Social Science & Medicine 82 (2013) 30–34

Contents lists available at SciVerse ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

Short report

Addressing the unequal geographic distribution of specialist doctors in Indonesia: The role of the private sector and effectiveness of current regulations

Andreasta Meliala [a], Krishna Hort [b,*], Laksono Trisnantoro [a]

[a] Centre for Health Service Management, University of Gadjah Mada, Gedung IKM, Faculty of Medicine, Jl. Farmako Sekip Utara, Jogjakarta 55281, Indonesia
[b] Nossal Institute for Global Health, University of Melbourne, 161 Barry St, Carlton, Victoria 3010, Australia

ARTICLE INFO

Article history:
Available online 30 January 2013

Keywords:
Health workforce distribution
Specialist doctors
Indonesia
Private sector
Regulation

ABSTRACT

As in many countries, the geographic distribution of the health workforce in Indonesia is unequal, with a concentration in urban and more developed areas, and a scarcity in rural and remote areas. There is less information on the distribution of specialist doctors, yet inequalities in their distribution could compromise efforts to achieve universal coverage by 2014. This paper uses data from 2007 and 2008 to describe the geographic distribution of specialist doctors in Indonesia, and to examine two key factors that influence the distribution and are targets of current policies: sources of income for specialist doctors, and specialist doctor engagement in private practice. The data demonstrates large differences in the ratio of specialist doctors to population among the provinces of Indonesia, with higher ratios on the provinces of the islands of Java, and much lower ratios on the more remote provinces in eastern Indonesia. Between 65% and 80% of specialist doctors' income derives from private practice in non-state hospitals or private clinics. Despite regulations limiting practice locations to three, most specialists studied in a provincial capital city were working in more than three locations, with some working in up to 7 locations, and spending only a few hours per week in their government hospital practice. Our study demonstrates that the current regulatory policies and financial incentives have not been effective in addressing the maldistribution of specialist doctors in a context of a growing private sector and predominance of doctors' income from private sources. A broader and more integrated policy approach, including more innovative service delivery strategies for rural and remote areas, is recommended.

Introduction

Inequalities in the distribution of the health workforce are widespread in lower and middle income countries. WHO estimates that although one half of the global population live in rural areas, these areas are served by only 38 per cent of the total nursing workforce, and less than one quarter of total physicians (Dolea, Stormont, & Braichet, 2010; Mistretta, 2007). This pattern of distribution contributes to health inequities, with populations in urban areas having better access to health care, compared to those living in rural areas (Dussault & Franceschini, 2006; Lehmann, Dieleman, & Martineau, 2008; Wibulpolprasert & Pengpaibon, 2003; Wilson et al., 2009).

Many studies have been conducted to identify the factors causing this imbalance, and, in particular, factors behind decisions by health workers on where to locate or remain. These factors can be summarised in three categories: (a) individual, namely: age, gender, marital status, background; (b) organisational, such as job resources, team, incentive schemes; and (c) broader environmental factors, including regulation, culture, and security (Dieleman, Kane, Zwanikken, & Gerretsen, 2011; Dussault & Franceschini, 2006; Lehmann et al., 2008; Wibulpolprasert & Pengpaibon, 2003; Wilson et al., 2009).

Indonesia provides an example of a country facing particular challenges in regard to the distribution of its health workforce. These include a wide geographic distribution and considerable regional variation in health service availability and health status (Rokx, Schieber, Harimurti, Tandon, & Somanathan, 2009). Inequalities in distribution of the health workforce, particularly doctors, have been identified as an important policy issue for Indonesia, with only 20% of doctors in rural areas, serving 70 per cent of the population (Rokx, Giles, Satriawan, & Marzoeki, 2009).

One category of the health workforce that is a particular issue in Indonesia is the category of specialist doctors. Specialist doctors are defined by the Indonesian Medical Council as those doctors who

* Corresponding author. Tel.: +61 3 8344 9122; fax: +61 3 9347 6872.
E-mail addresses: andremeliala@yahoo.de (A. Meliala), khort@unimelb.edu.au (K. Hort), Trisnantoro@yahoo.com (L. Trisnantoro).

0277-9536/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.socscimed.2013.01.029

have completed advanced training in a particular medical speciality. More than half of Indonesia's specialist obstetricians and 40 per cent of its anaesthesiologists work in the capital Jakarta and other main cities (Mize, Pambudi, Koblinsky, & Stout, 2009).

The Indonesian health system has undergone significant changes over the last decade, including decentralisation of responsibility for health service provision, introduction of social health insurance for the poor, and growth of the private sector (Kristiansen & Santoso, 2007). Recent studies in Indonesia have demonstrated an increased use of the private sector (Heywood & Harahap, 2009a) and increased numbers of private hospitals, which now constitute 44 per cent of total hospitals and 37 per cent of total hospital beds (Rokx, Schieber, et al., 2009).

Although most specialist doctors in Indonesia are state employees, dual practice in state and private facilities is well established and widespread. Dual practice dates from the colonial period and it is estimated that eighty per cent of public physicians in Indonesia also work in the private sector (Eggleston & Bir, 2006).

Internationally, dual practice has a range of implications for health system performance, in terms of equity, efficiency, and quality (Prado & Gonzales, 2007). Various regulatory measures have been proposed to manage dual practice, including tighter contractual arrangements, encouraging state physicians to carry out their private practice in public facilities, raising public salaries, and self regulation by the professional association of their members (Jan et al., 2005; Wibulpolprasert & Pengpaibon, 2003; Wilson et al., 2009).

Indonesia has also introduced a number of policy measures, such as regulation of private practice and financial incentives for rural location, to address the inequitable distribution of doctors, including specialist doctors. However, the problem persists and could compromise efforts by Indonesia to achieve universal coverage by 2014 by limiting geographical access to health services in underserved areas, even as social health insurance reduces financial barriers for the poor (Trisnantoro, Meliala, Dewi, & Hort, 2012).

Indonesia is divided into 33 provinces, scattered over five main islands (Java, Sumatera, Kalimantan, Sulawesi and Papua), as well as many smaller islands. Provinces with the highest populations tend to be on the central islands of Java (West Java, Central Java, East Java and the cities of Jakarta and Yogyakarta), and Bali. Populations on the other islands are generally much less and many have a low population density.

Since 1999, Indonesia's health system has been decentralised, with authority for regulation at a provincial and district level transferred to provincial and district governments. However, the central government, in this case the Ministry of Health, continues to have the role of steward and overall regulator of the health system. Laws are passed by the national parliament, and the Ministry of Health develops Ministerial level regulations and instructions to provide guidance and direction for Provincial and District Health Offices.

The vast majority of doctors and other formal health care providers are employed by the state as permanent civil servants (*Pegawai negeri sipil* or PNS), with a few as temporary contracted civil servants (*Pegawai Tidak Tetap* or PTT). While their principal location of practice is their location of state employment (a government hospital or facility), doctors and health care providers may also apply for a licence to practise in up to two additional private facilities (hospitals or private practice locations). Division of work hours between state and private practice is governed by general regulations for civil servants and specific local (provincial or district regulations). These generally require civil servants to spend 8 hours per day, five days per week, in their state employment.

The study reported here attempts to explore how current regulatory and financial policies have impacted on the behaviour and practices of specialist doctors in Indonesia, and how this might influence their geographic distribution. The findings will contribute to a better understanding of the effects that new developments in the health sector, particularly the shift towards a mixed public–private health system, are having on the medical workforce; and to provide new information on the distribution of specialist doctors.

This paper, therefore, describes the current geographic distribution of specialist doctors in Indonesia and examines two key factors that influence distribution and are targets of current policies: these being income sources for specialist doctors; and specialist doctor engagement in private practice.

Methods

Measurement of geographic distribution of specialist doctors

The distribution of state specialist doctors was derived from data for the year 2008, provided by the Bureau of Personnel at the Ministry of Health. This data is based on reports by District and Provincial Health Offices throughout Indonesia on the number of specialist doctors working in government facilities. While this excludes any specialist doctors that worked exclusively in private practice, on the information available, this number is quite small.

Current policies and regulations

Laws and regulations enacted by the Government of the Republic of Indonesia and the Ministry of Health, relevant to the distribution of specialist doctors, were identified and reviewed. The identification process was limited to regulations enacted from 2004 to 2011. Regulations are the instruments used by government to regulate medical practice throughout Indonesia.

Case studies of specialist doctor income and working practices

(i) Survey of sources of income of specialist doctors. A survey was undertaken to identify the income of specialist doctors in one city in each of eight provinces in Indonesia in 2007. The provinces selected, and number of respondents, were: Papua (12), North Sulawesi (19), West Nusa Tenggara (10), Yogyakarta (25), Central Java (14), DKI Jakarta (35), Bengkulu (13) and North Sumatera (21). In each city, one C class hospital was identified (a hospital with at least 4 specialists and 50–100 beds) and all specialists associated with that hospital approached. Total respondents were 149 specialist doctors, comprising: Obstetrics and gynaecology specialists (40), Internal Medicine specialists (39), Surgery specialists (36), and Paediatric specialists (34). The survey was undertaken through interviews with specialist doctors practising in each city in 2006–2007, using a structured questionnaire. The activity was supported by the Indonesian Medical Association and PT Askes (national insurance company). The primary information derived from the specialist doctor interviews was compiled and analysed.

(ii) Study of specialist doctor work practices in one provincial capital city of Sumatera.

This study entailed direct observation by shadowing of all 15 specialist doctors licensed to practise in the city during their daily practice, and was undertaken in 2008. The observer reviewed the licence to practise of all specialist doctors and compared it to the practice locations identified through shadowing. The observer looked at the practice sign of each specialist doctor in any location found during the observation. Findings were noted and cross-checked with the attendance of the specialist doctor whose name was written on the sign board, to avoid missed observations. The