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Title Page

Title: Geriatric Medicine in Malaysia- Riding the Wave of Political Change

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Abstract

Malaysia became the centre of international attention when it democratically removed a semi-authoritarian government of 62 years during its 14th general election this year. This electoral success has provided geriatric medicine in Malaysia with the unexpected ageing icon in the oldest prime minister in the world. Political change has led to a wave of optimism for the expansion of geriatric services in Malaysia, which has met with numerous challenges in the last two decades. The number of geriatrics specialists and services had already begun expanding under the previous government. However, existing geriatricians will need to reassess the landscape of delivery and access of care in our rapidly growing ageing population and develop new strategies to truly expand their services. In addition to unrelenting efforts in the recruitment and training of future geriatricians, the steady expansion of the geriatric workforce should take into account the inclusion of geriatric medicine in the undergraduate training curricula of all healthcare professionals. Expansion of geriatric services will also be a cost-effective strategy to reduce the growing national healthcare budget incurred by the growing needs of an ageing population.

Keywords: Aged; Geriatrics; Successful Ageing; Care Quality; Health Systems; Training

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Introduction

On the 9th of May 2019, Malaysia took the world by surprise by voting out it's government of 61 years in its 14th general election since its independence from British rule in 1957. The newly elected Prime Minister, at 93, became the oldest head of state in the world. This monumental step in Malaysian and Southeast Asia- the birth of true democracy, has also presented a fresh opportunity to address ageism. This major political shift calls for a period of re-evaluation of the direction of healthcare services, particularly in the care of older persons in Malaysia.

Malaysia is a considered an upper-middle income country. Among its population of 32 million, 2 million are aged 65 years and over [1]. While 6% would appear small compared to that of developed nations world-wide, the speed of increase in both the proportion and the absolute numbers of older persons in Malaysia is unprecedented. In the year 2010, only 5% of the Malaysian population were aged over 65 years, and by 2040, this is expected increased to 14.5% [2]. These potentially alarming figures are fuelled by reduced birth rates, which have for the first time dipped below replacement rate last year, as well as a rapid increase in life expectancy.

Prior to the change of government, the development of geriatric medicine in Malaysia has been challenging, with there being little progress in the first decade [3]. However, in recent years, there has been increased investment in geriatric services, and increasing numbers of doctors specialising in geriatric medicine. Much of the expansion in geriatric services that will be seen in Malaysia in the next few years would actually have resulted from initiatives

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supported by the previous government. Over the past eight years, the Malaysian Ministry of Health has consistently funded at least five fellowships per year through structured subspecialty training in Geriatric Medicine, which leads to recognition in a National Specialist Register held by the Academy of Medicine Malaysia. This has led to the increase in number of practicing geriatricians from 14 in 2011 to 39 in 2018. In addition to the increase in numbers of geriatricians, numerous geriatric units have emerged in public hospitals throughout the country. There are now geriatric services in 11 of the 14 states, including the Federal Territory Kuala Lumpur (Table 1). This represented a major increase from just four states in 2010.

Table 1. Distribution of Geriatricians According to the States of Malaysia

State	Number of Geriatricians*	Population Aged ≥65 years ('000)**
West Malaysia		
Northern States		
Perlis	None	21.6
Kedah	1 Public	158.7
Penang	1 Public, 2 Private	141.3
Perak	2 Public, 2 Private	246.5
Central States		
Federal Territory	11 Public, 3 Private, 1 Retired	120.2
Selangor	4 Public, 2 Private	306.1

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State	Number of Geriatricians*	Population Aged ≥65 years ('000)**
Negeri Sembilan	1 Public	81.6
Southern States		
Johor	1 Public, 1 Private	248.3
Melaka	1 Public, 1 Private	71.1
East Coast		
Pahang	1 Public (visiting geriatrician from Selangor)	110.8
Kelantan	None	113.8
Terengganu	None	65.4
East Malaysia		
Sarawak	1 Public, 1 Private	192.7
Sabah	1 Public, 1 Private	123.4

*indicates total number of geriatricians working in the public and private sectors as of September 2018

**Department of Statistics Malaysia Population Estimates[2]

The 39 geriatricians are distributed between public hospitals and the private sector. With one-third of the geriatricians located in the capital city of Kuala Lumpur, the geriatric services in public hospitals in all the other states comprise stand-alone units run by single-handed geriatricians in individuals states, operating with a limited number of beds or in integrated general medical wards. Available geriatric services, are therefore a long way from meeting the needs of the existing older population. Hence the question remains, can

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geriatrics services in Malaysia expand sufficiently to affect a tangible change in the delivery of quality care for older persons in order to meet the needs of our older population?

When we compare the development of geriatric medicine with our closest neighbour, Singapore [4], one cannot help but ask, "what happened"? Geriatric services in Singapore and Malaysia started at approximately the same time, but Singapore has raced ahead, while geriatrics services in Malaysia, literally got stuck for a while, and has only started wading through the mud to get to solid ground. Have we finally hit solid ground, and are the winds of political change now going to blow us further forward? If so, we better get our sails ready.

In order to affect a positive change, the issues and challenges that held Malaysia back in developing geriatric services need to be examined and addressed. A factor in the slow expansion of the number of geriatricians in the country can be attributed to the political forces driving healthcare provision and its distribution to the more attractive and popular specialties. Geriatric medicine may appear as less 'sexy' to medical graduates who have just completed their basic specialty training as many other specialties such as cardiology and gastroenterology also promise far better financial remuneration in the private sector [5]. Malaysia has also seen a rapid expansion in the number of medical colleges over in the first decade of this millennium [6]. However, few of the 34 registered medical courses currently include geriatric medicine within their undergraduate curriculum. Others replace geriatrics modules with nursing home visits which may further tarnish the image of geriatric medicine [7]. Another contributing factor to the slow expansion of geriatrics is the low likelihood of medical undergraduates encountering a geriatrician, let alone be attached to a geriatric

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ward, throughout their medical training. A further irony to this is that trained academic geriatricians are concentrated within one public university. Many of the other geriatricians within public hospitals do contribute as adjunct clinical lecturers to medical programmes, but this is unlikely to have much impact on the 5000 medical graduates produced by the country each year [8]. The repercussions of the limitations described here need to be quantified in terms of the impact of such limited exposure to geriatric medicine among our healthcare professionals on the care of older persons in our rapidly ageing population. This is necessary to inform the establishment of remedial steps to upskill the existing workforce.

Most Malaysians receive their healthcare through public hospitals, at virtually no cost to all citizens. There is a growing number of middle class Malaysians who are now insured and seek healthcare in private hospitals, but nearly all older persons access private healthcare through out of pocket payments, since few are able or willing to pay the exorbitant insurance premiums demanded of older clients [9]. Community services are provided by government health clinics as well as private general practitioners. Since the 13th General Election in 2013, public healthcare has been free for all senior citizens aged 60 years and over. The rationale underlying the lack of expansion of geriatric services in both public and private sectors therefore differ somewhat. Free healthcare funded fully by taxation can no longer be a sustainable funding model. This issue has been raised since the 1990s, and there have been bills debated in Parliament to reform the health funding structure, but to date, the funding of the Malaysian public healthcare system has remained largely unchanged since independence [10]. The public hospitals maintain archaic hierarchical structures, which are slow to embrace change [11]. Hospital directors, who are usually senior doctors with experience in treating a large of number of older persons but limited exposure to

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training in geriatric medicine, may find it difficult to assimilate new concepts of care amidst other competing priorities.

Many have attributed the slow pace of change in the public health system primarily to the attraction of the private sector. However, geriatric medicine has barely thrived in the private healthcare sector either, with limited financial remuneration available to private geriatricians, as consultation fees are capped by the Private Health Care Act [12]. The current payment structure in the private healthcare system severely disadvantages the geriatrician who requires long consultations with their patients. Many clinical assessments pertaining to mental status, falls assessments and frailty evaluations have not been listed in the fees schedule, further limiting the earning potential of private geriatricians but additionally discouraging busy doctors from performing these assessments. In addition, since private patients usually access specialists directly, few may acknowledge the role of the geriatricians, as they usually seek the attention of the 'best doctor' for their problem which is perceived as the most famous organ specific specialist.

Health service provision is largely hospital-centric, with the accident and emergency department being the first port of call for many frail older persons. Government health clinics in urban areas are grossly oversubscribed due the increasing burden of non-communicable diseases [13]. The sick older person is unlikely to be able to sit in the consultation room for long hours while waiting to see a doctor. This may lead to delayed presentation to medical services, but others also present to the emergency room as soon as they fall ill, acknowledging the danger of waiting. However, the older person who presents to the emergency room is at least three times more likely to be admitted to hospital [14].

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With few medical schools teaching geriatric medicine, few emergency physicians have had training in caring for older adults. Negative experiences of the older client may, therefore, range from inappropriate discharges to overly aggressive treatment at the end of life [15]. With the rapidly ageing population, practical absence of community services, and limited expansion of public health services, it does not come as a surprise that all our hospitals, private and public, are bursting at the seams [16]. Sick patients are regularly turned away from private and public hospitals. It is now a common occurrence for the older person to be admitted to a different hospital every time they require admission. No hospital avoidance or early discharge systems are currently in existence, since hospital and community services are funded by different fiscal budgets, leading to complete separation of care. All geriatricians are hospital-based, and overwhelmed by the burden of caring for the frailest of clients who are often the victims of poor care with little time to focus on starting or changing the current delivery of care.

Limited provision currently exists for social care, as it is expected of adult children or family members to care for 'their own' older person. Retirement savings are usually exhausted within 3-5 years of retirement, with the retirement age only extended from 55 to 60 years five years ago [17]. The average life expectancy is now 75 years [18]. Adult children are expected to give up work to care for their dependent ageing parents if they are unable to pay for care. The average cost of 24-hour care is at three times the minimal wage recently announced by the new government. With the old age dependency ratio dropping rapidly, fewer families are able to meet these societal expectations. Therefore, as public hospital care remains free for senior citizens, the era of 'granny dumping' has finally arrived, amidst outcries of declining moral standards. The healthcare professional, however, only sees the

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delayed discharge and the lack of bed availability and seeks to act punitively against the adult children who have 'abandoned' their parent [19].

Geriatricians work in multidisciplinary teams. The 'toxic' working environment within the health system, however, emphasizes the mantra of 'every man for himself'. This is unsurprising considering the hierarchical structures which extend beyond doctors. Limited opportunities for career progression across all healthcare disciplines may lead to a less conducive working environment, where individuals feel the need to out shine their fellow colleagues rather than being mutually supportive to enhance organizational growth [20]. The hierarchical culture also prevents multidisciplinary team members from expressing their opinion or make executive decisions on individual patients, with the decision making role entirely confined to the doctor in charge [21,22]. The hiring of healthcare professionals within the public health system still requires a vacancy to be created by the Public Services Department which is the purview of the Ministry of Human Resources. Efforts to create new salary scales for allied health professionals and nurse specialists in order to employ and retain adequately qualified nurse specialists, occupational therapists, speech therapist and psychologists to name but a few, have been met with limited success [23]. The geriatrician, therefore, struggles to assemble multidisciplinary teams and retain multidisciplinary team members, let alone operate as multidisciplinary teams which know how to work as teams.

Future service development now needs to plan for a service that not only effectively influences the care of older adults but also grows at a pace faster than the relentless increase in older patients. Development needs to take into account human resource, culture change, structural changes and service delivery. All the above is indeed challenging, but

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there is no alternative. Without addressing the increasing healthcare needs associated with population ageing, our country may not be able to break out of the middle-income trap that has held it back from attaining the much coveted higher income status over the past two decades. The demographic dividend that our country should have prospered from has more or less ended [24].

Expansion of human resources is perhaps the easiest part. It is entirely possible to see to a rapid increase in the number of geriatricians in the country provided there is a strong commitment to recruit and train future geriatricians. Acceptance into subspecialist geriatrics training should be determined by the number of individuals with the right aptitude and desire and the number of geriatricians and training centres. There should not be any need to award fellowships as all doctors in training are already paid by the government and hence only needs to be placed in posts where they will receive geriatrics training. Incentives should be offered to those who take up geriatric medicine to increase the attractiveness of the subspecialty, such as minimizing any administrative and political delay to these individuals entering training. With the massive increase in numbers of medical graduates, our country is no longer short of doctors [25]. With a clearer entry criteria proposed by the National Postgraduate Curriculum for Internal Medicine, trainees will no longer have reason to delay entry into subspecialty training of their choice; provided the unequal distribution of human resources between subspecialties are addressed. Subspecialty geriatric training in Malaysia currently require three years. Only geriatricians working in the public sector are trainers, and currently comprise 60% of the total geriatrician population. Therefore, a simple projection assuming all public sector geriatricians train one geriatrician every three years; will see to the achievement of the Canadian 2011 levels of 0.5 per 10,000 population aged

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65 years or over by 2026 and UK targets of 0.85 per 10,000 population aged 65 years or over by 2030 (Figure 1) [26,27]. Human resource expansion also needs to include other professionals allied to geriatric medicine. An urgent revision of the governance behind posts for healthcare professionals by the Public Services Department is required to enable more equitable systems that are more sensitive and responsive to local needs.

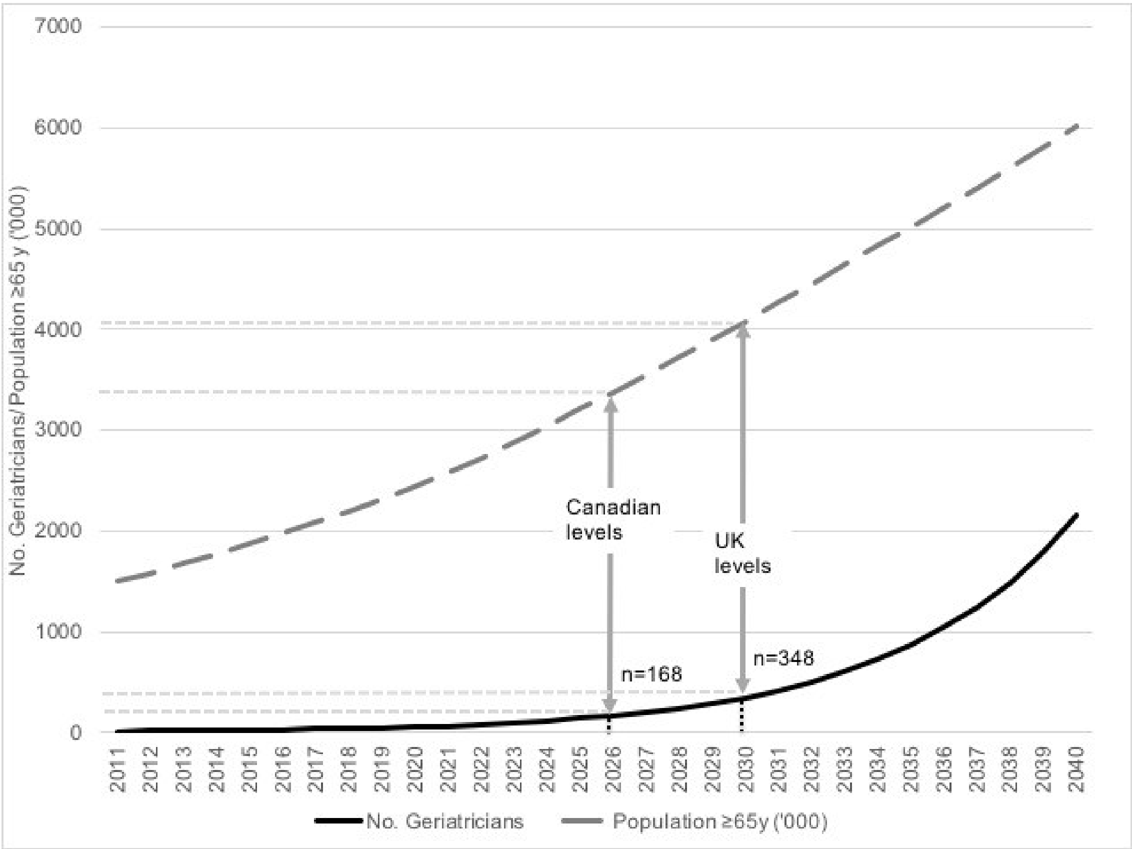

Figure 1. Projection of Older Population and Number of Geriatricians in Malaysia from 2011-2040.

The population projections for the total number of Malaysians aged 65 years and over from 2011 to 2040 (broken grey line) with a simulated model of expected number of geriatricians in Malaysia if 60% of geriatricians trained one new geriatrician every three years (solid black line). At this rate of increase, the total number of geriatricians will meet Canadian levels of

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0.50 per 10,000 persons aged 65 years and over[26] by 2026, and United Kingdom (UK) targets of 0.85 per 10,000 persons aged 65 years and over[27] by 2030.

Exposure to geriatric medicine needs to be mandated for undergraduate courses for all healthcare professionals [28]. It may not be possible, however, to ensure sufficient exposure to geriatrics services at the intial stages. The initial requirement should, therefore, be for all undergraduate courses for healthcare professionals to include a geriatrics curriculum [29]. As all such courses require accreditation by the Malaysian Qualifications Agency, this can almost be implemented overnight [30,31]. These courses should then be incentivized through ratings and funding availability to include clinical geriatrics exposure, which will eventually be made compulsory once clinical services have expanded adequately. Early exposure to geriatric medicine will ensure that future healthcare professionals will graduate with the requisite skills to care for older patients, reducing the level of potential harm to patients experienced by all older persons seeking medical attention today [32]. In addition, more medical graduates and allied health professional are likely to take up geriatric medicine as a subspecialty or specialist interest if they have had the opportunity to meet and be inspired by those caring for older persons early on in their careers [33]. As a positive step toward the right direction, the National Postgraduate Curriculum for Internal Medicine is due to be launched in 2019 with the inclusion of a geriatrics component.

The hierarchical working culture which has plagued the healthcare system lends poorly to the development of geriatric medicine and effective team working. Therefore the re-examination and establishment of organizational structures which rewards meritocracy rather than bowing to seniority, is an imperative. Education on team work and dealing with

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bullying and harassment needs to be included in undergraduate, postgraduate and continuing professional development courses and effective disciplinary procedures put in place to ensure such a culture is no longer perpetuated [34]. Instead, effective teams are acknowledged and rewarded. Geriatric medicine will only thrive if the multidisciplinary team adopts a flat hierarchy and if colleagues from more established subspecialties are willing put aside the, 'they must fight for it and wait for their turn, like I did' attitude, but to consider the interest and needs of the patient first and foremost.

In this climate of change in our nation, policy makers and hospital management need to acknowledge that geriatrics services pay for themselves as cost-effectiveness measures. The comprehensive geriatrics assessment reduces length of stay and readmission rates, hence reducing the ever increasing burden on hospital beds [35]. The current approach of equating geriatrics to general medicine or only allowing the practice of geriatric medicine through consults is counterproductive. Available evidence indicates that care provided by roving teams have poorer outcomes, with the evidence supporting coordinated multidisciplinary teams delivered through dedicated specialist beds [36]. Therefore, in the current climate where the new government is crying foul of excessive debts which will lead to continued economic hardship for the next few years, rapid expansion in geriatric services is likely to help 'balance the books' with regards to healthcare funding.

The biggest challenge has to be addressing the heavily lopsided funding between health and social care whereby healthcare is free for senior citizens, fully funded by taxation, while social care remains almost entirely out of pocket with the expectation that adult children and family members meet the cost [37,38]. While healthcare and social care funding

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reforms by introducing universal insurance coverage for both health and long term care funded by compulsory salary sacrifice would seem the obvious solution, no self-respecting government, no matter how sincere, is likely to be able to implement such a drastic change [10]. Furthermore, lessons from the UK National Health Service suggest that a universal national insurance system is unlikely to be sustainable [39]. No clear solution, currently exists to address the matter of funding [40]. In this regard, we are perhaps starting on a level pegging with other developed economies which are in agreement that the approach of "providing for the older persons' needs" is not a sustainable one [41]. The effective solution for this politically sensitive area, however, remains elusive. Armed with the knowledge of "how not to do it" by learning from other 'failed' systems, what we have is the clean slate from which we can build a system that does not repeat anybody else's mistakes [42].

Geriatric medicine in Malaysia now has the poster boy to die for! What better driving force for wholesale attitude and policy change than a 93-year-old Prime Minister- simply the best example of successful aging! The road ahead to play catch-up with reforming health services to meeting the needs of the ageing population remains daunting. Issues associated with lack of popularity, limited early exposure of the workforce, hierarchical organizational structures and absence of social care funding will need definitive action, in order to enable accelerated expansion of geriatric medicine as a subspecialty.

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