

GENDER LONGEVITY: MALE/FEMALE DISPARITY

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ABSTRACT

The issue of gender longevity has been of great concern in the field of psychology. The issue has received more attention especially with the statistics that have been showing that women have a higher life expectancy than men. Understanding the factors behind this disparity is significant for this study. This paper focuses on discussing the trends in the disparity witnessed in the life expectancy between women and men. The study achieves this through a comprehensive literature review of peer reviewed journals that publish reports on gender longevity. The paper also aims to establish the factors behind the gender disparity with finding associating high mortality rates to behavioral as well as biological factors. The most interesting finding is that the gender gap between men and women in life expectancy is decreasing day by day.

INTRODUCTION

Attaining the prime ages of 80 and above appears to be an uphill task in the 21st Century. This is because the whole society requires constant provision of social and economic amenities, health care services, as well as pensions and insurance needs, most of which require a great deal of thought (Longevity Bulletin, 2014). This explains why life expectancy has had disparities, especially in industrialized countries like the USA. In these countries, women are reported to live longer than men. For example, studies show that France had the largest gap between men and women in terms of life expectancy in the year 1996 (Longevity Bulletin, 2014). The United Kingdom then had the lowest gender differences. In almost the 187 counties across the USA, life expectancy at birth ranks at 40th for males and 39th for females (Longevity Science Advisory Panel, 2012).

These statistics together with the fact that US and other industrialized countries spend a lot on health care has given the issue of gender longevity and specifically the disparities between men and women in terms of life expectancy great attention in the world of psychology (Longevity Bulletin, 2014). Thus, understanding the disparities in life expectancy between men and women, especially in the US and other industrialized countries may help provide greater insight into the concept of longevity. This study comes after great observation of the kind of statistics found after research in such countries. For example, between 1983 and 1999, female expectancy was reported to grow low in almost 180 counties in the USA while male life expectancy fell in almost eleven counties (Longevity Science Advisory Panel, 2012).

This explains why this paper aims to establish the s factors behind gender disparities when it comes to studying the issue of gender longevity. The study will be achieved by a literature review of the recent trends in male-female differences in mortality and life expectancy. The historical perspective is also another measure that forms an important part of the literature review. Thus, journal articles, peer-reviewed journals, psychological reports, eBooks, as well as

government reports on gender longevity will form the primary as well as secondary sources of this study (Longevity Bulletin, 2014).

LITERATURE REVIEW

Historical Perspective of Gender Disparities in Life Expectancy

In nearly all developed societies, women have an advantage over men when it comes to mortality. For some time, Paleo-demographers have been trying to prove the fact that there has been no life expectancy difference between males and females when the development of agriculture is considered (Longevity Bulletin, 2014). It is considered an assumption that women must have suffered higher mortality than males with the development of agriculture. Whether by heavy work burden, environmental factors or high fertility factors, the reason for the female disadvantage has not been well established (Murphy & Topel, 2006).

With historical records of mortality from Wales and England, male and female mortality bore a little difference in the 17th and 20th century (Longevity Science Advisory Panel, 2012). The same records show that the females enjoyed low mortality in some periods during these centuries. In the same period, England and Wales, registered a life expectancy of 38.7 years for males and 37.6 for females. Towards the end of the 20th century, this changed in 37.4 years for female with that of males being low at 35.8 years (Longevity Science Advisory Panel, 2012). In the years 1775 to 1799, men again lived longer up to 40.8 while women trailed at 39.5 years (Longevity Science Advisory Panel, 2012).

A significant disparity was not seen until the beginning of the 21st century. For example, the males were disadvantaged at the ages 20 to 50 years in France at around the time there was the two world wars (Longevity Science Advisory Panel, 2012). The same disparity was seen in Denmark in males at the age of 18 and 25 in the 1950s. Most of the mortality cases resulted from accidents (Longevity Science Advisory Panel, 2012). As well, these disparities were seen more during the reproductive ages. France was undergoing a fertility transition which resulted in a reduction of female death rates at such reproductive ages. Denmark, on the contrary, had a high female mortality at the reproductive ages, which was mainly due to maternal mortality (Longevity Bulletin, 2014).

With regard to the causes of death, infectious, parasitic diseases were to blame. Diseases such as tuberculosis were the major killer diseases (Murphy & Topel, 2006). As well, the frailty of girls from the age of 5-15 years was as a result, of sexual discrimination that was mostly common in western countries by then (Longevity Science Advisory Panel, 2012). Other factors that played a role were nutrition and hygiene, poor working conditions and access to education and medical assistance (Longevity Science Advisory Panel, 2012).

In the third world, life expectancy has highly increased, especially in the past thirties. This has been accompanied by an increase in the gap between male and female gender in terms of survival. The widening gap has been associated to the high pace of improvement for females rather than on men. The disparity is great to an extent that the factors behind it have to be established. The disparities that have been observed mostly at the age of 20-35 years have been associated with cardiovascular and cancer rates, which is seen to be higher in males than in

females (Longevity Science Advisory Panel, 2012). The gap has also increased in most developed countries since the Second World War. Another observation is that the sex disparity at late adulthood and the beginning of old age have been shifting greatly (Murphy & Topel, 2006). It was high in the 1960s in the ages 55-to 65 years. Thus, the mortality at old age has been high for the last three decades.

Male–Female Differences in Mortality

Studies show that life expectancy in industrialized countries is lower in the male gender at birth than women (Murphy & Topel, 2006). The magnitude differs as one move from one country to another. During the 1970s, Finland and United States had the highest sex differences with differences of 8.5 and 7.6 years respectively. In Greece and Ireland, the life expectancy differences between male and females was as low as 3.7 and 4.7 years (Faulds, 2012). By the late 1990s, this trend had changed with France and Finland has the highest male-differences in values of 7.8 and 7.5 respectively (Faulds, 2012). At this time, the United Kingdom and Sweden had their different values as low as 4.9.

These statistics showed that despite the high number of boys that were born compared to girls at this time, the number of males decreased rapidly (Longevity Science Advisory Panel, 2012). These days, infant mortality remains higher for boys than girls. For example, the number of women living at the age of 25 is higher than that of men. As well, the sex differences have been reportedly most significant at old age. In the 1990s, women at the age of 85 were more than men in the United States of the value of 1.8. In Japan, the value stood at 2.3, France in 2.7 and Great Britain at 2.9.

When the patterns of male versus female mortality in industrialized countries are observed, the differences emerge with a large gap (Longevity Science Advisory Panel, 2012). Studies show that countries from the central Europe region have shown a similar trend in the patterns of sex differences in mortality. Other countries like Denmark and United States have shown a different pattern (Longevity Science Advisory Panel, 2012). The countries from the Eastern part of Europe have a higher mortality for males over the age of 20 as compared to women. Another unique observation was made in France where male-female differences were higher after the age of 30 (Longevity Science Advisory Panel, 2012).

From the above statistics, it is clear that significant differences exist in the level of mortality after the age of 30 (Longevity Science Advisory Panel, 2012). The differences come out clearly when Denmark and France in which mortality doubles at adult ages. In other words, France registers high mortality for males at adult age than for women (Longevity Science Advisory Panel, 2012). The sex difference has been associated with high death rates from accidents at young ages (Longevity Science Advisory Panel, 2012). At adult age, the high death rates have been associated with cardiovascular diseases.

With close reference to France, the high adult mortality among males is as a result of cancer. This has been the same in countries within Eastern Europe (Longevity Science Advisory Panel, 2012). France, as well, registers the lowest mortality rates associated with lung cancer for

women. This implies that the behavior of French men and women is different, especially with reference to factors like smoking (Longevity Science Advisory Panel, 2012).

Factors behind Gender Disparities in Gender Longevity

The above discussion shows that women have been living longer than men since the 20th century. The first reason that is given is the obvious physical differences between males and females (Faulds, 2012). Men are endowed with smaller health reserves, mostly at birth. Secondly, the disparity could be as a result of the different roles of men and women in society. Studies conducted on the disparities that existed in the 20th century show that biological difference between men and women as well as the difference in their roles collectively played a role in the disparities. Little has been reported on the role of social-cultural factors in creating the reported disparity (Murphy & Topel, 2006).

Several studies show that males have high rates of fetal mortality. This has been associated to the sex differences in the ischemic heart disease mortality as a major contributor. Waldron (1995) gives an analysis of different types of biological factors and arrives at the conclusion that women's sex hormones have the capability to reduce the risk of the disease by the favorable effects they have on serum lipids. This is different in the case of men since they have high testosterone level, causing uncomfortable effects on serum lipids (Faulds, 2012). She also highlights men's accumulation of abdominal body fat as another contributing factor to the heart disease (Faulds, 2012).

Despite the above explanations, it is clear that biological factors only provide small section of explanations (Murphy & Topel, 2006). Environmental, social and behavioral factors play a role in creating the disparities in life expectancy, as well (Murphy & Topel, 2006). Behavioral factors in this case include smoking, diet and poor medical care. These mostly contribute to the differences in the adult ages (Longevity Science Advisory Panel, 2012). This is evident in the diseases such as cardiovascular diseases and lung cancer which come due to smoking (Faulds, 2012). This is a strong ground to explain why more men die early as compared to women; men smoke more than women (Longevity Science Advisory Panel, 2012). Studies conducted in the 1950s show that smoking has been one of the major contributors to sex differences in cardiovascular mortality (Murphy & Topel, 2006). Thus, the sex differences in mortality can be associated to the difference in smoking behavior between men and women.

Other independent studies show that social roles also play a role in the disparities seen on the mortality rates (Faulds, 2012). The studies put more emphasis on the fact that men get employed in more dangerous in more dangerous, harmful, stressful and difficult occupation than women (Longevity Science Advisory Panel, 2012). Efforts to explain the disparities from this perspective also conclude that socio-occupational factors have not played a big role in the excess mortality of men in the late 20th century. Thus, every behavioral factor is being shaped by the changing social roles for both men and women (Longevity Science Advisory Panel, 2012). The mortality gap may thus narrow down when the differences in men and women's roles diminish (Longevity Science Advisory Panel, 2012).

Disparities in Gender Longevity: Focus on USA

The focus on USA is due to its industrialized nature. It is one of the countries which spend much on healthcare (Longevity Science Advisory Panel, 2012). Looking at their historical records, it is evident that life expectancy for the females in the US increased from 78 years to 80 years in 2010. Male expectancy, on the other hand, trailed at 71 years in 1985 to 76 in 2010. Thus the gap between male and female life expectancies in 1985 was 7 years while 2010 was 4 years (Faulds, 2012). This shows that the gap is narrowing day by day. At county level, men stood at 65 while females had increased to 85 from 81 years.

The ratio of male life expectancy which is seen to be low is associated with the periods of evolutionary equality. These include the period of rising inequality (1985-1993); a period of stable inequality (1993-2002) and the period of rising inequality (2002-2010). In these periods, male life expectancy remained stagnant or declined (Longevity Science Advisory Panel, 2012). Therefore, the gap between male and female life expectancy remains evident in the USA as well (Longevity Science Advisory Panel, 2012).

RESULTS

Men are considered to have a physical advantage over women because they are stronger, taller and less overweight. However, none of these qualities guarantees them long life (Drevenstedt et al, 2008). Thus, the women live longer than men. The findings from the above study show that women outlive men in most developed countries and some undeveloped countries. The gender disparity is mostly evident in old age, and thus women outnumber men in a ratio of 9:1. The gender gap has reportedly widened in this century leading to life expectancy of women exceeding that of men. From a Darwinian perspective, female longevity seems to gain more interest than the prolonged survival of males (Drevenstedt et al, 2008). Despite this, the gap between male and female life expectancy is narrowing day by day. The bad news is that when they converge, women may end up suffering from some male diseases (Faulds, 2012).

A comparison of the death rates between women and men in countries like USA shows that there is a difference in the mortality patterns for both men and women (Drevenstedt et al, 2008). Thus, men are three times more likely to die than women (Faulds, 2012). These deaths are caused by reckless behavior or violence. The deaths are mostly associated with motor accidents, homicide, suicide, cancer and drowning, especially for men in the age of 15 to 24 years (Faulds, 2012). This study also establishes that the disparities between male and female mortality gets lower towards middle age (Drevenstedt et al, 2008). At the ages of 55 to 64, most mortality is behavior-related especially among men. Men at this age are seen to die mostly due to car accidents or homicide, twice more than women. This explains why the gap between men and women in terms of life expectancy exists.

Other causes of disparities between men and women's life expectancy are alcohol and smoking (Action on Smoking and Health, 2013). Alcohol and smoking are said to kill more men than women. The gender gap is reportedly associated more with heart diseases. Men are said to experience a rise in the risk of heart diseases as from the ages of 40 while women's risk of contracting heart disease starts at menopause (Action on Smoking and Health, 2013). Even

though the gender gap experienced in young adults is smaller, the number that gets affected is large. While accidents kill 45 men in every 100,000 young adults, heart disease kills 500 in every 100,000 men between the ages of 55 to 64 (Action on Smoking and Health, 2013).

In addition, findings from research by experts associated gender differences in mortality patterns to sex hormones, especially the male hormones (Drevenstedt et al, 2008). In men, it is the testosterone while in women it is estrogen. The high mortality rate of men at puberty mostly coincides with increased testosterone production in men (Drevenstedt et al, 2008). It is being associated with the gender gap being experienced because researcher report that male hormones are linked with aggression and competitiveness (Drevenstedt et al, 2008). At later ages, the hormone puts men at more risk biologically as well as behaviorally.

CONCLUSION

The study on gender disparities and the causes of it in the concept of gender longevity shows that women outlive men in the entire world. The size of the longevity gap also varies across the world. The reasons behind this gap in longevity seem to originate from the different lifestyles of men and women. An increase or decrease in the gender gap in the future depends on the manner in which countries across the globe will address the various health issues that are tied to longevity. This is specifically smoking rates, and alcohol consumption mostly found in men. However, the gap would just remain as it may be natural that women were meant to live longer.

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