

# Total fertility rate (tfr) and maternal mortality rate (mmr) essays example

[Sociology](#), [Population](#)



Figure 1: Map of Africa showing the countries selected for this study

## Introduction

Population dynamics affects a country's development and the general contribution of the country or region to the global society. This paper examines the relative population growth of Africa using ten countries from the continent (Libya, Angola, Kenya, Cameroon, Guinea, Mauritania, Botswana, Ghana, Chad and Madagascar) in comparison to five countries from other regions. The U. S. A, Ukraine (former Soviet Union), South Korea (Asia), Qatar (Middle East), Brazil (South America) are the countries selected to compare to the African countries. This paper presents ranking of the fifteen countries above in terms of Total Fertility Rate (TFR), Maternal Mortality Rate (MMR), Infant Mortality Rate (IMR) and Life Expectancy at Birth. Comparisons are made for these variables in order to establish the population dynamics of Africa. An elaboration of policies and cultural factors in South Korea, U. S. A and Ghana suffices to explain the pattern of population growth in each of these regions.

Total Fertility Rate (TFR) represents the number of children that a woman would bear if she were to live to end of her childbearing years and also if she was to bear children according to current age-specific fertility rates (cia.gov). Maternal Mortality Rate (MMR) refers to the annual number of women deaths per 100, 000 live births. The deaths in this case are related to the pregnancy or its management (cia.gov. MMR considers deaths that occur during pregnancy, at childbirth or within a period of 42 days following the termination of pregnancy regardless of the site or duration of the pregnancy

for a given year. The relationship between TFR and MMR is that the higher the TFR, the higher the number of women at risk of maternal death. With slight deviations, it is notable from the tables that countries with high TFR also have high MMR.

Figure 2: Total Fertility Rates

(cia. gov)

Figure 3: Maternal Mortality Rate

(cia. gov)

## **Infant Mortality Rate (IMR) & Life expectancy**

Infant Mortality Rate (IMR) refers to the number of deaths of infants below one year old in a specific year for every 1, 000 live births. Life Expectancy refers to the average number of years that is expected to be lived by a group of people born in the same year of the mortality at each age group remains constant in the future.

Figure 4: Infant Mortality Rate

Figure 5: Life Expectancy

(cia. gov)

## **How population growth rate (measured by Total Fertility Rate) varies with Infant Mortality Rate and Life Expectancy at Birth.**

Population growth rate as measure by TFR varies with IMR and Life Expectancy at birth. When the TFR is high, the IMR is low and the Life Expectancy at birth is high, then a country experiences rapid or high population growth because women give birth to a large number of children

who are able to survive infancy and grow to adulthood. When the women in that age group reach childbearing age they are able to survive all years (say from 14 to 49 years) and raise their children because the country also enjoys high life expectancy. However, this is not usually the case, because in countries with high TFR usually have high IMR meaning that many of the children born do not survive infancy and therefore there are relatively fewer people per each age group who reach child bearing age (Berlatsky, 18). This means that the population growth rate is hampered. Developed countries on the other hand practice intense family planning and government regulation on childbirth meaning that although they have proper health services that raise their MMRs and life expectancy, they have low TFRs which leads to reduced population growth rates (Berlatsky, 18).

### **The relationship between MMR, IMR and TFR**

Developing countries especially those from Africa and specifically Sub-Saharan have high TFR, MMR and IMR. Notably, relatively poor countries such as Chad, Angola, and Guinea have IMR of 91. 94, 81. 75 and 57. 11 respectively while relatively rich countries from other regions such as USA, South Korea and Qatar have IMRs of 5. 9, 4. 01 and 6. 6 respectively. This shows that mortality is highest in developing countries that are relatively poor. The same trend is observable in terms of the MMR. This can be explained by the fact that the poorer a country is, the more challenged that country is in providing its populace with quality health. As such, people tend to die of diseases and conditions that are otherwise adequately handled in the developed world (Berlatsky, 18). The lack of quality health services also

accounts for the high TFRs in the developing countries because women of child bearing age do not have access to family planning services and as such they give birth to many children. The effects of culture in Africa where discussions on sexuality and reproduction are shunned and treated as taboos also contributes to the high TFRs in those countries as opposed to the more developed regions of the world.

### **Population policies and cultural factors that explain the pattern of population growth**

The population policies include regulations on childbirth such as the government setting a maximum number of children that a couple can have. For instance, South Korea which ranks at number 15 of all the countries used in this study posts a TFR of 1.24 meaning that majority of South Korean women get only one child throughout their child-bearing years. This trend can be traced back to 1962 when the country began a widespread family planning campaign that targeted to reduce the population growth rate in order to help stabilize the country economically (Berlatsky, 22). Bearing of few children has gained root in South Korea and many other countries in the region such as Japan, China, and Singapore among others. Population control policies in Asia have significantly aided the region to grow economically due to adequate allocation of resources and effective government planning. The USA also posts a relatively low TFR at 2.06 because of intense capitalistic policies that compel parents to take care of their children. Due to the work pressure and socio-economic hardships and dynamics, many Americans opt to have lesser children (Berlatsky, 23).

Africa has deep-rooted cultures on issues about sexuality and reproduction.

African cultures value motherhood and children and this is one of the reasons why TFRs in Africa are relatively high (Berlatsky, 21). The lack of government regulations that limit the number of children people can have also accounts for the high TFRs. Moreover, the economic challenges that face countries in Sub Saharan Africa such as Chad account for the high IFRs and low life expectancy. With a TFR 4. 8, an MMR of 1, 100 and an IMR of 91. 94 Chad is representative of several countries in the region whose provision of health quality as well as cultures on reproduction is wanting. The situation has been worsened by lack of political stability over several years. The situation is improving in Africa and health care is improving and as such these countries continue to post relatively improved life expectancy while the MMR, IFR and TFR are gradually declining.

## **Works Cited**

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