The Indonesianization of Social Medicine

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Abstract

The purpose of social medicine, which began in Europe as an academic discipline during the Second World War, was to investigate the correlation between specific factors such as age, gender, race, heredity, economic circumstances, domestic environment, occupation and nutrition on health. Almost a decade later, Indonesian physicians applied social medicine ideas to promote public health in a country characterized by weak state intervention. These physicians eschewed the narrow correlation between poverty and ill health but reinterpreted social medicine within the Indonesian social context with its entrenched patriarchal system and cultural preferences. The wider theme explored in this article concerns the emergence of social medicine in twentieth-century Indonesia as a critical reaction to Dutch public health policies. The article examines the partnership between Indonesian physicians and the post-colonial state and their shared vision on state-guided social medicine, but does not explore why social medicine failed to usher in a transformation of the nation's health system.

Keywords: *Social medicine, Pembangunan, nutrition, famine*

Introduction

Social medicine began as an academic discipline in Europe at the time of the Second World War with the aim to investigate the correlation between specific factors such as age, gender, race, heredity, economic circumstances, domestic environment, occupation, nutrition, and environment on health and disease (Ryle, 1948: 9-12). Nearly a decade later, Indonesian physicians such as Raden Mochtar applied social medicine ideas to promote public health in a country where the public health system was under-resourced and marked by weak state intervention. These physicians eschewed the narrow correlation between poverty and ill health and reinterpreted social medicine within the Indonesian context with its emphasis on family stability, a patriarchal system, and cultural choices pertaining to food-affected health outcomes. This article depicts the emergence of social medicine in twentieth-century Indonesia as a critical reaction to Dutch public health policies. The article contains three sections. The first section offers a chronological account of social medicine in the late-colonial period and during the Indonesian Revolution. The second section surveys the Indonesian discourse in social medicine immediately after independence. The third and final section devotes attention to the specific problem of population growth and child health.

Colonial medicine and decolonization

Medical initiatives in the Netherlands Indies before the nineteenth century were limited to curative care, catering primarily to the European population in major cities such as Batavia, Semarang and Surabaya. However by the nineteenth century, the colonial authorities introduced smallpox vaccination as a preventive public health measure. The Civil Medical Service of the Netherlands Indies (renamed Public Health Service in 1925) had launched disease eradication campaigns against malaria, yaws, hookworm and plague and was entrusted with the task of implementing quarantine, intensive hygiene schemes, medical research, the training of doctors and midwives although anti-plague measures were resented by the indigenous population. This section discusses the dynamic nature of colonial public health policy in the Netherlands Indies, the unpopularity of health measures such as vaccination, popular resistance, and the way health became absorbed in the anti-colonial struggle. In the process, colonial public health measures were subject to nationalist criticism.

Between 1912 and 1940, the portion of the public budget in the Netherlands Indies allocated to health service ranged between 2.5 and 5 per cent but showed a declining trend for much of the period as health received only about half the amount spent on police and less than one-ninth of the expenditure on defence (Abeyasekare, in: Chandler & Ricklefs [eds], 1986: 4). Health was an issue on the nationalist agenda. The Volksraad (People's Council) was created as an advisory body by the colonial government in 1918; it fell under the jurisdiction of the Governor-General and the Dutch parliament. The Volksraad was not a legislative body and not all members of the Volksraad were democratically elected. A few prominent Indonesian nationalists, especially physicians, were represented in this advisory body, for instance Abdul Rasjid. The Volksraad served as a platform for the nationalists to criticize colonial health measures that would later serve as a blueprint for health policies during the Soekarno era. A major bone of contention between the Indonesian nationalists and the Health Service in the Volksraad was the administration of the anti-plague campaign which involved both puncturing the spleen of corpses to detect disease and rat-proofing of houses. The former action was held by many Muslims to violate Islamic injunctions related to the sanctity of the body after death (Abeyasekare, in: Chandler & Ricklefs [eds], 1986: 9). The Indonesian members of the Volksraad campaigned to make the Health Service more responsive to the needs of the colony. I will briefly examine the contribution of Abdul Firman gelar Maharadja Soangkoepon (Volksraad delegate from North Sumatra) and the nationalist physician Abdul Rasjid who envisioned an Indonesian alternative to the dominant colonial health model that in the 1930s focused largely on prevention of infectious diseases.

Maharadja Soangkoepon was critical of the high cost of health care in the Netherlands Indies which left the poorer section of the Indies population in the rural areas without access to Western medicine (Maharadja Soangkoepon &Abdul Rasjid, 1938: 156-60). He encouraged individual initiatives to promote hygiene and sanitation in rural areas, a task which could be well accomplished by enlisting Indonesian physicians better placed than their Dutch counterparts in determining existing health needs. Abdul Rasjid argued that medicine not only affected physical but also spiritual well-being of the person and could be studied from scientific, religious and humanist considerations. Rasjid's view of health embraced not only a narrow defence against disease but engaged broadly with socio-economic aspects affecting overall well-being by emphasizing health conditions of rural areas in medical education. Medicine anchored in Western science but adopted to the way of life

in colonial Indonesia was essential to promote acceptance of basic hygiene. Nationalist leaders such as Maharaja Soeangkoepon and Abdul Rasjid thus used the Volksraad as a political forum to criticize the nature of colonial medicine in the 1920s and 1930s.

The Bandung Conference in 1937 approached the question of rural hygiene from an interdisciplinary perspective involving collaboration of medical professionals with sanitary officers, architects, engineers, scientists, and agriculturalists. The conference acknowledged that preventive medicine was a cost-effective way of improving health in Asian countries (League of Nations, 1937: 42). Such an approach implied tracing the socio-economic causes of ill health. The conference recognized that overpopulation was correlated with a high rate of infant mortality. A poor diet, low standards of living, and oppressive land laws were regarded as causative factors for malnutrition that raised infant mortality. Therefore, scientific research on nutrition and demonstration of the nutritive value of certain foodstuffs through village lectures could help mitigate the problem of malnutrition in Asian countries. The conference acknowledged that good health was a part of overall well-being. Decentralized health delivery to rural areas (focusing on preventing disease) was a cost-effective public health measure for which the rural public had to be educated through practical hygiene demonstrations. The Bandung Conference was revolutionary in perceiving public health as a cog in the wheel of rural development, addressing sensitive political issues such as land reform in colonial countries, and placing villagers at the forefront of the development process. The delegates to the Bandung Conference saw public health as a means towards nation-building. Nationalists such as Gandhi were inspired by the ideals of rural reconstruction and incorporated them in their thinking.

Although medical initiatives in the Netherlands Indies before the nineteenth century had been largely oriented to curative care, such measures proved expensive towards the end of the nineteenth century as the archipelago suffered a severe shortage of skilled medical personnel. Given the constraints of the acute shortage of skilled personnel and financial resources, the Health Service concentrated on the control of epidemics while leaving individual treatment of the individual to private enterprise, in particular the missionary and estate hospitals. Such measures did not enlist the co-operation of indigenous people.

Between 1942 and 1949, Indonesian public health faced formidable challenges: the Pacific War, including the Japanese occupation of the archipelago as well as the Indonesian Revolution (1945-49), both causing a considerable dislocation of health services. During the Japanese occupation, health was a tool of military propaganda. Public health was centralized under Japanese command in Java whereas the Outer Islands were neglected. Indonesian physicians such as Abdul Rasjid and Boentaran Martoatmodjo - now getting more responsibility than ever - envisioned an Indonesian alternative to Western medicine. They began to define what was at stake for the health of the Indonesian nation by advocating improvements in the standard of living of the population through a programme of increasing population, reducing the high rate of maternal and infant mortality, nutrition, and ensuring cost-effective measures to promote preventive health through use of *jamu* (Indonesian traditional medicine).

Subordination of public health to the Japanese military forces, appropriation of 50 per cent of the rice harvest for the military (*Gunseikanbu*), and forced labour of Indonesians were responsible for starvation deaths which went unreported in contemporary magazines and newspapers (*Sejarah Kesehatan* I, 1978: 71). The Japanese realized that ill health was a

constraint to economic productivity among the Javanese labor that would eventually thwart success of the Japanese mission of establishing a 'Greater East Asia Co-Prosperity Sphere' in Southeast Asia. The Central Office of Public Health under the Japanese (*Eiseikyokutyo*) was entirely focused on a *Djawa Sehat* (Healthy Java) campaign with a massive effort to eliminate framboesia (yaws) using salvarsan shots, although the implementation of the actual disease eradication was entrusted to local authorities suffering an acute shortage of budget and medical supplies.

Martoatmodjo - unlike the *Eiseikyokutyo* which had used public health as a tool of political mobilization of the population - advocated a comprehensive health programme that envisioned raising the standards of living of Indonesians through a reduction of maternal and infant mortality, malnutrition, and chronic tuberculosis by way of a comprehensive programme of health education in schools (*Berita Ketabiban*, 1944: 46). Martoatmodjo attributed the high incidence of tuberculosis in Indonesia during the Pacific War to the poor nutritional status of the Indonesian family where per capita consumption of protein rich food was sub-optimal.

Indonesian physicians such as Abdul Rasjid now began to rediscover the scientific value of using *jamu* in delivering cost-effective sanitary prophylaxis in rural areas of the archipelago although such remedies were rarely used by Indonesian doctors. *Jamu* was dismissed as 'unscientific' within the Indonesian medical establishment as it could not be subjected to scientific verification (Seno Sastroamidjojo, in *Madjalah Kedokteran Indonesia*, 1956: 18). Prior to 1942, not many scientific articles had been published on *djamu*. Promoting use and research of Indonesian traditional medicine in public health was perceived within a section of the Indonesian medical circle (for instance Abdul Rasjid, R.M. Abdoelkadir) as a means of nation-building and to achieve self-reliance by reducing import of Western medicine which dried up during the Japanese occupation. Japanese attempts to promote *jamu* were superficial as there was no access to Western medicine during the war. They therefore had to negotiate a solution that kept everyone happy. They used *jamu* as a tool of political propaganda.

Soon after the Japanese occupation of the archipelago ended in August 1945, Indonesian medicine was marred in political uncertainties resulting from the Indonesian Revolution and Dutch attempts at reoccupation of the archipelago. The two Dutch military interventions – in 1947 and 1948/49 - caused displacement of the population and interrupted medical supplies. The government of the Republic instituted the first Indonesian Ministry of Health under leadership of Dr. Boentaran Martoatmodjo, but it was unable to implement a coordinated health policy due to the two Dutch military interventions. The Ministry of Health was relocated to Yogyakarta soon after the first military intervention.

From its inception, the Republic's Ministry of Health prioritized upgrading of the qualification of paramedical personnel in order to tackle the acute shortage of physicians. The Rockefeller Foundation supported training of personnel such as vaccinators, public health instructors, and malaria campaign officials in Magelang where from 1946 the office of the division of hygiene and health education was located. This office began to enlist the cooperation of local people in the establishment of a rural hygiene service which was active in promoting health education. However, because of the 'Madiun affair,' and the second Dutch military intervention, the activities of rural hygiene services came to a premature ending (Raden Mochtar, 1953). The main feature of the health education work in Magelang, which had begun as a health demonstration unit, was the campaign against soil and water pollution, enlisting the support of villagers in improving

water supply and mobilizing joint action on health issues. Prior to the first Dutch military intervention, paramedical personnel in the Banjumas regency in Central Java pursued guerrilla warfare against the Dutch forces. In 1948, the Rockefeller Foundation gave financial aid to the amount of Rp. 165.000 to pay sanitary workers in Yogyakarta. Particular Indonesian initiatives in public health during the Revolution included setting up rural hygiene demonstration units.

Indonesian thinking on social medicine

In the post-war period, the World Health Organization (WHO) has been especially influential in shaping social medicine thinking in newly decolonized nations in Africa and Asia. The WHO argues that public health is part of a wider programme of social development. Consultants within the WHO, for instance C.E.A. Winslow, claim that advances in public health cannot be undertaken by curative medicine alone but require improvements in water supply, housing, sanitation, nutrition, and conditions of work. Post-war thinking on health in Indonesia after independence broadly reflected the WHO definition of health which states that health is not merely an absence of disease but also a state of physical and psychological well-being. Public health in the Soekarno era was loosely associated with the ideology of nation-building (*pembangunan*). In that way, Indonesians refashioned the idea of developmentalism inherent in the WHO discourse to fit Indonesian conditions. The Basic Indonesian Law of 1960 'On Health' (*Undang- Undang Nomor 9 tentang Pokok Pokok Kesehatan*) broadly reflects the synthesis of the WHO definition with the Indonesian vision of furthering the goal of a socialist society. In this section, I broadly examine the contributions by Seno Sastroamidjojo, Raden Mochtar, Soetopo, Johannes Leimena and Poorwo Soedarmo to shaping the thinking on Indonesian social medicine during the 1950s by critically examining the Indonesian perspective on public health, disease eradication, national health services, and how nutrition ought to be incorporated into a broader framework of 'social well-being.'

President Soekarno's version of *pembangunan*, based on what was feasible, left a deep imprint on the development of Indonesian social medicine in the 1950s. His version reflected the newly decolonized archipelagic nation's aspirations for a brighter future based on the proposition that the Indonesian nation possessed immense physical and psychological strength since the independence struggle (Soekarno, 1965: 196). The basic pillar of *pembangunan's* was the doctrine of *Pancasila,* the philosophical foundations of the Indonesian nation enumerating respectively belief in one God, just and civilized humanity, democracy, and social justice for all Indonesians. The principle of 'social justice' for all Indonesians was reflected in Soekarno's concern about ensuring Indonesia's self-sufficiency in rice that would lead to fulfilment of one of the most basic needs (food) for all Indonesians. Soekarno's version of *pembangunan* embraced the idea of *kemerdekaan* (freedom) that stood for multiple possibilities in the 1950s, including prosperity, human dignity, and physical and spiritual welfare for all Indonesians. *Pembangunan* in the 1950s was associated with achieving the highest standard of living for every Indonesian, investment in human skills, and achieving an equitable distribution of wealth. Soekarno's *pembangunan* was internationalist in the true sense of the word, evaluating successful socio-economic models functioning elsewhere in the world, and adapting them to Indonesian conditions. The internationalist aspect of *pembangunan* was evident in Indonesian newspapers such as *Pos Indonesia* and English newspapers such as *Times of Indonesia*. In the following sections, I examine whether Soekarno's version of *pembangunan* translated into positive health outcomes.

Seno Sastroamidjojo was a leading social medicine expert in Soekarno's Indonesia. Sastroamidjojo's vision of social medicine serves as a vantage point to examine how social medicine ideas were adapted to an Indonesian context, considering that he had an eclectic educational experience, ranging from a *pesantren* (Muslim boarding school) in Grabak (Java) and STOVIA in Jakarta (graduate of 1916) to specialist training in gynaecology and social medicine at Amsterdam University, training in midwifery at Berlin University, venereology at Budapest (Hungary), social medicine at Stockholm, subsequently serving as a doctor for the Health Service of the Netherlands during a brief interlude, working as a private practitioner in Jakarta for six years, later as a surgeon at the Billiton mining company. His international training conditioned his outlook on social medicine. He was indeed a translated person.

According to Sastroamidjojo's philosophy, social medicine was a synthesis of sociology and public health. He classified poverty and illiteracy as enemies of Indonesian society, perceiving social security as an insurance against injury at the workplace. He was of the conviction that without social insurance the WHO definition of health - as 'not only absence of disease but also a state of psychological and social well-being' - would be become redundant. Sastroamidjojo's understanding of the WHO definition of health was shaped by eugenics. He believed that for producing a strong and healthy generation, the medical examination of couples before marriage for venereal diseases was necessary (Seno Sastroamidjojo in *Madjalah Kedokteran Indonesia*, 1956: 17). For the eradication of venereal diseases, sex education before marriage was necessary. The high rate of oedema among Indonesian infants in the 1950s was, according to Sastroamidjojo, due to a shortage of food. A malnourished child mirrored the poor health of the economy. By linking malnutrition to the poor state of the Indonesian economy, Sastroamidjojo reflected the idea of *pembangunan* or nation-building. At the time of the transfer of sovereignty in 1949, Indonesian doctors lacked an indigenous vocabulary for the terminology of social medicine. Indonesian social medicine had, according to Sastroamidjojo, developed its own identity considering the archipelagic diversity of the nation in terms of culture, religions, and manners. For the effective delivery of social medicine in rural areas, there was a pressing need to orient the medical faculty towards village social life (Seno Sastroamidjojo in *Madjalah Kedokteran Indonesia*, 1956: 20).

Mochtar became head of the Department of Community Education in the Ministry of Health soon after 1949. He served as Professor of Public Health in the Faculty of Medicine at the newly established Universitas Indonesia in Jakarta and was also a visiting faculty member at the univerisities Gadjah Mada (Yogyakarta), Airlangga (Surabaya) and Hasanuddin (Macassar). He reiterated WHO thinking of the 1950s that health was not merely an absence of disease but rather a state of physical, psychological and social well-being (Raden Mochtar in *Madjalah Kedokteran Indonesia*, 1957, no. 7: 141). Environmental factors affecting population well-being were inadequate housing, and nutritional diseases such as kwashiorkor. Public health was a means to alleviate human suffering. Public health was not an isolated pillar standing on its own but anchored in public welfare, the rights of labor and the humane care of the mentally ill. According to Mochtar, public health was a means to achieve the dignity of mankind. Society was not homogeneous. Social variables affecting access to community health services included gender, age of the population, nationality, religion and occupation.

Mochtar believed that public health education was a means to improve health indicators by inculcating hygienic habits. This implied efforts to improve socio-economic

conditions of the masses and was a way for the community to identify its health needs (Raden Mochtar in Madjalah Kedokteran Indonesia, 1957, no. 11: 341). Health education was an active process. The health educator had to convince the public that health was one of the basic necessities of life such as food. Health education necessitated a coordinated approach between various levels of government: central, provincial and district. Health education consisted of imparting a 'one-way method' message involving communication of the message through films, lectures, newspapers, or the radio. The 'two-way Socratic method' was an important pedagogic technique for public health education consisting of discussions on matters of public health initiated by public health officials with schoolchildren (Raden Mochtar in *Madjalah Kedokteran Indonesia*, 1957, no. 11: 346). Mochtar thus envisioned the public as an active partner in the health education process. For sensitizing future medical practitioners to social conditions in the rural areas, the Universitas Indonesia introduced a course on preventive medicine.

In 1959, Mochtar served on the advisory committee of the Department of Health in the municipal government of Jakarta. He argued that a disease did not exist in isolation but was rooted in social, environmental, psychological, and physical factors. To illustrate his argument on the environmental impact on disease, Mochtar used an example from an Indonesian family (*Pos Indonesia*, 23 June 1959). A child aged six, living with his/her grandparents (the parents having divorced) suffers from asthma and hookworm. The grandfather is uneducated but earns a modest income to support the family with at least two square meals a day. However the child suffers from asthma as a result of stress due to family tensions. Stress was a social factor affecting health and well-being.

Mochtar's ideals of achieving the highest possible standard of health through cost-effective preventive measures emphasizing community participation, was crystallized in the concept of Puskesmas (Pusat Kesehatan Masyarakat, community health center) in the late 1960s. The full realization of Mochtar's ideals on primary health care in the 1950s was probably inhibited by the waxing and waning of Indonesia's parliamentary institutions, lack of coordination between the centre and provinces on financing health projects, and the Darul Islam insurrection in West Java in 1956.

Johannes Leimena served as minister of Health from 1947 until 1956, except during the first cabinet of Ali Sastroamidjojo (1953-1955). Leimena's pressing task was to rebuild Indonesia's health infrastructure which had been destroyed during the war and the Indonesian Revolution. As a result, Indonesia experienced an acute shortage of doctors, paramedics, and hospitals. Implementing a coordinated health plan to address acute shortages of personnel and achieving a synchronization of decrees issued by the centre with local governments proved highly challenging since the Indonesian Revolution had produced a federal state structure in which the demarcation of public health responsibilities between the central governments on issues such as financing campaigns against communicable diseases became a rather thorny issue. Leimena was faced with the arduous task of achieving coordination between and within different levels of government. Newly independent Indonesia had inherited the legacy of the Dutch health system which largely emphasized the prevention of communicable diseases such as plague, smallpox and cholera. Yet, curative care was largely managed by Christian missionaries, private estates (particularly in Sumatra), and government polyclinics, mainly in major cities. Leimena conceptualized Indonesia's health policy in terms of integrating preventive and curative health care through five-year plans. At the time, Leimena's vision of integrating preventive and curative care seemed a far-fetched dream since the government lacked

funding for such a project (Johannes Leimena, 1980: 59).

Leimena's logic was that disease and poverty constituted a vicious circle. A sick person became poor and this impoverishment accounted for further disease. Improvement of the socio-economic conditions of the people alone could ensure the development of a basic standard of health. A healthy nation was reflected in the physical and mental well-being of its inhabitants (Johannes Leimena, 1956: 9).

As a minister of Public Distribution, Leimena perceived that an adequate quantity and quality of nutritious food was critical to the health of pregnant women, children and ensuring the productivity of workers. However Leimena perceived the question of nutrition through the lens of scarcity. He held that Indonesia's achieving self-sufficiency in rice was the most effective way means to overcome nutritional and calorific deficiencies. Indonesia's per capita consumption of rice per person per year was 84 kg prior to the Second World War and 93 kg in the late 1950s. However, Leimena observed, Indonesia was experiencing a population growth at 1.7-2 per cent per year in the 1950s which outstripped its food production (Leimena in *Berita Kementerian Kesehatan Republik Indonesia*, 1959: 5). Indonesia compensated its shortfall of rice production through imports. Leimena was of the opinion that Indonesia could become self-sufficient in rice by maximizing production and distribution to feed its ever-growing population. He envisioned building Indonesia's capacity in rice production through intensification of paddy cultivation in Java and extensive dry land farming of paddy in the Outer Islands as a means to achieve *berdiri kaki sendiri* (to stand on one's own feet). Leimena perceived Indonesia's nutritional problems through the lens of the *Pancasila* ideology which includes social justice for all as one of its tenets. He focused the state machinery towards ensuring an equitable distribution of food by maximizing rice production. His plan in achieving an equitable distribution of food in Indonesia proved overambitious as the Ministry of Public Distribution was unable to achieve coordination with the departments of Agriculture, Transmigration, and Labour.

Poorwo Soedarmo was an alumnus of the London Postgraduate School of Public Health and later a faculty member of the Medical School of the University of Indonesia in Jakarta. His publications on nutrition largely dwelt on the issue of kwashiorkor in Indonesia. He had observed that during the colonial period, children afflicted by kwashiorkor or marasmus were labelled as 'indolent'. Since then, the word 'indolent' came into usage as an epithet to describe the diseased indigenous body. He has noted in his autobiography that nutrition forms an important indicator of the quality of the nation (Poorwo Soedarmo, 1995: 35). He advocated that a food policy for Indonesia had to take into account the rate of population growth, percentage of dependent population, and a food balance sheet for the Indonesian population which would take into account the nutritional requirements for the 'average Indonesian.' He had observed that in several islands of the archipelago, particularly in Java, Madura, and Bali, self-denial of food was regarded as a virtue. As a result, people from Java, Bali, or Madura were reluctant to talk about food scarcity.

Ensuring a minimum quantity of rice for each person was also regarded as a basic entitlement of the Indonesian citizen. While a stable Indonesian currency could meet Indonesia's growing rice requirements, there was also a fear among policy-makers that rice imports would compromize Indonesia's self-sufficiency.

The population controversy and child health

By 1953, world population had grown by 10 per cent since before the Second World War as a result of improvements in public health,

for instance vaccination against tuberculosis. This had contributed to reducing death rates but birth rates continued to rise, particularly in developing countries in Africa and Asia, contributing to the problem of diminishing per capita availability of food. The premise of the WHO and FAO that the world's population was a source of potential human capital found support among Indonesian policy-makers. Indonesia's first Five-Year Plan unequivocally signalled that Indonesia's population was growing at an alarming rate but planners were divided on economic and religious grounds whether to use birth control to lower the rate of population growth.

In 1953, Soetan Sjahrir - the Socialist party leader who had served as Indonesia's foreign minister and as first prime minister negotiated the Linggadjati agreement with the Dutch in 1947 – was disillusioned about the Indonesian leadership's inability to address pressing economic problems such as the food scarcity caused by its ever increasing population (*Times of Indonesia*, 31 March 1953: 4).

The first Five-Year Plan (1956-1961) had acknowledged that Indonesia had an unusually high rate of population growth, with nearly two-thirds of the population concentrated in Java. Yet, the Plan was coached in alternate versions of the *pembangunan* ideology which argued that Indonesia's surplus population would serve to harness the country's natural resources. On the other hand, every increase in the national income would be neutralized by an increase in population. The discussions in the early 1950s boiled down to two propositions (Hull & Hull, 2005: 3). First, poverty and high fertility continued to kill mothers. Second, poverty could be overcome through economic planning. These propositions had widely different implications on the question of how the government should address the question of poverty.

Dr. Julie Sulianti Saroso, technical director of Maternal and Child Health in the early 1950s, was awarded a WHO Fellowship to study the functioning of maternal and child health policies in Sweden. Dr. Saroso had observed that the family planning programme in Sweden, incorporating birth control, was successfully executed through district health centres. She was very outspoken in a radio broadcast from Radio Republik Indonesia about using birth control as a means to prevent maternal mortality. Vice President Hatta was outraged at Saroso's open advocacy of family planning as he found such a discussion offending the cultural and religious sensibilities of Indonesians although he had perceived that Indonesia's growing numbers put pressure on the per capita availability of food (Hull & Hull, 2005: 4).

In the early 1950s, Soekarno faced several pressing challenges as the nation's first president such as forging national unity in the wake of regional uprisings, conflict between the army, the religious groups and the communists, and tackling economic problems such as poverty and food scarcity. The question of addressing the problems created by Indonesia's rising population did not capture the President's attention in the early 1950s. Soekarno stated that Indonesia could easily support a population of 250 million and that the most pressing problem for Indonesia was to provide housing and jobs for the people. Therefore, foreign journalists perceived that Soekarno argued in favor of a link between population growth and economic development. Foreign journalists in the 1950s tended to represent Soekarno as 'pro-natalist' although Soekarno was able to accept the logic of birth spacing in order to protect the health of mothers (Hull & Hull, 2005: 12). As the nation's president, he did not want to be seen accepting advice from foreigners on population control and advocating family planning programmes associated with immorality (Hull & Hull, 2005: 13).

Soekarno had observed that Indonesia's population was growing at the rate of one million per annum in the 1950s which increased the pressure of population on land, particularly

in Java. Subsistence agriculture alone was unable to fulfil the food requirements of an ever-expanding population. On the tenth anniversary of Indonesian independence, on 17 August 1955, Soekarno stated: *Ia adalah satu bangsa jang biologis-dinamis* (The Indonesians are a biologically dynamic nation). In order to achieve the Javanese ideal of *loh djinawi, subur kang sarwa tinandur* (such fertile that everything one sows, grows), Soekarno argued that it was necessary to resettle Java's ever-increasing population on the Outer Islands through a programme of *transmigrasi* (transmigration) and at the same time increase productive capacity of land through a modernization in agriculture (Soekarno, 1965: 221). Soekarno had approached the population problem through a vision of transformation of Indonesia's economy from a colonial economy based on estates and subsistence agriculture to a self-supporting socialist economy capable of standing on its own feet (*berdiri atas kaki sendiri*), based on industrialization.

In 1959, Dr. Hadji Ali Akbar had published an article in *Madjalah Kedokteran Indonesia* on birth control in order to address the medical, political, economic, and religious reservations in Indonesia against birth control through a Malthusian lens. According to Akbar's argument, the world's population expanded at a rate of 25 per cent per decade in the 1950s leading to a fear of 'population explosion'. Nearly two-thirds of the 900 million children worldwide in the late 1950s suffered from inadequate nutrition. One of the commandments of the Koran proclaims that every person shall have a right to food and shelter. But population growth outstripped food supplies, particularly in Indonesia. Therefore, birth control was a necessary measure to improve the quality of life of children. As most Indonesians were of the conviction that life is sacred from conception, they found it hard to accept the economic rationale of birth control. Therefore, Akbar cited from the *Hadith* (sayings of Prophet Mohammed) to justify that coitus interruptus as a means of family planning was permissible in the greater common interest of preventing maternal mortality.

Indonesian newspapers such as *Pos Indonesia* and English-language newspapers such as *Times of Indonesia* reflect the internationalism of the Soekarno era, in 1959 critically evaluating the success of family planning programmes elsewhere, for instance India and Malaya (Singapore). Such an approach was at odds with the Indonesian government's preoccupation with domestic concerns such as the deterioration of parliamentary institutions and the government's perception of family planning as an international aid intervention infringing upon Indonesia's sovereignty. A *Pos Indonesia* article dated 5 July 1959, screamed *Bahaja Besar jang Mengantjam Asia*: *Kenaikan Penduduk Sangat Tinggi, Sudah Perlukan Diadakan Sistim Pemandulan* (Asia needs drastic steps to curb population growth). The rate of population growth in Indonesia was seven times the corresponding figure in Europe. It outstripped the nation's capacity to produce food, thereby raising fears of starvation (*bahaja kelaparan*) (*Pos Indonesia*, 5 July 1959). In India, 25 per cent of the population was undernourished. In the state of Madras, the then Congress government had introduced a cash-based incentive for couples practising family planning. Elsewhere in Southeast Asia, the People's Action Party in Singapore had introduced family planning in the late 1950s, accompanied by a comprehensive programme that served to improve the quality of life of children through enhanced nutrition, and education.

Family planning was a controversial issue that divided the Indonesian physicians in the 1950s. Although advocated by Indonesian newspapers such as *Pos Indonesia*, based in urban centres such as Surabaya, such articles had limited readership in the 1950s.

A related issue in social medicine in Indonesia at the time concerned child health, a matter generally subsumed under the broad umbrella of population health. A representation of the post-colonial Indonesian child and the way child health and survival influenced discussions about social medicine form missing elements in the historiography of Indonesian medicine of the Soekarno era.

The idea of instituting maternal and child welfare in independent Indonesia was the brainchild of Professor M. Soemedi who had earlier worked on a Rockefeller hygiene project in Java prior to the Second World War. In 1948, the Ministry of Health under the Republican government had set up health advisory bureaus to achieve coordination between maternal and child health. They were rechristened as Balai Kesedjahteraan Ibu dan Ana*k* (BKIA). *Kesedjahteraan*, loosely translated into English as welfare or happiness. In 1949, the BKIA implemented maternal and child health programmes in Indonesia that embraced both rural and urban areas (Gambiro in *Paediatric Indonesiana*, 1964: 136-7). However in the early 1950s, Indonesia faced an acute shortage of skilled medical personnel, most noticeably midwives. On average, one BKIA served a population of 15,000, but these figures are misleading. Although on paper every subdistrict would have one BKIA, in reality,the BKIA was not fully functional in the Outer Islands, or they were seldom visited by pregnant women. In Central Java, only 26 per cent of expectant mothers visited a BKIA whereas in Kalimantan less than 10 per cent of women made use of the services of the BKIA. Rural areas in Indonesia were the *dukun* and the *dukun bayi* domains. A *dukun* was able to attend up to six deliveries per week in contrast to three deliveries per week per midwife. However, the *dukun* were untrained in hygienic practices. Therefore, a pioneering attempt was made in Indonesia to train *dukun bayi* in simple hygienic practices with which they could carry out their profession in cooperation with the BKIA. The pilot project of enlisting *dukun* for childbirths was initially implemented in the Yogyakarta region and met with success during the period 1953-1961 in preventing maternal and neonatal mortality. On the whole, enlisting the cooperation of *dukun* to prevent maternal mortality was largely unsuccessful as the *dukun* refused to register for the training program provided by the government fearing competition from the BKIA midwives. According to the Division of Maternal and Child Health estimates for 1961, Indonesia's population grew at the rate of well over one per cent annually whereas there were only 50 midwives entering the health services, a figure grossly insufficient to keep pace with the country's rapidly rising population.

The fervor of the Indonesian Revolution continued to have an impact on health policies during the Soekarno era. Nation-building was held synonymous to character building. Children were perceived as agents of social transformation, constituting *Manusia Indonesia Baru* (New Indonesians) in accordance with the *pembangunan* (developmentalism) ideology. The growth of a baby was in policy circles regarded as a golden standard to assess the state of the Indonesian nation.

The issue of child health was addressed through a number of pilot studies, often undertaken with international support. In the 1950s, the Southeast Asian Regional Organisation of the WHO (SEARO), and the UNICEF initiated pilot nutrition projects in Indonesia to investigate the socio-cultural determinants of nutritional deficiencies through dietary and nutritional surveys. The surveys showed that rates of malnutrition were related to socio-cultural practices such as dietary preferences, schooling, and household income (social determinants of health), causing chronic malnutrition in Jakarta and Lombok.

In 1949, Poorwo Soedarmo and J.V. Klerks of the Nutrition Institute (Jakarta) with the support of UNICEF carried out a survey of

infants (both boys and girls) below the age of 3, school-going children under the age of 12, and men in the age group of 12-20, 25-45, and 50-60 years in order to assess their dietary status as a response to food shortage in Lombok due to the failure of rice harvest in 1949 (Poorwo Soedarmo, in Poorwo Soedarmo, J.V. Klerks & W. Praenger [eds], 1949: 3). The nutritional surveys revealed that toddlers enjoyed better nutritional status compared to their school-going siblings due to the higher allocation of food at the household level. Overall, the state of nutrition of the working age group (25-45) was relatively favorable with only 11.5 per cent suffering from nutritional deficiencies as compared to 29 per cent in the 12-20 age group. The survey indicated that *Sasak* households favored men from the working-age group above women, toddlers and children in the distribution of food. School feeding was implemented as an emergency relief measure in 1950 to reduce under-nutrition among children but failed to achieve desired results due to a local food shortage in Lombok and a lower priority given to school-going children in the allocation of food at the household level. The nutritional survey questioned the feasibility of emergency relief measures in ameliorating poor nutritional status of the population without addressing poverty, intra-household inequality, and problems of rural indebtedness.

In 1952, the WHO commissioned a study of chronic malnutrition among Jakarta's toddlers which established a co-relationship between infant feeding practices at the household level and kwashiorkor (Poorwo Soedarmo & H.A.P.C. Oommen in *Madjalah Kedokteran Indonesia*, 1953: 229-49). This study examined the influence of the wider social environment that contributed to poor feeding practices leading to chronic malnutrition. The sample population consisted of 146 untreated cases, of which 127 cases were chronically malnourished, at the Central Hospital, Jakarta. These toddlers hailed from families whose parents were engaged in the informal sector. Apart from ascertaining the age of the toddler and medical examination for tuberculosis, which would aggravate malnutrition, the study established a positive correlation between feeding habits and malnutrition. Interviews with mothers revealed that poverty was not the most significant determinant that influenced poor nutrition of toddlers, although 75 per cent of the family income was spent on food. The study discovered that the health of the mother was not always positively correlated to nutritional disorders among children as faulty feeding practices such as a rice-based diet may have contributed to a reduced nutritional intake. The nutritional surveys in Indonesia of the 1950s force us to rethink the direct correlation between poverty and malnutrition that was assumed to hold true in policy circles of the WHO and Indonesia.

Conclusion

The ideology of *pembangunan* (developmentalism) influenced Indonesian understanding of health policies throughout the 1950s. President Soekarno's interpretation of *pembangunan* ascribed agency to mankind to surmount national problems. Indonesian leaders acknowledged a correlation between illness and low economic productivity. They appropriated the WHO definition of 'health' - health defined in terms of social well-being - into the Indonesian context. Consequently, health became a means to realize the aims of a socialist society in accordance with the principles of *Pancasila*.

Pilot studies on nutrition in Indonesia undertaken by the Indonesian nutritionist Poorwo Soedarmo in 1949-1952, questioned the WHO thinking that perceived a vicious circle between poverty and ill health. The studies highlighted the need to identify structural forces such as the patriarchal system, age, gender, and class in assessing the incidence of nutritional disorders and recommended health

education to bring about an attitudinal change in feeding habits.

This article offers a close examination of the partnership between Indonesian physicians and the nationalist regime immediately after independence, including their shared vision of state-led social medicine. However, the article does not explore why social medicine failed to reshape the Indonesian health system. The larger theme of this article is the evolution of Indonesian social medicine in the twentieth century in a critical response to colonial health policy, a critical attitude by Indonesian physicians towards WHO thinking and President Soekarno's notion of social justice.

Bibliography

Document sources

League of Nations, *Report of the Intergovernmental Conference of Far Eastern Countries on Rural Hygiene held at Bandung (Java) from August 3-13, 1937*. Geneva: League of Nations, 1937.

Leimena, Johannes, *Public Health in Indonesia. Problems and Planning*. Jakarta: Van Dorp & Co., 1956.

Leimena, Johannes, *Kewarganegaraan Jang Bertanggung Jawab*. Jakarta: Gunung Mulia, 1980.

Mochtar, Raden, *Health Education and Rural Health Problems in Indonesia*. Jakarta: Ministry of Health, 1953.

Sejarah Kesehatan Nasional Indonesia Jilid I. Jakarta: Departemen Kesehatan, 1978.

Soangkoepon, Abdoel Maharadja & Abdoel Rasjid Soangkoepon, *Redevoeringen van de leden van den Volksraad, Abdul Firman gelar Maharadja Soangkoepon en Abdoel Rasjid gelar Maharadja Mahkota Soangkoepon, over het zittingszaar 1936-1937*. Buitenzorg [no publisher known], 1938.

Soedarmo, Poorwo, *Gizi dan Saya*. Jakarta: Fakultas Kedokteran Universitas Indonesia, 1995.

Soedarmo, Poorwo, 'Food Shortage in Lombok,' in: Poorwo Soedarmo, J.V. Klerks & W. Pranger (eds), *Lombok Food Problems*. Surabaya: Van Ingen, 1949.

Soekarno, *Dibawah Bendera Revolusi*. Jakarta: Panitia Dibawah Bendera Revolusi, 1965.

Newspapers

Berita Kementerian Kesehatan Republik Indonesia, Vol. 8 No. 1, 1959, pp. 5-12.

Berita Ketabiban, 1944, pp. 43-52.

Madjalah Kedokteran Indonesia, Vol. 3, No. 6, 1953, pp. 226-49; Vol. 4 No. 9, 1959, pp. 198-215; Vol. 6 No 1., 1956; Vol. 7 No. 7, 1957, pp. 140-54, No. 11, 1957, pp. 341-8.

Paediatrica Indonesiana, Vol. 4 No. 1 & 2, 1964, pp. 135-53.

Pos Indonesia, 23 June and 5 July 1959.

Times of Indonesia, 31 March 1953.

Published works

Abeyasekare, Susan. 'Health as a Nationalist Issue in Colonial Indonesia,' in: David P. Chandler & M.C. Ricklefs (eds), *Nineteenth and Twentieth Century Indonesia: Essays in Honour of Professor J.D. Legge*. Clayton, Vic.: Monash University Press, 1986, pp. 1-13.

Hull, Terence & Valerie Hull. 'Health Care: A Brief History,' in: Terence H. Hull (ed.), *People, Population and Policy in Indonesia*. Jakarta: Equinox, 2005, pp. 1-69.

Ryle, John. *Changing Disciplines: Lectures on the History, Method, and Motives of Social Pathology*. Oxford: Oxford University Press, 1948.