BACKGROUND

In Malaysia, primary healthcare services are provided by both public and private sector. Healthcare services in the urban areas are predominantly provided by the general practitioners whereas the Ministry of Health (MOH) focuses its healthcare delivery to the rural areas.1 Differences between the practices of urban and rural general practitioners have been reported in several countries2,6 but there is a paucity of local studies done on an urban-rural distribution of general practitioners and their services in primary care.1,9

OBJECTIVE

This study aims to compare the general practitioners characteristics and services profile between urban and rural general practices in Malaysia.

RESULTS

Figure 1: Distribution of general practices (GPs) by strata and state in Malaysia, 2010 by urban-rural areas

Figure 2: Type of practices in urban and rural areas

Figure 3: GPs operating hours by urban-rural classification

Table 1: General practitioners’ characteristics and service profiles of general practices

Table
Criteria
Urban n (%) Rural n (%) P value
General practitioners’ characteristics
Age
Male 256 (66.7) 27 (81.8) 0.071
Female 129 (33.6) 6 (18.2) 0.671
Years of experience† 18.42 (9.97) 15.06 (10.45) 0.065
Gender
Preventive services
Acute Care Services
Primary Care Services
Primary care clinics

DATA COLLECTION & DATA ENTRY

Analysis and comparison by urban-rural areas

METHODOLOGY

Survey form development
Survey population: Private primary care clinics
n = 4529
Sample size selection
n = 107
Independent t-test (unequal variances)
Descriptive clinics
Data collection & data entry
Data cleaning, verification
Data analysis

National Healthcare Establishment and Workforce (NHEWS) Primary Care Database: 2010

ACKNOWLEDGEMENT

We would like to thank the Ministry of Health and Director General of Health for the permission to carry out and publish this study and the Department of Statistics Malaysia for classifying our sample of general practices to urban-rural classification.

REFERENCES

7. Arnheim R, Maksimovic M, Maksimovic VM. Types of general practitioners’ services provided by more than 60.0% of general practices in our study. In Table 1 were provided by more than 60.0% of general practices in our study.

CONCLUSION

This is the first study that compares the distribution of general practice and practitioners between urban and rural areas in Malaysia. General practitioners in urban areas were slightly older with significant mean differences observed for urban-rural comparison (Table 1). All general practices in rural areas provide acute care services. One clinic from urban areas did not provide acute care as it offered medical check-up services only. Less than 5% of the general practitioners did not provide preventive care services. Preventive services were available in both urban and rural general practices with majority offered medical check-up and maternity services. No significant urban-rural differences were observed for all services provided with exception of maternity service. General practices might not be able to provide preventive care services equivalent to those provided by public clinics, but this study highlighted that four out of six preventive services listed in Table 1 were provided by more than 60.0% of general practices in our study.

DISCUSSION

Urban population made up 71.0% of total population in Malaysia. Kuala Lumpur and Putrajaya have 100.0% level of urbanisation while states with lowest urbanisation levels were Kelantan (42.4%) and Pahang (50.5%).3 Following classification by Department of Statistics, 90.8% (4113/4529) of total general practices population in Malaysia were located in urban areas (Figure 1). Negeri Sembilan had the highest number of general practices set up in rural areas (25.4%, 49/193).

The response rate from clinics in urban areas was 51.2% while 53.6% of total clinics sampled from rural areas responded to our survey. From our study population, 277 clinics out of 307 clinics (90.2%) that participated in our survey were in urban areas. There are more solo practitioners in both urban and rural areas (Figure 2). Such preferences for solo practices has been noted by other studies4,6 in contrast to public clinics, general practices have flexible operating hours and clinics schedules.2 However, majority of the general practices operate less than 24 hours per day (Figure 3) with no significant urban-rural differences observed.

General practitioners in urban areas were slightly older with significant mean differences observed for urban-rural comparison (Table 1). All general practices in rural areas provide acute care services. One clinic from urban areas did not provide acute care as they offered medical check-up services only. Less than 5% of the general practitioners did not provide chronic care services. Preventive services were available in both urban and rural general practices with majority offered medical check-up and maternity services. No significant urban-rural differences were observed for all services provided with exception of maternity service. General practices might not be able to provide preventive care services equivalent to those provided by public clinics, but this study highlighted that four out of six preventive services listed in Table 1 were provided by more than 60.0% of general practices in our study.

This is the first study that compares the distribution of general practice and practitioners between urban and rural areas in Malaysia. General practitioners in urban areas were slightly older than those in rural areas. Age of general practitioners and the availability of maternal services were the only variables with significant differences observed between urban and rural areas. There is no imbalance in the services provided in both urban and rural general practices. Further study is necessary to measure the rurality for accuracy of related studies in Malaysia.

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