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A comparative study on the Demographic Indicators of the Kingdom of Saudi Arabia, Ministry of Health

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ABSTRACT

This research analyses the historical development of Demographic Indicators of Saudi Arabia from the year 2006 to 2016. ***Objectives:*** To compare the demographic indicators of the Kingdom of Saudi Arabia for the years 2006, 2011 and 2016. ***Research Methods:*** It is a descriptive and comparative research study in which historical data was analysed (Library Research). ***Significance of Research:*** There is a growing demand of healthcare services in the Kingdom of Saudi Arabia. The Saudi Arabian General Investment Authority has identified healthcare as a priority sectors for investment and nationalization for employment. ***Research Design:*** The demographic indicators from the annual reports of the Ministry of Health, Kingdom of Saudi Arabia for the years 2006, 2011 and 2016 were compared and analysed. ***Study Population:*** This research is limited to the demographic indicators of the Kingdom of Saudi Arabia for the years 2006, 2011 and 2016. ***Data Collections:*** Data were collected from the annual reports of Ministry of Heath, Kingdom of Saudi Arabia for the years 2001, 2011 and 2016, relevant published journals, articles, research papers, academic literature and web portals. ***Conclusion:*** Overall, there is an increase in the total estimated population by 34.05%, total saudi population by 16.26%, total non-saudi population by 81.90%, annual population growth rate by 9.48%, population of 15-64 years by 1.65%, population from of 65 & above by 48.93%, total life expectancy at birth by 2.33%, life expectancy at birth-male by 1.94%, life expectancy at birth-female by 2.70% in the year 2016 as compared to the year 2006. However, there is decrease in the population under 5 years by 8.62%, total fertility rate by 25.47%, crude birth rate per 1000 population by 30.80% and population under 15 years by 7.75% in the year 2016 as compared to the year 2006. Hence, there are enormous opportunities in the Kingdom of Saudi Arabia for the investment of international and national entrepreneurs and employment for Saudi nationals in the lucrative healthcare service industry.

1. Introduction

The uses of demographic indicators contribute to overall population health goals, namely improving the health of populations and reducing health inequalities. Indicators can classify situations as “unfavourable” or “favourable,” to show “improvement” or “deterioration” over time[1]. Different indicators are chosen not only for their different uses, but also because different societies—and authorities—will value, acknowledge some aspects of health or determinants of health more than others[2]. To improve the health of populations and increase opportunities for comparability, more valid, comprehensive, transparent, and standardized ways of measuring and reporting on population health are needed. Such metrics will need to be connected to a clear conceptual framework, integrating relationships between the different elements of population health.

In Saudi Arabia, the Ministry of Health (MOH) was founded in the year 1950. [3] In the year 1925, Saudi Arabia's first public health department was established in Makkah.[4] The department was responsible for building hospitals and healthcare centres and issuing and enforcing regulations to provide the necessary standards for practicing medicine and pharmacology. A public health council was also established to address the growing need for healthcare services and it was the highest-level supervisory board, overseeing all aspects of the country’s healthcare services. Then, these healthcare institutions were transformed into a ministerial body in 1950.[5] Abdullah bin Faisal Al Saud was the first health minister.[6] The ministry is based in Riyadh.[7] Healthcare services in Saudi Arabia are provided by several public and private agencies. However, the ministry is the major planner and provider of these services.[8] The Ministry of Health in the Kingdom of Saudi Arabia is committed to provide the most recent health statistics and information for all partners in the health sector, including decision-makers and healthcare service providers.

Saudi Arabia is a high-income country with a per capita GDP of US$ 22 713.4 in 2010 and an equally high human development index ranking, 56 in 2011.[9] The extensive health care system divided among three tiers of care and caters for a population of approximately 27 million (2010).

The Ministry of Health is the main provider of health care services. Health has featured in the national 5-year development plans since 1970, and is seen as a key part of overall development in the country.

Saudi Arabia is on track to achieve the Millennium Development Goals (MDG) targets. The development plans

indicates that there is an extensive progress has been made in economic development. As a result of the strong economy, the country has rapidly expanded health, education and social services infrastructure.

Health legislation support is important for health system functions, and particularly for the governance role of the Ministry of Health. Regulation of service delivery is supported by laws defining the responsibilities of various partners and service delivery in relation to set norms and standards.

Although the Ministry of Health has demonstrated its strength in developing strategic directions for service delivery and for various promotive, preventive, curative and rehabilitative health care programmes, more concentrated efforts are required to create a national health workforce. In addition to managing, planning and formulating health policies, supervising health programmes and monitoring health services in the private sector, the Ministry of Health is responsible for advising other government agencies and the private sector on ways to achieve the government's health objectives.[10]

A programme was recently developed by the Ministry of Health in partnership with other national and international agencies to reform service delivery in line with the national strategy. The new delivery model is organized into five tiers: primary health care centers, district hospitals, general hospitals, central hospitals and medical cities. Primary care centers serve a gate keeping function for referrals to general and specialized hospitals. Citizens can generally only access the primary care centers in their areas of residence.[11]

The Ministry of Health is promoting quality assurance and improvement through use of standard operating procedures and accreditation of health care facilities. Efforts are being made to improve patient safety in both public and private health facilities.

The cost of health services in the private sector is perceived as high and results in out-of-pocket expenditures, particularly for workers in the public sector, which are not covered by supplementary private health insurance. Until recently, foreign workers were not allowed to use Ministry of Health facilities except for emergencies.

Saudi Arabia is undergoing epidemiological and demographic transition, represented by a growing burden of chronic and non-communicable diseases and ageing population, while public expectations for quality care services are expanding. Urbanization is increasing and unhealthy lifestyles, represented by unhealthy eating habits, tobacco consumption and limited physical activity, are on the rise. The new strategies for primary health care and for service delivery are patient-centered, focus on health promotion and protection and put emphasis on social determinants of health. Coordination between the Ministry of Health and related sectors is paving the way to advocate for health in all policies, and such coordination is stronger at sub-national level. Human resource development aimed at gradually replacing the expatriate population is among national priorities in health development plans.[12]

2. Review of Literature

Until the 1960s, most of the population was nomadic or seminomadic; due to rapid economic and urban growth, more than 95% of the population is now settled. 80% of Saudis live in ten major urban centres— Riyadh, Jeddah, Mecca, Medina, Hofuf, Taif, Khobar, Yanbu, Dhahran, Dammam.[13] Some cities and oases have densities of more than 1,000 people per square kilometre (2,600/mile²). Saudi Arabia's population is characterized by rapid growth and a large cohort of youths.

Demographic characteristics of a country provide an overview of its population size, composition territorial distribution, changes therein, and the components of changes such as nativity, mortality, and social mobility. The demographic indicators are subdivided into two parts- Population Statistics and Vital Statistics. Population statistics include indicators that measure the population size, sex ratio, density and dependency ratio, while vital statistics include indicators such as birth rate, death rate, and natural growth rate, life expectancy at birth, mortality and fertility rates. These indicators for the country as well as states will help in identifying areas that need policy and programmed interventions, setting near and far-term goals, and deciding priorities, besides understanding them in an integrated structure.

The crude birth rate is defined as the number of live births occurring among the population of a given geographical area during a given year, per 1,000 mid-year total population of the given geographical area during the same year.[14]

The Population growth rate is defined as the rate at which the number of individuals in a population increases in a given time period, expressed as a fraction of the initial population. Specifically, population growth rate refers to the change in population over a unit time period, often expressed as a percentage of the number of individuals in the population at the beginning of that period.

A positive growth rate indicates that the population is increasing, while a negative growth rate indicates that the population is decreasing. A growth ratio of zero indicates that there were the same number of individuals at the beginning and the end of the period—a growth rate may be zero even when there are significant changes in the birth rates, death rates, immigration rates, and age distribution between the two times.[15]

Total Fertility Rate (TFR) is defined as the number of children who would be born per woman (or per 1,000 women) if she/they were to pass through the childbearing years bearing children according to a current schedule of age-specific fertility rates.

The TFR is the most widely used fertility measures in program impact evaluations for two main reasons: (1) it is unaffected by differences or changes in age-sex composition, and (2) it provides an easily understandable measure of hypothetical completed fertility.

Life expectancy at birth is defined as how long, on average, a newborn can expect to live, if current death rates do not change. However, the actual age-specific death rate of any

particular birth cohort cannot be known in advance. If rates are falling, actual life spans will be higher than life expectancy calculated using current death rates. Life expectancy at birth is one of the most frequently used health status indicators. Gains in life expectancy at birth can be attributed to a number of factors, including rising living standards, improved lifestyle and better education, as well as greater access to quality health services. This indicator is presented as a total and per gender and is measured in years.

Life Expectancy at Birth is defined as the average number of years that a newborn could expect to live, if he or she were to pass through life subject to the age-specific death rates of a given period.

Oil revenues make up 80%–90% of fiscal earnings. Spending on health and social affairs has increased by 26% since 2010, in part due to the introduction of unemployment benefits.[16] In 2008, the youth unemployment rate was 28.2% (percentage of labour force aged 15–24 years), and 45.8% among women, and the total unemployment rate was 5.4% (15.9% among women). A nationalization policy is in place with the aim of reducing dependency on foreign workers and increasing opportunities for nationals to gain employment.[17] By recent royal decree, women are encouraged to seek jobs in fields previously reserved for men, such as law and business. Education in Saudi Arabia has in recent years focused on closing the gender gap in literacy and education in general. The literacy rate among adult females (15 years and older) went from 79.7% in 2004 to 85.0% in 2010, with a total adult literacy rate of 88% in 2010. Among the overall population with at least a secondary education (percentage ages 25 and older) in 2010, females comprised 50.3% and males 57.9%.[18] Obtaining a university degree is increasingly seen as a goal for many Saudi women, who currently make up 59% of the national student body.[19] However, legislation legally mandates gender segregation in all university campuses and not all classes or disciplines are available on women's campuses, specifically in areas of science such as engineering and veterinary medicine. In 2008 Saudi Arabia allocated 19.3% of government expenditure towards education and 5.6% of GDP.[20]

3. Data Analysis

The data was collected from the Ministry of Health, Statistical Year Books, Kingdom of Saudi Arabia for the years 2006, 2011 and 2016 and tabulated in order to compare by using the statistics. The Statistical Yearbook is like a mirror, reflecting the statistical activities and the various achievements of the health sectors in the Kingdom of Saudi Arabia throughout the year that made the Ministry of Health put the book accessible to readers.

Table Number 1: Demographic Indicators:

Sr. No.	Demographic Indicators	2006[21]	2011[22]	2016[23]
1	Total Estimated population	23,678,849	28,376,355	31,742,308
2	Total Saudi Population	17,259,235	19,405,685	20,064,970
3	Total Non-Saudi Population	6,419,614	8,970,670	11,677,338
4	Crude birth rate / 1000 pop	24.9	22.9	17.23
5	Annual Population Growth Rate (%)	2.32	3.19	2.54
6	Population Under 5 years %	11.6	11.22	10.6
7	Population under 15 years %	32.9	31.41	30.35
8	Population 15-64 years %	64.4	65.73	65.46
9	Population from 65 & above %	2.8	2.86	4.17
10	Total fertility rate	3.22	2.93	2.4
11	Total Life expectancy at birth	73.1	73.8	74.8
12	Life expectancy at birth-Male	72.1	72.7	73.5
13	Life expectancy at birth-Female	74.1	75.1	76.1

Table number 1 depicts the demographic indicators of Saudi Arabia, Ministry of Health.

Table Number 2: Demographic Indicators Comparisons between the years:

Sr. No.	Comparisons between the years Demographic Indicators	2006-2011	2011-2016	2006-2016
1	Total Estimated population	19.84%	11.86%	34.05%
2	Total Saudi Population	12.44%	3.40%	16.26%
3	Total Non-Saudi Population	39.74%	30.17%	81.90%
4	Crude birth rate / 1000 pop	-8.03%	-24.76%	-30.80%
5	Annual Population Growth Rate (%)	37.50%	-20.38%	9.48%
6	Population Under 5 years %	-3.28%	-5.53%	-8.62%

7	Population under 15 years %	-4.53%	-3.37%	-7.75%
8	Population 15-64 years %	2.07%	-0.41%	1.65%
9	Population from 65 & above %	2.14%	45.80%	48.93%
10	Total fertility rate	-9.01%	-18.09%	-25.47%
11	Total Life expectancy at birth	0.96%	1.36%	2.33%
12	Life expectancy at birth-Male	0.83%	1.10%	1.94%
13	Life expectancy at birth-Female	1.35%	1.33%	2.70%

Table Number 2 depicts that the total estimated population has increased by 19.84% (2006-2011), 11.86% (2011-2016) and 34.05% (2006-2016); total saudi population has increased by 12.44% (2006-2011), 3.4% (2011-2016) and 16.26% (2006-2016); total non-saudi population has increased by 39.74% (2006-2011), 30.17% (2011-2016) and 81.90% (2006-2016); crude birth rate per 1000 population has decreased by 8.03% (2006-2011), 24.76% (2011-2016) and 30.80% (2006-2016); annual population growth rate has increased by 37.50% (2006-2011), 9.48% (2006-2016) and has decreased by 20.38% (2011-2016); population under 5 years percentage has decreased by 3.28% (2006-2011), 5.53% (2011-2016) and 8.62% (2006-2016); population under 15 years percentage has decreased by 4.53% (2006-2011), 3.37% (2011-2016) and 7.75% (2006-2016); population 15-64 years percentage has increased by 2.07% (2006-2011), 1.65% (2006-2016) and has decreased by 0.41% (2011-2016); percentage of population from 65 & above has increased by 2.14% (2006-2011), 45.80% (2011-2016) and 48.93% (2006-2016); total fertility rate has decreased by 9.01% (2006-2011), 18.09% (2011-2016) and 25.47% (2006-2016); total life expectancy at birth has increased by 0.96% (2006-2011), 1.36% (2011-2016) and 2.33% (2006-2016); life expectancy at birth for males has increased from 0.83% (2006-2011), 1.10% (2011-2016) and 1.94% (2006-2016); total life expectancy at birth for females has increased by 1.35% (2006-2011), 1.33% (2011-2016) and 2.70% (2006-2016).

4. Conclusion

Overall, there is an increase in the total estimated population by 34.05%, total saudi population by 16.26%, total non-saudi population by 81.90%, annual population growth rate by 9.48%, population of 15-64 years by 1.65%, population from of 65 & above by 48.93%, total life expectancy at birth by 2.33%, life expectancy at birth-male by 1.94%, life expectancy at birth-female by 2.70% in the year 2016 as compared to the year 2006.

However, there is decrease in the population under 5 years by 8.62%, total fertility rate by 25.47%, crude birth rate per 1000 population by 30.80% and population under 15 years by 7.75% in the year 2016 as compared to the year 2006.

Hence, there are enormous opportunities in the Kingdom of Saudi Arabia for the investment of international and national entrepreneurs and employment for Saudi nationals in the lucrative healthcare service industry.

Limitations of the Study

This study is limited to the Demographic Indicators of the Kingdom of Saudi Arabia, Ministry of Health for the years 2006, 2011 and 2016.

Directions for future research

In future, such research studies should be conducted to compare the improvement on an annual basis and to take appropriate decisions in the healthcare service industry.

Sources of funding for the Study

This research was self-financed by the author himself.

Implications of the findings

There is significant difference in the demographic health indicators of Kingdom of Saudi Arabia between the years 2006, 2011 and 2016.

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References

1. P´eron Y, Strohmenger C. 1985. Demographic and Health Indicators: Presentation and Interpretation. Ottawa: Stat. Canada, Health Div., Res. Anal. Sect. 261 pp.
2. Navarro V. 2004. The world situation and WHO. Lancet 363:1321–23.
3. https://en.wikipedia.org/wiki/Ministry_of_Health_(Saudi_Arabia)
4. "Kingdom of Saudi Arabia Ministry of Health Detects System Threats and Policy Violations 25% Faster with Fewer Analysts".

5. David E. Long (1 January 2005). Culture and Customs of Saudi Arabia. Greenwood Publishing Group. p. 15. ISBN 978-0-313-32021-7.
6. Ahmad, Mahmoud (9 May 2007). "Abdullah Al-Faisal Passes Away". Arab News.
7. Basic addresses OSCE. September 2011.
8. Mohammed H. Mufti (29 February 2000). Healthcare Development Strategies in the Kingdom of Saudi Arabia. Springer Science & Business Media. p. 9. ISBN 978-0-306-46314-3.
9. Human Development Reports 2011 and 2010. United Nations Development Programme
10. Almalki M, Fitzgerald G, Clark M. Health care system in Saudi Arabia: an overview. Eastern Mediterranean health journal, 2011, 17(10):784–93.
11. Walston S, Al-Harbi Y, Al-Omarc B. The changing face of healthcare in Saudi Arabia. Annals of Saudi medicine, 2008, 28(4):243–50.
12. Saudi Arabia and Political, Economic & Social Development, May 2017 Report
13. https://www.saudiembassy.net/sites/default/files/whitepaper_development_may2017.pdf
14. House, Karen Elliott (2012). On Saudi Arabia : Its People, past, Religion, Fault Lines and Future. Knopf. p. 69.
15. Handbook of Vital Statistics Systems and Methods, Volume 1: Legal, Organisational and Technical Aspects, United Nations Studies in Methods, Glossary, Series F, No. 35, United Nations, New York 1991.
16. Association of Public Health Epidemiologists in Ontario Archived 2008-05-22 at the Wayback Machine.
17. Economist Intelligence Unit: Industry Report, Healthcare Saudi Arabia, February 2012.
18. Draft country programme document Saudi Arabia 2012–2016. Executive Board of the United Nations Development Programme and of the United Nations Population Fund, 2011 Annual Session.
19. Human Development Reports 2011 and 2010. United Nations Development Programme
20. Mills A. Saudi universities reach toward equality for women. Chronicle of higher education. August 3, 2009.
21. World Bank online database. Available at: http://data.worldbank.org/country/saudi-arabia/
22. Kingdom of Saudi Arabia, Ministry of Health, Health Statistical Year Book, 2006
23. Kingdom of Saudi Arabia, Ministry of Health, Health Statistical Year Book, 2011
24. Kingdom of Saudi Arabia, Ministry of Health, Health Statistical Year Book, 2016

