some cases even usufruct rights to their land. The lack of such security in tenure invariably leads to the degradation and eventual loss of the natural resource base through unsustainable usage or appropriation by others.
- (b) The Indigenous knowledge base needs to be preserved and transmitted to the younger generation of Indigenous peoples in a more inclusive and creative state education system that currently ignores the needs of this traditionally non-state society. Among the Orang Asli, Indigenous knowledge was transmitted from adults to children via the daily activities of the family or band. The modern state schooling system ignores this knowledge and divorces the involvement of parents and community adults from the children's education. To reverse this requires state education policies that include Indigenous knowledge in its curriculum and facilitates the involvement of parents and community adults in teaching.
- (c) Indigenous peoples have to navigate the treacherous waters of social change that are rapidly changing the values and social customs that underpin their traditional social protection system. This is further undermined by widespread poverty that prevents people from having sustainable livelihoods. State policy must first have a genuine focus to tackle the issue of poverty among Indigenous peoples and enhance livelihood security. In addition, policy makers need to understand and recognise the role of these non-state traditional social protection systems and support them through appropriate measures that bring new methods into traditional systems, such as local credit and savings groups, mutual aid and insurance groups, or the strengthening of common property management groups.
- (d) Finally, international and national agencies promoting universal health coverage need to move substantially more in their policy directions towards including Indigenous

people's community control and participation in health care decision-making. For a long period, health policy decisions have been made without consulting or involving Indigenous people who use the services. In contrast, an Indigenous peoples' traditional health care system intricately involves its users in the management of its resources, the learning and transmission of its knowledge and in the care of its patients to attain better health outcomes.

These policy recommendations, if applied, can help address the major gaps that still exist with indigenous peoples' health. The commons health care system presented in this article provides a framework for engagement.

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