MONASH University

HEALTH CARE AS COMMONS:

REDISCOVERING INDIGENOUS HEALTH SYSTEMS

TO IMPROVE THE WELL-BEING OF

THE *ORANG ASLI* IN MALAYSIA

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Abstract

Globally, indigenous peoples live with stark disparities in health when compared with national populations. The disparities arise from a combination of epidemiological, social, economic and political transitions taking place arising from historical and current marginalisation. These transitions are fuelling the decline of indigenous health systems and indigenous knowledge systems, the degradation of forests and a contest for natural resources, making it more difficult to address current disparities and threatening to widen it further. In Malaysia, the indigenous peoples known as the *Orang Asli* are a leading example of the situations described earlier. Current health care provisioning has made significant progress in improving the health of the *Orang Asli* but it has still failed to close the gap. In order to address the disparity, health providers and policymakers need to take a major re-think about its approach and study the situation from the *Orang Asli's* perspective. One key area is in health systems where there are two dominant or mainstream health systems – the public health system and the private health system – that have historically proven approaches, but are increasingly stagnating in delivering health care to indigenous peoples and in need of urgent adaptation for the indigenous context. This thesis proposes that indigenous peoples possess a third way to organise their health systems utilising the Commons and that this system may provide the key to closing the gap.

Through an ethnographic study of the *Orang Asli's* traditional health care system, the thesis conceptualises the Commons health system and provides evidence of its key features, its workings and how it within the limits of its medical technology, maintains the health and well-being of the community. The thesis examines the impacts of transitions on *Orang Asli* health, their indigenous health system that is based on the Commons and *Orang Asli's* responses to the modern health care system. Quite often, the impacts of transitions on communities are more clearly exposed during crisis or severe situations and during the course of the study, two such situations happened that allowed for case studies to be utilised. One was from the aftermath of severe flooding and a health emergency that affected the *Orang Asli* villages and the second on the on-going treatment of *Orang Asli* mothers accessing maternal health services.

The findings of the study indicate that health authorities require a change in mindset and approaches in order to make further progress in addressing health disparity among the *Orang Asli* specifically, and indigenous peoples in general. National health systems have to engage the community in structured partnerships because indigenous people possess a health system based on the Commons that can complement the strengths and mitigate the shortfalls of the dominant health systems.

Thesis including published works declaration

I hereby declare that this thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

This thesis includes 3 original papers published in peer reviewed journals and 1 submitted publication. The core theme of the thesis is the Commons health system. The ideas, development and writing up of all the papers in the thesis were the principal responsibility of myself, the student, working within the Global Public Health, Jeffrey Cheah School of Medicine and Health Sciences under the supervision of Prof. Pascale Allotey and Prof. Daniel Reidpath.

In the case of Chapters 3, 5, 6 and 7, my contribution to the work involved the following:

Thesis Chapter	Publication Title	Status *(published, in press, accepted or returned for revision, submitted)*	Nature and % of student contribution	Co-author name(s) Nature and % of Co-author's contribution*	Co-author(s), Monash student Y/N*
3	Health Care as Commons: An Indigenous Approach to Universal Health Coverage	Published	75%. Concept, collecting data and writing.	1) Pascale Allotey, input into manuscript. 15% 2) Daniel Reidpath, input into manuscript. 10%	N N
5	Maternal confinement or maternal imprisonment: Health systems	Submitted	60%. Main concept, collecting data and writing.	1) Daniel Reidpath, contributory concepts, data	N N

	responsiveness and the price of maternal health for the *Orang Asli* in Malaysia			analysis, input into manuscript. 30% 2) Pascale Allotey, input into manuscript. 10%	
6	Why we run when the doctor comes: *Orang Asli* responses to health systems in transition in Malaysia	Published	60%. Main concept, collecting data and writing.	1) Pascale Allotey, data analysis, input into manuscript. 20% 2) Daniel Reidpath, contributory concepts, input into manuscript. 20%	N N
7	Sustainable development goals, universal health coverage and equity in health systems: the *Orang Asli* commons approach	Published	70%. Concept, collecting data and writing.	1) Pascale Allotey, data analysis, input into manuscript. 20% 2) Daniel Reidpath, input into manuscript. 10%	N N

I have not renumbered sections of submitted or published papers in order to generate a consistent presentation within the thesis.

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I hereby certify that the above declaration correctly reflects the nature and extent of the student's and co-authors' contributions to this work. In instances where I am not the

responsible author I have consulted with the responsible author to agree on the respective contributions of the authors.

Main Supervisor name: DANIEL REIDPATH

Main Supervisor signature: **Date:**   30 May 2019

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CHAPTER 1:

INTRODUCTION

The author and his Orang Asli friend in 2017 (Photo credit: WYS)

I vividly recall some 20 years ago visiting an *Orang Asli*[1] friend in Hospital Raja

Permaisuri Bainun, the main public hospital in the city of Ipoh in the State of Perak,

Malaysia. He had been knocked down by a lorry while he was riding his motorcycle and

had suffered extensive injuries. Lying there with plaster casts over various parts of his

body and with a steel frame wrapped around his neck and head, he joked that he looked

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[1] *Orang Asli* translated means Original People. The *Orang Asli* are the Indigenous Peoples of Peninsula Malaysia.

like 'Robocop'. He was trying to remain upbeat but as we talked, he was clearly worried about whether he would ever get the surgery he needed since he did not have the money to pay for it. I remarked that the Department of *Orang Asli* Development or *Jabatan Kemajuan Orang Asli* (JAKOA) normally covers medical costs for *Orang Asli* and he replied that his family had already requested for financial assistance but that JAKOA was non-committal as apparently they only covered basic medical expenses. All he could do was to wait and by this second week in the hospital, his frustration and anxiety was clearly evident on his face. "This is the unfortunate fate of the original people in our own land," he said.
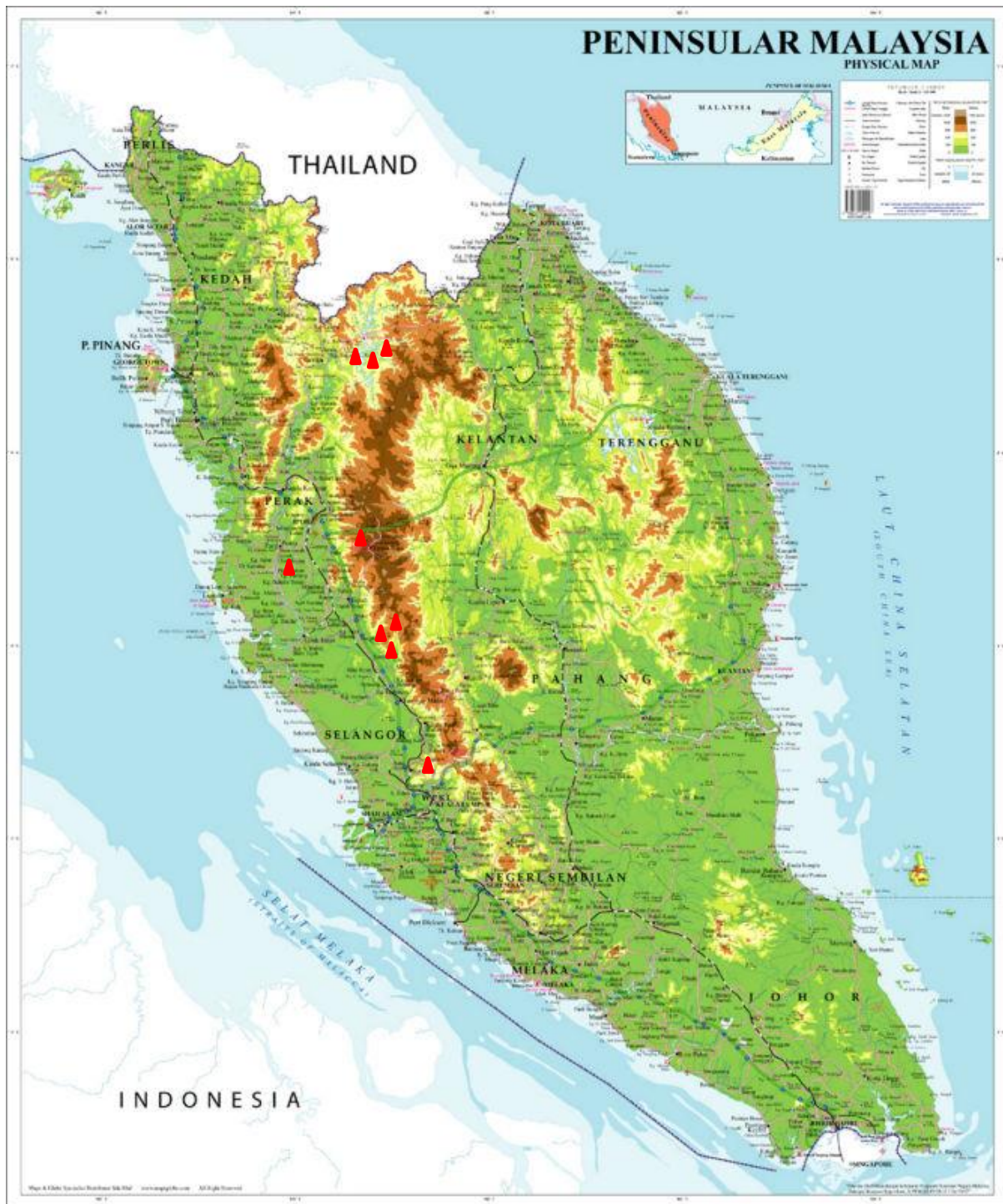
Beyond my concern for his physical recovery and whether he would get the subsidy he needed for his operation, what touched me most was his lament for his community. As the First Peoples to settle on what is now known as Peninsula Malaysia; a community that was largely egalitarian who utilised sustainable farming, horticultural, hunting and collecting practises. A people group who lived and thrived independently in the natural environment of the peninsula for much of history was now a far cry from the one my *Orang Asli* friend was reminiscing back to. Instead, the community was now dependent on the state, hemmed in as they lose more land and forest to development and beset with health, education, social, economic and political inequalities.

I first came to know the *Orang Asli* community in the States of Perak and Pahang during the early 1990s when I joined a local social work NGO that was beginning community development work alongside the Semai *Orang Asli* communities located there. Perak and Pahang are the two states with the largest population of *Orang Asli* accounting for almost two-thirds of the total (JAKOA, 2016). Malaysia is a multi-ethnic society and as a city-bred Malaysian of Chinese descent, I had little prior knowledge of the *Orang Asli* and almost no contact. Any perceptions up until then were shaped by what had been

taught in government schools and what was in popular media which was of a fringe and primitive society. That was to change considerably once I got to know them directly.

Over the next 27 years, I would spend a lot of my time with *Orang Asli* communities, particularly in Central and Southern Perak, and Western Pahang, learning their culture, social history, language, and working with them to address socio-economic development issues that affected them. Most of the field research for this thesis was conducted in Central and Southern Perak with the remainder in Northern Perak. The *Orang Asli* villages in these parts of the country are situated variously from the fringe of forested areas to deep in the forest-covered highlands of the Peninsula. Venturing into the domain of the *Orang Asli* requires a fair amount of travelling over rough trails due to the lack of basic infrastructure but once there, it is unlike any other population on Peninsula Malaysia. The uniqueness revolves around the ubiquitous presence and role of the tropical rainforest and land that shapes societies situated there.

Estimated to be over 100 million years old, the tropical rainforest that stretches from Southern Thailand down the mountainous central spine of the Peninsula is one of the most bio-diverse ecosystems in the world (Napis, Salleh, Itam, & Latiff, 2001) (Manokaran, 1992) and the *Orang Asli* had over many millennia adapted to it. From the forest they obtain their raw materials for shelter and household equipment, toys, medicines, poisons for hunting, meat, fish, fruits, vegetables, shampoo, insect repellent and tradable goods. Rice and root crops are farmed in a unique indigenous farming system known as swiddens that are adapted to the forest environment and tropical seasons. Clean water is available in abundant quantities from springs, streams and rivers. The forest is also a fundamental component of cultural practices, spiritual beliefs and social systems.

🔺 *Location of Orang Asli villages in field study*

Helping hands over rough trails from Orang Asli children (Photo credit: WYS)

Orang Asli village nestled in the rainforest (Photo credit: WYS)

Having lived regularly with them over the years, I can say it is a conducive environment to live in with essential resources available all around. That said, neither do I discount the inherent dangers and deprivations in that environment which include encounters with dangerous wildlife, weather extremes, offending spirits, tropical diseases and human conflict. The *Orang Asli* know well the advantages and disadvantages of their homelands and do not romanticise about it, but they would not choose any other. That has been my experience of their attachment and relationship to their land.

The following vignette is drawn from years of observing and participating in the day-to-day life of *Orang Asli* communities including in the villages where the research for this thesis took place. Presenting this, I hope to tease out some insights into the social history of the community:

Getting the hearth going at the dawn of a new day (Photo credit: Wang Tak)

The house begins to stir early in the morning as woven *Pandanus²* mats are rolled up and stored while fires are re-kindled and water is boiled. The nights are usually cold because of the intact forest that surrounds the village, so those who are awake will huddle around the hearth for warmth and piping hot tea. Others will wrap themselves up more snugly to doze for a little longer but before long everyone is up.

Some Orang Asli school children trek through trails to get to school (Photo credit: WYS)

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² *Pandanus* is a genus of palm-like dioecious tree or shrub whose leaves are commonly used for weaving mats, bags and various types of handicraft.

Other Orang Asli children have state hired transporters that literally pack them off to school
(Photo credit: WYS)

Where children are enrolled into government schools, they dress quickly and set off for school either on foot, by motorcycle or in government provided transportation. It is a routine familiar to the more urbanised populations of Malaysia but the setting will likely be unrecognisable to them. For the *Orang Asli*, the independence afforded by a resource rich environment where the raw materials for houses, mats, fuel, water and food are freely available all around is not matched by the availability of access to basic modern day services such as electricity, education or health care. Contrast this to their urbanised Malaysian counterparts where they have easy access to every type of modern

day services such as education, transportation networks, water, electricity, fuel and food supplies but are totally dependent on the state to provide or ensure its smooth functioning. It can be argued then that the *Orang Asli* have greater independence of action compared with other populations in Malaysia. However, the land and forest that acts as a bastion of their independence and separation is steadily disappearing as deforestation accelerates from land being parcelled out by the state for oil palm plantations, logging, dams and other commercial ventures. As the land and forest is lost along with the indigenous systems that are anchored on it, the *Orang Asli* are made more and more dependent on the state.

With the children off, women take the washing down to the river while others head to swiddens to collect vegetables, cassava, taro, bananas and fuel-wood. Swidden farming is an important subsistence agriculture system for rural communities because of its rich crop diversity, ecological adaptation to upland forest environments and integration with the social systems and livelihood strategies of a community (Cramb et al., 2009). Opening up swiddens require the cooperative effort of a number of families to clear and maintain a large enough patch of land to plant staple food crops like rice or cassava. In this way, crops harvested in a particular swidden are the shared property and livelihood of the families who worked it. However, swidden farming is also facing significant transitions as the economic system changes from subsistence to the market economy and contestations with the state over land and forest management increase (Ziegler et al., 2009) (Rerkasem et al., 2009).

Meanwhile, some men hurry off to orchards and the forest to check hunting traps, collect forest products or tap their rubber trees. The few who hold wage-labour jobs leave for their work sites in the nearby towns or plantations and will not be back until

evening. For the men and women who remain, it is time to tend to the cleanliness of the compound or fashion traditional equipment like baskets, blowpipes and roof thatch. The raw materials for these and other goods are primarily harvested from the forest. All this is happening while the adults are keeping a close watch on their young children and babies.

Preparing a swidden for planting (Photo credit: WYS)

By mid-afternoon, the older children who were in school would be back and they would take over the task of looking after their younger siblings. With an average of six children in a family, this quite often becomes a permanent duty because many who attend school drop-out before they complete formal education. Official statistics show that the school attrition rate after six years of schooling was 25.21% and after eleven years it rose to 35.31% (JAKOA, 2016).

This compares to the national average of 0.19% and 1.93% respectively (Patel, 2014). *Orang Asli* students express a host of reasons for the predicament ranging from lack of awareness of the need for schooling to poor infrastructure to discrimination where in some instances they were mocked as being stupid and smelly (Danker & Idrus, 2019).

Orang Asli children learn to care for their siblings from young (Photo credit: WYS)

Soon, people who were out at swiddens, orchards or forest would begin trickling back with things they had collected in the field. There would be cassava and other root crops as staples to complement rice that is harvested once a year. An assortment of

vegetables, mushrooms and fruits would arrive changing its variety as the seasons changed. A regular supply of fish from the river is expected but what really excites the whole village is when something bigger is caught – wild boar! The customary practice in the community is to divide up the meat so that every family has a share of a successful hunt. With an average of two to three families in a household, such sharing practices become a crucial source of food for a community.

An abundant harvest of cassava from their swiddens (Photo credit: WYS)

A successful hunt feeds the whole village (Photo credit: WYS)

Before long it is evening and those who had traded forest products such as rattan or bamboo, sold the harvest from cash crops like rubber or cocoa, or were wage-labouring return home with groceries bought from the nearest shops. Cash income allows them to obtain things that cannot be found in the forest such as sugar, chocolates, biscuits, soap, toothpaste, mobile phones, top-ups and more. For the *Orang Asli*, the balance between a subsistence economy and a cash economy has been steadily shifting towards the latter over the years (Gomes, 2004). Monetisation of resources and changing behaviour

patterns attracted to the conveniences of consumer culture are compelling factors causing the shift. This is most noticeable where fewer villages still freely apportion the meat from hunts to every family as more places switch to the practice of selling it to their neighbours. Monetisation is also manifested in the burgeoning illegal wildlife trade where species like the pangolin are heavily poached and sold for quick cash. Customary reverence for the ecosystem is steadily eroding under the transition.

Changed consumption patterns brought about by the cash economy (Photo credit: WYS)

An onslaught on the habitat is another factor pushing the *Orang Asli* deeper into the cash economy. In the early 1990s, swidden farms were a common sight in parts of southern Perak where I travelled but not anymore as the majority of *Orang Asli* whom I know now buy their supply of rice and basic goods from shops. As the *Orang Asli* loses

more land to development, less is available for the swidden farming system, for hunting and collecting forest resources. Deforestation destroys the habitat from which many of their basic goods come from, damaging the sustainability of the resource system and forcing the *Orang Asli* into shops to purchase replacements. And as fewer and fewer people farm, the knowledge to utilise the system is progressively lost over generations.

With most people back home and the cooler weather in the evening, the village springs to life with children running everywhere and playing with home-made toy carts, catapults and even toboggans. It is also time for people to catch up with each other on the day's happenings often over an evening meal. Informal, light but affirming, these daily interactions are important moments for news to be exchanged, cultural practices communicated, social networks strengthened and trust to be built. Communal decision-making, reciprocal norms and oral histories pass from person-to-person, generation-to-generation as they are applied, witnessed, discussed, told and re-told each time.

What is happening in these social interactions is indicative of the concept of social capital. Comprising three main elements – social networks, norms of reciprocity and trust (Putnam, 1995) (Ferlander, 2007) – social capital builds and strengthens the communitarian bonds of a group for the purpose of mutual benefit. In the village setting, mutual benefit is economic in the shared livelihood and labour arrangements; it is in health with shared food and care-giving arrangements; and it is in culture where shared customs and kinship ties give recognition and access to knowledge and resources. These shared arrangements are the tangible outcomes of the customary norms of reciprocity where individuals have set obligations to each other. The advantage in a group like the *Orang Asli* where the social structure is more egalitarian is that social networks are

mainly horizontal and informal. Norms of reciprocity then are simplified because it does not have the vertical element of a heavily stratified society.

Such informal gatherings convene and reconvene randomly in multiple homes with different members of the community, often continuing on until late at night under the dim light of oil lamps. By then, those who are tired start dozing off and eventually people make their way home. The woven *Pandanus* mats are rolled out again and another day comes to a close.

Children just want to have fun – a tree bark for a toboggan (Photo credit: WYS)

Social capital built over meals (Photo credit: WYS)

This brief foray into the social history of the *Orang Asli* gives a glimpse of the uniqueness of indigenous systems and the challenges it faces in the midst of social, economic, cultural and political transition. It is from these two areas of indigenous systems and transitions that this thesis will attempt to address issues surrounding indigenous health disparities and explore possible solutions. To begin the process of doing this, the research questions guiding this thesis are:

1. What does an indigenous health care system look like? What are its key features?

2. What impact has transitions had on these health care systems?

3. How can rediscovering indigenous health care systems help improve the well-being of indigenous peoples?

The research focuses on the *Orang Asli* of Malaysia but the thesis expands the relevance of its findings to indigenous peoples globally. The anticipated outcomes from the research are:

1. The original contribution of my research is the concept of the Commons health system as the third model of a health system compared with the mainstream Public or Private health system models. Using this model, the thesis will develop a health systems framework for traditional indigenous health care that is based on common property regimes.

2. An analysis of the impacts of transition between traditional and mainstream health care systems and indigenous responses to the transitions will give indications as to why health disparities continue to persist despite efforts to close the gap.

3. Lastly, it is to recommend solutions to eliminate indigenous health disparities based on the findings of the preceding two outcomes with specific reference to the Malaysian context.

To set off on the above outlined tasks and to give a roadmap to the reader, chapter one of the thesis begins with the literature review of the main topics that inform it. Globally, indigenous peoples are among the most marginalised groups of people, so the first main topic looks at the accumulated research on who indigenous peoples are, what causes

lead to their current situation and the impacts on them. Focus is given on indigenous health and health disparities as the study begins to examine the role of health systems in meeting indigenous health needs and its limitations. This is followed by the next main topic that gives a general background on property regimes, the Commons and how they relate to health systems as I lay the ground work for my original concept of the Commons health system.

In chapter two, the conceptual framework of the Commons health system is laid out in the publication of a research paper in the International Indigenous Policy Journal. By using the example of traditional *Orang Asli* health care, the paper postulates that indigenous health care systems are based on a commons system which have key features that are crucial for indigenous health, but which are not present in mainstream health systems. Chapter three is the methodology chapter that details the choice of approach, the research setting, the background of the *Orang Asli* in Malaysia, and the data collection process. In chapter four, the data from field research begins to yield its findings and I begin by looking at what are some of the shortfalls of the mainstream health systems when responding to indigenous health needs. Often it is not with the medical solutions but the non-medical approaches that fail in very fundamental areas like basic human rights. Using data gathered from *Orang Asli* mothers in pregnancy and their families, the research paper which was submitted for publication scrutinises maternal health services from the Malaysian public health system specially targeting the *Orang Asli* and raises issues that have remained largely hidden. It challenges the norms of practice in the mainstream system where recipients have no voice and advocates for a system with embedded inclusion much like the Commons health system.

As the pace of social, economic, cultural and political transitions accelerate, health disparities are likely to persist without some fundamental re-think over historical and structural barriers when state systems engage with indigenous peoples. The state often views indigenous peoples as resistant to progress but the issue crucially is why they are apparently resistant. Addressing this issue requires a deeper understanding of indigenous context and efforts that go beyond the purview of the mainstream health systems. In chapter five, the thesis examines this issue via the publication of a research paper in the Critical Public Health journal. Using data gathered in focus group discussions and from interviews in the course of two emergency relief efforts to a number of flood and disease affected *Orang Asli* villages, the *Orang Asli's* response to state intervention and the state's response to the *Orang Asli* response highlight the gulf separating the two positions. Bridging this gulf requires a more participatory and multi-dimensional response from the state for which the Commons health system could serve as a model of.

However, before the Commons health system can be put forward as a model, is there evidence that it actually works? A conceptual framework of the system was developed in chapter two but now the task is to examine a working model of it. Based on a research paper published in Global Health, Epidemiology and Genomics, chapter six analyses *Orang Asli* traditional component systems[3] to see if the purposes and practices when viewed as a whole give evidence of the Commons health system. Is the Commons health system a solution to the persistent health disparities faced by indigenous peoples where public and private health systems have been unable to close the gap? That is the key question as the thesis brings all the findings together in chapter seven to look at

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[3] Individual systems or practices such as the farming systems, livelihood practices, social care practices or indigenous knowledge systems function independently but are at the same time closely interconnected for common goals.

operationalising the Commons health system in today's context. Operationalising this system does not mean replacing the mainstream health systems as modern health services of both public and private regimes have contributed substantially towards the improvement of indigenous health. However, structural limitations in these systems render them poorly disposed to eliminate the health disparities further. An equal partnership between the three different health systems offers a way to succeed in closing the health gap. In the final chapter, my thesis concludes with a call for greater reflective and imaginative efforts to engage with the community and address the longstanding health disparity gap among indigenous peoples.

CHAPTER 2:

LITERATURE REVIEW

Orang Asli traditional houses made of materials from the rainforest (Photo credit: WYS)

The United Nations estimates that there are over 370 million indigenous peoples worldwide living in approximately 90 countries (DESA, 2009). Encompassing a huge range in ethnicity, geography, language and cultures, finding a universally accepted definition for what indigenity means is fraught with different opinions and approaches. The conundrum thrown up by the multiplicity of definitions has meant that the United Nations has not adopted any single definition for 'indigenous peoples' and the international focus has shifted instead to self-identification and community acceptance. Coming closest to a definition is Jose Martinez Cobo's study on discrimination towards indigenous peoples that is widely used by the United Nations to describe the shared societal commonalities in the context of social organisation, political experiences,

environmental bonds and economic modalities seen among indigenous groups (DESA, 2016):

INDIGENOUS COMMUNITIES, PEOPLES AND NATIONS ARE THOSE WHICH, HAVING A HISTORICAL CONTINUITY WITH PRE-INVASION AND PRE-COLONIAL SOCIETIES THAT DEVELOPED ON THEIR TERRITORIES, CONSIDER THEMSELVES DISTINCT FROM OTHER SECTORS OF THE SOCIETIES NOW PREVAILING ON THOSE TERRITORIES, OR PARTS OF THEM. THEY FORM AT PRESENT NON-DOMINANT SECTORS OF SOCIETY AND ARE DETERMINED TO PRESERVE, DEVELOP AND TRANSMIT TO FUTURE GENERATIONS THEIR ANCESTRAL TERRITORIES, AND THEIR ETHNIC IDENTITY, AS THE BASIS OF THEIR CONTINUED EXISTENCE AS PEOPLES, IN ACCORDANCE WITH THEIR OWN CULTURAL PATTERNS, SOCIAL INSTITUTIONS AND LEGAL SYSTEM.

THIS HISTORICAL CONTINUITY MAY CONSIST OF THE CONTINUATION, FOR AN EXTENDED PERIOD REACHING INTO THE PRESENT OF ONE OR MORE OF THE FOLLOWING FACTORS:

- OCCUPATION OF ANCESTRAL LANDS, OR AT LEAST OF PART OF THEM
- COMMON ANCESTRY WITH THE ORIGINAL OCCUPANTS OF THESE LANDS
- CULTURE IN GENERAL, OR IN SPECIFIC MANIFESTATIONS (SUCH AS RELIGION, LIVING UNDER A TRIBAL SYSTEM, MEMBERSHIP OF AN INDIGENOUS COMMUNITY, DRESS, MEANS OF LIVELIHOOD, LIFESTYLE, ETC.)
- LANGUAGE (WHETHER USED AS THE ONLY LANGUAGE, AS MOTHER-TONGUE, AS THE HABITUAL MEANS OF COMMUNICATION AT HOME OR IN THE FAMILY, OR AS THE MAIN, PREFERRED, HABITUAL, GENERAL OR NORMAL LANGUAGE)
- RESIDENCE IN CERTAIN PARTS OF THE COUNTRY, OR IN CERTAIN REGIONS OF THE WORLD
- OTHER RELEVANT FACTORS.

This description emphasises self-identification and it has become the cornerstone of the wider concept of self-determination where indigenous peoples are able to determine for themselves their identity and political, social, cultural or economic development. This is

now a recognised concept globally and it is apparent in the United Nations Declaration on the Rights of Indigenous Peoples (United Nations, 2008a).

The second commonality shared by indigenous peoples is that they are among the most marginalised of groups as a result of historical and current developments in encounters with dominant state societies. Indigenous peoples face disparities in most development indicators – economic, education, health, social or political space. While they constitute only about 5% of the total world population, indigenous peoples make up 15% of the world's poor and one third of the world's extremely poor rural population (DESA, 2009). The impacts of historical marginalisation are felt in indigenous communities today where development indicators show the disparity faced by the community compared with dominant populations. In education, indigenous children lag behind in school performance, have higher school attrition rates but have lower school enrolment rates compared with the non-indigenous population. Illiteracy too is widespread for example in South Arnhem land in Australia among Aboriginal communities illiteracy is up to 93%; in Vietnam among the Hmong illiteracy is over 80% and in Venezuela, illiteracy is five times higher in indigenous than the non-indigenous population (DESA, 2009). The dismal state of education has an indirect effect on health as studies show that better education is a determinant of health (Ross & Wu, 1995) even when the health improvement may be incremental for individuals but at a population level, it can be significant (Langford et al., 2015). The lack of access to quality education contributes to the overall disparities in health indicators for indigenous peoples globally.

The disparities continue despite the special attention given by dedicated departments of governments in countries with large indigenous populations. For example, in Australia the Department of Families, Housing, Community Services and Indigenous Affairs is

mandated to look into the welfare of Aboriginal communities. In Brazil, the role falls on the National Indian Foundation; in India, it is the Ministry of Tribal Affairs; in New Zealand the Ministry of Maori Development; in Thailand the Hill Tribe Welfare Division while in the USA, the Bureau of Indian Affairs.

In Peninsula Malaysia, the indigenous peoples are collectively known as the '*Orang Asli*' which means original people in the national language. Like other countries, the Malaysian government has a dedicated department called the Department of Orang Asli Development or JAKOA whose stated objectives according to its website[1] are:

- Increase income of the *Orang Asli* and thus remove them from the poverty threshold

- Expand the scope of infrastructure development and social amenities available to the *Orang Asli*

- Empower the *Orang Asli* through the comprehensive development of human capital

- Raise the standard of health of *Orang Asli* towards prosperous living

- Conserve and uphold the traditional knowledge and heritage of the Orang Asli

- Improve the effectiveness of the department by adopting and embracing good governance

Lofty objectives such as these have not masked the apparent failure of successive national governments to adequately address the disparity between their indigenous population and the dominant population. While the language of inclusion and democracy is easily adopted, the actual practices of the state have often been paternalistic towards the people's culture and social issue (Maddison, 2008), and inflexible to their claims for land or human rights (Cronin, 2017) and even coercive

1 http://jakoa.gov.my/info-korporat/profil/objektif/

when people do not respond to development programmes as the state expects (Smith-Oka, 2009). In one sense, the modern nation-state in its relationship with indigenous peoples has not changed appreciably from the colonial state of the past. As colonial states made way for newly independent nation-states, the agendas were for the most part simply carried over while its administration remained largely unchanged. As in the days of the colonial state, the appropriation of resources and labour to supply markets and the control over populations living within its territories continues to affect indigenous peoples today (Scott, 1999).

The continuing deadlock in the relationship with the state has forced indigenous groups to seek their own solutions to the contested interpretation and implementation of development principally at the supranational and international level (Morgan, 2004). At this level, global pressure can be brought to bear on nation-states to adhere to international standards of conduct with indigenous populations. Additionally at this level, despite the huge heterogeneity of indigenous peoples, they are able to find mutual support for their common cause. At the beginning of this chapter we looked at the quest for a universal definition of indigenity that culminated in the concept of self-identification and community acceptance. Self-identification has given rise to efforts to rediscover traditional indigenous practices and how they can be applied in a modern day context to cope with the effects of socio-economic, cultural, political and ecological transition. Some examples are in the promotion of indigenous storytelling to aid environmental conservation (Fernández-Llamazares & Cabeza, 2018) and in fusing indigenous and contemporary music to highlight indigenous identity and rights (Neuenfeldt & Oien, 2000) (Gibson, 1998) (Tang, 2016). These efforts give indigenous peoples a sense of uniqueness and distinctiveness from dominant populations by

seeking to apply the best indigenous practices in a new context while attempting to incorporate the benefits of modern technology and knowledge.

Another sector where the fusion of indigenous and modern practice is seen is in the institutionalised health sector where traditional medicines are used alongside the usage of modern medical services as an effort to further new pharmacological technologies (Yuan, Ma, Ye, & Piao, 2016) or to improve health outcomes for communities who have continually used both concurrently (S. J. Oliver, 2013). Matters of health and well-being are fundamental concerns for individuals, communities and nation-states and this is evident in the elaborate and extensive health systems and health industry seen in societies today. For indigenous peoples, this is no different where indigenous systems such as food production, spiritual ceremonies or social norms are geared towards maintaining the health and well-being of individuals, families and communities. As modern day systems ranging from health to economic to education systems impose into and make itself available, indigenous groups have to weigh their responses based on historical experience, potential benefit and indigenous identity.

2.1 HISTORY OF MARGINALISATION AND STRUGGLE

Most of recorded or written history is a product of state societies beginning with the earliest civilisations in Mesopotamia (Roberts & Westad, 2013). For non-state societies like indigenous peoples, stories from pre-history onwards are passed down through oral traditions. Hence, for much of recorded history, indigenous peoples' experience with dominant state societies has been of assimilation or colonisation (DESA, 2009). Colonisation was not an exclusively European enterprise but it is the best documented and researched. Far less is known about the impact of pre-European colonisation on indigenous peoples. In the case of European and subsequently Euro-American

colonisation that affected indigenous peoples, most were centred in the Americas, Australasia, South and Southeast Asia, and Southern Africa. For indigenous peoples in regions with less Euro-American colonisation or during the era prior to Euro-American colonisation, the evidence still speaks largely of violence, displacement and marginalisation. For example, the *Orang Asli* of present day Malaysia were subjected to slavery, assimilation and dispossession of their lands by Malay kingdoms long before Europeans arrived in the region (Bedford, 2009) (B. W. Andaya & Andaya, 2015). Among the hill tribes of what is now Indo-China, Thailand and Burma, the Lahu, Khmu, Akha and Hmong had to actively avoid the reach of the pre-modern states or face forced labour, taxation and the loss of their identity (Scott, 2010). In Southern Africa, the Khoisan hunter-gatherers are the oldest inhabitants of the land settling the region more than 14,000 years ago but were displaced by Bantu-speaking tribes from Central Africa circa 1,800 years ago who migrated into and colonised the Khoisan areas (E. Oliver & Oliver, 2017) (Schlebusch, Prins, Lombard, Jakobsson, & Soodyall, 2016). European colonisation only officially began in 1652 in South Africa and this led to greater discrimination and dispossession for both the Khoisan and their African colonisers (Palmer & Parsons, 1977).

What were the leading causes of marginalisation and why was it seemingly so widespread even when specific histories of various indigenous groups were not connected to each other? The actions of the colonising state can be grouped under the following drivers:

2.1.1 ECONOMIC CONTEST FOR LAND AND RESOURCES

Early waves of colonisation by pre-modern state entities were numerous in various parts of the world as feudal kingdoms and city-states sought control over food

producing areas, corvee labour, trade and taxable populations (Scott, 2010) although these were always contested fields. In Indochina and Southeast Asia, there were the pre-modern states of the Khmer in present day Cambodia, Ayutthaya in Thailand, Srivijaya in present day Sumatra and other early kingdoms that dominated the respective local populations and sought to control trade and the region's economy (Tarling, 1992) (Munoz, 2006). Meanwhile on the other side of the world, the Inca Empire colonised huge swathes of the Andean region for over 300 years incorporating yet adapting indigenous practices into its imperial religious, economic and governance systems (Wernke, 2006). Although indigenous peoples were variously colonised or assimilated by such pre-modern state entities, the vastness of the land meant that there were enough areas of undisturbed hinterland that was less attractive economically and just beyond the reach of the state where groups could retreat to for safety. It is no coincidence that many indigenous peoples today are found in difficult to reach and isolated areas such as upland hilly territory, heavily forested or swamp areas, or dry desert-like environments because of flight to avoid state capture (Scott, 2010). When recounting the oral history of their villages to me in personal communication, the *Orang Asli* frequently told of how their original settlements were in places where towns now stand but then they had to flee further and further inland with each wave of colonisers and settlers because of fear and conflict. Successive dispossession of the *Orang Asli's* choice lands from the era of the pre-modern state till now, the age of the developmental nation-state, points to a typology of settler colonialism (Cavanagh & Veracini, 2016) that continues unabated.

When it began, Euro-American colonisation of large parts of the world was primarily for economic reasons riding on the impetus of trade. Historians trace how global colonisation by Europe began with the Portuguese who opened up trading stations

along the routes of their ships in Africa, Arabia, South Asia, Southeast Asia and East Asia (Roberts & Westad, 2013). Initially, colonies were limited to these trading stations and scant interest was given to the vast interiors of the places where they traded or to its inhabitants if they were not directly linked to their trade activities. Portugal's exploits were soon followed by other European powers searching for new trade routes, natural resources and markets for their goods. In places where there were large populations with established pre-modern states, access to trade took precedence over colonisation for a longer period such as in South Asia, Southeast Asia and China. However, in places that were more sparsely populated and where non-state societies predominated such as in North America and Australia, settler colonialism took precedence. Settler colonialism has been variously likened to genocide (Dunbar-Ortiz, 2015) (Wolfe, 2006), invasion (Jennings, 1975) and racism (A. Smith, 2012) but at its core, settler colonialism is the elimination of the indigenous and their replacement by the settler society so that a new narrative of indigenity and resource allocation replaces the original (Veracini, 2010) (Wolfe, 2006). What initially began with establishing trade turned into a contest to monopolise the markets and eventually into appropriating the commodities, means of production and the lands of the colonised itself. What made it different from pre-modern state colonisation was the extent of its reach due to advances in technology and the scale of its ambition to dominate the world. Euro-American colonisation of much of the world was an unprecedented contest for land and the resources on, in and under it.

Whether pre-modern or Euro-American, the colonising state needed land to grow on, land to extract from, land to live on and land that they would kill for. As Patrick Wolfe (Wolfe, 2006, p. 387) states, "Land is life – or, at least, land is necessary for life. Thus contest for land can be – indeed, often are – contests for life."

2.1.2 POLITICAL DOMINANCE OF THE STATE VS NON-STATE

Throughout history, societies that evolve into states often develop imperialistic tendencies that result in expansionary policies to dominate and in some cases colonise surrounding societies. Michael Dietler (Dietler, 2015) describes imperialism as "an ideology or discourse that motivates and legitimizes practices of expansionary domination by one society over another" (Dietler, 2015, p. 18). Easy targets for domination were non-state societies that in Elman Service's typology were groups structured as bands, tribes or chiefdoms (Service, 1975) and consistent with the social structures of indigenous groups. Unable to contend with state societies due to their smaller population, less advanced technologies for war and less sophisticated military, political and governmental organisation, non-state societies were bit by bit incorporated into state societies as room for flight diminished.

Non-state indigenous society varied considerably ranging from small bands of closely knit kin to larger chiefdoms with centralized direction and hereditary hierarchies. Their variation in political organisation is described by Elman as being from egalitarian to hierarchical (Service, 1975, p. 16). Their main difference from states is that they either do not have or have very rudimentary forms of institutionalized civil law and government that is backed by the power of force to impose its requirements beyond mere personal action or public opinion. It is this power to control that differs from the egalitarian structures evident in indigenous groups where the success of a group member to get his band or tribe to follow him is dependent on his personal abilities to influence the rest as leadership was neither formal nor permanent. Historically, colonising states have asserted political control over a resistant indigenous population by means of subjugation that ranged from armed conflict in the case of Native

Americans and Southern African tribes (Gump, 2016) to slavery in the case of the *Orang*

Asli (B. W. Andaya & Andaya, 2015), to co-option in governance via co-constituting a

blend of direct rule by the coloniser, and in-direct rule by local elites as with Inca

colonisation of Andean tribes (Wernke, 2013).

State incorporation of non-state societies was profoundly political in nature as it co-

opted or supplanted local governance, religious and cultural systems in order to

resource the incorporating state and its functions. In Elman Service's view, the state's

aim is to essentially safeguard its rule and increase its power (Service, 1975, p. 12). For

example, the United States government entered into more than 500 treaties with Native

American groups between the Revolutionary War and the turn of the twentieth century

in order to secure access to land and natural resources. However, almost every one of

the treaties was broken by the United States because its political, economic and military

dominance allowed it to pursue its own interests (Spirling, 2012). In Malaysia, the

Orang Asli traditionally did not have a formal or permanent headmen but since

incorporation into the state's political system there are now state appointed and

salaried headmen whose apparent role is to support and promote the ruling

government's agenda while preventing alternative and independent political views

from rising among the people (Nicholas, Yok Chopil, & Sabak, 2003).

Despite state hegemony and impositions of power, indigenous peoples have been able

to mount forms of resistance and pragmatically adapt to the changed context. In

Malaysia, the Penan, Kenyah and Kayan indigenous groups of Borneo succeeded in

halting the construction of the Baram hydro-electric dam that would have flooded 400

square kilometres of customary land and pristine rainforest through blockades, court

action and political advocacy (Malone, 2016) (The Star, Malaysia, 2016). In the United

States, Native Americans who were portrayed as a disappearing group after the massacre at Wounded Knee, were instead able to forge a common identity from the years of colonial oppression and adopt ways of legal activism, political advocacy and economic development to forge a new narrative of the people (Treuer, 2019).

State political dominance may have allowed it to impose its policies and practices on indigenous peoples for a while but it has also been a force to galvanise oppressed populations to adapt and resist colonisation proving the resilience of the people.

2.1.3 RACIAL, RELIGIOUS AND CULTURAL SUPERIORITY

Race, belief and culture form a central motivating and unifying element of any social group because it is a people's worldview that shapes what they do (Roberts & Westad, 2013). At the same time, they also give a social group its distinctiveness and demarcate it from others. When state societies develop imperialistic tendencies and embark on colonising projects, the distinctiveness of the colonised represented by race, belief and culture often become a problem when they do not align with the purpose of the state. For example, indigenous spirituality and culture is often tied to the land, a specific geographical location or resource (DESA, 2009). If that becomes contested by the state, there is less opposition to appropriating it if the hegemonic worldview of the coloniser is accepted by the colonised.

Up until the era of modern nation states, most civilisations were religious kingdoms hence civilising the Other was based on the imposition and adoption of the religion and culture of the colonising state. For example, the Inca empire's method of controlling its vast territory and the linguistically and ethnically diverse population was through the co-option of local elites and subordination of local deities under the hegemony of the Inca Sun god and Inca descent of it (Wernke, 2013). In Southeast Asia, the early pre-

modern states that arose in the lowlands were Hinduized kingdoms that legitimized the hierarchical structuring of society under a common monarch (Scott, 2009, p. 99).

Euro-American colonisation is closely identified with Catholic and Protestant Christianity where conversion to the religion of the colonisers was not just a spiritual exercise but cultural as well, subjugating natives into the colonisers' European dominated socio-cultural regime but inadvertently assimilating native worldviews and rituals as well (Martin, 2001). Attempts to maintain the illusionary distinctions between the two often resulted in methods to enforce religious and cultural change that were more coercive and violent. In North America and Australia, indigenous children were separated from their families and placed in boarding schools run by Christian churches or state institutions as a means to eliminate native culture, religion and language and school them into the mainstream social norms (Kelm, 1996) (Palmiste, 2008).

In Malaysia, the *Orang Asli* face a state that actively pursues an agenda of racial, religious and cultural assimilation into the dominant Muslim Malay community (Nicholas, 2000) (Benjamin & Chou, 2002) (Toshihiro, 2009). According to Nobuta, while the resurgence of Islam in Malaysia was the cause, religious and cultural assimilation was also a way to sedentarise a shifting population with traditional claims to large land areas since this led to a settled lifestyle similar to the dominant group.

Scott postulates that the civilising effort of states to settle, incorporate and register 'uncivilized' barbarians, savages, tribals or primitives who tended to shift around and whose race, religion and culture were different, in order to ease the ability of the state to appropriate surplus labour and produce. In Euro-American colonisation, civilising efforts were in effect an assertion of the racial superiority of the White colonisers over the colonised non-White populations. Either legitimised by religious belief or by

scientific racism in theories such as Social Darwinism, they justified the appropriation of land and resources in much of Asia, Africa, Austronesia and the Americas from indigenous populations under such banners of inherently racist concepts of 'manifest destiny' (Miller & Furse, 2006) and 'terra nullius' (Francis, 1996) (Borch, 2001).

However, the contradictions of religious and cultural incorporation are exposed in the policies of racial segregation where colonised populations who had adopted the religion and cultural form of the coloniser were often prohibited from accessing the same privileges as the colonisers. The Dutch Reformed Church of South Africa was active at religious conversion of blacks and coloured South Africans but during the Apartheid years Dutch Reformed Churches were segregated along racial lines mirroring the social norms of white South African society (Schoeman, 2010). Similarly when indigenous Africans were enslaved and shipped to the United States during the 18th and 19th Century, they were converted to the religion of the enslaving state. However, neither adoption of the state religion, Emancipation nor Constitutional guarantees accorded them equal rights, as Blacks in the southern states of the country were then subjected to state sponsored racial segregation in housing, employment, education, public transportation and other public services (Fehrenbacher, 2002) (Franklin, 1956).

2.1.4 STRUGGLE AGAINST HEGEMONY AND OPPRESSION

The quest by the state to impose its economic, political, racial, religious and cultural hegemony over indigenous populations did not go uncontested. Resistance came in various forms. The most direct form of resistance was in organised armed conflicts such as with the Maori Wars from 1845 to 1872 between the Maori and the New Zealand government, the Zulu War of 1878 to 1879 between the Zulu and the British, or the Plains Indians War from 1867 to 1878 between the Native American tribes and White

Americans. Other conflicts were long drawn out localised skirmishes such as with the Aborigines against white settlers and the Australian government in what was known as the Frontier Wars from 1788 to 1938 (Connor, 2002). In pre-modern Peninsula Malaysia, *Orang Asli* oral tradition speaks of the Sangkil War fought by the Semai *Orang Asli* tribes against Malay colonisers who were raiding their villages and enslaving their people (Akiya, 2007). Not surprisingly, the huge asymmetry in power and weapons technology usually pre-determined the outcome of armed conflict in the colonialists' favour and indigenous peoples had to resort to flight or more passive forms of resistance such as withholding cooperation, feigning ignorance or slowing down work in what Scott (Scott, 2008) describes as the weapons of the weak.

However, the ultimate irony for the colonialist who imposed their perceived superiority over local populations was that the oppressed were at times able to successfully organise their resistance using the very same ideology and religion brought by the colonialist, reverse its application and challenge the moral authority and power of the colonial state. In the case of Black South Africans (Taliep, Lazarus, Seedat, & Cochrane, 2016) (Gruchy, 2005) and Black Americans (Bennett, 2005) (Loevy, 1997), the ideals of democracy, justice and equality became a rallying cry while the Christian church structures became one of the key hubs to mobilise people of diverse backgrounds into the common cause and a focal point for solidarity, representation and refuge when confronting the oppressive power of the state. South Africans ultimately triumphed over Apartheid and the civil rights movement in the United States moved Congress to adopt the Civil Rights Act in 1964 but in many other places, efforts by indigenous peoples to address marginalisation and regain their rights remain unresolved. Nevertheless, the control of labour, land and its resources was always contested in the struggle against state hegemony and oppression.

2.2 HEALTH AND INDIGENOUS PEOPLES

Poor health among indigenous peoples has been one of the main consequences of marginalisation and widespread health disparities persist between them and dominant populations. This is found in low-income countries and in high-income countries as well where health care services are of a comparatively higher standard (Anderson et al., 2016). For example, in El Salvador, 40% of indigenous children under five were malnourished compared with 23% of non-indigenous children (DESA, 2009) while indigenous children in Australia experience 1.7 times higher levels of malnutrition than non-indigenous children (Wright & Lewis, 2017). In Cambodia, infant mortality among indigenous children in the Ratanakiri province was 187 per 1000 live births compared to the national average of 95 per 1000 live births (Heineke & Edwards, 2012). Infant mortality in 2016 among indigenous people in Australia was 6.0 per 1000 live births compared to 3.1 per 1000 live births for non-indigenous Australians (AIHW, 2018). In New Zealand, infant mortality was 6.8 per 1000 live births for Maori compared to 4.5 per 1000 live births for non-Maori (Ministry of Health New Zealand, 2018) while in the United States, infant mortality among Native Americans was 7.6 per 1000 live births compared to 5.8 per 1000 live births for the national population (Office of Minority Health, 2017). Although absolute numbers are significantly different between high income and low income countries, the health disparity between indigenous and non-indigenous populations is clearly evident.

Globally, indigenous peoples carry a higher burden of diseases such as malaria, tuberculosis, HIV/AIDS, parasitic infections and respiratory diseases compared with non-indigenous peoples (DESA, 2009, p. 162-164). In addition, non-communicable diseases have become a major health problem for indigenous populations due mainly to

externally induced changes to their diet, environment, economy and lifestyle. For example, diabetes prevalence among indigenous Australians is three times that of the national rate (Cohen, 2017) while in Canada, First Nations populations show a similar trend of higher diabetes prevalence (N. D. Riediger, Lix, Lukianchuk, & Bruce, 2014) (N. Riediger et al., 2017). In the case of cancer, only some forms such as lung, liver and cervix cancers show higher prevalence among indigenous Australians but they suffer higher mortality and lower survival rates due to late diagnosis and inadequate treatment compared to other Australians (Condon, Armstrong, Barnes, & Cunningham, 2003). The combination of carrying a higher burden of both communicable and non-communicable diseases puts indigenous populations in an even more vulnerable position as they contend with poor access to health care and continuing marginalisation.

2.2.1 ATTEMPTS TO ADDRESS INDIGENOUS HEALTH DISPARITIES

According to the United Nations State of the World's Indigenous Peoples report (DESA, 2009), some of the reasons for this poor state of health among indigenous peoples is due to the poor access to health care facilities, inadequate state financing, geographical distance or isolation, high out-of-pocket expenses, lower quality services and culturally inappropriate or insensitive services that do not take into account the socio-cultural practices, knowledge and beliefs of indigenous peoples.

Some countries have used targeted health services to address these long-standing issues but with mixed results. In the early history of the United States, Native American health was under the purview of the Bureau of Indian Affairs until it was transferred to the US Public Health Services in 1954 as a special division called the Indian Health Services (IHS) that provided integrated health services from the reservations to regional medical facilities. However along with the tide of privatisation in the 1990s, funding for the IHS plateaued while 'compacting' – a form of contracting services – to

tribal authorities grew. The result was that as tribes were given more responsibility to provide health and other public services but with inadequate government funding, they resorted to generating revenue from other sources such as the wave of casinos opening in tribal areas (Kunitz, 1996). In Malaysia, a dedicated hospital run by the Department of *Orang Asli* Development (JAKOA) named Gombak hospital was setup at the height of the Communist war to provide medical treatment for *Orang Asli* referred from district hospitals or from medical stations in military outposts (Bedford, 2009). Health services for *Orang Asli* have since been transferred to the Ministry of Health and with the exception of mobile clinics that service remote villages, *Orang Asli* public health care provision has been merged with services for the general population. Although such targeted public health services have contributed to improvements in health, the gap still persists between indigenous and non-indigenous populations.

As far-reaching changes sweep through the health care sector globally at a time of increasing privatisation and liberalisation, concerns about its consequences on inequality have been raised (Mooney, 2012) (Blumenthal & Hsiao, 2005) (Angell, 2008). Targeted health services have not been immune to the trend towards privatisation and the scene described earlier of changes to health services for Native Americans raises concerns on access to quality health services for indigenous peoples as public health services and funding shrink. The inability to close the health gap amidst rising challenges threatens to widen the disparities further. It suggests that the barriers are systemic and that there is a need to re-examine the structure of health systems itself to see if they strengthen or stifle health equity.

2.2.2 HEALTH SYSTEMS AND THE APPROACH TO REFORM

Health systems exists to deliver quality health care to people and in order to do that, health systems require a sustainable financing mechanism, a competent workforce, access to information for policy formulation and well maintained facilities to deliver its medicines and technologies (WHO, 2019). Since the late nineteenth century, health systems have largely been setup, funded, staffed and stocked by the state. From Germany's 1883 national health insurance system to Britain's NHS launched in 1948, governments across the globe have followed with similar systems to provide health coverage, albeit not routinely universal, to their populations. But as countries grappled with expanding populations, growing demand for health care, shrinking budgets and more costly technologies, health systems have come under more and more pressure to provide better services while ensuring they are equitable, effective and efficient.

To adapt to new challenges, reforming health systems has largely centred either on improving microeconomic efficiencies in the industry such as health services programmes and packages, technology adoption and human resource development (Frenk, 1994) or on macroeconomic efficiencies such as appropriate public sector allocations for health and regulatory incentives for an economy-wide health care sector (Docteur & Oxley, 2003). While these are key areas for reform, they mainly address the efficiency and effectiveness question of the equation but do not address directly the equity issue in health systems. The assumption is that by improving the system's efficiency and effectiveness, the outcomes will reduce inequities as well. Hence, the health systems reform debate has not moved away from existing health systems and reform has largely been of incremental changes to components and sub-sectors in the public or private health care system. The tendency towards incremental reform can be

attributed to the theory of path-dependency where actors are hemmed in by existing institutional and structural models that channel them towards established policy and practices (Wilsford, 1994). Locked into the two dominant health care systems of today – public and private – big changes are unlikely without a major re-examination of the fundamental properties of these health systems. One of the fundamental properties in question is of the ownership arrangements expressed in institutionalised property arrangements. The dominant health systems are held under the ownership of the state in the case of public health systems or by private actors in the case of private health systems. The persistent health disparity among indigenous peoples raises the question as to the ability of the dominant health systems to close the gap and point to a need to re-examine at a more fundamental level ownership arrangements. Rather than staying hemmed in by existing models, an alternative framework that prioritises equity may offer a new path to address the health gap plaguing indigenous communities.

2.3 THEORETICAL FRAMEWORK: HOW PROPERTY IS HELD

How we hold property or property rights is defined as a theoretical, socially-enforced construct for determining how a resource or economic good is used and owned (Alchian, 1991). There are four accepted types of institutional arrangements under which property can be held (Fikret Berkes & Farvar, 1989) (Bromley, 1989) (Bromley & Cernea, 1989). They are:

1. State/Public property regimes. Where the state has ownership of and control over decision-making as to usufruct rights of the property. The state can either directly manage the property or grant usufruct rights to individuals or groups to manage it.

2. Private property regimes. Where an individual or legally registered corporate

group has ownership and exclusive use rights to the property in so far as it is within legal and socially accepted perimeters of usage.

3. Common property regimes. Where a socially recognized group has ownership of and exclusive use rights to the property. Individuals accepted as members into the group have usufruct rights and duties with respect to the accepted perimeters of usage.

4. Open access regimes. Where there is no recognition of property or rights to a resource, institutional arrangements of ownership and use rights to a resource either do not exist or have broken down. Under this regime, a resource will belong to the party who first exercises control over it at any specified period of time.

Today's dominant health care systems are held under two types of property regimes – state and private.

2.3.1 PRIVATE PROPERTY REGIMES AND HEALTH CARE

Private property regimes describe an individual or legally registered corporate group that has ownership and exclusive use rights to a property in so far as it is within legal and socially accepted perimeters of usage (Berkes, 1989) (Bromley, 1989) (Bromley & Cernea, 1989). Institutionalised private health care providers are naturally owned and operated by privately owned entities. These can be for-profit institutions – businesses, or non-profit institutions – religious bodies, charitable foundations, NGOs. These institutions function in a private property regime. Such provisioning of health care has mainly been in medical care providing services in the form of physicians or hospitals and welfare institutions and traces its origins back to the Middle-Ages where providers were almost exclusively non-profit institutions – monasteries, Christian churches

(Rosen, 1993). They were to remain the main providers of health care until the Renaissance when states progressively extended their control over their populations including in matters of health. The eclipsing of the role of private providers by a dominant state as the main – and in the case of communist states, the sole – provider of institutionalised health care was to remain this way until the latter half of the 20th century with the rise of liberalisation and market driven policies. This time however private provisioning of health care had shifted primarily to for-profit enterprises that ranged from medicine sellers to small-scale general practitioners to well-equipped hospitals in rich urban centres.

Although the users of private health care came more from the richest quintile of individuals (Saksena, Xu, Elovainio, & Perrot, 2012), the poor still constituted a considerable proportion of users in less developed countries incurring significant expenses with private sector treatment particularly in places where public services are lacking (Bhatia & Cleland, 2001). Increasingly, contracting out the delivery of health services by the state in less developed countries to private sector providers is becoming more acceptable (Prata, Montagu, & Jefferys, 2005) (Loevinsohn & Harding, 2005). However, when using private health facilities, out-of-pocket spending can quickly become a catastrophic financial burden on households especially when an alternative option in the public health system is weak. For example, household out-of-pocket expenditure in Malaysia rose 567% between 1997 and 2014 contributing to an average of 78% of private health expenditure (Hameed, Rasiah, & Shukor, 2017).

The drawbacks of for-profit private provisioning are first, the market-driven system does not cater to people who cannot afford the fees particularly as the cost of health care services and pharmaceuticals increases. Private property regimes are well-

matched for wealth creation and economic growth as the benefit stream accrues directly to the individual or corporate actor as profits (Linklater, 2014). However, it is precisely this orientation that excludes those who cannot pay from the services, inevitably exacerbating inequality and deprivation in situations where those services are essential for meeting basic needs.

Second, for-profit providers operate in locations where health care services are market-determined leaving out the places where those who cannot pay reside. For example in Malaysia, for-profit private health care providers are located in cities and major towns where populations, infrastructure and wealth are concentrated and not where the poor are (Abdullah, 2005). Despite this orientation, some for-profit private health care providers together with non-governmental organisations are known to provide the coverage needed to reach marginalised populations even in remote rural areas or conflict areas providing public health inputs such as immunisation and disease control into underserved areas (Ahmed, DeRoeck, & Sadr-Azodi, 2019). Non-profits like Medicine Sans Frontier operate health clinics to provide much needed medical services in remote, conflict or disaster locations like Afghanistan, Malawi, Democratic Republic of Congo and Yemen where there are few modern health care facilities (MSF, 2019). In Malaysia, religious bodies and civil society groups are known to regularly organize medical clinics for poor and marginalized communities.

However, for both non-profit and for-profit providers working in such difficult and unprofitable places, coverage is often patchy or limited due to resource constraints even if the service quality is high. Dedicated and passionate to their organization's mission, such efforts face limitations in medical personnel who are mostly volunteers, facilities that are basic and are only able to cover a small geographical area. In addition, decisions

such as where and what services to provide may be driven by an NGO or donor's preferences or biases and these may not match national or even local community needs. Put together, these limit the location, number of people and type of services that can be provided for hence limiting the impact their services can have on health disparities beyond local conditions.

2.3.2 STATE OR PUBLIC PROPERTY REGIMES AND HEALTH CARE

Until the rise of neoliberalism, state ownership was by far the most widespread way of holding and governing a health system. Public property regimes describe the state's ownership of and control over decision-making as to usufruct rights of the property. The state can either directly manage the property or grant usufruct rights to individuals or groups to manage it (Fikret Berkes, 1989). With the public health system, ownership by the state means public health services become the practical outworking of its health policies and regulations. The decisions of national health policymakers eventually govern people's health and depending on the political system of the nation, the people's liberty to participate and to influence policies and regulations that affect their health. Since the public policy making process is a profoundly political process and not a purely linear, analytical, problem-solving process (Walt, 1996), national health policies are used to further the goals, priorities and biases of the state.

With for-profit private enterprises, health services are not just for health provision but a commodity for making profit. With the state, what is its overriding agenda? In most cases, the agenda would be for public safety such as with immunisation services or the maintenance of public health and hygiene standards but there are some scenarios where more sinister agendas apply. British colonial authorities in Malaya used health services as a strategy to attract and isolate the *Orang Asli* away from communist

influence during the Malayan Emergency (Bedford, 2009). In South Africa during its Apartheid era, the state used health policies as part of its strategy to maintain the dominance of its white population (McIntyre & Gilson, 2002) and in Mexico, health services were used in its counter-insurgency effort to suppress the Zapatista rebellion in Chiapas (Farmer & Gastineau, 2005). In the war in Syria, studies show that there are deliberate strategies by the state and its allies to attack health facilities and health workers, criminalise humanitarian aid to the opposition, and besiege medicine supplies. The aim of the strategy was to restrict or deny access to health care – in effect using health as a weapon of war (Fouad et al., 2017). The wide spread use of these strategies point to a tendency of the state in situations where there are contestations, to utilise health services not just to improve health but also as a strategy for the state to exert control and impose its will and agenda on target populations.

It is not unusual that the state uses every means within its disposal to achieve its political goals. Even in scenarios where the state had benevolent intentions, the propensity for it to resort to coercive means when voluntary participation fails is high. A case in point was Julius Nyerere's leadership of Tanzania from 1961 to 1985 that was lauded by many as ethical and principled. Nyerere's concept of community, familyhood, equality and collectivised economic development was made a reality through the 'Ujamaa' national development programme that among other achievements was able to reduce infant mortality rates, increase life expectancy and increase primary school enrolment rates (Legum & Mmari, 1995). However, the reality was somewhat different and it too ended up using repressive tactics to force a very diverse and reluctant population to adopt a one-size-fits-all development programme. Villagers were forcibly removed from their old settlements into new planned resettlements. In order to prevent them from returning to their original villages, houses were burnt or pulled down. In

their new planned villages, the people were persuasively instructed to adopt state policy on agriculture production, living arrangements, housing, health, education, work styles and even mind-set change giving populist legitimacy to decisions they had no say over (Scott, 1999). The state was able to achieve improved social indicators and the people benefitted but they also bore a heavy price for it.

2.3.3 COMMON PROPERTY REGIMES AND HEALTH CARE

There is a third way of holding property that is less utilised in contemporary times and in the modern health care sector, virtually unknown. This is the Commons way or common property regimes. Before we examine how this property regime applies to health systems, we should first briefly review the extensive work that has been done on common property.

The Commons is the generic name for a *common-pool resource* that is owned and managed under a *common property regime*. The two terms represent separate aspects of an economic system – the former describes the attributes of a resource and the latter describes a communal arrangement to regulate, conserve, maintain and exploit a common-pool resource. Common-pool resources have two essential attributes: (1) that it is difficult or costly to exclude someone from using the resource – non-excludability – and (2) that one person's consumption of the resource subtracts from what is available to others – non-divisibility – which means it can be over exploited unless there are ways to limit usage (Gardner, Ostrom, & Walker, 1994) (Ostrom, Gardner, Walker, & Walker, 1994). For the most part, the Commons framework has mainly been applied to the management of natural resources (Ostrom, 1990) (Bromley & Cernea, 1989) (Bromley, 1992). This concept of a common-pool resource has been extended into the area of knowledge in a domain known as the Knowledge Commons where a debate on the issue

of open access to knowledge and information is taking place as the pressure to privatise information grows (Hess & Ostrom, 2006) (Williams-Jones, 2005). One application of the concept of common-pool resources in the area of health has been to ascribe health as a public good that is non-divisible and non-excludable. The approach here is that in an age of globalisation where communicable and non-communicable diseases have a global reach and impact, the maintenance of public health requires that health services should be non-excludable because anyone who needs the service should have access to it to potentially ward off a disease or health condition that could morph into a public health threat (Chen, Evans, & Cash, 1999). Applying the same attribute of non-excludability is the rights-based approach but instead of the potential threat of epidemics, health is recognised as a fundamental human right and therefore health care must be accessible to everyone (Gruskin, Grodin, Marks, & Annas, 2004) (Tarantola, 2008) (Smith-Nonini, 2006). While the first approach is utilitarian in nature and the second is based on human morals not to exclude anyone, the outcome for both these approaches is to ensure open access to health provision. However, beyond the concept of a Health Commons, both approaches lack a concrete working example that models the integration of utilitarian and moral functions.

The second attribute of a common-pool resource – non-divisibility – is mistakenly referred to in a UNDP report as "the ability of all to benefit from the public good once it is produced" (Chen, Evans, & Cash, 1999, p. 284). Non-divisibility in the context of the commons actually refers to the finite nature of the good where a unit consumed is a unit less for the next. This attribute is what makes a common-pool resource so fragile to overexploitation and that it must be managed sustainably if it is to remain a benefit for all. In this way non-divisibility accurately identifies health care as a common-pool resource where for every unit of health resource consumed, it subtracts from its

availability to others. Globally, providing health care for all is a key concern amidst rising cost, population growth, demographic transition, technological advancement, epidemiological change, environmental degradation and economic transition (Kumar et al., 2011). The challenges are especially centred on financing health care where countries face competing claims and low priority in state budget allocations leaving health under financed such as in South Africa (Sanders & Chopra, 2006) and India (Kumar et al., 2011), transitions in the economic system from state to market driven provisioning as in China (Qingyue & Shenglan, 2013) or the escalating cost from meeting a changing demographic pattern in Japan (Tsutsui & Muramatsu, 2007). The need for sustainable and equitable models is pressing.

Conceptually then health can be categorised as a common-pool resource in that it has the attributes of non-excludability and non-divisibility. In general, common-pool resources are variously held as private, state or common property. It can also 'not-be-held' or unowned in an open access regime where no party has ownership of it and in these situations, the resource can very quickly be overwhelmed as parties scramble to extract the resource without regulation in what is known as the 'tragedy of the unmanaged commons' (Garrett Hardin, 1968) (G. Hardin, 1994) (Feeny, Berkes, Mccay, & Acheson, 1990). As an example of this tragedy happening, fisheries in open seas were once thought to be inexhaustible and because vast areas of the seas and oceans were open access for any party to exploit, vast amounts were harvested until fishery stocks collapsed. To address overexploitation, states have to come up with common and global fishery regulations to revive and sustainably manage this common-pool resource before it is too late (Garrett Hardin, 1998). A similar tragedy is unfolding with regards to the atmosphere as open access has given any party the freedom to pollute and degrade this common-pool resource resulting in what could well be the greatest challenge to

mankind – global climate change that will have far-reaching environmental, economic, social and health consequences (Intergovernmental Panel on Climate Change, 2018).

As governments across the world take action to work out a global agreement to reduce and regulate each country's carbon emissions into the atmosphere, they are in effect attempting to change the managing of the atmosphere from an open access regime to a common property regime, where every party represented by individual countries rather than individual persons has usufruct rights, but also commitments and obligations to the perimeters of usage.

Like fisheries or the atmosphere, I have argued that health is a common-pool resource. Unlike fisheries or the atmosphere, health has not come under an open access regime but the dominant health systems today are either held as private or public property regimes. The characteristic of each property regime fundamentally affects the use of the resource accordingly (Ostrom, 2000). Health systems under for-profit private property regimes would invariably lead to inequity because access would depend on purchasing power. On the other hand, under public property regimes, health systems would be intricately linked to the political agenda of the state which is normally benevolent but may not always be benign.

2.4 CHAPTER CONCLUSION

The literature review has taken us through the main current issues affecting indigenous peoples and then for a brief introduction into property concepts and health care. Bringing these two fields together will provide the evidence for my hypothesis of a health commons. In the next chapter, I conceptually explore health systems held under the common property regime and propose that a concrete working model exists with indigenous peoples.

Monash University

Declaration for Thesis Chapter 3

Declaration by candidate

In the publication *Health Care as Commons: an Indigenous Approach to Universal Health Coverage.* In The International Indigenous Policy Journal (2014), 5(3), Article 1 /Chapter 3, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Lead and corresponding author, conceptualised the idea, accessed and organised literature, drafted initial manuscript, submitted manuscript to journal and managed correspondence with editors and reviewers until final publication.	75

The following co-authors contributed to the work. Co-authors who are students at Monash University must also indicate the extent of their contribution in percentage terms:

Name	Nature of contribution	Extent of contribution (%) for student co-authors only
Pascale Allotey	Supervised all activities leading to the publication of the paper, critiqued concepts, contributed to analysis and edited draft of manuscript.	15
Daniel Reidpath	Critiqued concepts and contributed to analysis.	10

Candidate's signature

	Date:
	27 May 2019

Declaration by co-author

The undersigned hereby certify that:

1. The above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors;

2. They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;

3. They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

4. There are no other authors of the publication according to these criteria;

5. Potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit;

   And

6. The original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)

Global Public Health, School of Medicine and Health Sciences, Monash University Malaysia

Signature 1		Date: 30 May 2019
Signature 2		Date:
Signature 3		Date:

CHAPTER 3:

HEALTH CARE AS COMMONS – A CONCEPTUAL FRAMEWORK

Common property: an Ipoh tree (Antiaras toxicaria) whose sap is used for the Orang Asli's poison darts (Photo credit: WYS)

Property institutions are social constructs whose functions are to facilitate economic growth and provide social security. Dreze and Sen (Drèze & Sen, 1991) see social

security as the "use of social means to prevent deprivation, and vulnerability to deprivation" (Dreze & Sen, 1991, p. 5). Economic growth alone is recognized as inadequate for preventing severe deprivation and some form of direct intervention is essential for improving living standards (Dreze & Sen, 1991, p. 11). Private property regimes do this indirectly through wealth accumulation, allowing individuals to raise their living standards and secure access to insurance markets, whereas public property regimes do this depending on the priorities and policies of the state.

Common property regimes on the other hand, provide directly for social security needs through guaranteed access to vital resources and through risk pooling (Swallow, 1997) . Common property regimes, guarantee access for everyone in a community to extract the resources they need to meet livelihood and health needs by the recognition of the rights of members to vital resources. In risk pooling, common property regimes moderate the effects of disasters from affecting every productive resource through the practice of scattering and spatial diversification. It also allows the risk of failure to be pooled among the group instead of individuals where reciprocity and mutual insurance helps individuals tide over periods of ill health, severe or unexpected deprivation. Risk pooling and access to vital resources are particularly important for poorer groups as Jodha in studying Indian rural communities found that they derived much larger proportions of their subsistence needs from common property resources compared to the wealthy (Jodha, 1992). Social security systems in common property regimes are largely based on social relationships such as kinship, loyalty or patronage relations within a village society (Platteau, 1991). Such networks yield many social benefits such as minimizing risk, fulfilling social obligations, credit favours, and enhancing personal prestige (White & Runge, 1994) which may not be readily quantifiable in monetary terms but require enormous amounts of personal effort, time and material investment

to build. Considerable transaction cost then is involved in establishing such social networks and any induced shift towards a new or different system would potentially cause considerable social and economic disruption.

The emphasis on securing the social security needs of everyone in the community show the underlying values of inclusivity and equity of common property regimes. This seems to be an ideal setup for a health care system, but are there working models that would give us a glimpse of how it functions? I explore a conceptual framework of the Commons health system in the following publication and argue that it is the health system used specifically by the *Orang Asli* of Peninsula Malaysia and generally with indigenous peoples in their traditional health care.

June 2014

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

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

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.

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 models[1](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).

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[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 obliged[2] 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

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[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 subtractibility[3] 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

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[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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3.1 CHAPTER CONCLUSION

With the conceptual framework of the Commons health system laid out in this publication, I can begin to analyse the field data collected from the *Orang Asli* who participated in the field research phase of this study to validate the Commons health system framework. I will also delve into the challenges and impacts of the rapid social, economic, cultural and political transitions on the people and the Commons health system in subsequent chapters.

CHAPTER 4:

METHODS

Methods of making and utilising traditional crafts are passed down from generation to generation (Photo credit: WYS)

My thesis uses an ethnographic approach for its research which can be described as the qualitative study of social phenomena in groups of people. As a research method, ethnography has a long history tracing its roots back to anthropological studies in the early 20th Century among isolated rural societies where the researcher often had to live and participate in a society for long periods of time (Reeves, Kuper, & Hodges, 2008). The benefits of this approach is that by being immersed in a particular setting, the ethnographer is able to observe the subtleties of social phenomena in different contexts,

look for possible linkages, and gain insights into social practices that may not normally be seen by people outside of the group.

For all the benefits of the ethnographic approach, researchers have also come to recognise that they are not the unbiased, uninvolved observers of social phenomena in the societies they study. Known as reflexive ethnography, researchers have to be aware about the possible effects their very presence has on a subject's behaviour and how their own biases and perceptions on issues affect a research situation (Davies, 1999). The ethnographer has effectively become the research instrument, and therefore has to take into account the influence he has over the data collected, and its analysis because it is impossible to separate one from the other (Bruner, 1993) (Murchison, 2009). More so when research is conducted with indigenous peoples whose unique culture, worldview and history are very different from the mainly non-indigenous, Western-trained background of researchers. In 'Decolonising Methodologies', Tuhiwai Smith demonstrates how scientific research is neither neutral nor objective as is assumed because the underlying assumptions and values that inform research practice come largely from a dominant Western paradigm of knowledge and frameworks (L. T. Smith, 2012). This paradigm has its own set of values, conceptualisations of time, space, gender and of knowing that influences how the indigenous Other is understood. If not careful, the end result could be a continuing colonisation of how indigenous peoples are viewed.

4.1 REFLEXIVITY, REFLEXIVITY, REFLEXIVITY

Being non-indigenous and schooled in a Western education system, this research with the *Orang Asli* was a reminder to turn on a critical lens to my different set of values, work ethic, concepts of time, privacy, and how knowledge was organised, compared to the community's. As I had worked and lived regularly with the *Orang Asli* community

for over 25 years as part of the community development work done by the NGO I was in, one advantage was that by the time I started this research I was fluent in their language, and had an in-depth understanding of their culture, social norms, ecological practices and political struggles. The close relationship provided a strong jumping off point for this research as ethnography requires an 'insiders' perspective that could only be obtained by being involved through hands-on experience in a local cultural setting (Schensul, Schensul, & LeCompte, 1999). Another advantage was that many of the challenges and problems they faced that are highlighted throughout this research such as loss of land and forest, health service responsiveness and others were brought up repeatedly by the people even before beginning this research. In fact, they served as sign posts to the priority issues that needed in-depth study. In this way, when the data collection began, past information was able to help verify some of the fresh data being collected to deepen the insights into the issues.

On the other hand, the downside is that no matter how close a relationship, as a non-indigenous my ethnocentrism and worldview cannot be fully set aside to see the world purely through the eyes of the indigenous Other. Instead, it is a hybridised view that could potentially bias the analysis and conclusions of the research. This could be a major setback as the majority of research on indigenous peoples is done by non-indigenous researchers. For example, of the numerous scholarly writings and research papers about Native Americans, the majority were written by non-indigenous writers (Mihesuah, 1998). A similar trend is apparent with the *Orang Asli* in Malaysia as a glance at a bibliography of research publications on *Orang Asli* (Lye, 2001) soon reveals that *Orang Asli* researchers are a small minority. As a member of the guilty party then, mitigating the imbalance means making reflexivity doubly important in ethnography with indigenous populations. Reflexivity can be further embedded into ethnographic

practice through incorporating the writer's voice and emotional reactions into his or her writing as part of a reciprocal exchange between the researcher and respondents (Pack, 2011) (Bruner, 1993). This way the writer declares his or her perceptions and the reader of the end product of research is able to gauge the effects the person may have on the analysis and findings. As in the case with autoethnography (Mykhalovskiy, 1996) (Sparkes, 2000) (Holt, 2003), this may generate concerns that this level of reflexivity may lead to over-introspection to the point that it overshadows the object of study and becomes self-indulgent and narcissistic. However, Ellis (Ellis, 2002) has reasoned that good personal narratives build community, creates understanding of the Other, and moves people to social action. With that in mind but without turning this into an autoethnography of a non-indigenous researcher writing about the indigenous, I strive to declare and distinguish what my perceptions are from the perspectives of the *Orang Asli* on the issues raised, so that readers can weigh any effects on the findings.

One last caution was the fact that I had worked with the *Orang Asli* in facilitating poverty eradication projects, and this introduced a patron-client power dynamic that cannot be ignored as it could potentially skew the people's responses to my enquiries. The field of development aid continues to grapple with the issue of power, control and influence (Eyben, 2006) (Groves & Hinton, 2004) even as it has adopted new rhetoric – empowerment, inclusion, participation and transparency. Much still has to be done to improve personal and institutional systems to reduce power differences such as adopting critical reflection methods and changing rules and procedures to balance power relationships. That notwithstanding, the crux still lies in personal agency where the choices and actions one takes is central to whether the initiative is beneficial or exploitative of the people (Chambers & Pettit, 2004). The same would apply when

conducting social research where the researcher must ensure that the research process and the research product is transparent, accountable and accessible to the people, and it results in real benefits for them.

Ultimately, the goal of ethnography is to understand sociocultural problems and use these understandings to bring about positive change for communities or institutions (Schensul & LeCompte, 1999). I appreciate that the goal of the methodology lines up suitably with the intent of my research with the *Orang Asli*.

4.2 RESEARCH SETTING

The setting for this research is among the *Orang Asli*, the Indigenous Peoples of Peninsula Malaysia. Officially classified by the state into 3 main groups and sub-divided further into 18 ethnic sub-groups. The latest officially posted *Orang Asli* population was in 2018 (MAMPU, 2018) but a check of the figures quickly reveals that the population figures have not changed since a 2010 census which indicated a total of 178,197 persons (JAKOA, 2016). From personal communication[4] with officially linked sources, the population is now approximately 217,000 or 0.7% of Malaysia's total population of 32.6 million in 2018 (Department of Statistics Malaysia, 2019). Disaggregated statistics on the *Orang Asli* is undisclosed making it difficult for the public to determine the exact population of the group or the crucial indicators of socio-economic disparities. Where once these statistics on the *Orang Asli* were made public, today's data is cloaked in broader population statistics as they are counted together with the far more numerous indigenous peoples of Borneo Malaysia under the category "Other Bumiputera" which translated literally means "Other Sons of the Soil". This approach is used in a number of

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[4] Personal communication with Armani Williams-Hunt, an *Orang Asli* activist lawyer who is on the National Economic Council.

countries with significant indigenous populations rendering them largely invisible in census data and other official statistics (Horton, 2006).

However, what is known is that through genetic and dental profiling, the *Orang Asli* are the oldest population group recorded to inhabit the Peninsula (Zainuddin, 2012). The *Orang Asli* are not a homogenous group but they share similarities in factors requisite as 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 3 main *Orang Asli* groups – Negrito, Senoi and Aboriginal Malay – have pre-histories that go back 10,000 to 2,000 years (Dentan, Endicott, Gomes, & Hooker, 1997).

The earliest state systems in the Peninsula were Indianised kingdoms dating back to 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 or 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 with each of the communities, a number of features were common across the groups. They were small to medium sized bands of kinship related households (Dentan et al., 1997) and this enabled them to exploit ecological resources in a

sustainable fashion, provided sizable group protection from state control but were still agile enough to facilitate flight when there was a perceived threat (Scott, 2010).

Their social structures were largely egalitarian particularly within the Negrito and Senoi groups (Dentan et al., 1997) (Lye, 2002), 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.

Across the groups, their livelihoods and daily needs were mainly 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 for nourishment; household, building and trading materials; medicines, and leisure (Colfer, 2008) (Vinceti, Eyzaguirre, & Johns, 2008). Land and natural resources were held communally to allow every member of a community access to vital resources (Vinceti et al., 2008).

The population of the *Orang Asli* in the 1947 Census Report stood at 34,737 of the total population of 4.9 million (Del Tufo, 1949) or 0.7% of Malaya's population. Largely ignored by the governments of the day, it was not until 1948 when the Communist insurgency war in Malaya began that this triggered a concerted effort by the state to exert influence and control over the *Orang Asli* and their domains in order to combat communist strongholds operating in the vast forested and mountainous hinterlands. When Malaya gained independence from the British in 1957, the governance over the *Orang Asli* passed to the new nation state. In the earlier years after the country gained independence, *Orang Asli* 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).

In over 60 years of living under the modern development state, many of the features described above by early explorers have changed significantly yet some persist despite the encroachment of development from the modern state. Almost all *Orang Asli* now live in one of the 853 officially recognised settlements or 'kampong' throughout the peninsula (JAKOA, 2016). Where land and forests are still intact the *Orang Asli* are able to maintain key traditional practices such as swidden cultivation, hunting and gathering. Even then, most are inextricably tied to the cash economy in varying degrees either as farmer producers, traders of forest products or wage labourers. Egalitarian leadership structures have been supplanted by state appointed male-only headmen and the village development and security committee and the state has assumed control over almost every aspect of *Orang Asli* life from where to live to where to give birth. Land and natural resources is still held communally but in many places these are coming under increasing threat from encroachment and appropriation by state or commercial interest, and the influence of the market economy.

The settings in which this research takes place lends itself suitably as the Commons setting is deeply embedded in the social and cultural fabric of the community. At the same time, they are experiencing major transitions that are affecting their personal well-being and communal systems.

4.3 FIELD RESEARCH AND DATA COLLECTION

With my preceding contact and understanding of the *Orang Asli* context, the data collection extended over a period of two years where a series of nine focus group discussions (FGD) and three in-depth interviews from nine different villages were conducted. The villages were located in Perak and the ethnicities of the *Orang Asli* were Semai and Temiar. The in-depth interviews were conducted with selected

individuals who had greater knowledge of traditional health care systems and practices, and subsequently during a number of crisis relief operation with some villages affected by flood and a health emergency.

The field research began in six *Orang Asli* villages and the data was collected in 2013 and 2014. For the purpose of this thesis, data from one of the six *Orang Asli* villages was not utilised in the final writing because that village's setting was too different from the other five as it had been completely overtaken by urban development in the capital city of Malaysia, Kuala Lumpur. Ethics approval was obtained through the Monash University Human Research Ethics Committee dated from 30 January 2012 to 30 January 2017 under project number CF11/2653-2011001538. Participant observation was used throughout the field research as part of ongoing work in the community. Altogether, seven focus group discussions and four in-depth interviews were held to gain deeper insights into the traditional health care – its system and features (Wong, Allotey, & Reidpath, 2016), and the effects of development and access to modern health care. The focus group discussions and interviews also sought to explore responses to the changes that were taking place to the traditional health system and modern health systems and the community's perceptions and utilisation of both traditional and modern forms of health care.

The focus group discussions were held in the villages and were each attended by between 10 – 20 persons. Attendance, even during a discussion, was fluid, varying because people would come in and out of the 'shelters' to join in or leave the discussions, balancing curiosity, their interest in the topic and competing obligations elsewhere. In-depth interviews were conducted with mainly the older folk who were experienced practitioners, more knowledgeable about the traditional systems while the

focus group discussions had a mix of gender and age groups. Focus group discussions and interviews began with an introduction to let participants know who was conducting the research, what its purpose was, how the time would be spent and how their information would be used. A discussion guide was used to ensure topics were covered systematically but a fair degree of flexibility was maintained to allow for issues of relevance to participants to be discussed. Written notes and audio recordings were taken throughout the discussions.

Following two separate, critical events that resulted in the need for crisis management, a number of in-depth interviews for instrumental case studies were conducted in a further three villages that were affected by floods and a health emergency in late 2014 and early 2015. I was an integral part of one of the teams responsible for relief efforts and interviews were conducted with two village headmen, who in their positions, engaged the most with state officials and non-government organisations during this crisis. These villages were not the same as the initial six mentioned above. However, the immediacy of events during the crisis provided an ideal opportunity to investigate further the *Orang Asli* response to health services. In addition, in the absence of data on actual health service utilisation, the instrumental case studies provided 'real time' evidence of practice. According to Stake (Stake, 1994) (Stake, 1995) an instrumental case study is used to provide insight into an issue or to refine a theory where a case or cases are selected because they shed light on the issue or theory rather than the case itself.

Lastly, as a result of the first round of data collection, information regarding *Orang Asli* mothers and maternal health care services came to light that was relevant to issues in this thesis. As this warranted further investigation, two additional focus group

discussions were conducted in 2017 with the women who had shared their experiences earlier and others. This concluded the field research and data collection part of this thesis.

All the focus group discussions were tape recorded while only some of the in-depth interviews were tape recorded but written notes were taken in these cases. Recordings were transcribed and translated by myself and an *Orang Asli* was hired to check that the transcripts were accurately translated. Data was collated and analysed using nVivo software (QSR, 2015) while bibliographical data was referenced using Zotero open source software. Thematic analysis began with analysing the frequency of words in the interviews and focus group discussions. Patterns were searched for which were then filtered and prioritised for the key themes of the research topic which were natural resources, indigenous knowledge and social protection. Other themes that emerged were maternal health, people's perception of germs, types of traditional medicines, and the relationship with the state and outsiders. Not all the themes were used in the final thesis but there are those that could make important material for future research.

4.4 CHAPTER CONCLUSION

Reflexive ethnography used in this study if done correctly and sensitively, opens up a window into the indigenous health system from the *Orang Asli's* perspective. Importantly, this can help health professionals understand that indigenous peoples do have a complex functioning system and is not just about collecting herbs from the back garden. It also helps health professionals be more aware of the transitions taking place and its impact on the people's health. This we will explore in the next few chapters.

Monash University

Declaration for Thesis Chapter 5

Declaration by candidate

In the publication *Maternal Confinement or Maternal Imprisonment: Health Systems Responsiveness and the Price of Maternal Health for the Orang Asli in Malaysia.* Submitted to Health Systems Journal on May 24, 2019. In Chapter 5, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Lead and corresponding author, conceptualised the idea, accessed and organised literature, drafted initial manuscript, submitted manuscript to journal and managed correspondence with editors and reviewers until final publication.	60

The following co-authors contributed to the work. Co-authors who are students at Monash University must also indicate the extent of their contribution in percentage terms:

Name	Nature of contribution	Extent of contribution (%) for student co-authors only
Daniel Reidpath	Supervised all activities leading to the publication of the paper, critiqued concepts, contributed to analysis and edited the draft of manuscript.	30
Pascale Allotey	Critiqued concepts and contributed to analysis and editing.	10

Candidate's signature

	Date: 27 May 2019

Declaration by co-author

The undersigned hereby certify that:

1. The above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors;

2. They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;

3. They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

4. There are no other authors of the publication according to these criteria;

5. Potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit;

   And

6. The original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)

Global Public Health, School of Medicine and Health Sciences, Monash University Malaysia

Signature 1		Date: 30 May 2019
Signature 2		Date:
Signature 3		Date:

CHAPTER 5:

FINDINGS – HEALTH SYSTEMS UNDER-RESPONDING AND OVER-RESPONDING TO INDIGENOUS HEALTH NEEDS

Health care for Orang Asli mothers and children (Photo credit: WYS)

Although poor, *Orang Asli* do not confine themselves to the use of public health services even though it is heavily subsidised, but many do pay out-of-pocket and utilise private health services too. They choose this option mainly for minor illnesses because of the

shorter waiting times, and a perception that medicines and treatment from private providers are more effective than those of public providers. However, when it comes to major illnesses or injuries, their only option is in public hospitals where treatment is paid for by JAKOA, the state agency looking after the welfare of the *Orang Asli*. The sequence of actions described by the participants in one of the focus groups is:

- *It is like this, there are three steps we take. First, we treat in the village. Second, we go private. Third, then we go government.*

- *The reason we go to private clinic is for the medicine and if we get well then we don't have to go to the government. We should be well but if it still persists then we go government.*

- *But this needs money. If no money, then send straight to government.*

Such health treatment seeking is not uncommon for the non-indigenous segment of the population but what sets the *Orang Asli* apart is the widespread poverty, geographical isolation and historical-cultural discrimination they face. These have contributed to the health disparities in the community (Phua, 2015)y compared to the dominant population with higher burden of malnutrition, undernourishment and parasitic infestation (Shashikala, Kandiah, Zalilah, & Khor, 2005) (Khor & Zalilah, 2008) (Idrus, 2013) ; higher infant, child and maternal mortality (Amar-Singh, 2008) (Manaf & Juni, 2011); lower life expectancy (Idrus, 2013); higher incidences of communicable diseases such as tuberculosis, malaria and leprosy (Nicholas & Baer, 2007); and the rising incidence of non-communicable diseases such as obesity, diabetes and hypertension setting in (Darwina & Wan Puteh, 2012) (Phipps et al., 2015) leading to the community having to cope with a double burden of non-communicable and communicable diseases (Saibul et al., 2009) (Chee Yen et al., 2015).

As noted in an earlier chapter, modern health services to the *Orang Asli* had an underlying military and political agenda that undermined its effectiveness and created suspicion. While today's government health services are equipped with mobile and flying units that go into the interior to provide emergency or primary health care services, the *Orang Asli* are still considerably underserved due to infrequent visits, bad weather or road conditions, and the cultural gulf between providers and users. It is also highly unlikely that profit oriented private health providers would venture into these places except on charitable excursions which are even more sporadic and patchy in coverage. Thus, between public and private provisioning, health systems are clearly under responding to the pressing needs of the *Orang Asli* to close the disparity gap.

Health systems under-responsiveness to the health needs of an indigenous population like the *Orang Asli* is a result of limitations imposed by its property regime and the failure to adapt to the community's context. A health system under a public property regime strives for uniformity and centralised control of services as the state is duty bound to provide the services nationwide. These very traits render it clumsy and uncompromising to change to suit the complex, varied and different localised conditions and needs of indigenous communities. Ironically, it can also result in health systems over-responsing to address a health need. We are more familiar with health systems under responding but what happens when it over responds? The following publication gleaned from the field data provides an insight into the issue.

Maternal confinement or maternal imprisonment: Health systems responsiveness and the price of maternal health for the Orang Asli in Malaysia

Abstract:	Health systems responsiveness is the ability of a health system to adapt and anticipate the non-health needs of people as they access the system's health services. As globally, indigenous people face stark disparities in health when compared with non-indigenous people, are there disparities in health systems' responsiveness to indigenous populations when compared with the residual population? Using an ethnographic approach, this paper looks at the experiences of a particularly vulnerable segment of a population that is already marginalised – pregnant mothers among the Orang Asli indigenous peoples – towards maternal health services provided by the public health system of Malaysia. Due to the higher maternal mortality rate among indigenous mothers when compared to non-indigenous mothers, the urgency by the state to address health needs can come at the expense of non-health needs resulting in added social, economic and mental stresses thereby jeopardising the benefits of improved health services. With the preceeding Millenium Development Goals and currently the Sustainable Development Goals, more weightage has been given to meeting health or medical targets including maternal health but by right, the responsiveness of health systems is an integral and foundational part of the whole system that functions together to ensure healthy lives and promote the well-being of people. Health systems responsiveness should be accorded equal emphasis because it is predicated on the foundations of human rights that emphasizes the importance of the dignity of people, their ability to participate in decisions that affect them and having adequate access to vital resources that sustains their well-being. For populations such as indigenous peoples, this takes on added signifance because the protection of human rights is a path out of marginalisation.

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Maternal confinement or maternal imprisonment: Health systems responsiveness and the price of maternal health for the Orang Asli in Malaysia

Abstract

Health systems responsiveness is the ability of a health system to adapt and anticipate the non-health needs of people as they access the system's health services. As globally, indigenous people face stark disparities in health when compared with non-indigenous people, are there disparities in health systems' responsiveness to indigenous populations when compared with the residual population? Using an ethnographic approach, this paper looks at the experiences of a particularly vulnerable segment of a population that is already marginalised – pregnant mothers among the Orang Asli indigenous peoples – towards maternal health services provided by the public health system of Malaysia. Due to the higher maternal mortality rate among indigenous mothers when compared to non-indigenous mothers, the urgency by the state to address health needs can come at the expense of non-health needs resulting in added social, economic and mental stresses thereby jeopardising the benefits of improved health services. With the preceeding Millenium Development Goals and currently the Sustainable Development Goals, more weightage has been given to meeting health or medical targets including maternal health but by right, the responsiveness of health systems is an integral and foundational part of the whole system that functions together to ensure healthy lives and promote the well-being of people. Health systems responsiveness should be accorded equal emphasis because it is predicated on the foundations of human rights that emphasizes the importance of the dignity of people, their ability to participate in decisions that affect them and having adequate access to vital resources that sustains their

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well-being. For populations such as indigenous peoples, this takes on added signifance

because the protection of human rights is a path out of marginalisation.

Keywords
Health systems responsiveness, maternal health, human rights, indigenous peoples, Orang Asli

Background

Among the many criticism of the Millenium Development Goals (MDG) (Fehling, Nelson, & Venkatapuram, 2013) one was that it was too disease focused in its health targets leaving out other critical contributory components of health such as effective health systems (Haines & Cassels, 2004)(Keyzer & Van Wesenbeeck, 2006). Hence, with the advent of the Sustainable Development Goals (SDG), ensuring health for all took on a broader population health agenda but even with the new agenda, the multitude of indicators track mainly a wider array of disease areas giving little attention to the performance of health systems (Seidman, 2017). One important health systems area that has not received adequate attention in the SDGs is in health systems responsiveness even though it is an issue of emphasis at the global level as countries strive to improve their health services to their populations. According to the World Health Report 2000, responsiveness does not measure health needs but the non-health needs as people access and utilise health services (WHO, 2000). These non-health needs can be summed up in the following domains: (i) respect for the dignity of persons; (ii) autonomy to participate in health decisions; (iii) confidentiality; (iv) prompt attention; (v) adequate quality of care; (vi) communication; (vii) access to social support networks; and (viii) choice of health care providers. A health system that is responsive contributes towards better health outcomes by improving utilisation and the quality of its services (Mirzoev & Kane, 2017).

Perhaps one clinical area that is a significant gauge of the responsiveness of health systems is with maternal health. Mothers are among the most at-risk segments of a population and therefore acutely exposed to any deficiencies in a health system. Maternal and perinatal morbidity and mortality has for a long time been a global health priority and better health outcomes can be achieved when health systems are able to adapt to the context and anticipate the health needs of this group.

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While global maternal mortality rates have declined steadily over the last century, in 2015 there were still 216 deaths per 100,000 live births with significantly higher maternal mortality rates (MMR) in less developed countries (WHO, 2015). A disturbing trend that cuts across developed and less developed countries is that there is a marked disparity in MMR between indigenous people and the residual population.

First consider some developed country rates. In New Zealand, the MMR for Maori and Pacific Islanders from 2006-2016 was more than twice that of all other ethnicities in the country (PMMRC, 2018). In Australia, Aboriginal mothers had an MMR three times higher than non-Aboriginal mothers (AIHW, 2017). In the United States, maternal death rates among Native Americans and Alaskan Natives were 1.5 times greater than all other ethnicities combined (United Nations, 2015).

Comparable results hold when looking at the MMRs of less developed countries. In Brazil the MMR for indigenous women was between 2.4 to 4.0 times higher than the non-indigenous population (Santos, Deivid Ramos dos et al., 2017). In the Indonesia province of West Papua, which has the worst maternal and infant mortality rate in all Indonesia, indigenous West Papuan women's MMR is 1.6 times higher than the national average (Munro, 2016).

The global situation is well captured by a UNFPA report that states, "indigenous women and adolescent girls experience significantly worse maternal health outcomes than majority populations" (UNFPA, 2016). Given the magnitude of the problem faced by indigenous women, efforts to make health systems more responsive is urgently required.

In this study, we look into the case of Malaysia where the national health system has made impressive health gains for its population and is held up as a model by the World Bank for developing countries to lower maternal (Pathmanathan et al., 2003) but is struggling to close
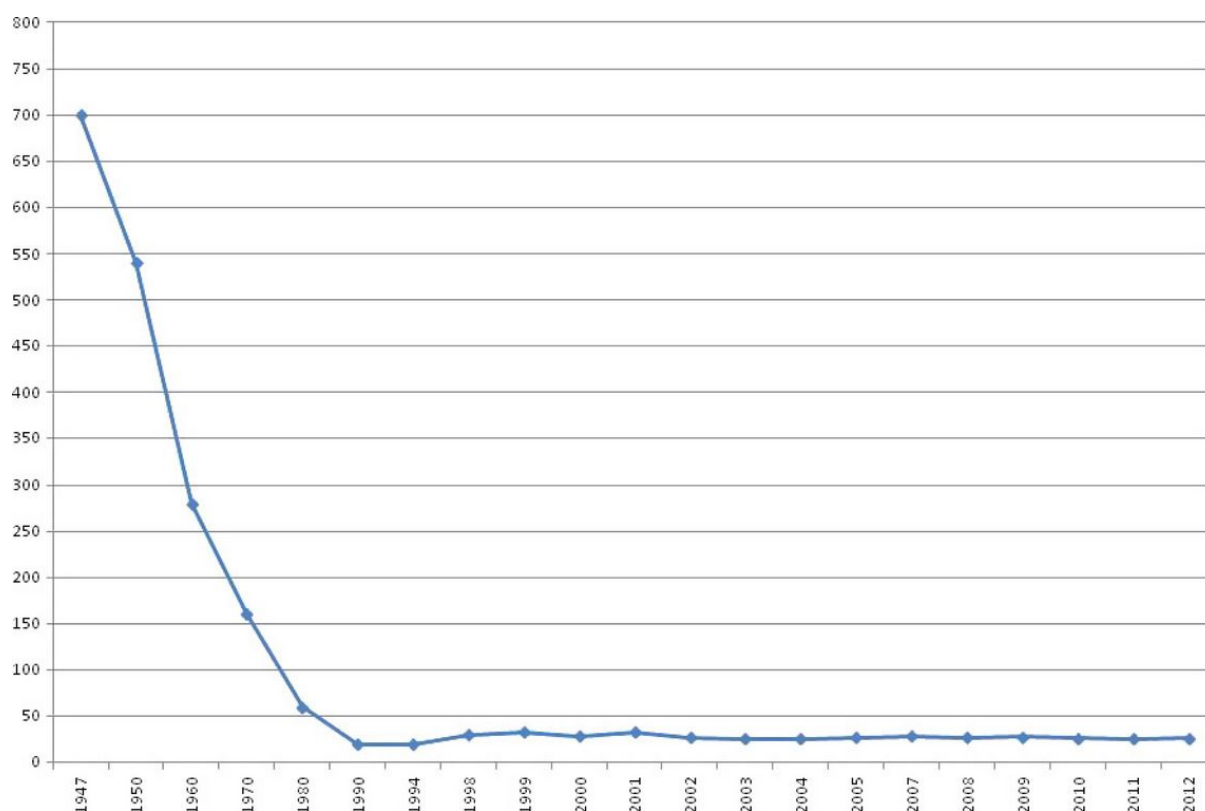
the gap for its indigenous population. We address the question, "Why are health systems less

responsive to indigenous people?"

Maternal health in Malaysia
Malaysia did not meet its Millenium Development Goal (MDG) goal for reducing maternal

mortality achieving a 42 percent decrease between 1991 to 2012 as opposed to the MDG goal

for a three quarter decrease in maternal mortality (UNDP, 2016). Nevertheless, addressing

maternal mortality was one of the key development priorities for the country since it gained

independence in 1957 and overall, it has made considerable progress. From 1950 to 2010,

MMR reduced from 540 per 100,000 live births to 28 per 100,000 (Hematram, 2012) and by

2012 it dropped to 23.2 (Achanna, Krishnaswamy, Ponnampalam, & Chattopadhyay, 2018).

The declining MMR was the result of a series of interventions by the Ministry of Health

beginning in 1955 with the introduction of the Maternal and Child Health programme in

health centres, the incorporation of the High Risk Approach in MCH programmes, the

Confidential Inquiry into Maternal Deaths (CEMD), and the WHO initiated Safe Motherhood

programme, all achieved with a comparatively low investment of 0.38% of GDP by the

public sector in maternal health (Ravichandran & Ravindran, 2014) (Pathmanathan et al.,

2003).

Malaysia's rapid economic development and efforts to eradicate poverty contributed to the

drop in MMR. The poverty rate, for example, fell from in 1970 to 3.8% in 2009 (Hatta & Ali,

2013) and by 2015 it declined to 0.4% (World Bank, 2019). However, the rapid reduction in

MMR has now plateaued and vulnerable groups such as undocumented migrants and

indigenous peoples have been left behind. In order to make further progress to meet globally

set targets previously under MDG goal no. 5 and now with SDG goal no. 3 , Malaysian health

authorities have to step up efforts to improve early risk detection, rapid responses and support

services to vulnerable groups (Sivalingam, 2003) (UNDP, 2016).

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Figure 1. Maternal mortality ratio for Malaysia (1947-2012)

Source: Ravichandran and Ravindran (2014)

The Orang Asli and socio-economic disparities

The Orang Asli are the indigenous peoples of Peninsula Malaysia and the oldest population

group to inhabit the Peninsula. Officially classified by the state into three main groups and

sub-divided further into 18 ethnic sub-groups, they constituted just about 0.6% of the national

population of 31 million (Department of Aboriginal Development, 2012). Since achieving

independence in 1957, Malaysia has seen rapid economic development but the Orang Asli

have, to a large extent, remained isolated from the advantages brought by it. According to

official statistics in 2014, 34% of Orang Asli were living in poverty compared with the

national average of 0.4% (United Nations Malaysia, 2016). However, the poverty rate is

likely to be even higher because the income poverty line applied to the Orang Asli population

is lower than the national poverty line (Idrus, 2013). Similar disparities arise in education

where 25% of Orang Asli children who completed six years of primary education did not

continue to secondary levels with another 27% not completing secondary education. This

compares with the national average transition rate from primary to secondary education of

2.71% in 2014 (United Nations Malaysia, 2016).

Health disparities
Since Malaysia's independence, the Orang Asli have faced increasing pressure on their tenure

to traditional lands due to the development agenda of successive national governments

(Nicholas, 2000). The loss of land and natural resources not only affects Orang Asli

communities economically but it is also detrimental to their health. The degradation of the

land has resulted in the contamination of water sources, loss of food and nutritional variety,

and the degradation of traditional medicinal resources (Y. S. Wong, Allotey, & Reidpath,

2016). One of the stark disparities between the Orang Asli and the residual population under

the national development agenda is that even basic health needs like nutrition remain unmet,

and malnutrition and undernourishment continue to affect a large proportion of the

community (Khor & Zalilah, 2008) (Osman & Zaleha, 1995) (Saibul et al., 2009)

(Shashikala, Kandiah, Zalilah, & Khor, 2005).

The Orang Asli also carry a significantly greater burden of diseases like tuberculosis, malaria

and leprosy compared with the national population. The crude death rate, infant mortality rate

and MMR were also higher than the national average (Baer, 1999) (Nicholas & Baer, 2007).

In one study in the State of Perak, perinatal mortality for Orang Asli infants was three times

the national average (Amar-Singh, 2008) and in another study from the State of Negeri

Sembilan, the MMR for Orang Asli women was 30% higher than the national rate (Manaf &

Juni, 2011). The studies concluded that poverty, household food insecurity, high risk

pregnancies and unsafe home deliveries were the main contributory factors to maternal and

infant mortality.

In an effort to address the over representation of the Orang Asli in the MMR and infant

mortality statistics, the state became progressively more active and simultaneously,

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progressively more coercive. When it was disclosed in 1996 that 60% of mothers who died

during home delivery were Orang Asli, the government responded by making it compulsory

for Orang Asli mothers to check-in well before term to Alternative Birthing Centres (ABC)

located near or within the premises of government hospitals for delivery (Nicholas & Baer,

2007).

When a state resorts to coercive power to implement better health services, the redundancy of

gauging health systems responsiveness becomes apparent. In this study, we raise the

possibility of a state over responding to negative publicity and the pressures to meet health

targets, a tendency not uncommon when voluntary participation fails to produce the desired

results the state expects even for what is purportedly benevolent purposes (Scott, 1999).

When this happens, it is marginalised groups who are more vulnerable at being the targets of

state coercive action.

Methods

To obtain an emic perspective of the social stresses arising from coercive practices of the

health system toward Orang Asli mothers, an ethnographic approach was needed to elicit

their responses. Ethnography is an appropriate method as this research sought to capture the

thoughts and feelings of mothers and their families so that we could understand the interplay

between the external conditions they faced vis-à-vis their social, economic and cultural

background that could help bring about positive changes to the community or institutions

(LeCompte, Schensul, Nastasi, & Borgatti, 1999). Ethnography requires extended and face-

to-face interactions to learn, understand and accurately reflect the people's everyday

viewpoints and practices (Carruthers, Schensul, Schensul, & LeCompte, 1999) so this level

and intensity of interaction was helped by the fact that the lead researcher (Wong) had a

longstanding relationship with the community as a director of a non-government organisation

that has worked alongside the community in poverty eradication initiatives.

A mix of participant observation, focus group discussions and in-depth interviews were organised with five Orang Asli communities. However, before these proceeded, there were lengthy interactions covering the latest news from within and without the community. This process helped to reinforce the relationship between the researcher and community. The five villages were chosen in relation to their ability to access or be accessed by modern health care services. Two villages were in remote, rural areas and difficult to access due to poor road conditions while three others were located nearer urban areas accessible via sealed roads.

Eight focus groups discussions were held with a total number of 87 participants with between ten to twenty people attending each focus group discussion. Six of the focus group discussions looked at a broader theme of the traditional health care system of the Orang Asli and the effects of social and economic changes. Two focus group discussions then focused on issues about maternal health services. The numbers for each were difficult to control in spite of prior organization because of the open, fluid and participative nature of village discussions; nobody was excluded from participation. In-depth interviews were conducted with older members of the community to gain an understanding about the community's traditional health system which included midwifery practices.

Focus group discussions and interviews would begin with an introduction covering the purpose of the discussion and the study, and the ethical rules where approved under the Monash Research Ethics Committee. Discussion topics across the different groups followed a guide, however, some flexibility was maintained to allow the participants to direct the level of depth and details of the various topics. The participants therefore spoke at length about the traditional health care system and issues such as maternal health services by the state amidst the changing social conditions.

Data from focus group discussions and interviews were audio recorded and transcribed by the researcher but the translations were verified by an Orang Asli assistant to confirm accuracy as most discussions were conducted in the Orang Asli language. The data from the transcribed text was imported into nVivo (QSR, 2015) software and analysed thematically so that it maintained the context and its complexity but still reflected the wider issues affecting the community (Thomas & Harden, 2008).

Results and Discussion

Despite being depicted by the state as anti-development or backward for opposing or not accepting development, the Orang Asli are in fact favourable to development and modern amenities that bring real benefit to them (Idrus, 2011) (Nicholas, 2000). One segment of the community who clearly recognise this are mothers who are able to weigh the help they need during the risky period of pregnancy. In this study, that was clearly voiced in the interviews with Orang Asli mothers.

- I feel the hospital is better. They know how to treat me if anything goes wrong and there are enough medicines if I need it.
- It is like this, in the past during delivery it was quite often that people died but since we have had the present system, it seldom happens. But in the past, when it was time for delivery, it was a very worrying time because we did not know what the fate was whether the mother would be safe or not.

Like many indigenous people groups, the Orang Asli have their traditional health system that provides maternal health care through traditional birth attendants (TBA) and a communal social protection system (Wong et al, 2014). However, this does not blind them from recognising the gaps in their traditional system or the benefits of using modern health services. They are pragmatic and seek the best solutions for their health needs.

123456789 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

Their pragmatism does not seem to receive a reciprocal response from health policymakers as there is no provision for them to decide on a health provider of their choice – a key element identified by WHO as a health system that is responsive. In fact, the option to choose a provider is precluded when coercive tactics are used to ensure compliance to what is practiced. While there may not be an official policy to use coercion, information from people in various villages[1], other research (Nicholas & Baer, 2007), and this study's first hand interviews consistently found that pregnant mothers are told that the child's birth certificate would not be given to them unless they checked into the birthing centres run by the state. Coercion in the form of enforced confinement leaves Orang Asli mothers in a quandary as to whether to forgo their choices or to obtain basic public services for their children and for themselves.

- In the past, we could choose to give birth in the village but no longer. The nurse won't allow us to give birth in the village.
- They won't allow us to give birth our way. We have to give birth in the hospital.They say they won't give us birth certificates if you give birth in the forest. They said it was difficult to check the mother and baby so that is why they won't allow. They said they were afraid if any problem should arise.

The need to undergo enforced maternal confinement in order to access better health care services would seem to go against established universal human rights and the right to health requiremtns. As a by-product of a human rights approach, health systems responsiveness is predicated on respect for human rights and when there is a threat to withhold a child's nationality in violation of Article 15 of the UDHR or the forced confinement of expectant mothers in violation of Article 3 and 9 of the same, the efficacy of the entire health system

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[1] Similar information was shared with the lead author through personnel communication with multiple Orang Asli from villages not involved in the focus group discussions of this research.

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comes into question. To what extent do health needs override those of non-health needs such as that which were setout by WHO? For actors in the health system where the pressure and priority to meet international and national targets to reduce the incidence of mortality and morbidity of mothers and infants, the expediency and quick results of resorting to coercive methods confirms the inherent attributes of state controlled systems for control and uniformity. The importance for greater transparency and more robust accountability structures is apparent.

The facilities where Orang Asli women were warded are known as Alternative Birthing Centres (ABC) and the description given by the Ministry of Health (MOH) is of a service with high medical standards and quality care for expectant mothers and their families[2]. The ABCs are basically self-contained dormitory styled wards located in or near the premises of government hospitals in major towns where there are large Orang Asli populations nearby. In the interviews with the Orang Asli women and their families, they recognised and appreciated the better obstetric services made accessible to them. From their own assessment, they knew that these health services had made pregnancy safer for them and their babies.

- It is like this, in the past during delivery it was quite often that people died but since we have had the present system, it seldom happens. But in the past, when it was time for delivery, it was a very worrying time because we did not know what the fate was whether the mother would be safe or not.

- None, not yet. Since the health department started handling this there has not been any deaths yet. It has been safer, a bit safer.

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[2] Quoted from the Ministry of Health Malaysia (2008:115) "Alternative Birthing Centres offer an alternative to conventional birthing centres in hospitals for women without known or predictable obstetric risk factors. Such centres are managed by trained staff without compromising established standards of obstetric care. Careful selection of mothers using predetermined protocols with ready access to referral centres in emergency situations makes such centres a solution to avoid crowding in urban hospitals and an alternative for more marginalised populations in certain areas. The ABC provides for a home-like environment by facilitating the baby friendly and husband friendly approaches" (Ministry of Health Malaysia, 2008).

Despite the improved medical services, issues concerning health systems responsiveness to the Orang Asli gained national attention. In 2015, a news report highlighted the poor condition of one of these ABCs (Spykerman, 2015) and drawing national attention to the health disparity faced by the Orang Asli. This study confirmed that what was in the news story was not an isolated case. In interviews with the mothers and their families who stayed at a different ABC from the one in the news report, they described a host of problems that severely stressed them physically, emotionally and mentally.

- Food is difficult. They provide food but when it floods, the place is terrible. It floods when it rains. Sometimes when it floods during the night, maybe the mothers will float away. If they cannot run away, they will just be submerged. It is like a pond. Pregnant mothers swimming. Even the frogs come out. When it floods, all the frogs come out. They get into all our things and start croaking. Our mattresses go for a swim.

- (We feel) sad, scared because there is no security, scared because of strangers coming in.

- Yes, the safety at the transit house is not assured even dangerous especially at night because the place is secluded and hidden. It is isolated and lonely so at night it is a problem especially for pregnant mothers staying there alone. I was staying there recently and I could not sleep because I was afraid of gangsters and like most people dream up many other things.

- Strangers come in. There is no guard. The nurse tells us if strangers come in, we should call the police but it is difficult as we have no telephone.

The tragicomedy of the stories as they recounted their experiences underscore the evidence that marginalised groups disproportionally have more trust barriers and shy away from the

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system despite better health services when responsiveness is wanting (Njeru, Blystad, Nyamongo, & Fylkesnes, 2009) (Forouzan et al., 2016). Present day experiences add on to the historical experience the community has of the state, conflagrating the suspicion and placing even more barriers for the Orang Asli to accept and access health services (Y. S. Wong, Allotey, & Reidpath, 2018). The dignified treatment of users, clear communication in the native language, and adequate quality of care as prescribed by WHO would have gone a long way to improve the well-being of the Orang Asli. The communal nature of Orang Asli society usually means family members will accompany the pregnant mother during her stay in the ABC. This way they provide mutual physical, emotional and social support to each other. The difficulty arises when the mother is confined to the ABCs for weeks or months as this places considerable stress on the the family with the monetary expenses that they have to pay out-of-pocket for travelling between their homes and the centre, toiletries, provisions and other incidentals.

- The reason is that even though staying in the transit centre is under JAKOA[3] and they are suppose to take care of everything, in reality that is not the case. The likelihood is that out of five things they say, they will only take care of two and the rest you have to take care of it yourself. For example nappies; JAKOA will only provide one pack and the rest you have to buy your own. If you do not have money? Sometimes, the nurse will get angry and demand, "Where are your nappies or talcum powder or shampoo or baby oil."

Out-of-pocket expenses, the extended period away from their homes and the inclusion of family members was a situation known to and catered for by the health authorities in the 1960s and 1970s when the state first began to extend modern health services to the Orang

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[3] JAKOA – Department of Orang Asli Development, the Malaysian state agency that looks after the welfare of the Orang Asli.

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Asli. In the hospital that was designated to cater for Orang Asli patients, not only was board and lodging provided for but even children's playgroup facilities, adult education and vocational classes and health awareness activities (Bedford, 2009). This allowed patients and their families to be engaged purposefully during their prolonged stay. Unfortunately, none of these are carried out anymore in the current model of the ABCs or 'transit houses' as the Orang Asli call them. Instead, the users languish in lethargy while families scramble to cope with the disruption economically, emotionally and physically. What they expressed gives a snapshot of the stresses to their normal support networks.

- In the morning the nurse comes and checks us then after that we just sit around the rest of the day, that is all. I miss home until I cried.

Some fathers had this to add:

- If I stay in the village and my wife is in the transit centre, I cannot stay at home only. I have to go and visit her. If I do not go, the nurse will comment and say, "You only know how to make (babies) but don't know how to take care of her."

- Yes, these are the problems. However, I feel at least at the transit my wife is safer health wise but with other things, it is wanting because I cannot afford the things the hospital demands such as nappies, shampoo or talcum powder.

In the WHO list of domains of responsiveness, access to social support networks recognises that emotional and social support provided by family and community members contributes tremendously to people attaining better health outcomes including mental health. A health system that is unresponsive to supporting social networks risks jeopardising longer term health outcomes as people shy away from services or develop mental and emotional stresses as a result of the experience at the ABCs. We have seen that with Orang Asli health services, the gap between the ideal found in official reports and the reality on the ground is significant.

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While the progress made with improved maternal health facilities and access to services is
commendable, they hide a continuing marginalisation that leaves the Orang Asli
disempowered and feeling neglected. Needing to utilise its technology and services for better
health outcomes, the Orang Asli find instead a health system where pre-determined
objectives have neglected important non-health concerns of the community when they
attempt to access modern health services. Without the power to challenge the decisions of the
state, the Orang Asli are left with little choice but to accede to enforced confinement and the
erosion of rights. It is sadly summed up with this lament from one of the mothers.

- In name it looks like someone is looking after us but in reality, no one does. We are
  left there to fend for ourselves.

Indigenous peoples and health systems responsiveness
Health systems responsiveness gauges the ability of a health system to respond to the well-
being of people by how well it adapts to and anticipates their non-health needs as they utilise
its services (Mirzoev & Kane, 2017). In this study, we found that with both these actions, it is
the reverse that is true as Orang Asli have had to adapt to and anticipate the requirements of
the health system. The Orang Asli experience may be specific to Malaysia but the disparities
and discrimination connects indigenous peoples worldwide. To overcome the inconsistency
in the responsiveness of health systems between residual and indigenous populations, the
following areas require attention:

1. The need for accountability structures and processes that ensure compliance with human
   rights articles.

The right to health is not limited to delivering health services only but to a similarly robust
application of other fundamental human rights as this enables the full realization of health for
people as it is intended by making health systems responsive (Braveman & Gruskin, 2003).

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Coercion as a means to improve a population's health status is impossible to justify in the

absence of a public health threat or emergency. Even then it has to be applied judiciously

with avenues for appeal. Indeed, this highlights the urgent need for structures and processes

within and independent of a health system to ensure that there is monitoring and compliance

with human rights codes. Similarly with the domains of responsiveness, equal attention to

monitor and ensure its compliance is needed. Part of the problem is situated in an overly

weighted focus on medical needs without giving equal attention to addressing non-health

needs such as historical and on-going discrimination. This may bring short-term health gains

but does not address long-term social problems and the overall well-being of the people.To

this, health institutions must also contribute its knowledge and expertise towards addressing

the effects of poverty and marginalisation which for indigenous peoples include the historical

traumas of colonialisation and violence, the loss of traditional health systems, land and

natural environments, effects of social and cultural dislocation, rural-urban migration and

urbanisation, and the changing pattern of health and disease burden (Gracey & King, 2009).

2. Greater consultation with and participation of indigenous peoples in health care services

    targeted for them.

Individual and collective participation of people in the policy making, planning and

implementation of health care services directed to them is recognised as a core principle of

human rights and it is a way to develop more effective, sustainable, inclusive and accountable

services (WHO, 1978) (Rifkin, 1990). With indigenous peoples, the importance of

participation rest on the principle of free, prior and informed consent (FPIC) that is

recognised as foundational in protecting their rights (United Nations, 2008). Although FPIC

is referred to more widely in cases of development projects that affect ancestral lands,

resources or intellectual property, FPIC can equally be applied to health care provision meant

for the community so that there is meaningful participation from them as users. Yet,

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translating that into actual practice has been an uneven affair and although successful

interventions such as the Guatemalan Maya Mothers and Children project (UNFPA, 2016) or

the Canadian Inuulitsivik Midwifery service (Wagner, Osepchook, Harney, Crosbie, &

Tulugak, 2012) exists, too few countries have found the political will nor invested the needed

financial and human resources to include and expand the participation of indigenous

populations in this sector.

3. Intentional training for health policymakers and service providers on indigenous health

   systems and issues.

Knowledge of and understanding of indigenous systems should be an essential part of the

training required for health policymakers and service providers who are engaging with

indigenous communities. Improving cultural sensitivity is a well known and necessary step

but there is little knowledge or attempts to understand and include indigenous systems that

govern health or the social determinants that affect health into the decision making process.

For example, indigenous peoples traditional health systems are based on the Commons which

integrates indigenous knowledge, the provision of medicines and livelihood from the natural

ecology with communal social protection that provides care-giving for the unwell. These are

held in common for all in the community but with regulations on access to ensure

sustainability (Young Soon Wong, Allotey, & Reidpath, 2014). Within the limits of their

technology, indigenous health systems have contributed to the well-being of their populations

for generations but conflict, colonisation and development have severely degraded these

systems (Y. S. Wong et al., 2018).

For health systems to close the disparity gap between residual and indigenous populations, it

is vital that key features from indigenous health systems are able to inform and integrate with

modern health systems in health care planning and provision so that benefits from the best

practices of the past can add to current efforts. To this, more research has to be focused on

understanding indigenous health systems and resources channelled to setup or replicate

successful initiatives that integrate the two health systems.

Conclusion

The progress made in extending maternal health services has enabled safer deliveries for

indigenous mothers but more has to be done to close the disparity gap in health and non-

health domains with a view that preserves the full extent of their human rights. Pregnant

mothers are among the most vulnerable in any population particulary indigenous populations

who already contend with global disparities. Therefore, how responsive health systems are to

addressing the disparities faced by women during term may be a defining measure of the

success or failure of the SDGs whose oft repeated slogan, "Leave no one behind" would

certainly be agreeable and very well accepted by indigenous mothers.

Ethical approval and Consent to participate

Ethics approval was obtained from Monash University through the Monash University

Human Research Ethics Committee dated 30th January 2012. Anonymity was assured and

participants were briefed on the purpose of the research before consent to participate was

obtained.

Disclosure of interest

The authors report no conflict of interest.

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Over-responsiveness is as much a sign of the limitations and failure to adapt to context as under-responsiveness. It exposes the propensity of the state to resort to coercive power in order to achieve its aims when it cannot get voluntary participation (Scott, 2008). Although much of the debate on health systems responsiveness is on the individual service providers or users, the structural elements of the system which includes its property arrangement is a key determinant of responsiveness too.

5.1 CHAPTER CONCLUSION

As indigenous communities are faced with the rapid pace of change caused by induced development, health providers and policymakers who are able to understand indigenous systems and take into account the effects of transitions will stand a better chance of providing services that benefit the well-being of the people beyond mere medical relief. This is made even clearer in the findings of the next chapter when crisis hits the community and health professionals scramble to provide assistance according to their understanding.

Monash University

Declaration for Thesis Chapter 6

Declaration by candidate

In the publication *Why we run when the doctor comes: Orang Asli responses to health systems in transition.* In Critical Public Health (2018), https://doi.org/10.1080/09581596.2018.1438588. In Chapter 6, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Lead and corresponding author, conceptualised the idea, collected and analysed the field data, organised literature, drafted initial manuscript, submitted manuscript to journal and managed correspondence with editors and reviewers until final publication.	60

The following co-authors contributed to the work. Co-authors who are students at Monash University must also indicate the extent of their contribution in percentage terms:

Name	Nature of contribution	Extent of contribution (%) for student co-authors only
Pascale Allotey	Supervised all activities leading to the publication of the paper, critiqued concepts, contributed to analysis and edited the draft manuscript.	20
Daniel Reidpath	Contributed to concepts, critiqued concepts and contributed to analysis and editing the draft manuscript.	20

Candidate's signature

	Date:
	27 May 2019

Declaration by co-author

The undersigned hereby certify that:

1. The above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors;

2. They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;

3. They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

4. There are no other authors of the publication according to these criteria;

5. Potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit;

   And

6. The original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)

Global Public Health, School of Medicine and Health Sciences, Monash University Malaysia

Signature 1		Date: 30 May 2019
Signature 2		Date:
Signature 3		Date:

CHAPTER 6:

FINDINGS – INDIGENOUS PEOPLES RESPONDING TO HEALTH SYSTEMS IN TRANSITION

Orang Asli community coping with the impact of major floods (Photo credit: WYS)

The World Health Organisation's definition for health is 'Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (WHO, 1946). It can quickly be deduced from this definition that first, health is quite undefinable because of its complexity and breadth. It would also be almost impossible to attain because it is a moving target, shifting according to people's perception, priorities and context of what being healthy means. In that sense, it is a statement of ideals rather than a set of verifiable objectives. Seemingly, all that can

practically be done is to address specific aspects of health such as disease, nutrition, sanitation, livelihood, climate and so on. Second, the notion of change is core to understanding health and the practice of delivering health as transitions happen constantly to impact the health of populations (Rayner & Lang, 2013). Therefore, the two notions of complexity and change should shape how health systems are organised. It would need to be multi-dimensional if not in whole at least in part to address complexity, and it would have to anticipate and adjust for transitions.

The two notions are critical lessons for today's health systems if it is to address the intractable health disparities affecting indigenous populations. Higher infant and maternal mortality, lower life expectancy, malnutrition, malaria, tuberculosis, hypertension and diabetes, populates a long list of health problems that may seem straightforward to solve, but whose complex root causes and interrelatedness require more than medical interventions to address. Indigenous health systems based on the Commons were multi-dimensional in order to meet direct and in-direct health needs and offer lessons for the systems of today – something we will explore in detail in the next chapter.

Addressing the complexity of the health issues is compounded by the rapid changes that are affecting indigenous communities. Caused mainly by induced development, various transitions are taking place that stress the resilience of individuals and communities. However, transitions can also help pinpoint what critical areas require a response from health authorities specifically or the state in general. It is in these areas where the root causes of ill health often lie or where the people are most vulnerable to factors that cause ill health. What areas of transition are adversely impacting indigenous health?

In the field of public health, Rayner and Lang identified nine as the most influential: Demographic, Epidemiology and Health, Urban, Energy, Economic, Nutrition, Biological, Cultural and Democratic (Rayner & Lang, 2013). In their analysis, the transitions induced by these areas individually and in its totality have and is affecting human health and its co-existence with the natural world. Since this thesis is framed specifically to indigenous peoples, I propose some realignment to transition areas that are closer to its context. They are a Historical-Social transition, Ecological-Economic transition, Knowledge-Technological transition and Epidemiological-Health transition. The first are the effects of transition from a largely egalitarian, non-state, tribal community to an increasingly stratified, state dominated community in search of its socio-political identity. The second of a subsistence based, self-reliant, low environmental impact community transitioning into a market based, dependent and poverty stricken community. The third are the impacts of transition from maintaining an indigenous knowledge commons that is informal and practical for daily needs to the largely theoretical formal education divorced from local context but with the promise of progress in the new world. Lastly, the fourth is the transitions in health practices and systems, the changes in nutrition, and the burden of communicable diseases and non-communicable diseases. These four areas of transition influence in varying degrees the response of indigenous peoples to health services. This is what I explore in the next publication.

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Why we run when the doctor comes: Orang Asli responses to health systems in transition in Malaysia

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ABSTRACT

Globally, indigenous peoples live with stark disparities in health when compared with national populations. The disparities arise from a combination of factors that relate to the social and economic determinants of health, combined with disenfranchisement, and a rapid destruction of indigenous health systems, forests, natural resources and indigenous knowledge. In Malaysia, the indigenous peoples, known as the Orang Asli or 'Original People', are often viewed by authorities as 'backward, ignorant and resistant to modern health services', and therefore responsible for their poor state of health. This view situates the problem in the indigenous community, with the state as the benevolent provider of progress and improvement including health services. Orang Asli responses to this benevolence ranges from pragmatism to resignation to resistance. Drawing on a two-year ethnographic study, this paper explores, from the perspective of the Orang Asli, the dynamics of state and non-state societies, the structure and role of indigenous health systems and the effects of socio-economic transition in shaping Orang Asli responses to modern health services. Already burdened with poorer health compared with the national population, there is a growing problem of non-communicable diseases among the Orang Asli. Addressing this will require a shift from the benevolent dependency-creating approach commonly adopted by state public health services to one that is inclusive, responsive and participatory.

Introduction

Globally, Indigenous people are recognised as culturally and historically distinct from the politically dominant population, and they often have specific rights under international or national legislation that protect their ties to the land. These rights notwithstanding, Indigenous people, almost without exception, also live with stark disparities in health when compared with dominant populations of their countries (Department of Economic & Social Affairs [DESA], 2009). The disparities are evident in most health indicators regardless of the wealth of the country and the standard of available health services for both communicable diseases and non-communicable diseases (Australian Institute of Health & Welfare, 2014, 2016; Darwina & Wan Puteh, 2012; Health Canada, 2013; Idrus, 2013; Office of Minority Health, 2013; Satterfield, DeBruyn, Santos, Alonso, & Frank, 2016; Servan-Mori, Torres-Pereda, Orozco, & Sosa-Rubi, 2014).

One of the reasons for the health disparities is the poor utilisation of modern health care and health systems (Castro, Savage, & Kaufman, 2015; Ware, 2013). According to the United Nations, the causes include inadequate state financing, geographical distance, high out-of-pocket expenses, lower quality of services, threats to indigenous knowledge and environments, racism and discrimination and culturally inappropriate or insensitive services (DESA, 2009). These causes are interlinked. For instance, many indigenous populations are geographically isolated, or through forced relocation to particular settlements, without the provision of proximate services.

Indigenous people's early encounters with modern health systems were experienced simultaneously with encounters of colonising state societies. While modern health treatment provided some relief, this was overwhelmingly eclipsed by the problems introduced by state societies. In Australia, the size of the Aboriginal population plummeted from an estimated 300,000 people when the British arrived in 1788 to 75,000 people at the turn of the twentieth Century due largely to introduced diseases, dispossession of their land and resources and conflict (Campbell, 2002; Harris, 2003). Similarly, in Canada, the Aboriginal population declined by between 40 and 80 per cent after contact with Europeans (Northcott & Wilson, 2008; Thornton, 1997). Today, the health of indigenous populations retains the legacies of colonialism displaying problems both epidemiologically and in mental health (Brave Heart & DeBruyn, 1998; DESA, 2009; Gracey & King, 2009; King, Smith, & Gracey, 2009).

There have been several global initiatives over the last two decades to address these disparities. These include the Commission on Social Determinants of Health and the Millennium Declaration with commitments through the Millennium Development Goals and now the Sustainable Development Goals to focus explicitly on the issues affecting marginalised populations such as Indigenous people (Wong, Allotey, & Reidpath, 2016). Initiatives to address Indigenous health are weighted heavily towards the contexts in higher income countries. Health systems in low and middle income countries like Malaysia face different challenges in the provision of health care to the population in general (Allotey, Davey, & Reidpath, 2014; Allotey et al., 2012) and to the Indigenous population in particular (Wong, Allotey, & Reidpath, 2014). One challenge is that the Malaysian government has an under developed view of its indigenous people, evidenced in this excerpt of its country report to the UN Human Rights Council:

> The most significant challenge which besets Malaysia is lifting indigenous groups from *backwardness* (italics added for emphasis) and assimilating them into mainstream society. (United Nations, 2008)

Newspaper reports suggest that state health officials hold similar attitudes with regards to indigenous peoples' non-utilisation of modern health services (see, for instance, The Star, Malaysia, 2015c). There has been a persistent gap between the health of indigenous and non-indigenous groups despite targeted health services (Baer, 1999), and evidence of underutilisation of various mainstream health services by indigenous peoples (Alford, 2015; Department of Economic & Social Affairs [DESA], 2016; Hepworth et al., 2015). Critically, the health of Indigenous people, from a health systems perspective, has been under-researched and is poorly understood. Given the lack of understanding of reasons and context of poor utilisation of health services, this qualitative study aimed to explore the context for health services utilisation among the Orang Asli of Peninsular Malaysia.

The Orang Asli concept of a health care system

Our previous research identified Indigenous health care systems as based on a 'commons' approach with three key features – the natural resource base, knowledge base and social protection base, all of which are owned and accessed communally (Wong et al., 2014, 2016). It is this common ownership and usufruct arrangements that define traditional health services utilisation (Wong et al., 2014). Traditionally, the Orang Asli obtained the materials they needed for their well-being from the natural resource base encompassed within their communal lands. Held as common property, land and natural resources are not owned by any individual but accessible to every member of a group but crops planted by individuals belonged to that individual and his or her household (Lim, 1997; Nicholas, Yok Chopil, & Sabak, 2003). Shared natural resources can range from medicinal plants that cure common ailments to

food varieties to mundane but handy things such as cockroach repellent, and forest environment are crucial to health and well-being. Similar systems of holding property and natural resource usage can be seen with other indigenous groups such as Amerindians in Amazonia (Balee & Gely, 1989; Dufour, 1990). Second, although access is guaranteed in a commons system, successful utilisation required the necessary knowledge and skill to turn a resource into useful medicines, shelter or food. For this, the commons system guarantees equitable access to knowledge. Many indigenous communities hold their knowledge in common (Joranson, 2008) whereby every member of a group can acquire the knowledge needed to use those resources (Wong et al., 2014). Third, indigenous health care systems rely on a social protection base that draws on communal obligations, reciprocity, cultural sanctions and kinship relations to provide treatment and care. The social protection gives services to those who fall ill, making the system a community effort (Nicholas & Baer, 2007; Wong et al., 2014, 2016). By pooling risk where group members who are well or appropriately skilled provide services when they are healthy and receive services when they are ill, the system guarantees needed sustenance, treatment and care for every group member.

The commons approach to the utilisation of land, natural resources, knowledge and social protection resulted in a health care system that had maintained equitable access and sustained the well-being of indigenous populations for generations, allowing them to co-exist with their environments before their more recent incorporation into modern health care systems.

Historically, this commons approach was pitted against the introduction of health care which served primarily as a means to a military and political end. In Malaysia, modern health care services to the Orang Asli during the war with Communist insurgents from 1948–1989 were used as a counter insurgency tool to attract and gain the confidence of the people then resettling them so that they were isolated from the insurgents (Bedford, 2009; Nicholas & Baer, 2007). Such services invariably placed military or political objectives above that of the health of the population with the result that health services were then viewed with suspicion. This set the stage for the fractured and contradictory relationship between health providers and the Orang Asli where the benefits of improved health care were negated by its modes of delivery and equated with efforts by the state to suppress and control. Within this political and historical context, this study set out to explore contemporary responses of the Orang Asli to health services, given reforms under the broader remit of universal health coverage. We were interested in the factors that influence their decisions to utilise modern health services. For a long time, Orang Asli communities were isolated from dominant populations due to the mountainous terrain and extensive forest but as the pace of development picked up with Malaysia's independence in 1957, more and more villages were exposed and opened to state services and control. Social, economic, political and cultural transition is changing the health systems, the way health is viewed and how services are used by the Orang Asli.

Materials and methods

The study design was qualitative, using two main approaches. A broadly ethnographic approach was used to explore service utilisation from the community's perspective; and an instrumental case study approach was used to analyse how health service utilisation unfolded through real life events.

Ethnography is designed to gain understanding of sociocultural phenomenon (LeCompte, Schensul, Nastasi, & Borgatti, 1999); in this case, the sociocultural perspective of a marginalised community, by focusing on the meanings of the individuals' explanation and actions in the challenging health context they face. The contextual, reflexive and evolving features of ethnography (Savage, 2000) were fundamental to this study. Widely recognised is that sociocultural and economic context contributes as much to health or ill health as medical factors (WHO, 2008). For research with the Orang Asli, this perspective was even more important because most health research to date has focused on medical topics rather than portraying an emic view from the Orang Asli. In privileging the perspective of the subaltern, ethnographic reflexivity was vital in order that the researchers' views did not overshadow

the subaltern's. Finally, ethnography's flexibility to allow for changes as a study progresses enabled the incorporation of new situations affecting health services that arose during the study.

The study began in five villages in the northern state of Perak, with data collected over a period of two years in 2013 and 2014. Participant observation was used throughout the study as part of ongoing work in the community. Six focus group discussions and in-depth interviews were held to gain deeper insights into the traditional health care (Wong et al., 2016), and the effects of development and access to modern health care. The five villages were selected for their different degrees of rurality, to examine the impact of proximity to more urbanised centres on access to and use of modern and traditional health systems. The focus group discussions and interviews also sought to explore responses to the changes that were taking place to the health systems and the community's perceptions and utilisation of both traditional and modern forms of health care. The focus group discussions were held in the villages and were each attended by 10–20 persons. Attendance, even during a discussion, was fluid, varying because people would come in and out of the 'shelters' to join in or leave the discussions, balancing curiosity, their interest in the topic and competing obligations elsewhere. In-depth interviews were conducted with experienced practitioners who were knowledgeable about the traditional systems while the focus group discussions had a mix of gender and age groups. A discussion guide was used to ensure topics were covered systematically but a fair degree of flexibility was maintained to allow for issues of relevance to participants to be discussed.

Instrumental case studies were conducted in a further three villages which were selected following two separate, critical events that resulted in the need for crisis management and provided an ideal opportunity to investigate Orang Asli responses to health services. The lead researcher WYS was in a team providing relief efforts and interviews were conducted with two village headmen who in their positions engaged the most with state officials and non-government organisations during this crisis. In the absence of formal data on actual health service utilisation, the instrumental case studies provided 'real time' evidence of practice. According to Stake (1995), an instrumental case study is used to provide insight into an issue or to refine a theory where a case or cases are selected because they shed light on the issue or theory rather than the case itself.

Findings

Participants in focus groups and interviews explained that they never really had a choice or voice about what they wanted as a people. A lack of trust and understanding of the motives of non-Indigenous people was a recurrent theme, regardless of protestations of concern about health as they recounted their history and how that affected their present predicament. This focus group discussion was attended by about 17 women and men:

- That's it, flee and flee.
- It wasn't that we started a war but the Malays captured our women, our children, that was why we fled. This is history. The Sultan, the Regent (*Raja Muda*) asked, 'Why can't the Orang Asli progress? Because last time the Orang Asli were captured and sold'. He himself admitted.
- They took our women and married them. The men they slashed or sometimes made them slaves.
- That is why it is very difficult for the minds of Orang Asli to progress. We have been colonized, we have been sold. What I say is true.
- Our thinking is stuck.

The underlying cause for their seemingly 'backward' response in fleeing state health officials is the Orang Asli's concerns for security and the trust deficit towards state society in general. Insofar as there were still places left to flee to, the Orang Asli could remain beyond the reaches of the state. But with the pace of development in the modern Malaysian state now reaching into the remotest areas of the country, flight is becoming less and less of an option. Pressed to the margins, an elderly Orang Asli man responded:

- Outsiders will come and tell us many things we must do like 'plant more vegetables', 'build toilets' or 'send your children to school'. We would always nod our heads and say 'yes, yes that is very good' but when they go home, we will continue to do things our way.

For more and more Orang Asli, modern health care services are becoming the main choice and eventually may be the only one available to them. This is because the forest, the natural resource base from where they obtain their nutrition and medicines is fast dwindling due to deforestation, land dispossession and loss of usufruct rights. As explained by the 25–30 Orang Asli in this focus group:

- In the old times, before I was born, during the times of the old people. They never went to the clinic when they were ill. They looked for medicines from the forest. But since the 1980s, beginning then, we seldom sought medicines in the forest. Nowadays when we are ill we go to the clinic. There is a reason for this. The reason is that last time there was a lot of medicines in the forest but in the 1980s, the Chinese loggers came in and bulldozed everything there was including the medicines that healed all types of illness. These are all gone. This is the cause why we seldom look for medicines in the forest.

The collusion of state officials in marginalising the Orang Asli reinforces their historical distrust of the state and their sense of helplessness was expressed in the discussion:

- The people from Forestry are even more dangerous. In the past they allowed logging, then after logging they sell our *nenqriiq* (ancestral domain/territory). That's the end of our *nenqriiq*. This is the danger for us. First, they give to the loggers then they sell our land. This we know of the Forestry.
- Our medicines from the forest will be gone.

Here, the Orang Asli understood the intentions and impacts of these developments and was not ignorant in their reading of the situation. As a response, some adopt a stance of resistance such as through non-compliance while some adopt a pragmatic stance by taking advantage of the benefits of modern health services. They are not mutually exclusive but applied based on immediate need, experience and careful analysis of what is effective. This is expressed by participants in another focus group:

- Traditional medicine can work, town medicine can work
- We try the traditional medicine first. If we can't handle it then we send to town but we also see the situation. If the illness is too serious then we will send the person straight there (town) and not keep the person here.
- With town medicine, there is extra where you can operate or treat serious things. Our traditional medicine can't operate or treat these. It can only treat some or give energy so town medicine has more.
- In the old days, the town medicine wasn't much better than ours but now that we understand it, they are the same.
- But we will see the condition of the illness. If it is possible to treat in the village, then we will treat in the village. If not then we take to town.

This was a consistent theme as the Orang Asli recognised the benefits and conveniences of modern medicine and had incorporated it into their health seeking strategy. However, that recognition did not always translate into health services that were responsive or inclusive of their needs. In isolated villages located far from urban areas with poor access to clinics and medicines, the Orang Asli have learnt to accept whatever services are available and the conditions attached to its usage. A case in point are antenatal services for interior villages where the state requires expectant mothers to relocate to transit centres in hospitals in urban centres weeks or months before the expected date delivery. Failure to do so jeopardises the ability of the child to be registered for a national identification number, critical for all administrative services and public goods. The Orang Asli have no say in this matter and are resigned to it as expressed here:

- Not allowed (to give birth in the village).
- If we follow our hearts definitely we would rather have it in the village but now we will be refused any help.
- We want (to deliver) in the village.
- If in the village they will not do our birth certificates.
- They say they will not give the birth certificates if born in the village.

Between resistance, incorporation and resignation, there is likely no clear boundary between the different responses the Orang Asli display when deciding on utilisation of health systems. How they finally respond depends on past experiences with external groups, options open to them and opportunities that give them the best possible outcomes for their health.

The instrumental case studies

December each year brings the monsoon to Malaysia but in 2014, the rains were heavier than usual. In upland areas where heavy deforestation had occurred, this resulted in massive floods that swamped the northern states of Kelantan, Perak and Terengganu (The Star, Malaysia, 2014). Many Orang Asli communities were badly affected by the floods and had to flee in the middle of the night as water levels rose suddenly by six to seven metres inundating their villages. Relief aid was provided mainly by civil society groups while local news reports suggested a distinct lack of response from state agencies (The Sun Daily, Malaysia, 2015). Three months into the crisis, their houses remained underwater and it was not until the media was alerted and their plight was subsequently publicised that state authorities explained that the dam waters were being kept artificially high in anticipation of drier weather later in the year (The Star, Malaysia, 2015a). Prior to this report, state agencies had not kept the Orang Asli informed of the situation.

The crisis presented an opportunity to observe interactions with state agencies, and hear the views of the Orang Asli faced with emergencies that threatened well-being. In interviews, one said:

- It was around two o'clock in the morning when we suddenly felt the water rushing into our home. We did not even have time to take any of our belongings and rushed to higher ground. We lost everything; even my stove and gas tank are still underwater.
- Since this happened, [the state agency] has only come once. They gave each family one bag of rice, a few cans of sardine, cooking oil and soap. When they come again, I will tell them they were supposed to help us but instead the non-government organisations have helped us more.

Their frustrations were evident over the dearth of aid from state agencies but despite the predicament there were signs of resilience as the villagers with their own initiative started building new houses on higher ground with materials from the forest. In addition, their unaffected swiddens planted with cassava and corn provided them with an autonomous source of food supplies irrespective of the amount of external aid. The integrity and accessibility of the natural resource base had helped them recover quicker compared with being dependent on aid. However, the Orang Asli were also worried about the future viability of the forest showing us where logging was taking place and their suspicion about it contributing to the floods. Pointing to a sea of logs and debris, they said:

- This mass of logs floating on the lake was washed down from upstream by the floods. From the shore, the forest looks normal but when you go further inside it is a different story altogether.

The second crisis happened in November 2015 when the media (The Star, Malaysia, 2015b) headlined what was alleged to be multiple deaths among the Orang Asli in Belum, Perak from a mysterious disease. In an immediate response after the news broke, officials from the Ministry of Health and the Department of Aboriginal Development initially refuted the claims about the deaths and teams of medical personnel descended on the area to investigate the situation. Health authorities explained that a suspected oral candidiasis infection was the cause and readily treatable and suggested that the

Orang Asli were to blame for its persistence because of superstition (The Star, Malaysia, 2015c). They stated that when health officials show up, the Orang Asli refused treatment or ran away from them. A month later, WYS visited to assess the fallout of the crisis and unstructured interviews were conducted.

In the interviews, the Orang Asli told us not to listen to the media reports. People were not dying every day and it was only occasionally when someone was really ill that death occurred. However, it was the aftermath of the publicity that appeared to worry them more:

- A week later they came and questioned us about that case. They thought that we had complained about them saying they did not give us food, did not give us money. They told us to ask you (civil society groups) to take care of us Orang Asli because they want to stop.
- No, they should not say things like that because we Orang Asli care for everyone. We care for the Chinese, we care for the Malays, we care for the Whites, we care for the Siamese, we care for the Indians. We care for all peoples because we have big powers. I am not boasting. Unfortunately, others do not care for the Orang Asli. We have power not because of anything but because we care for God if not we would all be finished.

Reciprocity, so important to Orang Asli social, cultural and religious practice and foundational in their commons health system, now no longer applies in the new context. In this marginalised position, the Orang Asli find they have little say over what happens to them as the narrative seems to be controlled by others whether the media, non-government organisations or the state.

Discussion

The study highlights the difficulties Orang Asli frequently find themselves faced with when they need health services, often seldom having any control or say in what is extended to them. To analyse the responses of the Orang Asli to a non-inclusive situation, three themes will be used – (i) resignation, (ii) resistance and (iii) pragmatic incorporation. To be clear these themes are not exhaustive or mutually exclusive as peoples' understanding of health and responses to health services is dynamic, and are influenced by individual subjectivity just as they are by historical, social and cultural forces (Senior & Chenhall, 2013).

Resignation as a response

This theme draws on the fields of critical pedagogy and postcolonial studies (Freire, 2014; Memmi, 1965; Tatum, 2003; Young, 1990) that seek to explain the experience of subalterns who are victimised by dominant groups and have internalised the dominant group's views of them as inevitable and are resigned to their marginalisation. Resignation as a response highlights the uneven power dynamics between the state and the Orang Asli where the decisions of the state are imposed on the Orang Asli and they are resigned to the marginalisation. It comes in the form of historical subjugation by violence and slavery (Clifford, 1989; Gullick, 1987; Mikluho-Maclay, 1878; Swettenham, 1880) that has conditioned the mind-set of the Orang Asli, to new forms of imposition ranging from land and resource dispossession (Nicholas, 2000) to threats of withholding citizenship for Orang Asli infants unless expectant mothers relocate to transit centres for birthing. Even though the Orang Asli prefers to give birth in their villages, they fear they have no choice but to comply with the directives of the state.

While infant and maternal mortality rates have progressively been reduced with better medical care and facilities they still lag significantly behind national rates (Economic Planning Unit, 2010) and at an additional cost not demanded of non-Orang Asli, where expectant mothers are compulsorily separated for long periods from their families in order to have access to the health services. Will the larger question of liberty and the rights of the indigenous community be factored in as an unavoidable price for improved health services from the state? When they perceive that they have no other options and have resigned themselves to the situation of marginalisation, then the Orang Asli develop a sense of

powerlessness and dependency of the subaltern towards the oppressor (Freire, 2014). 'Our thinking is stuck' in the words of the Orang Asli interviewed.

Resistance as a response

Fortunately, their perception of being 'stuck' is not unchangeable because in this second theme, we draw on the concept of resistance as a counter measure used by subalterns to circumvent or subvert the efforts of oppressors (Ortner, 1995; Scott, 2008). This theme sees the Orang Asli response from the opposite end of where the 'backward', 'ignorant' and 'stubborn' perspective is anchored offering an important reversal to the helpless and complicit picture of subalterns. It brings a dimension that displays the resilience of the marginalised. Researchers have noted that the Orang Asli were traditionally peaceful non-violent non-confrontational societies (Barnes, 2006; Bonta, 1996; Dentan, 1968). When confronted with the power of the state, non-state societies like the Orang Asli were seldom able to withstand state societies in prolonged conflict due to the state's superior organisational power and its ability to concentrate mass forces (Scott, 2010). Faced with such a situation, the realistic option is often to flee or withdraw into modes of 'learned helplessness' (Dentan, 2001; Scott, 2008) seen in the results of the focus group discussions. Historically, these as forms of resistance for a weaker, non-state society against the power and violence of states and dominant groups (Scott, 2010) enabled the Orang Asli to avoid real and potential dangers, survive and remain outside the domination of the state. Seen with this knowledge, running away from health workers in the instrumental case study is a form of resistance to potential threat and domination. If health officials want to change this dynamic, they need to learn and adapt to the key features of how the Orang Asli view health and organise their health care system. Persisting with long standing biases will only reinforce lines of resistance and may lead to more overt forms resistance in future.

The Orang Asli affected by the floods in the instrumental case study displayed a willingness to engage in more organised forms of active resistance by going to the press to highlight the shortcomings of state services and develop independent avenues to access the aid they needed. This is increasingly understood in more Orang Asli communities where by working with and learning from non-government organisations and a network of indigenous activist the tactics of utilising media communications, public pressure, campaigning, demonstrations, legal activism and opposition politics, the Orang Asli have periodically turned the tables on the state and its proxies over indigenous land rights and other civil rights issues (Idrus, 2014; Nicholas, 2000; Seng, 2000).

Having these new capabilities gives the Orang Asli more avenues to obtain health care services and aid that they need compared to the past when the state was the only channel. At times, it has the effect of shaming the state agencies directly responsible for the welfare of the community into putting in more effort but on other occasions, it has also caused the state to become defensive and hinder aid to them. The result is a contest of wills, and a dynamic positioning and re-positioning of power relationships to consider new alliances with civil society amidst the political space opened or closed by a resistance stance.

While various forms of active resistance are likely set to become more utilised in future, resistance in the form of flight or learned helplessness will continue to be seen as tested ways to keep the state at arm's length and deflect further stresses from dominant populations. Far from being 'backward' or 'ignorant', the Orang Asli who take the path of resistance do so from proven social and cultural practices as a wider strategy to mitigate state domination.

Pragmatic incorporation as a response

In discussing modes of incorporation of marginalised, minority or immigrant groups into dominant societies, assimilation is the most common concept used to describe the process and for the state usually the desired goal. Traditionally theorised as a linear process of moving from a more 'inferior' condition to the 'advance' state of dominant societies (Gordon, 1964; Warner & Srole, 1947), this is now

countered as far more multi-layered and contested process with uneven outcomes (Greenman & Yu, 2008). For the Orang Asli, assimilation into the dominant Malay-Muslim society has been the goal of the state (Benjamin & Chou, 2002; Endicott & Dentan, 2004; Nicholas, 2000) but this has often been contested and resisted by the Orang Asli. These forms of resistance have resulted in the Orang Asli being labelled as anti-development (Ibrahim, 1996; Idrus, 2011). However, the Orang Asli are not averse to development but are able to weigh the benefits of modernity; a view expressed during a focus group discussion where they recognised and use the benefits of modern health treatment but who at the same time seek avenues to incorporate it into their traditional health system and worldview on health.

Pragmatic incorporation proposes that subalterns find room to manoeuvre even within situations of severe constraints. The Orang Asli find space under their terms when they combine modern and traditional approaches to obtain the best possible outcomes for their health. Even in situations where that space continues to narrow, the Orang Asli are able to solicit new forms of aid and support from non-government organisations, sympathetic individuals and the media to counter the neglect of the state. The Orang Asli have incorporated their notions of reciprocity into the new dynamics of state and non-state society relations and found practical ways to utilise civil society space to highlight their plight and gain support for their health and livelihood needs.

As these examples show, how the Orang Asli interface with the state and utilise modern health services is more complex and multi-layered than the perception common with many health officials. It is deeply influenced by their traditional health system, the history and on-going dynamics of engagement between state and non-state societies, yet it is coupled with much pragmatism and incorporation that allows a group like the Orang Asli to navigate the marginalised position they find themselves in within the dominant state.

As a result, running away when the doctor comes does not seem so farfetched and backward anymore. Indigenous peoples responding along this continuum of resignation, resistance and pragmatism allow some to maintain a measure of independent identity and action beyond the control of the state but it often comes at a cost to their health when they do not or are unable to utilise modern health care while at the same time their traditional health care system is gradually degraded.

That health services are narrowed down to medical solutions point to a lack of engagement with factors highlighted by the social determinants of health (WHO, 2008) resulting in unaddressed social, economic and environmental issues that affect the Orang Asli. The loss of their resource base devastates their livelihoods deepening poverty and forcing them into unhealthy and lowly paid work situations as alternatives. Furthermore, the Orang Asli have little access to modern forms of social protection such as pensions and insurance since most work in the informal sector and have a semi-subsistence form of economy. In a commons health system, social protection comes from community mutual support and access to land and forest resources. When social cohesion is compromised or land and forest becomes inaccessible, they lose their social protection and become dependent on the state or public charity.

Clearly, state health services need to be more inclusive in its approach. For the Orang Asli where traditional egalitarian social structures place a high level of importance in participative practices and collective decision-making, the contrast found in the state health system of top down decisions and control results in a polarity of response from overt rejection to pragmatic submission. Plagued with persistent and long standing health disparities even in the current health system, the scenario for closing this gap with the rising incidence of non-communicable diseases in the community becomes more challenging and could become significantly worse (Aziz et al., 2016; Nelapalle, Peela, & Nyo, 2013). Malaysia is battling some of the highest non-communicable disease rates in South East Asia with a 17.5% prevalence in diabetes among adults, a 30.3% prevalence in hypertension and a 47.7% prevalence in hypercholesterolemia (Institute for Public Health [IPH], 2015). For many years, the state has been trying to combat the disturbing trend with media campaigns but with little to show for it (Letchuman et al., 2010), and this was aimed mainly at dominant population groups let alone catering to the needs of minority groups like the Orang Asli. To address the non-communicable disease threat with a population already burdened with health disparities, an inclusive approach that revives community participation and improves patient–caregiver involvement through updated health knowledge

and capacity building can strengthen the Orang Asli traditional health system so that it plays a complimentary role as a key component of overall health services. For example, current medical treatment for chronic non-communicable disease conditions for the most part involve interaction of individuals exclusively with health workers from a state health facility who provide a ration of free medication, and nothing else until the next appointment. The patient and their family will have no or only rudimentary information about the condition or guidance on how to cope with the effects, because of their reliance on the state health system to supply the solutions. Studies show that the health worker centred method is less effective when addressing non-communicable diseases at the individual and community level instead requiring a participative approach and patient-caregiver ownership (Ishikawa & Yano, 2011; Morisky, DeMuth, Field-Fass, Green, & Levine, 1985). Ironically, the participative model that is intrinsic to the traditional health system is gradually unravelling in the face of modernisation, loss of traditional forests and indigenous knowledge, and marginalisation.

At national and policy levels, attempting to reduce health disparities and improve health service utilisation without addressing the colonising state's historical legacies of dispossession, violence and forced resettlement ignores the social and health consequences of collective and intergenerational trauma (Czyzewski, 2011; Wesley-Esquimaux, 2004) experienced by the Orang Asli. The continuing marginalisation of the Orang Asli only serves to reinforce historical suspicion toward state authority and perpetuate socio-economic inequalities that adversely impact health. Addressing these issues requires the state to:

(1) Take legislative steps to recognise Orang Asli rights to traditional lands and natural resources.
(2) Rescind or amend health policies and practices that create dependency.
(3) Enact inclusive policies that enable Orang Asli participation in decision-making in health service provision, health education, formal education services, land and natural resource management, local governance and development.
(4) Make restitution for the impacts of historical violence and dispossession wrought on the Orang Asli.

Conclusion

The continuum of responses from the Orang Asli in this study shows that they are not averse to the benefits or ignorant of utilising modern health services where there is sufficient and appropriate health information and services are convenient to access as they readily select health services both traditional or modern that give better outcomes. The Orang Asli already possess a health system that has vital features important to the health of the community and that is increasingly needed to mitigate the effects of the non-communicable disease epidemic sweeping the country. The tragic comedy of Orang Asli running away from doctors, or doctors viewing the Orang Asli as backward, does not have to define the relationship between this state and non-state party for the future if there are genuine efforts to address the impacts of historical and current marginalisation and enable the Orang Asli to fully participate in decisions for the well-being of their community.

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The normal focus of health services is to address the Epidemiological-Health aspects of transitions. Like many other indigenous communities, the study shows the vulnerability of the *Orang Asli* who still contend with numerous communicable diseases and poor nutrition. This is in the midst of rising risk to NCDs and persistent poverty. If there were a multi-dimensional system in place, the effects of Historical-Social transition could have begun to be addressed for example in the national apologies offered by Australia and Canada to the First Nations peoples that aided the healing process from historical injustices or in the efforts at cultural sensitization of health care providers. However, these alone cannot guarantee reconciliation if actions in recognition, reparations and redistributive justice are not followed up by the state (Corntassel & Holder, 2008) (Philpot, Balvin, Mellor, & Bretherton, 2013) (James, 2008).

Indigenous peoples and their close bond with the land and natural environments have seen them utilise and preserve these resources for generations (DESA, 2009). Hence, it is a key issue for indigenous peoples that they be protected from the destructive and over-exploitative effects of the Ecological-Economic transition. In today's nation state setting, that would mean greater state protection of natural environments and genuine collaborative efforts to sustainably utilise the resources. Examples abound of local communities' successfully practicing common property resource management of natural resources when there are supportive policy environments (F. Berkes, Feeny, McCay, & Acheson, 1989) (Mckean & Ostrom, 1995) (Bon, 2000). However, most states pay scant attention to indigenous rights to their land or resources resulting in displacement and poverty for communities.

For a long time, indigenous traditional knowledge and practices were shunned, undervalued and even outlawed in some countries. The Knowledge-Technological

transition favoured Western and Industrial forms of progress but now there is increasing recognition of its importance to maintaining bio-diversity and sustainable ways of living (United Nations, 1993). More so as the tempo of environmental degradation has reached a level where human induced climate change is putting at risk the future of human civilisation. Indigenous ways of knowing is communal and held in commons but the misappropriation of indigenous knowledge such as for patenting purposes remains a threat as their knowledge becomes increasingly important and sought after for economic or cultural purposes.

6.1 CHAPTER CONCLUSION

The narrowing down of health services to just the treatment of disease, injury and illness leaves it handicapped with short-term solutions. Without adequately addressing the contributory causes, disparities will remain and indigenous peoples will still be the scapegoat for the system's inadequacies. For health providers to improve their services to indigenous peoples, health systems need to be re-modeled into functional multi-dimensional systems that focus attention and resources on issues in the transition areas and work out solutions participatively with the community. For practical purposes, a multi-dimensional system that addresses the well-being of indigenous peoples need not just rest on the health system, but importantly must include other state and private actors that involve the law, education, land and natural resources. The findings in the next chapter give evidence of a functioning multi-dimensional system in the *Orang Asli's* commons-based health system that can help make modern day health services more relevant to indigenous communities.

Monash University

Declaration for Thesis Chapter 7

Declaration by candidate

In the publication *Sustainable development goals, universal health coverage and equity in health systems: the Orang Asli commons approach*. In Global Health, Epidemiology and Genomics (2016), 1, e12, pp 1-10**.** In Chapter 7, the nature and extent of my contribution to the work was the following:

Nature of contribution	Extent of contribution (%)
Lead and corresponding author, conceptualised the idea, accessed and organised literature, drafted initial manuscript, submitted manuscript to journal and managed correspondence with editors and reviewers until final publication.	70

The following co-authors contributed to the work. Co-authors who are students at Monash University must also indicate the extent of their contribution in percentage terms:

Name	Nature of contribution	Extent of contribution (%) for student co-authors only
Pascale Allotey	Supervised all activities leading to the publication of the paper, critiqued concepts, contributed to analysis and edited the draft of manuscript.	20
Daniel Reidpath	Critiqued concepts and contributed to analysis and editing.	10

Candidate's signature

	Date: 27 May 2019

Declaration by co-author

The undersigned hereby certify that:

1. The above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors;

2. They meet the criteria for authorship in that they have participated in the conception, execution, or interpretation, of at least that part of the publication in their field of expertise;

3. They take public responsibility for their part of the publication, except for the responsible author who accepts overall responsibility for the publication;

4. There are no other authors of the publication according to these criteria;

5. Potential conflicts of interest have been disclosed to (a) granting bodies, (b) the editor or publisher of journals or other publications, and (c) the head of the responsible academic unit;

   And

6. The original data are stored at the following location(s) and will be held for at least five years from the date indicated below:

Location(s)

Global Public Health, School of Medicine and Health Sciences, Monash University Malaysia

Signature 1		Date: 30 May 2019
Signature 2		Date:
Signature 3		Date:

CHAPTER 7:

FINDINGS – COMMONS HEALTH SYSTEMS' CONTRIBUTION TO IMPROVING THE WELL-BEING OF INDIGENOUS PEOPLES

The land and forest provides for the Orang Asli's basic needs such as thatch for roofing
(Photo credit: WYS)

In the thesis, I examined earlier how public health care and private health care under their respective property regimes have features that work against them to close the health disparity gap faced by a marginalised group like indigenous peoples. For state regimes it is the propensity to dominate and control not only the property but the population of users as well, while for private regimes the narrow interest-driven motives serve only a small and often times elite segment of a population. Add this to human agency that can undermine even benevolent intentions plus the disordered effects of major transitions, and the outcome is that the disparity gap continues.

The Commons health system offers an alternative approach to the issue and the
potential for a true collaborative effort between the user and the provider because now
the user can also be a provider. A reversal of roles, ownership of resources and shared
benefits of a knowledge commons – could these help close the health disparity gap? The
last publication in this thesis fleshes out the workings of the Commons health care
system in an indigenous peoples' traditional health system.

HEALTH CARE SYSTEMS

ORIGINAL RESEARCH ARTICLE

Sustainable development goals, universal health coverage and equity in health systems: the Orang Asli commons approach

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Universal health coverage is a key health target in the Sustainable Development Goals (SDGs) that has the means to link equitable social and economic development. As a concept firmly based on equity, it is widely accepted at international and national levels as important for populations to attain 'health for all' especially for marginalised groups. However, implementing universal coverage has been fraught with challenges and the increasing privatisation of health care provision adds to the challenge because it is being implemented in a health system that rests on a property regime that promotes inequality. This paper asks the question, 'What does an equitable health system look like?' rather than the usual 'How do you make the existing health system more equitable?' Using an ethnographic approach, the authors explored via interviews, focus group discussions and participant observation a health system that uses the commons approach such as which exists with indigenous peoples and found features that helped make the system intrinsically equitable. Based on these features, the paper proposes an alternative basis to organise universal health coverage that will better ensure equity in health systems and ultimately contribute to meeting the SDGs.

Background

A key area of health systems research has been the issue of health equity. While a health care system is commonly viewed as a complex social institution designed to provide biomedical interventions that produce better individual health, health care systems should also promote a wider set of societal values and norms that contribute to overall social good [1, 2]. Equitable access to health care for all is undoubtedly a benchmark, recognised in the Millennium Development Goals and its follow-on, the recently announced Sustainable Development Goals (SDGs). The interconnectedness of the SDGs is clear such as where healthy lives and well-being for all (Goal 3) is interlinked with ending poverty and hunger (Goals 1 & 2), reducing inequalities (Goal 10), providing clean water and sanitation facilities (Goal 6), protecting the environment (Goals 7, 13, 14, 15), providing decent work (Goal 8), ensuring gender equality (Goal 5) and having access to quality education (Goal 4). The underlying values of equity expressed is then meant to be actualised in universal health coverage (UHC) whose goal is to ensure that all people obtain the health services they need [3] and is now becoming the significant SDG health goal that links equitable social and economic development, and combines financial risk protection with equitable access to essential services [4].

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There is strong rhetoric surrounding UHC and it is high on the global agenda reflected in the 2012 United Nations General Assembly Resolution [5] to ensure the highest attainable health for all. There are a number of other international instruments that attempt to provide accountability bodies that support addressing equity such as the Economic and Social Council where tackling inequality has become a major focus. For indigenous populations in particular these include the United Nations Declaration on the Rights of Indigenous Peoples, the United Nations Permanent Forum on Indigenous Issues and the United Nations Inter-Agency Support Group on Indigenous Issues. However, the good intentions are subject to several intermediary drivers that have an impact on implementation. For instance, there have been concerns raised about the lack of participation by and deliberation with local communities in determining health goals and services. Furthermore, there are major tensions as a result of the growing neoliberal dominance, which has fuelled an almost parallel discourse on privatisation and commercialisation of public goods such as health care. Indeed, the privatisation agenda is itself reflected in the SDGs on industrialisation (Goal 9). The fundamental challenge is in reconciling a system based on maximising profits with a health system that aims to achieve equity [6, 7]. In the current environment, efforts to implement UHC rest on top of a system that intrinsically promotes inequality [8]. What effect will this have on achieving UHC and further on, the ultimate success of the SDG goals?

This tension is evident in the ongoing challenges to enhance health equity among the Orang Asli, the indigenous minority population of Peninsular Malaysia. In this paper, we review some of these tensions and present the findings of a study with the Orang Asli, the aim of which is to explore what an equitable health care system looks like.

Methods

The study took an ethnographic approach to gain an understanding of health and health care practices, which are deeply embedded in the social and cultural perspectives and norms of a society [9, 10]. The goal of ethnographic research is to understand sociocultural phenomena and ultimately, to use these understandings to bring about positive change in communities or institutions [11]. The ethnographic approach required extended and intimate face-to-face in-depth interviews to learn, understand and accurately reflect the people's viewpoints and practices in their natural setting [12, 13].

The research setting

The study was conducted in Malaysia, an upper-middle income economy with a total population of 29 million in 2012 and a national Gini coefficient of 0.43 in the same

year [14]. Since independence in 1957, the Malaysian health care system has changed from a largely national health service to one with a large private sector component particularly in provisioning urban, middle class locations [15]. For rural or poorer populations, state provided health services remain the place of choice for medical treatment but for geographically isolated populations such as many indigenous communities in West and East Malaysia, state health services is often the only choice for modern health services where health authorities periodically dispatch mobile medical clinics [16].

Study population characteristics – the Semai Orang Asli

The Orang Asli are the indigenous peoples group of Peninsular Malaysia with a population of 178 197 [17] or just over 0.6% of the country's population. Orang Asli which means original people is a collective term referring to three ethnic groups – the Negrito, Senoi and Aboriginal Malay – who are further officially grouped into 18 different language sub-groups by the state. The Semai are one of the six language sub-groups of the Senoi inhabiting the central and southern parts of the state of Perak and the northwestern parts of the state of Pahang in Malaysia. They are also the largest in number making up just over half of the total Orang Asli population. The Senoi come from the Mon Khmer family which is distinct from the dominant Malay population which is Austronesian in ancestry [18].

The Semai are not strictly hunter–gatherers although they do engage in hunting and gathering. Anthropologists have grouped them nearer to being horticulturist, swiddeners and traders [19–21]. This distinction is important because first it shows there is heterogeneity among the Orang Asli and second, the resulting variation in how resources are held and owned is foundational to their health care system. Among hunter–gatherers, Endicott's [22] study of the Batek, another Orang Asli group, show an absence of individual or even communal ownership to land or its natural resources. And while there is close affinity to a specific bounded area of land, the idea of excluding others from living or working on it is alien. This suggests that a more open access regime operates for land and natural resources among the Batek. However, a nascent concept of exclusive communal ownership does exist whereby Batek from other areas are not welcomed to another's fruit orchard's pickings. Endicott does note that studies of other groups of Orang Asli hunter–gatherers [23] show greater propensity towards communal property rights as with the Semai and he postulates that this due to greater population pressure.

Sampling and data collection

A total of five Semai villages in Perak were selected for sampling sites. These were chosen for their relative degree of rurality and development in relation to modern health

care services. Two villages were in remote, rural areas and difficult to access due to poor road conditions while three others were located nearer urban areas accessible via sealed roads. Villages were purposively sampled to examine the possible effects of urbanisation and proximity to health services on the traditional commons health care system [24] and the usage of modern health care services.

Given this setting to obtain information on people, culture, land and environment, a number of approaches were used to facilitate triangulation of the data. Those included participant observation, in-depth interviews and focus group discussions. Data collection was conducted with the Semai community in the setting of their own villages. Six focus groups discussions (FGDs) and a number of in-depth interviews were held with a total number of 76 participants; with between 10 and 20 people attending each FGD. The numbers for each were difficult to control in spite of prior organisation. The variation in attendance at the FGDs arose because of the open, fluid and participative nature of village discussions. Special invitations and arrangements were made to the older members of the community to participate as knowledge about traditional systems resided more with them; nobody was excluded from participation.

The lead researcher (Wong) has a longstanding relationship with the community as a director of a non-government organisation that has worked alongside the community in poverty eradication initiatives. FGDs were preceded by lengthy interactions covering the latest news from outside the community, as well as local social events. This process helped to reinforce the relationship between the researcher and community. FGDs would then begin with an introduction covering the purpose of the discussion and the study, and the ethical guidelines ensuring that discussions were held under Chatham house rules [25]. Discussion topics across the different groups followed a guide, however, some flexibility was maintained to allow the participants to direct the level of depth and details of the various topics. The participants therefore spoke at length about the traditional health care system and issues related to the modern health care system and the effects of changing social conditions.

Field notes were recorded during unstructured interviews with various members of the community and over long periods when the lead researcher was with the community observing their usage and care of land and natural resources, their interactions and relationships with each other and their interactions with outsiders. Data from FGDs were audio recorded and transcribed by the researcher. The translations were verified by an Orang Asli assistant to confirm accuracy where discussions were conducted in the Semai language. Transcribed text was imported into nVivo [26] software and the data analysed using thematic analysis, so that we were faithful to the context and its complexity but at the same time rendering it meaningful for wider issues [27].

The broad themes identified related to the workings of the traditional health care system focusing on how land and natural resources were communally held and used, social protection and various types of medicinal plants and treatments. Participants discussed rules that governed who could use those resources and how development was affecting the resource base on which their traditional health care depended on. A second set of themes related to the participants' experiences with the modern health care system and its effects on the traditional system. Participants shared about how they understood the causes of illness and treatment as informed by state health care workers and how they coincided or diverged with their traditional views. A third set of themes centred on how indigenous knowledge was communally owned and how it was being transmitted or lost to the new generation of Orang Asli youths. Lastly, a set of themes emerged on their experiences and views of marginalisation in relation to health, health care services and development.

Results

Indigenous peoples and health care systems

Indigenous peoples traditional health care practices have been the subject of much interest and study from a local to international level [28]. Most of the interest centred around an anthropological interest in individual ethnic group's practices, or botanically, of the taxonomy and usage of medicinal plants. Here we will take a systems approach instead. In debates over its relevance to modern health care, indigenous people's health care practice is often relegated to the periphery and within a biomedical system regarded as irrational or simply wrong [29]. From an emic perspective, however, indigenous health care practices are embedded in an elaborate and coherent system that meets the key needs of its people, their community and the environment.

In describing their health system, the key concepts centred around the notion of shared commons and property rights to resources integral to the maintenance of individual health and the well-being of the community. The commons or common property regime is a social construct where a socially recognised group of people have collective or communal ownership of and exclusive use rights to a property. Individuals accepted as members into the group exercise usufruct rights in conjunction with reciprocal obligations to the accepted perimeters of usage. A property can be cultural or natural resources that are shared by all members of a community and in traditional societies these may include shared lands, water sources, public property or social protection systems [30, 31].

Most literature on the commons has revolved around natural resources [30–35] and knowledge [36–38], but a handful of writers have begun to analyse health care using a

commons perspective. Smith-Nonini and Bell [39] use this perspective to analyse tax-based and market-based national health care systems, while Lewis [40] looks at the sustainability of a health care service if it operates as a common pool resource.

Wong *et al.* [24] went further to conceptualise indigenous peoples traditional health care system as a commons health care system that features communal rights and responsibilities to natural resource usage, knowledge transmission and social protection. This arose as a result of an egalitarian social structure, the wide diffusion of power and the common property ownership regime found in most indigenous peoples societies. For them, the most important property is land and natural resources such as forest. From it comes their food, water, medicinal plants, energy and building materials for shelter foundational to maintaining physical health and livelihoods [41–44]. Many indigenous peoples have developed land and forest usage practices that protect and preserve the environment for its ecosystem functions such as erosion control and climate regulation that are essential to human health [45–47]. The land and forest forms their social and spiritual backdrop providing a community with their belief system, their individual and ethnic identity as a unique group, and their cultural practices, each contributing to the self-worth and social cohesion of the community [48, 49]. Colfer describes the negative impacts of the loss of such socio-cultural settings experienced by communities traditionally linked with their land and forest environments.

Communal ownership of land and natural resources – rules of engagement

The Semai too have a close affinity to the land and forest. They have a strong economic investment in horticulture and swiddens that require periodic tendingand so accordingly, they have a definitive way to manage the use of its resources.

Like many other indigenous peoples groups, the Semai concept of ownership of land and natural resources is as a collective. However, common property ownership did not mean open access to anyone, as was frequently misunderstood because that leads to unsustainable use of resources [32]; it is definable and exclusive to group members with a strong shared identity. The participants in the FGD at Kampung Ulu Rasau described how territoriality within communal ownership was practiced:

> We who are from Rasau definitely are of Rasau; for example from the river mouth to its head waters. Then as the trees are growing big, we shift in a circle and the graves are here (in the middle) until we come back to the start. This is what we mean when we say we are people of Rasau. For example in Pahang at the Pahang river. The tributaries near the Pahang river where there is a village. Don't you go and look for fish there. Cannot! You cannot because the village area follows the tributaries of the river. That was how it was.

By controlling access, territoriality ensured that resources were not overextracted to the detriment of the well-being of a resident group.

Communal ownership of land and natural resources meant members of the same group had equal access to these resources in their territory. As long as a group member made an effort to work the land or gather produce and had the necessary knowledge to do so, then he or she was free to access and utilise the resources within their territory [50]. The rule for Semai from other groups who wished to gather food or medicinal plants was that they had to first obtain permission from the resident group before they could take out materials. In an interview, this farmer who has his own oil palm plantation from Kampung Bota even likens it to a government policy:

> Yes, ask. Like there was once someone wanted to go into the forest to get some leaves and roots to cure his body, he discussed with my grandfather first like there is a condition. This is for outsiders. It is like there is a bit of a policy.

> Maybe different places have their own different ways. Each has their conditions.

> As the saying goes different field, different grasshopper.

The rules become more stringent with non-Semai people and the following accounts from a FGD in Kampung Ganggai suggests that past collective experience with other people groups were an influencing factor:

> This is the situation; if it is with the Malays, its better they don't know about our medicines because they will take everything and then where will we find our medicines?

> What the headman means is that between Malays and Chinese, the Chinese will take little, because they will take what they need and that's it. Malays will take bit by bit, one, two, three and before long all is gone. Our nenqriiq (ancestral domain/territory) will be finish.

Definable boundaries and rules that match local needs are two key design principles that contribute to a successful and sustainable common property regime [35] and here we see that the Semai have established in their system boundaries to their land and who can access its resources including medicinal resources.

Within these rules of engagement, the Semai traditional health care system: (1) guarantees equal access to food, shelter and medicinal resources for resident group members; (2) allows Semai from other groups to access these resources once permission is given by the resident group; and (3) restricts the entry or extractive prospect of non-Semai based on their track record with the resident group. Together, these helped to ensure for the Semai equality in access and sustainability of their resources so as to not jeopardise the well-being of a community.

Reciprocity and social obligation

In a commons health care system, the benefits of ownership for group members come with obligations. Exercising

property rights meant fulfilling social and cultural obligations such as taking care of the young, the old or the sick [50, 51]. It is these obligations that form the basis of another key feature of the commons health care system – the social protection base [24]. Among the Semai, these reciprocal social obligations helped ensure that group members had sufficient food, had access to medicines and traditional health treatment, and were taken care of when ill, very young or very old. The women in Kampung Bota participating in a FGD shared this:

> That is normal. When we are in difficulty then they also help and when they need help, we help in turn.
>
> Yes, this is our custom of helping each other out.
>
> Help. Never been a case where a person is left abandoned.

For the Semai, practicing these social obligations arose first from compassion towards fellow group members in need of help and second, awareness of the risks of sanctions expressed in forms of social or cultural taboos. Recalling how his grandmother used to care for them, an elderly man from Kampung Ulu Rasau had this to say:

> Like with meat if it is a big piece, then she will give too. The way she will apportion is like with the ribs she will apportion equally among all families even if there are four or forty households. The legs, the ears, all will get a share.
>
> Not one will be left out.
>
> If they apportion wrongly and someone doesn't get their share, in a day or two there will be a village discussion. Cannot!
>
> We call it 'penali'. It is like if you don't follow the practice it will be inauspicious.
>
> It is because if they didn't do that, it showed they had no love. Second, it means they will be damned – punishment for breaking rules.

Together, compassion and the risks of sanctions helped motivate the collective role of group members to maintain good social relations and the overall well-being of the group and its environment.

Local and small group settings

The ability for social obligations, sanctions, good relations and communal ownership to be applied effectively require a level of intimacy that was only feasible in localised and smaller group sizes. The Semai lived in relatively small communities that traditionally ranged from 5 to 15 related households. The larger settlements of over 100 households with disconnected dwellings evident today are mainly due to regroupment and resettlement schemes enforced by the state. In the regroupment scheme of Pos Tenau, the people participating in a FGD shared this:

> It is because in the past the whole village stayed in one big house so we could see everyone and take care of each other. Not like now we stay in separate houses one by one.

> My father's family together with his brothers and sisters would build one big house. One big house with many rooms. But the guest space is definitely big.
>
> Whoever is sick in the house everyone will help to take care, everyone keeps watch.

Local and small community groups provided a more effective setting for the commons health care system to operate because people knew each other better and could watch out for one another.

Communal ownership of knowledge

For the Semai, knowledge is held as collective knowledge that is shared not only among an existing group but spans generations handed down in oral form and through repeated practice. As with many indigenous groups, it is this knowledge in adaptive livelihoods, conservation, ecosystem management and appropriate governance structures that sustains and allows communities to thrive [52]. Additionally, such knowledge is not just information but is fundamental to their identity as individuals and as a community with a history [53]. This form of collective knowledge is clearly evident in matters of the health and well-being of a community in a subsistence economy. Health care knowledge has to be mutually known for reciprocity to function because if other group members do not know how to obtain and prepare medicinal plants or take care of the sick or weak, operationalising a group's social obligations becomes impossible. As such for the Semai, health care knowledge is passed on to anyone in the group who is interested irrespective of gender or age.

Like many traditional societies, Semai see health as closely linked to the spirit world and illness as the result of problems with spirits [54] or the violation of social and cultural taboos [55, 56]. Thus, the knowledge needed in traditional health care addresses the physical, socio-cultural and spiritual causes of illness. Expressed in every sampling site, knowledge is held in common, passed down orally through generations and accessible to all in a group:

> Anyone can learn so long as they are interested.
>
> We know all these from the stories of our grandparents, our ancestors passed down the knowledge.
>
> Passed down each generation.
>
> The old people showed us the different kind of leaves and at the same time taught us how to use it. We would follow what they taught.
>
> They would show which is for stomach aches, headaches, fever, diarrhea. Then those which are for curing people who are disturbed by spirits in the forest.

What we see here with the Semai is that monopolising knowledge was unacceptable and that the sharing of knowledge was part of the social obligation of group members. This egalitarian and communal way of holding knowledge

helped promote equality since there was very little knowledge not accessible to every group member thus enabling them to in turn access resources needed for their health and well-being. The modern practice of monopolising knowledge through patents and copyrights or requiring payment to share knowledge was inconceivable in a commons system.

Summary of findings

Our findings point to an integration of features found in the commons health care system that together act to ensure equity in health care services for members of a community. Communal ownership of resources guarantees group members equal access to health treatment and resources. These resources include land for dwellings and crops, natural resources for medicines, sustenance and livelihoods, and the knowledge required to use the resources to maintain good health. This guarantee however applies with the expectation that group members fulfill their social obligations to other group members. Failure to fulfill these obligations could lead to sanctions being applied for failures to reciprocate or close supervision by the community for fear of inauspicious incidents linked to cultural taboos. These features within the limits of its technology provided the access, the treatment and the aftercare of the commons health care system.

For such undertakings to succeed, the key seems to be that they needs to operate in localised and smaller community groupings as this allows each member to know each other closely and are drawn from a set of common values and perspectives enabling them to apply effective influence. The ability to establish intimate community relations becomes more difficult in large groups making reciprocal social obligations and sanctions similarly harder to operationalise except through enforcement by law. As population sizes continue to grow, the pressure of maintaining health care services in smaller community groupings will also grow with rising demand.

The concept of sharing is not limited to material property but include knowledge [57]. Our findings indicate that the knowledge commons in the commons health care system functions as: (i) a shared repository of accumulated knowledge that is open to everyone from the group; (ii) an enabler for group members to give health treatment and to operationalise reciprocal social obligations; and (iii) an equalising mechanism that enables women and younger people to participate in decision making. This does not mean that there was no difference in capabilities between different ages or gender because acquiring the knowledge depended on time, interest and diligence. It also does not mean that individuals or groups of individuals do not have specialised knowledge such as a traditional healer would but the knowledge was freely available to anyone in the group if they wanted to learn. The more time and diligence invested in acquiring the knowledge determined the person's capability.

Interestingly, modern day society is beginning to rediscover the importance of a knowledge commons in an age dominated by proprietary knowledge and this has largely been made possible by the internet [37].

Discussion

This exploration of equity and health care systems asks the question what an equitable health care system looks like. With growing inequalities in the world, it is a particularly pertinent question because current health care systems are locked into an increasingly privatised regime or over-taxed in the state owned regime. Tackling this equity issue will need more than just tweaking the existing health care systems but some fundamental rethink. While indigenous peoples in developed countries such as Australia, Canada or New Zealand have made encouraging progress in engaging with mainstream health systems and giving some legitimacy and standing to traditional health systems in what are often referred to as intercultural health services [28, 58, 59], this is not necessarily reflected with indigenous populations in low and middle-income countries such as Malaysia. The traditional health care practiced by the Semai remain a quaint practice of collecting herbs from the back garden blown over from a bygone age. To the Orang Asli, however, it continues to provide essential health care. In addition, when shown to be a coherent health care system, its equity promoting values and features parallel the underlying values of UHC and can improve its implementation by reviewing:

1. Patterns of participation and ownership of health care services

Key to success is the participation of stakeholder communities in the system. Greater community participation by citizens or the community in health care services targeted for them is widely regarded as important [60, 61] because it better addresses local needs [62–64], it promotes a sense of societal goodness and social well-being [2], and leads to more equitable power relationship between the providers and recipients of services [65].

One weakness with the rhetoric of participation in the field of development is that they are still predicated on the fact that the 'centre' often decides how far participation happens with the 'periphery' and this can result in mere tokenism [66–70] proposes that for community participation to be effective, it must be an integral part of a community's experience. The commons health care system does this by proposing that beyond the benefits or gaps of a participatory approach, communal ownership in a commons health care system helps cement equity into services and resource allocation because it is an intrinsic part of the system rather than merely an intervention introduced by outsiders. Local communities should have co-ownership of local health care services that is legally recognised and these local services could be clustered to provide ownership representation at district and national levels in order for policy

making at higher levels be influenced. Gavin Mooney [71] postulated about the need for a 'constitution' where the values and preferences of local communities were elicited and used to guide decision-making of policy makers and public officials in order for health services to be inclusive of local needs. Having local communities co-own services would go a step further to ensure that community values and preferences do not just guide decision-making but have a measure of authority to see to its implementation.

2. Health administration into localised and smaller groupings

The importance of trustworthy relationships between health provider, patients and communities is crucial for co-ownership and mutual aid to function as it provides a safe environment where accurate information and proper health treatment can be exchanged. This is true for the human health provider such as doctors or nurses as well as for an organisational system where waiting times or continuity in care contribute to or undermine such relationships [72]. In the modern health care sector, small localised groupings such as through the family physician, the general practitioner or the local primary care centre had traditionally been the environment where close relationships with patients and communities were fostered.

This has been compromised by the incessant drive towards perceived efficiencies of a market-driven system. Doctor–patient relationships have increasingly come under pressure when neo-liberal policies are translated into the health care sector. For example, a Commonwealth survey found that in managed care contracts where incentives were provided for the greatest number of patients with reduced use of resources, physicians and patients reported a decline in satisfaction due to time-related pressures [73]. Studies indicate that longer time spent with patients mean physicians are able to obtain more accurate information of a patient's health conditions [74–76], have a greater likelihood of detecting psychosocial health conditions [77] and are able to do more in terms of health education [74, 78].

Reviving these relationships means a return to small localised groupings with a people-centred environment is an essential requisite for an equity-based system to succeed.

3. Approaches to transmitting health knowledge as a commons

Access to health knowledge is increasingly being challenged. This comes firstly from the emphasis on the commercialisation of knowledge by private industries and the restriction of information by the state that is resulting in the enclosure of the knowledge commons [79–83]. Inspired by and modelled after collective action in commons based systems, some libraries, universities, non-profit publishers and professional societies collaborate to counter this new form of enclosure and produce, preserve, share,

disseminate and act as repositories for information to ensure there is equitable access [84].

Secondly, the increasing complexity of medical knowledge and health training is putting it beyond the reach of people especially marginalised groups. This presents a huge challenge because the mastering of such complex knowledge requires extensive and expensive training only a select few would or could pursue. A possible solution is to this is via the use of information technology and the internet to make it accessible to people. Computerised guidance and decision support is now ubiquitous in the developed world allowing people who have no formal medical training to be knowledgeable about health and disease, and participate in decision-making over their own health with health providers [85]. The challenge now is to make it available and accessible to populations' particularly marginalised groups such as indigenous peoples where access to basic education and information technology is often as poor as access to basic health care. This again reinforces the case about the interconnectedness of addressing health, education, poverty and economic development in the SDGs.

Conclusion

The concept of UHC plays a fundamentally important role in promoting equitable access to health. Endorsed by WHO since 2005, it is now primed for a leading role in meeting SDG targets [86]. While there is consensus on its importance, there seems to be little consensus on anything else about it [87]. Since the gap between the concept of UHC and operationalising it depends on how it is defined, the current global emphasis is clearly narrowed down to health care financing followed by clinical health services [88]. This is not surprising given that the implementation of UHC is not independent of the health system it is in. In an era of privatisation, private health care services have increasingly replaced public services as the main provider of health care to populations and predictably, its emphasis has been in financing, and biomedical interventions and research [89].

Privatisation in health care is flourishing in the wake of neoliberal dominance in the economic and political structures of global and national governance [89, 90]. It is a global trajectory that is matched by developments in the Malaysian health care sector over the past 30 years where the Orang Asli find themselves [15]. Continuing to implement UHC in a health system that is based on a political and economic system that intrinsically promotes inequality will inevitably jeopardise the SDG goal to achieve health equity.

On the other hand, the commons health care system displayed by indigenous peoples in this study of the Semai offers a look at a system that promotes equality. It is grounded in the concept of a shared commons that has key features important to ensure equitable access to health resources and promotes reciprocal obligations that provide social protection for the sick and weak in a community. We

argue that the commons health care system is conceptually far closer to UHC than the dominant private health system and with its features provides a practical basis from which UHC can be better implemented.

Ultimately, the inclusion of marginalised communities in decision making, ownership and implementation of UHC will be critical if it is to really benefit those whom universal coverage is primarily meant for. The statements on the right to health of indigenous peoples should be reflected not only in the multitude of existing declarations and mechanisms at the international level but right through into district and local governance levels particularly in less developed and developing countries. Without this, UHC will end up disproportionately benefitting dominant and wealthier groups [87, 88] rather than marginalised communities like indigenous peoples and the promise of the SDGs will remain rhetorical.

Acknowledgements

Declaration of Interest

None.

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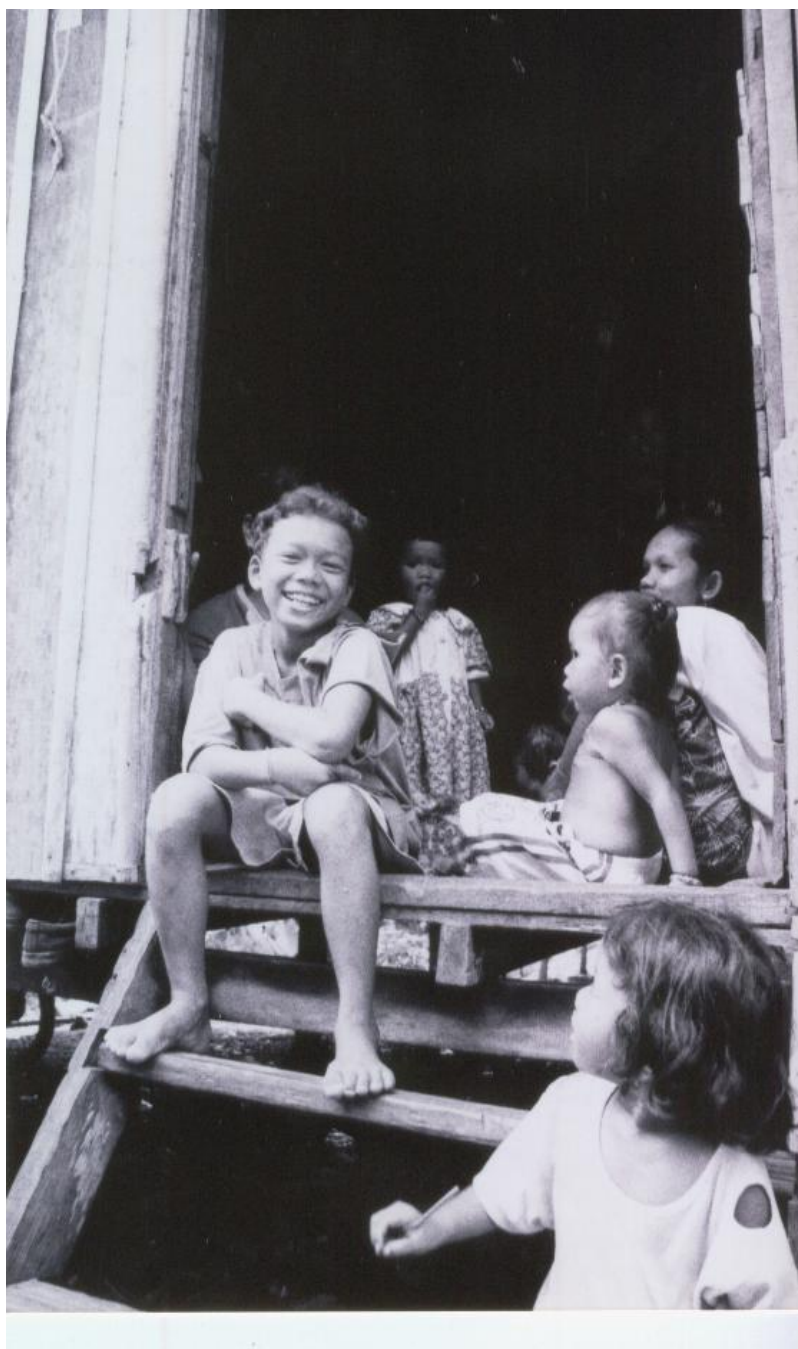
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7.1 CHAPTER CONCLUSION

Notwithstanding the limits of its technologies, the Commons health care system has the key attributes of equity, multi-dimensionalism and sustainability that are presenting an immense challenge for the mainstream health care systems in providing health services to national populations, let alone to marginalised groups like indigenous peoples. To be sure, it cannot function in isolation or on its own in the context of the world today. A way forward will be explored in the next chapter on how such an approach and forms of collaboration can be operationalised in today's context so that the health and well-being of the *Orang Asli* is improved.

CHAPTER 8:

OPERATIONALISING THE COMMONS HEALTH SYSTEM – A WAY FORWARD

Health for All Indigenous Peoples (Photo credit: WYS)

At this point, let me recap and synchronise the recommendations put forward in the preceding chapters. The sum of recommendations are:

1. For the state to recognise and protect the land rights of indigenous peoples; preserve the natural environment of those lands as they supplied crucial livelihood resources and medicines which sustained indigenous communities.

2. For indigenous history, culture and knowledge to be preserved and indigenous children be schooled in it so that it is not lost to future generations.

3. For health practitioners and policymakers to be schooled in indigenous health systes and cultural sensitivity so that they are able to contextualise services.

4. For indigenous health knowledge to be protected from exploitative use by state or private actors.

5. For indigenous participation in decision-making on health policies, health service provision, land and natural resource development that affects them according to the principles of free, prior and informed consent (FPIC).

6. For localised indigenous ownership or co-ownership of health systems and health services that are catering for their health needs.

7. For the setup of independent monitoring and accountability structures over national health systems to ensure quality of services and compliance according to international agreements such as the UDHR, UNDRIP, SDG and others.

Overall, these recommendations seek to protect the natural environment and indigenous land rights; maintain the indigenous health knowledge base that enabled

common access and utility; preserve the social and economic cohesion of the community in a time of major transitions; and advocate for the meaningful participation of the community in policy and practice that affected their health.

Most of these recommendations are not new or unknown as they have been put forward in various forums before, and in some places implemented with positive outcomes. For example in Australia, strategies are employed to embed cultural respect in health practitioners, services and systems towards Aboriginal and Torres Straits Islanders (T. Freeman et al., 2014). In Canada, the Inuulitsivik Midwifery service is a successful example of local indigenous ownership and integration of maternal health services (Wagner, Osepchook, Harney, Crosbie, & Tulugak, 2012). However, many of these innovative adoptions are in developed countries with far fewer uptakes in developing and less-developed countries either because there are fewer resources available or there is not enough political will to change the narrative. Is there a way to facilitate greater adoption and expansion? Although this discussion and recommendations are specific to Malaysia and the *Orang Asli*, various points are relevant to other countries because of the similar struggles faced by indigenous populations and the similar moulds in which states operate.

Globally, the use of public-private partnerships (PPP) in infrastructure development and some types of public services including public health care is becoming more widespread (World Bank, 2018) (Roehrich, Lewis, & George, 2014). In Malaysia, this trend for PPPs has been growing ever since the first wave of privatisation began with some key public sector services in the 1980s (Rashid, Hasan, & Sharkawi, 2016) including the privatisation of some ancillary services in the public health sector. However, despite years of experience and the increasing number of such ventures, the

consensus as to whether PPPs can really deliver the expected benefits of improved efficiency and the transfer of risks from public sector finances is still uncertain (Barlow, Roehrich, & Wright, 2013) (Sundaram, 2018) (H. Hashim, Ani, & Ismail, 2017).

Although the advantages and disadvantages of PPPs to deliver public services is a topic for more research and debate, this thesis will not delve further into that but instead discuss an alternative arrangement based on what has been gleaned from the Commons health system. The proposition is that in leveraging on partnerships to take advantage of the strengths of one party, can a public-commons partnership or even a private-commons partnership utilise its combined strengths to deliver benefits that hitherto eludes the singular public or private sector? As common property groups are identifiable institutional units, they can be formed into legal entities such as producer or user associations, or co-operatives to enter into partnerships. If this can be operationalised, the Commons health system offers a way forward to close the health disparity gap affecting indigenous peoples because based on its key features; it can contribute in areas that public and private property regimes are weak in.

8.1 PUBLIC-COMMONS PARTNERSHIP (PUCP) AND PRIVATE-COMMONS PARTNERSHIP (PRCP)

8.1.1 CHANGING THE MINDSET

For a PuCP or PrCP to even be conceived of, the first thing that is required is that the mindset of state and private actors has to change. This may sound incredulous given that so often it is state and private actors who deem the *Orang Asli* as ignorant or backward and in need of a mindset change. This attitude is epitomised in its report to the UN Human Rights Council when the Malaysian government wrote:

The most significant challenge which besets Malaysia is lifting indigenous groups from *backwardness* (italics added for emphasis) and assimilating them into mainstream society (United Nations, 2008b).

Yet, knowledge and capability is never a monopoly of any one group and studies show that indigenous peoples had various sophisticated and comprehensive socio-economic and environmental management systems alongside the system for governing health care. For example, studies show that the flora and fauna of almost the entire continent of Australia prior to 1788 was heavily shaped and managed by the Aborigines through a sophisticated system of fire usage and terraforming that in some aspects even surpassed modern agriculture land management systems (Gammage, 2012). Similarly, Native American use of controlled burning before European colonisation was widespread in North America as part of a multitude of diverse traditional systems of sustainable land and resource management according to different groups and locations (Kay, 2000) (Dockry & Hoagland, 2017). In Lake Chini, a natural freshwater lake, the *Orang Asli* used fire to control the marsh vegetation from choking up the lake and with it the ecosystem. When the Malaysian National Park authorities banned the traditional use of fire, the lake was soon choked by vegetation that hindered the flow of water and eventually affected fish stocks and navigation of the waterways.

Colonialism caused a great decline in the use of these traditional systems as indigenous populations were decimated and traditional practices banned. They were seen as incompatible with modern day science and remain largely under-appreciated by the dominant purveyors of knowledge and industry. Only in recent times is there a growing appreciation of indigenous knowledge and traditional practices particularly in an age of environmental crisis and the pressing need for environmentally sustainable modes of

development. Such appreciation has yet to happen in the circles of policymakers and practitioners in a country like Malaysia. Greater exposure and knowledge of indigenous systems could help change this mindset.

Second, a PuCP/PrCP should capitalise on the unique contributions of local communally managed and communally held natural resources and services. In standard PPPs, the strategy is to leverage on the strengths of each sector. As the preceding chapters have shown, the strengths of the Commons systems are in prioritising equity, social protection and environmental sustainability which could be brought into a partnership. If the Malaysian Public health system were to collaborate with the *Orang Asli* Commons health system to improve the well-being of the community, we could look forward to the following theoretical scenerio:

8.1.2 TACKLING THE SOCIAL DETERMINANTS OF HEALTH

Since gaining independence in 1957, the bulk of health services in Malaysia have been delivered by the Ministry of Health. Its stated mission is to ensure a high quality health system that is customer centred, equitable, affordable, efficient, technologically appropriate, environmentally adaptable and innovative. Its organisational structure is divided into Administration, Public Health, Medical, Research and Technical Support, Dental Health, Pharmacy Services, Safety and Food Quality, and Finance (Ministry of Health Malaysia, 2019). As the government's primary vehicle for health, the Ministry of Health has been able to deliver affordable and near universal health care to the population at a relatively modest outlay of total public expenditure (Ramesh, 2007) Notable achievements include the increased life expectancy from 55.8 years in 1957 (Hirschman, 1980) to 75 in 2018 (Department of Statistics Malaysia, 2018); the decline

in the infant mortality rate from 75.5 per 1000 livebirths at independence (C. Hashim, 2010) to 7.1 per 1000 livebirths in 2016 (Knoema, 2017).

The goal to improve population health would be hard to achieve if only restricted to meeting the medical needs of health as it is well established that good health and well-being is unattainable without addressing the social determinants of health (WHO, 2008) (Wilkinson & Marmot, 2003). Since independence, Malaysia has placed emphasis on addressing poverty and education in its national population. Official poverty rates show it declined from 51.2% in 1957 (Ikemoto, 1985) to 0.4% in 2016 (Department of Statistics Malaysia, 2017) while in education, the country had achieved a 98.6% primary school enrolment rate in 2017 (UNESCO, 2016). However, the stark socio-economic disparities among the *Orang Asli* show that the gains for the national population have not resulted in a similar gain for the *Orang Asli*. Tackling health and the social determinants of health among the *Orang Asli* requires an approach that fits into the community's context.

8.1.3 ENVIRONMENTAL SUSTAINABILITY

For the *Orang Asli* social determinants context, this means their sources of food, shelter, livelihood, social and psychological support rest on the land, the natural environment and in the social cohesion of the community. These matters would fall out of the purview of the Public health system by itself but in a PuCP, the Commons health system would already provide for the protection and sustainable use of land and natural resources at no additional cost to the Public health system or to the state. All the state has to do is to recognise and protect the *Orang Asli's* rights to their traditional lands. One argument from the state would be that according such rights to the *Orang Asli* would deprive the state of revenue from the extraction of natural resources or the

opportunity cost of not exploiting the land. However, my counter argument is that by not deforesting the land, the state would be substantially more able to achieve its carbon emissions target of a 45% reduction by 2030 that it committed to in the Paris Climate Agreement (Hamid, 2017). Studies show that avoided deforestation is a low cost solution that can contribute to over 40% of total carbon emissions reductions and offers the greatest potential to mitigate climate change in the shortest timeframe at a significantly lower cost compared with other measures (Minnemeyer, Harris, & Payne, 2017) (Kindermann et al., 2008). The loss in revenue for the state would be more than made up for by the savings from other more costly mitigation solutions if they were employed.

8.1.4 SOCIAL PROTECTION AND SOCIAL COHESION

In public and private health systems, the discourse on social protection focuses mainly on social health insurance. Other key components of social protection such as labour market interventions, social safety nets and social risk mitigation are often not integrated nor acting in concert with the health system. State provided and state funded social protection schemes designed for the national population has limited application in the *Orang Asli* context because most are self-employed, underemployed or have irregular wage employment while the uptake of voluntary insurance from private insurance markets face an even larger barrier due to poverty and lack of credit. As it stands, the state has not adapted to the local context and its interventions are limited to providing piecemeal forms of welfare and medical services to those with illnesses.

Therein is a case to broaden social protection beyond just public or private providers to add a non-formal system that is the Commons health system to plug the gaps. A PuCP would bring into the partnership a social protection system that has been applied by the

Orang Asli for generations providing mutual and reciprocal care and access to resources for members of a community. It would secure a pre-existing entitlement to a bundle of food and resources needed for the well-being of people. It would provide the vital livelihood, social and psychological support for those who are ill, and for the community as a whole, it would reduce the transaction cost of the transition to a new and unfamiliar formal state designed social protection regime.

Communal and reciprocal care the basis for social protection (Photo credit: Wang Tak)

For social protection in the *Orang Asli* Commons health system to function, the social cohesion of the community must remain intact. Herein lays the challenge as the social, economic, cultural and health transitions affecting the *Orang Asli* are causing major

disruptions to their age old practices and traditions. For example, traditional indigenous knowledge is being lost as children receive their education in formal school settings that do not include indigenous knowledge in its syllabus. Previously, such knowledge was passed down through the generations when children follow as apprentices to their parents. From here they learnt sustainable usage of the environment, sharing of resources, mutual caregiving for members of a community, social roles and responsibilities according to age and gender, family and community customs, and local governance rules. Adding to the disruption, the subsistence economy has largely been supplanted by the monetary economy resulting in the commodification of resources and even social relationships. The stress on the social cohesion of the people is vividly expressed during one of the focus group discussions:

- *Look at the plants in the forest, our young people don't know them. They know the fruits in the shop like apples, oranges, bananas. It is because they seldom follow their parents into the forest and second, they don't ask.*

- *About going to the forest, they never do, don't hope. If they went to the forest, they will get lost.*

- *They only go into the forest if they are searching for money. They know agarwood, petai, durian, pangolin. What has a price, they know. What has no price, they don't know. Like with the herbs that we talked about, if it has a price then they will definitely know. As long as they get money, that is enough.*

- *I was really saddened when I saw the old headman of Kg. Cluny over there. He was not my father but like a father to me – Cukup was his name. I went there in the evening once and the rice he was eating was left over for many days – watery, gone bad, and he was eating it. I cried when I saw that. He had children and*

grandchildren. He followed his children but that was the rice he had to eat. The rice was left for don't know how many days. This happened not too long ago. It is a recent story. Where were his children? It is like he didn't have children. Like he didn't get married. Better he didn't get married last time. I felt pity for him. That is why the old people in the past were more at ease.

- *The world is crowded now. We are exposed to all kinds of influence.*

According to the eminent economist Amartya Sen, this transition phase is when a community is highly vulnerable because their locally based systems that guaranteed them entitlements are disrupted by modernisation but there is yet to be put in place an effective social security arrangement to replace what is being lost (Sen, 1981). Protecting and maintaining the Commons health system would mitigate the effects of a disruption by guaranteeing access to entitlements, reduce the transaction cost for the state in setting up an alternative system and for the community to adapt into it, and safeguard the social cohesion of the *Orang Asli* in the face of – in their own words, *"all kinds of influence."*

8.1.5 KNOWLEDGE EQUITY

In the World Health Organisation report on the social determinants of health, one of the key recommendations to reduce health inequities was to address the inequitable distribution of power, money and resources (WHO, 2008). In the globalised and digital age of today, knowledge and information constitute major incubators of power, money and resources. From the Industrial Revolution in the mid-18th century to what is now known as the era of the Global Knowledge Economy, economic growth is transitioning from manufacturing to being largely driven by the ability of countries, companies or individuals to acquire, utilise, develop and monetise knowledge and information to their

advantage (C. Freeman & Louçã, 2002) (Neef, Siesfeld, & Cefola, 1998). Hence, knowledge and its ensuing technological innovations are often treated as uniform to allow for its application in globalised markets, propriety in order to fend off competitors, and a commodity to rake in the profits.

Indigenous knowledge is local and communal (Photo credit: Bea Yates)

This is a significantly different orientation compared to indigenous knowledge which is contextual, communal and free whose aim is to solve practical matters in daily living. It is contextual because it arises from the peculiarities of the place to describe and solve local issues there. It is communal because success relies on the collective observations, practices and experimentations of a community that no individual can amass alone. It is free because each member depends on the others to reciprocate when the need arises.

Combined, these ensured equitable access to knowledge and the practical technological outcomes that helped the people live and thrive in a particular environment. However, because the nature of indigenous knowledge is local, oral and non-competitive, its growth cannot match that of modern approaches to knowledge accumulation and innovation, and with the digital age, that gap is widening further due to both the lack of access and the loss of access to information and communication technologies (Radoll & Hunter, 2018).

The knowledge commons feature in the Commons health system guaranteed equitable access to health knowledge but its capacity for technological innovation has limitations because indigenous knowledge focuses on practical success and does not delve deeply into cause and effect unlike modern scientific enquiry (Scott, 1999). This is illustrated in how this group of *Orang Asli* describe the way they analyse the efficacy of a medicine.

- *Traditional medicine can work, town medicine can work.*

- *If it is precise to the illness, it will definitely work.*

- *The illness, if it is precise to the illness then it will go away too. If it doesn't work then it's possibly an illness we don't know.*

- *Actually we do not know whether a traditional medicine is precise but what we see is that the illness goes away. If after using the medicine it does not goes away then possibly the medicine is not precise to the illness. If it doesn't work probably there is something wrong that we don't know about.*

This limitation can be overcome in a health systems partnership where a PuCP or a PrCP can help plug the knowledge and technology gaps in the traditional system. The advances and innovations in present day health knowledge and technology from public

and private health providers would go a long way to address health problems among the *Orang Asli*. Perhaps the more challenging task is the question of how the *Orang Asli* can gain access to the appropriate knowledge and technology. In the *Orang Asli's* Commons health system, knowledge and skill is openly accessible to any member of the community regardless of gender so long as the individual has the interest to pursue it. It is passed on from generation to generation via communal learning and practical apprenticeship. While there is some differentiation in knowledge and skills between men and women because of the different gender roles in a group, the communal nature of its learning and application helps ensure the benefits are accessible to everyone. Harnessing the best knowledge feature of each system for the purpose of reducing health inequities brings about one important adaptation to the way health services are delivered to the Orang Asli, and has a fundamental implication for the way society holds knowledge.

In the former, rather than reacting to ill health and crisis when they happen or to providing piecemeal charity health checks, public or private systems in a partnership with a commons system can transfer appropriate knowledge, skills and technologies of modern health care provisioning into the *Orang Asli* ways of learning and apprenticeship so that *Orang Asli* providers of health care such as traditional birth attendants, herbalist and parents are able to provide modern health care alongside traditional health services. Already being done at varying levels of integration in some countries with large indigenous populations, this would bring the best of modern health services to the community in a setting that is familiar and embraced by them. It is also in line with the recommendations I have made at various points throughout this thesis that indigenous peoples' participation and ownership in decision-making and

implementation of services is a vital component to addressing local needs, improving social well-being and equalising power relationships between providers and users.

The latter speaks to the widening trend of enclosure that first began with land but now affects more sectors including the health sector. The earliest forms of human society were small to medium sized bands of indigenous peoples organised around family-based groups. This form of organisation has not changed much with many indigenous people still retaining similar societal features. As described in an earlier chapter, despite the heterogeneity of communities, some common features are an egalitarian social structure, communally held land and natural resources, mutual sharing of knowledge and skills, and an ethic towards sustainable use of the natural environment. Over time, some populations grew much larger and re-organised into more complex state societies but losing many of the earlier societal features in the process. Despite this, there were still ample areas of communal land where peasants or even landless peasants could cultivate crops, graze their livestock or harvest raw materials for their livelihood needs although this was always contested by the ruling classes. This began to change dramatically from the 18th Century onwards beginning in England and Wales when the enclosure of commons land accelerated with successive Parliamentary Acts on enclosure. The historian E.P. Thompson notes that from 1760 to 1820, wholesale enclosure in village after village robbed the peasants of their commons rights and left them without livelihoods, ultimately forcing countless many to migrate into cities in search of jobs (Thompson, 1963). Capitalism stoked the enclosures with the commodification of land and labour while the Industrial Revolution reaped the aftermaths.

Land enclosures of what is left of the commons continue today and indigenous peoples' land held communally is a prime target throughout the world. In Malaysia alone, the Malaysian Human Rights Commission reported that in 2013, there were 892 land rights cases between indigenous peoples versus the state, commercial plantations, land development schemes or logging concessions (SUHAKAM, 2013). Ominously, enclosure has spread from land into the knowledge sector as knowledge and information became increasingly valuable commodities that are monetised for profit (Boyle, 2003). The consequences of the knowledge enclosure can lead to increased socio-economic inequality, the stifling of scientific enquiry for public good, and the dominance of exclusive information legislation and technology (De Filippi & Vieira, 2014) (Adair, 2010) (Hess & Ostrom, 2006).

To safeguard against a slide towards such an enclosure in the indigenous health sector, a partnership in a PuCP or PrCP would give the *Orang Asli de jure* rights on the control, collection, usage and dissemination of health information and knowledge. Rather than being mere sources of information or passive recipients of services as they often are now, the *Orang Asli* would be co-owners of information, co-designers of research, co-workers of projects and co-beneficiaries of outcomes. With this capacity, they would be able to monitor and strengthen the principle commitment of open access to a knowledge commons so that whether it is indigenous knowledge or modern health knowledge, intellectual property and the sharing of knowledge is oriented towards common good rather than being monopolistic. This will help bridge the knowledge inequities faced by indigenous peoples.

CHAPTER 9:

CONCLUSION

"Do not trespass into our customary land, Pos Bersih Orang Asli village" (Photo credit: WYS)

I began this thesis with the research objective to find evidence in indigenous health systems for my conceptual framework of the Commons health system. This I was able to do utilising the *Orang Asli's* traditional health care system to show that it there are three key features that anchor a Commons health system – the natural resource base, the knowledge base and the social protection base. Within the limits of its technology, this health system sustained the *Orang Asli* for generations and allowed them to thrive in challenging environments.

Today however, the *Orang Asli* face glaring health disparities despite having access to modern health care. This was the second research objective of the thesis which was to investigate the impacts of socio-economic transition on the health of the community. As the traditional commons-based health system disintegrated faced with modernity and development, the replacing modern health system has barely been able to cope with the health of the community.

The current models of public and private health care have plateaued in closing the health gap for the indigenous and solutions are urgently need. Recommending some solutions was the final research objective and this was detailed in the previous chapter. It is my hope that the outcomes from this research with the *Orang Asli* can help inform and give impetus to efforts all over the world that seek to eradicate the global health disparity faced by indigenous populations.

9.1 CURRENT CHALLENGES AMID PROGRESS

For far too long have indigenous peoples faced oppression and marginalisation from both Euro-American and non-European colonisation that had devastating effects on them. Those effects reverberate till today in the economic, education and health disparities of indigenous peoples globally. Some countries and civil society have been

making concerted efforts to address the disparities but a lot still needs to be done and not enough is being done globally. The challenges cut across developed countries and developing countries. On February 14, 2019, Australia published the 'Closing the Gap Report 2019' that showed progress on certain fronts such as early childhood education but that persistent gaps remained particularly in health disparities where child mortality and life expectancy continued to lag behind the dominant population (Commonwealth of Australia, 2019). This thesis has zoomed in on the situation in Malaysia, a developing country where the state has to do far more to address the disparities. The failure of the state in developed and developing countries to adequately address the disparities and its underlying issues of poverty and land rights has propelled indigenous peoples the world over to take matters into their own hands. The movement has gained momentum since the 1960s and a milestone was reached in 2007 with the global adoption of the United Nations Declaration on the Rights of Indigenous Peoples or UNDRIP.

Still, the challenges remain and as the awareness and support for indigenous rights expands, there is also a concerted push back from groups who gained from their invisibility and marginalisation. The intense national debate over the contested meaning of Australia Day between those who are of immigrant descent and those who are indigenous to the land; the denigration of Native American rights with the resurgence of racism in a Trump America; or the plagiarism of indigenous identity by the dominant group in Malaysia strongly suggests that the quest for indigenous equity and solutions to the persistent disparities require some resolute rediscovering, reimagining and resetting in the concerns of the state and indigenous populations. That has been the quest of this thesis.

9.2 REDISCOVER – REIMAGINE – RESET

First, to rediscover indigenous systems like what this study has strived to accomplish with *Orang Asli* health. Indigenous health systems are cohesive and comprehensive systems based on the Commons that maintained equitable access to land, natural resources, knowledge and social protection thus sustaining within the limits of its medical technology the well-being of indigenous populations for generations. Rediscovering this Commons system that is gradually being lost due to social, economic and cultural transitions will help protect and promote its best practices and features thereby contributing to the well-being of the people.

Second, to reimagine how health provisioning is administered to the *Orang Asli* and to indigenous peoples in general. In the past, mainstream health provisioning improved indigenous health considerably but has since plateaued and reached an impasse to close the health disparity gap. Beyond the standard delivery of medical services, global acknowledgement of the importance of the social determinants of health and the right to health has widened our viewpoints about the linkages with health, human society and the environment. However, addressing these in an integrated way has proved to be challenging for mainstream health systems because of the limitations of its fundamental properties. Reimagining indigenous health provisioning as public, private and commons health systems collaborating in partnership by leveraging their different strengths can contribute towards achieving the shared goal of better health for indigenous peoples.

Lastly, to push for a reset in our relationship with the *Orang Asli* and indigenous peoples as a whole. State and private actors have for far too long acted as colonisers of indigenous peoples. Dominance, dependency and dispossession have been the legacy of that relationship starkly seen in the poor health of the community. On the shrinking

earth we live on where shared challenges like climate change and growing inequality have global footprints, gambling the future away by maintaining the status quo will eventually be detrimental to all. Shared solutions that emphasise equity, effectiveness and sustainability are needed and the Commons health system together with other indigenous systems that teach equitable and sustainable living have much to contribute to the global community today. A handful of countries have begun the reset process by apologising for historical wrongs to their indigenous populations. Malaysia is not one of them yet. Resetting the relationship to one where justice, equality and the well-being of indigenous peoples undergirds policy and practice then is the right thing to do.

Thank you and bye! (Photo credit: WYS)

POSTSCRIPT

Launched by the Prime Minister of Malaysia, the National Orang Asli Convention organised by the new government on April 22, 2019 to map out ways to address disparities faced by the community (Photo credit: Ooi Kiah Hui)

As I was completing the writing of this thesis, major developments concerning some of the key issues impacting the *Orang Asli* discussed here were taking place that I believe highlights and add urgency to the need for a reset in the relationship between indigenous peoples and the state. This I have added here as a postscript to the thesis.

On May 9, 2018, Malaysians went to the polls for the 14th General Elections and for the first time since the country gained independence in 1957, a new opposition coalition was voted into government ousting the 61-year reign of the ruling National Alliance. Amongst the many who voted for change was a growing number of *Orang Asli* who were frustrated by the lack of recognition of their customary rights, particularly towards land and the continuing marginalisation of the community. In the years leading up to the

General Elections, community activists had joined a broader civil society coalition advocating on issues of corruption, human rights abuses and electoral reform besides *Orang Asli* rights.

When the change in government actually took place, there was an expectation in civil society that the long-standing disparities and concerns of the *Orang Asli* would receive serious attention from the new administration with due participation from the community. However, as the months went by, customary land encroachment resumed threatening various villages, while efforts to address socio-economic disparities mirrored the indifferent attempts of the previous government to the point that it prompted the retired Head of Paediatric Department, Hospital Raja Permaisuri Bainun Ipoh, Perak to publish an open letter in major national newspapers on April 22, 2019 – the same day that the government was holding a National *Orang Asli* Convention to map out strategies to address the disparities faced by the *Orang Asli*. In the letter (Amar-Singh, 2019), he highlights the issue of malnutrition affecting *Orang Asli* children stating that:

- Between 70-80% of *Orang Asli* children were underweight or stunted in height by the time they reached school-going age.
- Malnutrition rates were increasing in *Orang Asli* children due to extensive loss of habitat from logging and river siltation that degraded traditional protein sources.
- *Orang Asli* child mortality was 6-8 times higher than other Malaysians and could be higher due to inadequate documentation.
- Government programmes to resettle the *Orang Asli* into planned villages removes them from their sources of food security leading to impoverishment and higher mortality.

- Inadequate amounts of public funds were being directed towards addressing malnutrition and socio-economic disparities.

He ends with a plea for immediate government action to prevent further loss of life among *Orang Asli* children.

Then on May 16, 2019, after three months blockading a timber company from removing logs from their customary land and polluting the water source, the Perak State government sent in enforcement personnel to dismantle the blockade setup by the villagers of Kampong Tasik Cunex (Malaysiakini, 2019). The government insisted that the land was not *Orang Asli* customary land as it had not been gazetted by the state hence logging was permitted. Immediately after the blockade was dismantled, the timber lorries moved in and extracted the logs. The degradation of this community's natural resource base will eventually lead to more malnutrition and poor health among the *Orang Asli*.

Across the country, many other *Orang Asli* communities continue to be threatened with the loss of land and forests. The loss of these natural resources will lead to the eventual loss of the Commons health system and further impoverish the health and well-being of the *Orang Asli*. For the new Malaysian government to seriously address the long-standing disparities that have been detrimental to the well-being of the *Orang Asli*, it has to reset and change the way it relates to the community and work in partnership with them. Like the previous government, whether it eventually chooses that path is a journey yet to be taken.

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