Comparison of Demographic Data, Health Indicators and the Status of Family Medicine/General Practice In Three Intimate Countries: Turkey, Korea and Japan

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Summary

Background: The aim of this study is to compare the demographic data, health indicators and the status of family medicine/general practice (FM/GP) in three intimate countries; Turkey, Korea and Japan.

Method: The questionnaire related to the aim, had been prepared and then filled by the contact persons of the study in every member country of a FM/GP. Main data and indicators are investigated in the questionnare.

Results: Among these three countries; crude birth rate (0,20%) and maternal mortality rate (28,5 per 100,000 live births) are significantly higher in Turkey. The life expectancy at birth is 68,8 in Turkey, 78,6 in Korea and 81,9 in Japan. Korea's crude death rate is the lowest (0,5%). Total expenditure on health is highest in Japan (8,89% of GDP). Contrary to the trends in the world, Turkey gives more emphasis onto the second and third step care services rather than preventive and primary care services.

Conclusion: Countries should give more importance on primary health care services in meeting the health needs of the people living in the country.

Key words: Demographic data, health indicator.

Birbiri ile ilişkili üç ülkenin demografik verilerinin, sağlık belirteçlerinin ve Aile Hekimliği/Genel pratisyenlik durumunun karşılaştırması: Türkiye, Kore ve Japonya

Özet

Giriş: Bu çalışma ile birbiriyle ilişkileri bulunan üç ülke; Türkiye, Kore ve Japonya'nın sağlık belirteçleri, demografik verileri ve bu ülkelerdeki aile hekimi/genel pratisyenlerin statülerinin karşılaştırılması amaçlanmıştır.

Method: Amaca yönelik olarak geliştirilen anket formu, her ülkedeki çalışma yürütücüsü tarafından doldurulmuştur. Anket formunda ana veriler ve belirleyiciler araştırılmıştır.

Bulgular: Bu üç ülke arasında; kaba doğum hızı (0,20%) ve anne ölüm hızı (100,000 canlı doğumda 28.5) belirgin olarak Türkiye'de yüksektir. Doğumda beklenen yaşam süresi; Türkiye için 68,8; Kore için 78,6 ve Japonya için 81,9 olarak saptanmıştır. Kore'de kaba ölüm hızı (0,5%) en düşüktür. Sağlık harcamaları Japonya'da en yüksektir (genel bütçedeki pay %8,89). Dünyadaki eğilimlerin tersine, Türkiye'de birinci basamak koruyucu hizmetlerden çok ikinci ve üçüncü basamak sağlık hizmetlerine daha fazla önem verilmektedir.

Sonuç: Ülkeler, vatandaşların sağlık hizmetlerinin karşılanmasında birinci basamak sağlık hizmetlerine daha fazla önem göstermelidir.

Anahtar kelimeler: Demografik veri, sağlık göstergesi.

Introduction

Asian Continent is the cradle of civilization of the world and there are some common points in the culture of the regional countries and common characteristic health features. The aim of this study is to compare the demographic data, health indicators and the status of family medicine/general practice (FM/GP) in three intimate countries; Turkey, Korea and Japan.

"Crude birth rate" was the first indicator in the study. It shows the number of births in a given population during a given time period, divided by the total population and multiplied by one thousand. "Life expectancy at birth" is the average number of years a newborn infant would be expected to live if health and living conditions at the time of its birth remained the same throughout its life. It reflects the health of a country's people and the quality of care they receive when they are sick[1]. "Crude death rates" are simply total rates which have not been adjusted to a standard population of a given year. They show the true current risk of dying[2]. Another indicator; "Infant mortality rate" is the of children dying a of by the number of births that year. It has been criticised as a measure of population health because it is narrowly based and likely to focus the attention of health policy on a small part of the population to the exclusion of the rest[3]. "Maternal mortality rate" reflects the number of maternal deaths in a population due to both direct obstetric causes and to conditions aggravated by pregnancy or childbirth. Socioeconomic factors such as poverty, education level, and malnutrition have proven to be the underlying causes of most maternal deaths[4,5].

"Total expenditure on health" shows us the sum of expenditure on application of medical, paramedical and nursing activities. It measures the final consumption of health care goods and services[6]. "Governmental expenditures on health" reflects the priority afforded to the health sector by government[7]. Studies suggest that well-targeted government expenditures on health should have a positive impact on both populational and economical growth[8].

Methods

The questionnaire related to the aim, had been prepared and then filled by the contact persons of the study in every member country of a FM/GP. The main data and indicators that were investigated in the questionnaire were crude birth rate, life expectancy at birth, crude death rate, infant mortality rate, maternal mortality rate, total expenditure on health, governmental expenditures on health, total physician number, total hospital number, population per physician, number of medicine faculty, beginning year of family medicine education. Informations were taken from the web sites of Ministry of Health for each country; so the study has confidence and it is easy to replicate the study for all other countries in Asia.

At the same time; an exclusive search for selected key words was conducted in Pubmed and other life science journals for articles that are related to this subject. We used internet for getting data from researchers between three countries. Then, data were evaluated. We determined the limitations of the study in three headline; language problem, problem in communication on internet and non existence of data.

Results

Crude birth rate; is clearly higher in Turkey (0,20%) among the other two countries. Second highest in Korea (0,9%) and lowest in Japan (0,88%).

The life expectancy at birth; it is 68,8 in Turkey, 78,6 in Korea and 81,9 in Japan. In the literature, this situation is directly regarded with the income of countries[1].

According to crude death rate; Korea is the lowest (0,5%) and Japan is the highest (0,82%). Crude death rate in 0,71% in Turkey.

There is great difference in infant mortalite rates. Although the infant mortality rate is similar (0,3-0,5%) among the two other countries, Turkey has approximately 7-8 times increased rates (0,34%). When the Republic of Turkey was founded in 1923; contagious diseases such as malaria, tuberculosis, typhoid fever, trachoma and leprosy were widespread throughout the country because of the poor conditions after war. The infant mortality rate was 300 per thousand[9]. By the radical measures taken by the government, infant mortalite rates decreased 10 times lower; but these improvements couldn't reach people living in suburban or rural regions. Although infant mortality has declined, it had not done so at the expected rate and was at the bottom of the list of developed countries[10].

Maternal mortality rate is also significantly higher in Turkey (28,5 per 100,000 live births) [11] compared with the other two regional countries; among them Korea has a ratio 15,0 per 100,000 live births and Japan has the lowest ratio (6,5 per 100,000 live births).

Total expenditure on health as % of gross national product (GDP) is 6,2 in Korea, 6,6 in Turkey and highest in Japan (8,9). Although total expenditure on health as % of GDP is high in Turkey; priority in expenditures goes to therapeutic services[10,12].

The first three of the most common mortality causes were; neoplastic, cardiovascular and cerebrovascular disease in Japan; neoplastic, cerebrovascular and cardiovascular disease in Korea; and cardiovascular disease, neoplastic and other diseases in Turkey. Neoplasms are gaining importance for Turkey and they will be the leading cause in the near future[13]. In Japan and Korea, mortality causes are not different. Cardiovasculer diseases and neoplasms are the leading causes of mortality all around the world.

Total physician (practitioner and specialist) number is highest in Japan which is compatible with the Japan's higher population number. Turkey has the second most crowded physician number among the three countries, Korea being the third.

Population per physician is highest in Turkey (721), high in Korea (574) and lowest in Japan (472). The fact that all physicians in Turkey, whether specialist or practitioner, have the right to work part-time in both the public and private sectors simultaneously, put a break on improvement of primary health care in practice and makes the rate of population per physician higher[10,14].

Hospital number is higher in Japan (9026) than in the other two intimate countries, of them Korea (1860) has the highest. Hospital number in Turkey is 1172.

Discussion

The higher specialist and hospital numbers and higher population burden of specialists compared to practitioners in Turkey may reflect that Turkey gives more importance on the secondary or tertiary healthcare services rather than primary healthcare services compared with the other countries. In Turkey, there were no known health structures such as primary, secondary or tertiary care; health services were mainly public hospital-based, at present called secondary care or public hospitals between 1923 and 1961. Important health reforms were launched in the 1960s by "Law on Socialisation of Health Services"15,16.

Turkey, should also give more importance on primary health care services as the other two intimates, because

Table 1: Demographic data, health indicators and the status of FM/GP in Turkey, Korea and Japan

	Turkey	Korea	Japan
Total population	67 803 927	47 041 000	127 767 286
Crude birth rate (‰)	20,6	9,0	8,8
Life expactancy at birth	68,8	78,63	81,9
Crude death rate (‰)	7,1	5,0	8,2
Infant mort. Rate (‰)	37,4	5,3	3,24
Maternal mort. Rate (‰)	28,5	15	6,5
Total expenditure on health as % of GDP	6,6	6,2	8,89
Governmental expenditure on health as %	62,9	6,5	?
The first 3 of the most common mortality causes	Cardiovascular, Neoplasm, Other	Neoplasm, Cerebrovascular, Cardiovascular	Neoplasm, Cardiovascular, Cerebrovascular
Total physician #	95 190	81 998	270 374
Practitioner #	51 530	26 050	?
Specialist #	43 660	55 948	?
FP #	1500	5 144	?
Pop. Per Physician	721	574	472
Pop. Per Practitioner	1331	1806	?
Pop. Per Specialist	1571	841	?
Pop. Per FP			
Hospital #	1172	1860	9026
Med. Faculty #	50	41	79
# of Med. Faculties with FP dept	37	35	?
The beginning year of FP education	1984	1979	?
# of FP-certified physicians	2000	5114	?

it is clear that Turkey's existing health system is unsuccessful in meeting the health needs of the people living in the country and the dominant trend in the world is to give more emphasis to the preventive and primary care services10. For Turkey, lack of social esteem, lack of continuing medical education concerning knowledge and skills in general practice and limited opportunities for post-graduate education are the reasons why practitioners are not integrated into primary health care services14.

This is a pilot study of a planned one and will be developed in the future. According to the proposals of the European General Practice Research Network (EGPRN) for studies in PHC on 2002 October; studies must be directed to mental health problems (depression, anxiety, suicide), frequently encountered somatic diseases, DM, COPD, ischemic cardiac diseases, heart failure.

Beside getting information about the demographic data, health indicators and status of FM/GP; international congresses, meetings, journals prepared together will help the development of the relations.

Competing interests

No reimbursement, fee, funding or salary from an organization have been received for this manuscript.

Authors' contributions

All of the four authors have made substantial contributions to acquisition, analysis and interpretation of data; have been involved in drafting the manuscript and have given final approval of the version to be published.

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