Research Implementation Plan Malaysia

How can the public and private sectors work more collaboratively to improve and integrate primary health care coverage and prevent segmentation of services in Malaysia?

Background and significance

The Malaysian primary health care is a two-tier system which consists of the public and private facilities. In 2017, the public primary health care clinics in Malaysia consist of the following; 1060 health clinics, 1803 community clinics and 357 Malaysia clinics.[1] In comparison, the number of registered private medical clinics is higher at 7335.[1] However, access and referrals between the public and private health care services are segmented. Though some may argue that this is good for patients' choice, it certainly does not do any good in terms of coordination and continuity of care which is much needed for chronic disease management. Access to private health services is limited to the richer society who can afford out-of-pocket payments of higher fees.[2]

Segmentation means division or separation into different parts. Segmentation of primary health care services is seen in terms of public and private sectors, in-patient and out-patient care, different in scopes of services, availability of diagnostic facilities and medications, and types of health care professionals.[3-7] Segmentation of the population into different groups of health care needs may result in better health care provision,[8] but segmentation of services is not generally perceived to contribute towards better health of the people, nor more effective and efficient care delivery.[9]

Segmentation may be compounded by different payment systems between the public and private sectors and their respective further clinical and medical care in the hospitals. The availability of health insurances can also influence whether patients choose to seek treatment at public or private sectors, and their according scope, timeliness and quality of medical care. Accessibility of the public or private primary care services could also influence segmentation based on the incidence and prevalence of certain health conditions at the community, or when the clinical situation of the person takes higher concern over affordability or health care cost.[10-13] The quality of service provided, including waiting-time, doctor-patient relationship and adherence to patients' expectations, may also influence patients' preferences.[14 15]

Segmentation and fragmentation of health services and facilities may exacerbate difficulties in access to comprehensive and quality services for the population at large,[3] and cause low response capacity towards certain health conditions at the first level of care by the health care providers.[16] This results in inefficiencies.[17] The rate of hospitalisation or referral for conditions that could be managed at a primary setting of a certain sector could be an indicator that reflects response capacity or presence of segmentation of services at the primary care level of that particular sector of services.[18]

A pharmacy practice reform that integrates pharmacists into primary health care clinics can be a potential initiative to promote quality use of medication. This model of care is a novel approach in Malaysia, and research in the local context is required, especially from the perspectives of pharmacists.[19] The Malaysian pharmacist board has recognised many issues that causes segmentation of services in Malaysia, such as control over the supply of medicines, quality of medicines (original or generic), national health care fund, even

distribution of pharmacy services, self-regulation in pharmacy services and practice, education and research, national formulary and pharmacopoeia and pharmacy legislation.[20]

Owing to the scarcity of data on the segmentation of primary medical care services in the current literature in Malaysia,[21] this study aims to expand our understanding of existing primary health care systems and present segmentation of services so that we may improve on them.

Specific Aims

1. To determine the perception and experience of providing care in their own sector of public and private primary care practitioners, the constraints they identify, and the access to services in the other sector to which they would like to have access.
2. To determine the mechanisms used by people in the community to decide whether to access public or private primary care services when unwell.

Specific research questions:

a. Was a deciding factor the availability of specific services or personnel at the sector they chose?
b. Did they ever have a cross-sector referral?

Study Design

Targeted geographic region and rationale for selection

Public and private health clinics in urban, semi-urban and rural regions in Selangor will be studied. This state provides different regions of public and private primary health care services as mentioned. It is the most populated state in Malaysia including regions of high to low-income populations. It is also close to the researchers' institutions which increases feasibility.

Targeted population

The family medicine specialists (FMS), senior medical doctors (work experience of two or more years) and pharmacists at the public primary care clinics; and selected family physicians in the private primary care clinics will be invited in the Phase 1 study. Additionally, policy-makers at the districts, states and national levels including public health physicians, health directors and administrators will also be approached for focus group discussions or in-depth interviews about their perceptions and experience of possible segmentation of services in the Phase 1 until saturation of the themes occurs. In Phase 2, the similar groups of public healthcare professionals and private doctors throughout Malaysia will be invited via email. The contact information will be obtained from the Family Medicine Specialist Association for the public FMSs and Ministry of Health Malaysia for the public health physicians; and the Academy of Family Physicians Malaysia or Malaysian Medical Association will provide contact information for the private doctors.

The FMSs and senior medical doctors are identified as the targeted population in this research because they are important in identifying and highlighting areas for improvement and integration of primary care services; as well as in identifying areas to prevent segmentation. Involvement of the policymakers in this study increases importance and participation in this study, as well as drawing attention of and increasing the chance of implementation of the study findings by the health authorities at the higher levels. This issue is already being highlighted as an important area of concern by our current Minister of Health and medical health professionals would be interested in participating in this research.

Measures to be used to encourage the participation of family medicine specialists and doctors include educating them on the need for collaboration, and working out with them on the benefits of such a collaboration; such as reduction of the patient-load and workload in the public sectors and improvement of services in both the public and private sectors. In addition, there will be an increased income to the private sector, where patients who can afford private fees can also be referred from the public to private sectors. These measures will also improve continuous professional development between the two sectors.[22 23]

Methodology

Phase 1

A mixed qualitative and quantitative methods will be used. Firstly, there will be a qualitative study using purposive sampling. Study participants will be selected from public and private primary care practitioners. Their perception and experience of providing care in their own sector will be explored in detail. The primary care practitioners' constraints and access to services that they wish they could have to the other sector will be also explored in detail. Public health physicians and health directors as policymakers and experienced administrators will be approached in this study at their respective offices.

The purpose of the study will be clearly explained by the researcher and informed consent obtained from the study participants. We will also invite patients or general public to share their perceptions on segmentation of primary healthcare services. Patients visiting the clinics at selected public and private sectors will be approached and interviewed on their preferences of which health sector and for what reasons.

Public family medicine specialists, senior medical doctors, and pharmacists from different regions will be invited for in-depth interviews or focus-group discussion. Similarly, private family physicians or general practitioners will be visited at their respective clinics in the three different regions to record their perception and experience on the above matters. This is to ensure richness of the data and to influence data generation. Public health physicians and health directors will be engaged in personal interview sessions for their opinions on segmentation of primary care services, and on their opinions of the other respondents' perception collected earlier. This approach is intentionally arranged to increase this group of respondents' interest and participation in this study. The sample size of this study will be determined once data saturation is reached. We expect the sample size to be about 125 (25 per group of respondents from public FMSs, senior medical doctors, pharmacists, private family physicians, policymakers). Using semi structured interview protocols, the matters under study will be explored and discussed.

All interview sessions will be audio-recorded and video recorded. After each interview, audio recording will be transcribed. Transcripts will be examined against actual recording to ensure accuracy. Thematic analysis using NViVO 12 will be used to identify major themes. The coding of the identified themes will be cross - checked by other researchers in order to ensure the accuracy and reliability of the coding process.

Information will also be gathered from patients in selected public and private sectors on their preferences of which sector and for what reasons.

Phase 2

Following the Phase 1 qualitative analysis, all the possible issues of segmentation of services at both the public and private primary health care services will be enlisted. These issues will be converted into items of a questionnaire on segmentation of services at primary care in Malaysia. Then, a nationwide survey of the public physicians, pharmacists, public health physicians and health directors, and private family physicians will be conducted to identify, confirm and estimate the degree of health care services segmentation in Malaysia. This will be conducted via emails and online survey. The estimated sample size for the nationwide FMSs is 350, senior medical officers 1500, pharmacists 600, private family physicians 1000 and policymakers 300. Supplementing the email invitation, personal approach to the identified respondents via telephone calls or visits maybe conducted.

A further survey will be conducted in Selangor with a sample of respondents' representative of the nationwide users of primary health care services on what factors determine their choice between the public or the private primary health sectors they attended when recently unwell, or should they become unwell in the future. This will be conducted by post to the Selangor population in random by stratification of the geographical regions and types of residential area. The estimated required sample size is 5000 with an estimated 50% non-response rate. Supplementing the postal invitation, personal approach to potential respondents at public and private health clinics, will be conducted to improve the recruitment of participants.

Potential research team and partners

1. Sherina Mohd Sidik (Professor Dr) (Universiti Putra Malaysia) – Principal investigator
2. Chew Boon How (Assoc Prof Dr) (Universiti Putra Malaysia)
3. Ambigga Devi Krishnapillai (Assoc Prof Dr) (Universiti Pertahanan Nasional Malaysia)
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5. Maizatullifah Miskan (Dr) (Universiti Pertahanan Nasional Malaysia)
6. Hasliza Abu Hassan (Datin Dr) (Universiti Pertahanan Nasional Malaysia)
7. Ng Kien Keat (Dr) (Universiti Pertahanan Nasional Malaysia)
8. Aznida Firzah Abdul Aziz (Assoc Prof Dr) (Universiti Kebangsaan Malaysia)
9. Noor Azimah Muhammad (Assoc Prof Dr) (Universiti Kebangsaan Malaysia)
10. Ummavathy Periasamy (Dr) (Ministry of Health Malaysia)
11. Muhambigai Perumal Samy (Ministry of Health Malaysia)
12. Vigneswary Perumal Samy (Ministry of Health Malaysia)

Overview work plan

The Phase 1 will begin in the last quarter of 2019 and be completed by the third quarter of 2020. Preparation for the Phase 2 will be done in the last quarter of 2020 and will begin in the first quarter of 2021. Completion of the Phase 2 with results for dissemination can be expected by the last quarter of 2021.

Barrier to implementation

Response rates to the online survey of the public and private doctors could be a challenge to achieve the desirable sample size. A letter or post card may be sent to the selected doctors before the arrival of the email and online survey. This is hoped to personalise the invitation and to better inform and prepare the potential respondents to the survey.

Similarly, the response rates of the general population to the postal survey may be too low or variable depending on region. Personal approach at the targeted regions and community may be considered to complement the shortcoming of the postal survey.

Dissemination of results

Results of the study will be disseminated to the relevant stakeholders / policy makers, medical and health professionals and also the public; via publications in journals (national journals and also international journals with impact factor 2.0 and above), presentations at national and international conferences and meetings. Two postgraduate students will be able to complete their PhDs under this project.

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