

Health Inequality in Resource Poor Environments and the Pursuit of the MDGs: Traditional versus Modern Healthcare in Rural Indonesia

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The article examines health inequalities and the impact of changing healthcare provision in rural Indonesia. Traditional medicine is often the only source of medical care for a majority of the population in rural Indonesia. However, the pursuit of the Millennium Development Goals (MDGs) requires the provision and implementation of modern healthcare systems. Using case studies from four rural districts in Kaledupa, a remote island in southeast Sulawesi in Indonesia, the study shows that although modern healthcare facilities are present in the sampled island, they seem to be remote with limited access in comparison with the number of traditional practitioners. High costs, cultural beliefs, distrust and distance to modern healthcare facilities appear to be the most common reasons for people opting for traditional healthcare. However, social reconstruction in the perception and provision of care has also led to a gradual disappearance of the traditional healthcare provision. The study calls for policy intervention approaches that are geographically and culturally sensitive as the most pragmatic means towards the attainment of MDG targets for the health sector of Indonesia.

Introduction

Improvement in the socio-economic well-being of vulnerable groups and indigenous people in developing countries has become a subject of paramount importance globally, especially with the publication of the report of the Commission of Social Determinant of Health (CSDH 2008). The CSDH's report on 'Closing the Gap in a Generation' is based on the idea that there is a new concept of development which focuses not only on economic growth, but also on its distribution. Some signs of this new development according to the report are, the Millennium Development Goals (MDGs) and the National Poverty Reduction Strategy Papers.

Achieving the MDGs and associated internationally agreed development targets holds the promise of reducing marginalisation and vulnerability in the developing world (United Nations 2008). The need to close the gap in generations and to address the social determinants of health in countries where large proportions of the populace live below the 'one dollar a day' poverty line has been identified by World Health Organisation (WHO 2002a). CSDH (2008) as a viable policy strategy in pursuing the MDGs on health. It has, therefore, become critical for governments to aim not merely to protect their citizens but also to ensure that even the poorest among the population have access to basic modern healthcare services (WHO 2008). Healthcare is extremely important, as a healthy population generates a more productive economy (Backman et al. 2008). It has been argued that access and effective utilisation of healthcare significantly influences the attainment of national and international development policy efforts (Phillips and Verhasselt 1994; Potter et al. 1999). However, access to modern healthcare is not always equitably provided in the developing world and the population in poor rural areas suffers from enormous disparities in modern healthcare delivery. In indigenous and isolated environments doctors are sparse, yet traditional healers are abundant and as a result there is a general shift from orthodox medicine to traditional medicine (WHO 2002b).

Inequality in health also occurs for a variety of reasons. Global and national health policies, doctor to patient ration, access, affordability and knowledge of healthcare provision and the degree of central government control, the level of health education and choice are identified as significant determinants (Joseph and Philips 1984; Tembon 1996). Nevertheless, some households avoid modern healthcare systems because of spatial differences and the vulnerable environments in which they live (Borins 1991; Rustamadji 2000).

The study therefore seeks to understand the changing patterns of access and utilisation of healthcare services in rural Indonesia in an era of national and global policy applications towards the achievement of health equity and human well-being. The research investigates the changes in access and usage of both modern and traditional healthcare systems to understand how environmental, social and spatial factors influence access to effective healthcare delivery. The article therefore contributes to the theoretical and policy discourses

on the health-related MDG targets and the reduction of inequitable healthcare with particular reference to primary empirical data on Indonesia.

Study Context

Healthcare systems in Indonesia consist of both modern and traditional healthcare (Indonesian Country Profile 2006). Traditional medicine practitioners play a vital role in the provision of public health, especially in the rural communities. They include herbalists, circumcisers and bonesetters. The term 'traditional medicine', is described by WHO as 'the sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness' (WHO 2007d). Considered a social problem, there are roughly 1.2 million isolated people in 18 provinces in the outer islands. It is reported that about 6,000 households belonging to 15 ethnic groups (or some 31,000 people) in Sulawesi, are under the isolated people category (Safitri and Bosko 2002). The National Health Systems Profile reports that there were nearly 8,000 health centres in the year 2000 (one per 26,000 population) and each centre is supported by two to three sub-centres, generally headed by a nurse. The Integrated Health Post provides preventive and health promotion services at the village level covering 50-100 households and a midwife is deployed at this level.

Nevertheless, with regard to the attainment of the MDG health-related targets, WHO reports that Indonesia had moved from 60 per cent of the population being below the poverty line in 1970, to around 17 per cent in 2004 with tremendous improvement in social indicators such as education, since literacy levels had risen from 61 per cent in 1971 to 91 per cent in 2002 (WHO 2004). Infant mortality is reported by the same source as having declined from 50 per cent in 1998 to 32 per cent in 2005. The country is, however, experiencing several constraints in pursuing the health-related MDGs as total health expenditure accounts for only 3.1 per cent of the Gross Domestic Product (GDP) and the government's contribution to health expenditure was 36 per cent in 2003. There are reported problems with procurement, distribution of essential commodities, delivering basic services, providing access to the most vulnerable section of the country and for surveillance and monitoring of results (WHO 2007a: 130). In addition, availability of health personnel is reported to be significantly low especially in remote areas in the wake of the decentralisation of governance and healthcare.

Also, concerning MDG 1 (eradicating extreme poverty and hunger), Indonesia experienced a slight rise from 24.6 per cent in 2000 to 27.3 per cent in 2002 which suggests that the country needs to do more in reaching out to the poorest and most disadvantaged groups (WHO 2007a). The country has, however, reported significant progress for MDG 4 (reducing child mortality) by achieving a mortality rate of 46 per 1,000 live births during 1998-2002 compared to 97 per 1,000 live births in 1986-91 for Under Five Mortality (Indonesian Demographic Health Survey 2002-03). Infant mortality rate (IMR) had reduced to 32 per 1,000 live births in 2005 although this figure is still higher than Southeast Asian countries. Indonesia, however does not have the statistical system to directly collect information on the 5th MDG (improving maternal health). Nevertheless, among 5 million deliveries occurring in Indonesia annually, an estimated 20,000 women die due to complications related to pregnancy and delivery (WHO 2007a). The proportion of births attended to by skilled health personnel increased steadily from 40.7 per cent in 1992 to 68.4 per cent in 2002 with the southeast Sulawesi province recording the lowest rate at 35 per cent and Jakarta the highest at 96 per cent (ibid).

Study Areas

The study was conducted in southeast Sulawesi province with a population of over 90,000, which is one of the most remote regions of the island of Sulawesi, and in particular the regency of Wakatobi in southeast Sulawesi province. Wakatobi comprises four large islands including Kaledupa, which has a population of 17,573. The island is divided into two administrative districts: northern and southern Kaledupa. Two villages were sampled in the northern district of the island and two from the southern district. The population in the two districts is 10,324 and 7,249 respectively. As each district has a health clinic, a village close to the health clinic and a village far away from the health clinic were used in the research.

The two villages in north Kaledupa are Ambueua, a government village, the most developed village, which is located close to the health clinic in Laggiwae, and Sombano, a traditional fishing village, the least developed and a few miles away from the health clinic. The two villages in south Kaledupa are Langge, the most developed in south Kaledupa and close to the health clinic and Sandi Kaswari, a predominantly farming village with some fishing, which is located further away from the health clinic.

The community-household data collection involved questionnaire surveys combined with semi-structured interviews involving 60 household. In addition, the headman from each village was included, leading to 64 participants from questionnaires and interviews. The focus group meetings were also held in each of the sampled villages and each focus group consisted of six participants, selected across different age compositions in the villages. Semi-structured interviews were also conducted with all three doctors in the study area and three healers from each of the sampled villages.

Empirical Results and Discussion

Healthcare provision and Associated Challenges

The official health services in many countries are facing difficulties in meeting basic health needs largely due to lack of resources (Kloos 1994). Equity in healthcare is not only a problem between countries but within countries. Addressing inequity in the primary and public sphere requires health delivery through access to affordable and good quality service for all, especially those who currently rely on traditional healthcare (Bodeker and Kronenberg 2002). The study therefore sought to understand the factors that shape the choice of healthcare in the sampled districts and identified that while some factors are limited to a particular delivery system, other factors are related to both systems. Thus, while cost of care and distance dominated the reasons why patients chose to see a traditional healer, availability of the health payment scheme, personal preferences and the professionalism of the medical staff were reasons why some others chose to see a doctor. It is critical for policy officials to understand these patterns and be able to incorporate such views in the development and planning of healthcare delivery.

Resource Availability and Service Cost

The study revealed that healthcare provision in Kaledupa faces several challenges in that there are no smaller health posts to support the major clinics but instead there are 'Posyandus' (village midwife clinics). Household interviews and discussions with medical staff revealed that the recommended use of vehicles for patient visits is rarely used because of the challenging environment. Also physicians are not always available for planned visits. The respondents indicated that home care is costly and most households and patients cannot afford this extra cost. Also, social construction over the generations has led to traditional healthcare systems being consistently popular. There is, however, a poor ratio of healthcare staff in comparison to the population (17,573) as illustrated by Tables 1 and 2.

As the two health centres on the island lack human resources (see Table 1), medical facilities and medicines, patients often travel to the nearest hospital which is a 12-hour boat journey to Bau Bau which costs between 80,000-100,000Rp (curing 2007-08). Throughout Indonesia, the Askeskin programme has been set up to help with medical costs (Indonesia Country Profile 2006). However, the patient numbers at the different clinics on the island was noted to be reducing over the years (Table 2). The pattern was attributed to rising costs and other socio-cultural factors that were further explored by the study and are discussed in the subsequent sub-sections.

Table 1 North (NK) and South Kaledupa (SK) Staff Records									
South Kaledupa Staff Records									
Year	Total	SK	Honoror	Physician	Midwife	Nurse	Admin	Male	Female
2005	11	11			3	8		4	7
2006	11	11			3	8		4	7
2007	16	12	3	1	3	11		4	12
2005	11	11						4	7
2006	11	11						4	7
2007	16	12	3	1	3	11		4	12

Source: Authors' field study

Table 2 Patient Numbers and Category for Lagiwae and Sandi			
Lagiwae	Askes	KKM	General
2006	1,563	1,456	884
2007	840	846	404
Sandi			
2006	724	1,015	30
2007	386	398	18

Source: Authors' field study

The study was informed that the new Health Service Programmer delivers three different levels or forms of medical care: civil servants have an Askeskin card, which provides them health insurance and entitles them to free medical care. A limited proportion of poor families are allocated a Kartu Keluarga Miskin (KKM). KKM literally translates as *Card Family Poor* and is the source of some bitterness towards the government among the poor population. Those who have neither an Askeskin nor KKM, have to pay for an appointment and for medicines, which is about 10,000Rp for each visit. These observations are similar to the view of Assan (2009) in Ghana, who argued that user fees can divert patients who cannot afford to pay to alternative sources of healthcare. WHO (2007e) reports that nearly one-third of the total expenditure on health in Indonesia is from public expenditure and three-quarters of the private expenditure is out of pocket.

Poverty and Social Marginalisation

Utilisation of modern healthcare systems where qualified health practitioners are employed is often undermined by poverty as only a small proportion of the population has enough resources to be able to afford it (Edgeworth and Collins 2006). Stephens et al. (2006) have established that the highest incidence of poverty occurs in regions populated by indigenous people. Indigenous people are also more likely to be poor than non-indigenous people and public spending on basic social services systematically discriminates against minorities and indigenous people in many countries, according to the 2004 Human Development Report. Thus, access to health services and medicines is limited in indigenous communities as it was observed during the household interviews in Kaledupa Isalnd in south Sulawesi.

This observation is also consistent with the findings of Safitri and Bosko (2002). Backman et al. (2008) explains that even if individuals have physical access to modern healthcare, the costs associated with consultation or treatment can prohibit patients from poor households from actually seeing a doctor as it can affect the household budget. Again, utilisation of the

modern healthcare system is not likely to be maximised when only a small proportion of the population has enough resources to be able to afford it (Edgeworth and Collins 2006). For example, it is reported that in South Asia and Africa 90 per cent of the population use traditional healers (Meade and Earickson 2000).

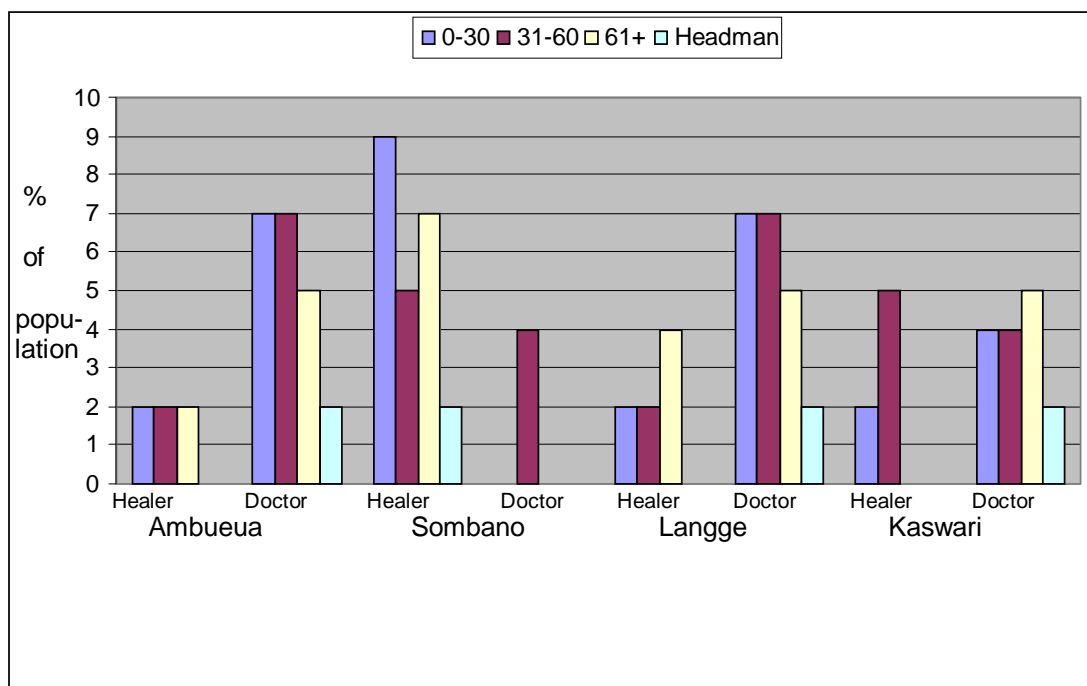
Demographic Influence: Service Utilisation by Age and Social Status of Village

It was observed during the interviews that some household members (mainly the elderly) perceive that orthodox health practitioners do not really know what they are doing and cannot be trusted as they are not natives of the Island (or not Kaledupans). However, the educated younger population and returnee migrants to Kaledupa prefer to see a trained physician rather than a traditional healer. However, when usages of either healthcare system were investigated further, new demographic and spatial patterns became apparent (see Figure 2).

The number of people using either healthcare system varies depending on their demographic group and the location of the village where they reside. Whilst most economically active and young patients used clinics, the survey also showed that 15 per cent of the sample in the 61+ age group saw the doctor and only 11 per cent saw the healer. Whilst the difference is not very significant, it suggests a gradual shift from the traditional perception presented during the interviews and differs from views presented in wider literature. The reason for this shift was attributed to the free healthcare offered to the elderly and those above 60 years in the National Health Service Scheme.

Furthermore, when data was disaggregated into spatial differences, it was noted that the more developed villages, Ambueua and Langge, have higher proportions of the population using the modern healthcare system. These villages have fewer indigenous or deprived households and communities compared to those villages considered underdeveloped by the sample. Also, the abundance of Askes or KKM in Ambueua and Langge, combined with education about modern healthcare being better and the professionalism of hospital staff could explain why more people see the doctor in those two villages. Haddad et al. (1998) argued that the decision on where to seek healthcare depends upon many factors including the availability of a provider within the community, the reputation of the provider, perceived quality of the service, cost of treatment and the arrangements for payment.

Figure 2
The Differing Usages by Age of the Healer or Doctor for the Four Sample Villages



Relationships and Perception of Care Provider

Relationships between patients and traditional practitioners did not appear to be as relevant as suggested in secondary literature for the developed villages of Ambueua and Langge (see Borins 1991; Frankel 1992). This could be due to spatial differences. Ambueua and Langge, on average, had better relationships with modern practitioner due to the generally high social status of the residents in these villages compared to the deprived and remote villages. Respondents from these socially respected communities indicated that they trusted the doctors more than the traditional healers and so preferred to visit the clinic. As regards social relationships with the clinic staff, most of the respondents said that they did not have any social relationship with the medical teams in their communities. A female household head explained: 'I feel safer being cared for by the doctor but do not have a good relationship with him because I feel embarrassed and insignificant compared to him.' It was more evident in Sombano and Kaswari that people believe their relationships are stronger with traditional practitioners, because 'the healer is my neighbour and friend; whereas the modern practitioners are outsiders who do not know me'. There are also negative feelings towards doctors from people who live far from the hospital because the doctors do not come when they say they will. Wa Una from Sombano had strong feelings about this because she had malaria when she was interviewed and she was not being attended to: 'If the doctor does come, it is only for their records to say they have been, they never give treatments...I am disappointed with the doctors for not coming and dissatisfied with the service.' This implies that the perception of medical staff towards members of a local community influences the extent to which patients would subscribe to their care.

Distance and Spatial Variation and their Impact on Healthcare

In all four sampled villages, more people indicated distance as a basis for their choice of care. This agrees with the 1978 Alma Ata Declaration and WHO (2008) which say that access and affordability are key issues in healthcare delivery. Sombano and Kaswari have bad roads to the hospital, making transportation and travelling difficult, although some families have motorbikes. Combining this with the lack of Askes and KKMs could explain why traditional healthcare is more popular in these villages. An individual's physical proximity is an important factor in accessibility and the utilisation of healthcare systems (Müller et al. 1998; Powell 1995). Although some individuals do want to use modern healthcare systems, long travel times and associated costs of transportation act as deterrents. This is emphasised by Needham and Bowman's claim that distance from the healthcare systems influences one's choice of care (Needham and Bowman 2003, cited in Edgeworth and Collins 2006). Field and Briggs (2001) argued that being closer to the hospital or clinic means one is more likely to use the service than if one is far away. Long distances from either healthcare system can result in self-medication, which involves self-diagnosis and use of old medicines or homemade remedies, or medicines bought without professional medical advice (Edgeworth and Collins 2006). Meade and Earickson (2000) and Müller et al. (1998) provide empirical evidence to show that long travelling times and cost of transportation can prevent individuals from using modern healthcare facilities.

Whilst spatial difference between the villages and the hospital was identified extensively by the sample as a factor which influences their choice of healthcare systems, spatial differences in terms of different locations of the villages have impacted on the levels of exposure, awareness and familiarity of residents regarding current developments in the quality and efficacy of modern healthcare. This observation was also made during interviews with traditional healers. It is therefore important to encourage residents and healers to participate in training programmes through government run courses as proposed by WHO (2007d).

Cultural Factors

The study revealed the presence of strong cultural factors and beliefs which shape respondent perception and choice of care and continual reliance on the utilisation of traditional medicine. The household interviews and survey showed that the sample is very deeply influenced by its traditional beliefs and cultures and as a result traditional practitioners have more important roles in some locations than trained doctors. They are viewed as readily

available, cheaper and culturally more acceptable (see Joseph and Phillips 1984). Although many individuals prefer to go to traditional practitioners, the World Bank (2003) reports that most traditional practitioners have no formal medical education. Claquin (1981) argued that as traditional practitioners play a large role in healthcare they should be involved in the health system's policies and development.

Studies by Stephens et al. (2006) in Indonesia and Philippines support this observation. They argued that taboos and misconceptions about health-related beliefs and practices dominate in the assessment of healthcare provision. Indigenous people distinguish between sickness for which there is a natural and obvious explanation (such as cuts, burns, bruises, scratches and shoulder and muscle pain from carrying heavy loads and from long hikes) and sickness for which according to them there is no natural explanation and which they believe is caused by evil spirits (flu, measles, skin diseases, diarrhoea, dysentery, cough, colds and fever, rheumatism, sprains and fractures). Interviews with traditional healers revealed that most of them are illiterate or have basic education and have not necessarily received any formal training. The traditional birth attendants are often the focus of formal training as they are generally preferred over midwives, nurses and doctors because they rarely touch body parts. Nevertheless, birth and death are not registered regularly and a majority of the sample explained that they do not receive regular prenatal and postnatal care from health workers or trained birth attendants. These observations have significant implications for both MDGs and health equity because keeping records and the provision of pre-natal and antenatal care would facilitate monitoring the improvement in the MDG targets for the country.

Conclusion and Policy Recommendations

At this point in time, the MDGs provide a unique opportunity by setting the political agenda through global consensus and strongly linking health to development; yet health-specific interventions and their funding remain confined to rather narrow geographical regions, selective programmes and sometimes to acute diseases as evidenced in the case of Kaledupa. Marginalised communities are often compelled to depend on traditional healthcare systems because of the lack of options (WHO 2008). Health inequality is reported globally with an estimated 80 per cent of the people in the developing world still using traditional medicines for their healthcare (Kim 2005). The study, however, reveals emerging changes in choice and access to rural healthcare within sampled communities and districts in Indonesia. The empirical findings suggest that social factors largely influence the degree of access and affordability of healthcare in rural Indonesia and are consistent with arguments by WHO CSDH (2008). Traditional or modern healthcare systems are chosen because of either access to hospital, cultural beliefs or the level of exposure and development in particular villages.

This research project suggests that proximity to health centre facilitates utilisation and access, which is consistent in cases presented by WHO (2008) and is identified as critical in addressing health inequality. Belief in which healthcare system to use appears to be the result of social construction and socio-economic status as well as culture. Whereas professionalism of the healthcare staff was the most common reason for using the modern healthcare system, cultural beliefs and the lack of access were strongly associated reasons for using traditional healthcare systems. These findings reveal that whilst rural households would like to gain access to modern healthcare, they would also like to be able to utilise improved and trained traditional healers who are able to supplement care in remote locations and in areas where modern and formal healthcare is not readily available locally.

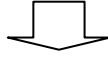
These patterns suggest that in pursuing health equity and to attain health sector related MDG targets, it is important for the traditional healthcare system to receive formal recognition and support in order to strengthen and allow it to perform its important role in the provision of community and public healthcare. Such a policy direction would also encourage the application of local indigenous knowledge in addressing such an important issue as primary and community healthcare. For developing countries effective, affordable and accessible primary healthcare is a critical challenge. Hence policy strategies that would allow a majority of the population living in marginal and vulnerable environments and deprived societies to receive decent and safe care would inadvertently help in improving human well-being.

The study shows that addressing rural infrastructure and deprivation can improve the social determinants of health significantly. Access and affordability of healthcare can also influence perceptions and patterns of utilisation of available health services and thereby promote the potential attainment of the health-related MDG. Whilst the recent WHO CSDH report points out the economic rationale of investing in the provision of healthcare services, associated costs and limited budgetary allocation are seen to undermine the ethos of primary and public healthcare. The health of individuals who cannot afford formal healthcare is often at risk when they purchase unregulated medicines. For the health-related MDG target to be met, there is need for the government and policy officials to move beyond the economics of care and seriously consider the ethical and social responsibilities associated with caring for a majority of the population who are living in vulnerable environments and are facing socio-economic deprivation and spatial marginalisation in their own societies.

Notes

Organisational Structure of the Modern Healthcare System in Indonesia

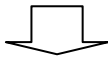
MOH Level from Central to peripheral level
Departemen Kesehatan (DEPKES)
Ministry of Health
Central Level



Dinas Kesehatan Propinsi (Dinkes)
(Provincial Health Office)
Provincial Level



Dinas Kesehatan Tingkat Kabupaten/Kota
(District Level Health Office)
District Level



Pusat Kesehatan Masyarakat (PUSKESMAS) tingkat Kecamatan
(Sub district level Health center)
Village Level

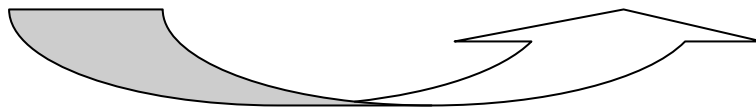


PUSKESMAS Pembantu (PUSTU) Pondok Bersalin Desa (POLINDES) Pos
Pelayanan terpadu
(POSYANDU)

Sub Health Center

Village midwife clinic

Integrated Health Post



Source: WHO (2007d)

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