

# A Comparative Study of Life Expectancy of Women in Warriar Community with other Minor Communities of Thiruvananthapuram

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**Abstract:** Life expectancy can be defined as a statistical measure of the average time an organism is expected to live. The factors like, the year of its birth, its current age and other demographic factors including gender influences its life expectancy. Life expectancy of women in India is 69.6 years, which is further more for Kerala i.e. 77.8 years. The objective of this study is to find out the average life expectancy of women in Warriar community which is expected to be higher than other minor communities, due to their well-organised lifestyle.

## I. INTRODUCTION

The World Health Organization (WHO) defines life expectancy as; "the average number of years a person is expected to live on the basis of the current mortality rates and prevalence distribution of health states in a population"(Disabled World, 2019). According to the latest WHO data published in 2018 life expectancy in India is: Male 67.4, female 70.3 and total life expectancy is 68.8 which gives India a World Life Expectancy ranking of 125 (Worldlifeexpectancy.com, 2018). India also recorded an improvement in life expectancy at birth. The life expectancy at birth in 1969 was 47 years and in 2019, it is 69 years (Business Line, 2019).

Among the Indian states, Kerala is unique as it is demographically ahead of the rest of the country and is in the final stages of demographic transition (to low fertility and mortality) (Rajan and Zacariah, 2009). The state has an outstanding track record in low birth and death rates and high life expectancy. It is also famed for having a female population that has outnumbered and outlined the male population. Kerala is home to 2.76% of India's people, and density at 859 persons per km<sup>2</sup> (2011 census) (Nair et.al, 1995).

Table 1: Life Expectancy Of Kerala State.

	TOTAL	MALE	FEMALE
KERALA	74.9	72	77.8
RURAL	74.9	71.7	78.1
URBAN	75	72.7	77.1

The state has made commendable achievements with regard to extending life expectancy and reducing levels of infant mortality. Life expectancy in Kerala is 68 years for males and 73 for females, far higher than the nationwide levels of 56 and 56.5 years for males and females, respectively. The state's 1991 rate of infant mortality was 17/1000 live births, less than 25% of the comparable overall level for India. Various recent surveys point to the faster decline in neonatal mortality compared to post-neonatal mortality. Kerala's fertility transition has always been attributed to the state's very high literacy rate, especially among women, and improved mortality

status. These data would therefore indicate a healthy population in Kerala (Arogyakeralam.gov.in, 2009).Kerala recorded the highest life expectancy at birth for both males and females in rural areas (Disabled World, 2017).

## A. Factors That Impact Mortality And Longevity (Kristen Beckman, 2016)

SI No.	FACTORS	
1.	Gender	Women live longer than men, on average. Some studies attribute this gap in part to riskier behaviour among men that may lead to higher rates of accidents.
2.	Genetics	The CDC lists the leading causes of death as: Heart disease, Cancer, Chronic lower respiratory disease, Accidents, Stroke or cerebrovascular disease, Alzheimer's disease, Diabetes, Influenza and pneumonia, Kidney disease, Intentional self-harm or suicide.
3.	Prenatal and Childhood conditions	Poor conditions in utero, at birth and in very early childhood are associated with higher mortality even at advanced ages, according to IFA.
4.	Marital Status	Married people have lower mortality rates than those who were never married, are divorced or are widowed. Marriage may improve cardiac health, help combat isolation and loneliness that can negatively impact mental health, and motivate people to make healthier choices like keeping regular doctor visits and giving up unhealthy habits.
5.	Socio-economic status	As socio-economic status decreases, so does the life expectancy. It affects a person's ability to access adequate medical care and their participation in healthier lifestyle habits like exercising more, smoking less and maintaining a healthy weight.
6.	Education	Higher education levels are linked to higher socio-economic status and both are linked to improved longevity, according to Hall and Peterson. It is also associated with

		lower levels of obesity and tobacco use, which may correlate with greater longevity.
7.	Ethnicity/migrant status	Ethnicity or migrant status may also be associated with socio-economic status. Mortality appears to vary as a result of differences in average mortality between host and home countries, as well as healthy selection for migration or return and length of residence in the host country.
8.	Lifestyle	It include unhealthy diet, inadequate exercise, tobacco use, excessive use of alcohol, risky behaviours, food safety, work place safety and motor vehicle safety
9.	Medical Technology	Advances in medicine and medical technology have had a major impact on increased longevity. Development of antibiotics and immunizations, as well as improvements in imaging, surgery, cardiac care and organ transplants all have helped push the average life expectancy higher

invaluable place in society and for that our unity, fraternity, co-operation are of prime importance.

To bring under an organization the unorganized community members and people having the same identity believing and following the same traditions, beliefs, customs, ritual etc and those with similar thinking. To work for the well being and welfare of all people, reawakening reforming, revisitalising unity, self esteem, co-operation spiritual and cultural renaissance and to achieve wholesome progress and expansion of the community. (warriersamajam.org)

Despite the ambiguity in spelling (Modern variations include Warrior), the community is considered to be a close-knit one. Largely due to the nature of its duties, community members were educated and professed the occupations connected with knowledge - like medicine, education and the sciences (Geni.com).

There is an organisation named Warriar Foundation. Warriar Foundation is a charitable organization registered in the year 1999 at Mumbai under Indian Charitable Trust Act 1957 and has extended its activities to Kerala in the year 2007. Their mission is to provide an ecosystem for individuals to create a way of life, discovering their potential in all dimensions - physical, mental, social and spiritual - thus identifying their purpose in life (warriarfoundation.org).

### C. Seventh-Day Adventists

Adventist, member of any one of a group of Protestant Christian churches that trace their origin to the United States in the mid-19th century and that are distinguished by their emphasis on the belief that the personal, visible return of Christ in glory (i.e., the Second Coming) is close at hand, a belief shared by many Christians. While most Adventist groups remain relatively small, the Seventh-day Adventist Church has become a significant global body, with congregations in more than 200 countries and a membership of more than 14 million.

Adventism is rooted in the millennial expectations recorded in the Bible. From their biblical study, the Adventists came to believe that, at the Second Coming, Christ will separate the saints from the wicked and inaugurate his millennial (1,000-year) kingdom. The Adventists' emphasis on the Second Coming led many of them to predict the date of its occurrence.

It was during the religious revival that swept the American frontier in the early 19th century that William Miller (1782–1849), whose speculations launched the Adventist movement, began to preach. Miller, while an officer in the U.S. Army in the War of 1812, had become a skeptic. Converted to the Baptist faith during the 1820s, he began to study the Bible, especially the prophetic books of Daniel and the Revelation to John. Primarily on the basis of his interpretation of Daniel 8:14, which spoke of 2,300 days, he concluded that Christ would return about 1843. He began to preach in 1831 and soon emerged as the leader of a popular movement. As the year 1843 approached, Miller predicted more specifically that Christ would return between March 21, 1843, and March 21, 1844.

Belief in Sabbath observance brought with it a new appreciation of the Hebrew Bible (the Old Testament). The Seventh-day Adventists accepted Old Testament dietary regulations, from which their present-day emphasis on health developed.

### B. Warriar Community

Warriar (Variar/Variyar/Wariar) is a South Indian, Hindu community from Kerala, India. They are engaged to assist the Namboodiri priests in temple-related chores, primarily catering to the floral requirement & are well known Sanskrit scholars. Largely due to the nature of its duties, community members were educated and professed the occupations connected with knowledge - like medicine, education and the sciences (Geni.com, 2019).

The word "Variyar" has originated from Tamil, meaning a person who maintains the accounts (in short, "Accountant"). In the pre-Namboodiri era of Kerala, the agricultural property of every village belonged to a village temple. There was an elected committee to administer the temple and the properties. The Manager or Accountant of this committee was called Variyar, and he was accountable to the Committee. (warriar.askdefine.com)

Many a warriar community members contribute indelible impression in the fields of Literature, arts, medicine, astronomy, astrology and the like. The versatile, genius, personalities whose contributions transcends place and time is a testimony to the esteemed status of the community. Traditionally Warriar Community members are bestowed 'Guru' position in Kerala as a mark of respect. Warriar belongs to 'ampalavasi' group or temple dwellers.

The word is commonly used in the plural form as Variar (Varian + -ar) to denote respect. The feminine equivalent of Variar is Varassyar. It is a combination of Variacchi/Variyassi/Variaththi and the plural suffix -ar. (WarriarSamajam.org, n.d).

Warriar community organises family get-together once in a month which keeps a record of the population and updates the activities of the members. The organisation is named WarriarSamajam. Almost all warriar community members are relatives or relatives of relatives though they may be residing in far off places. We have to strive to achieve and sustain our

The church's emphasis on healthy living and preventive medicine was augmented by the founding in 1908 of a chain of outstanding medical institutions.

In addition to the emphasis upon the Second Advent of Christ, two other matters set the Adventists apart from most Christians. First, they observe Saturday, rather than Sunday, as the Sabbath. This day, according to the Bible, was instituted by God, and the commandment concerning Sabbath rest is a part of God's eternal law. Second, they also avoid eating meat and taking narcotics and stimulants, which they consider to be harmful. Although they appeal to the Bible for the justification of these dietary practices, they maintain that these are primarily based upon the broad theological consideration that the body is the temple of the Holy Spirit and should be protected. (Jordon & James, 2019).

## II. RESEARCH METHODOLOGY

The study is carried out at Thiruvananthapuram district of Kerala using data collected from the book of 'Warriersamajam 2018', a record maintained by Warriars about the births, deaths and family census. A total of 94 units of Warriarsamajam is present in Kerala, with a total population of 25472 people. Females were estimated to be 13191 in number.

<b>Total Strength in Kerala</b>	<b>25472</b>
<b>Warrier Samajam units in Kerala</b>	94 units
<b>Total strength in Trivandrum</b>	1795
<b>Males</b>	820
<b>Females</b>	975

### A. Cohort Life Table

The method utilised in this study is life tables to measure life expectancy of a population at varying ages. There are several types of life tables. Generation / Cohort life table is what we use in the study.

A generation / cohort life table is a life history of the mortality experiences of an actual cohort of individuals. The cohort begins at birth and their mortality experiences are recorded through the death of the last member of that cohort.

Ten women from warrier community were selected at random, who were born between the cohort years 1920-1930 (10 years) in Thiruvananthapuram with similar lifestyles.

### B. Comparative Study

Another method used in the study includes a comparative study, where different communities were selected (Seventh-day Adventist), from Thiruvananthapuram. This comparison is done using the data, how many people are alive (90+), exhibiting high life expectancy.

## III. RESULTS AND ANALYSIS

Analysis of the life expectancy study was done in two methods: Cohort life table and Comparative study.

### A. Cohort Life Table

SI No.	Year of Birth	Year of Death	Age At Death
1	1920	2010	90
2	1920	2007	87
3	1921	2016	95
4	1923	2015	92

5	1923	2016	84
6	1924	2009	85
7	1925	2015	89
8	1926	2015	89
9	1929	Alive	89
10	1930	Alive	90

From Cohort Life table, the average age at death can be calculated.

Mean Age	88.9
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The average life expectancy of Warrier women belonging to the cohort is 88.9 years.

### B. Comparative Study

Different communities with similar population size is selected, who lives in Thiruvananthapuram and collected data from reliable source, of how many people are alive 90+ age.

	<b>7<sup>th</sup> day adventist Christians</b>	<b>Warrier community</b>
<b>Total population in Kerala</b>	app. 30,000	25472
<b>Total population in Tvm</b>	3108	1795
<b>Males</b>	1620	820
<b>Females</b>	1488	975
<b>90+</b>	19	16
<b>85+</b>	30	33

Seventh-day Adventist Christians has a similar population size of 1620 in Thiruvananthapuram. There are 19 people who are alive above the age 90+ and 30 above 85+.

## CONCLUSION AND RECOMMENDATION

The average life expectancy of women in India is 69.6 years, whereas in Kerala it is 77.8 years. The life style, food habits and demographic data influences life expectancy. It may differ among certain communities. Certain factors such as gender, religious beliefs, social interaction, marital status etc., play a major role in determining the life expectancy.

The results of this study shows that life expectancy of women in Warrier community is higher, i.e. 88.9 years. This high ratio may be due to the lifestyle they follow that increases their life expectancy. Similar high rates of life expectancy can be calculated from Seventh-day Adventists.

### Factors That Impact The Life Expectancy Of Women In Warrier Community:

The women in warrier community are well educated and well versed in hindu mythology. 90% of the population are vegetarians with religious beliefs. Warriarsamajam, a monthly family get-together helps them to improve their social interaction. 90% of the women in Warrier community do not drive. They get married at an average age of 22 years. Most of them pursue graduate and post-graduate levels. A regular exercise (walking) helps them to maintain their health. Prime attractive uniqueness of warrier community is their calm and non-violent behaviour.

The women in Seventh day Adventists have pursued a graduate education, with most of the families belonging to middle class. Their average age to get married is 20-21. Once

in every 6 months, they have a convention meeting which is compulsory for every member of their community. A fellowship meeting is held at the end of every 3 months which helps them to engage in various activities altogether to improve their social interaction skills. They follow a vegetarian diet with a renounced knowledge in their religion.

Following the lifestyle of these communities would help us to increase our life expectancy. Factors are tabulated below:

SI No.	Factors	Impact On Life Expectancy
1.	Gender	Females have more life expectancy than males.
2.	Vegetarianism	Vegetarians are more likely to live 6 – 9 years more than meat-eaters.
3.	Religious beliefs	Warriers are temple dwellers who fulfil the temple floral requirements. Whereas 7 <sup>th</sup> -day Adventists believe in reincarnation of Jesus. Having religious faith may extent life by as much as 4 years.
4.	Social interaction	WarrierSamajam (get together) is conducted every month. Convention (once in every 6 months) & fellowship (3 months) meetings are held for Adventist. Social interaction increases longevity.
5.	Driving	90% of women in Warrier& Adventist communities do not drive. People who drive all the time are more likely to die in car accident.
6.	Marital status	Women in Warrier and Adventist communities get married by the age 21-25
7.	Education	Most of them have pursued degree level education.
8.	Proper exercise	Yoga and walking are their main methods of exercise.
9.	Diseases	Most of the diseases prevalent in these communities are manageable, which increases the life expectancy.
10.	Financial background	Almost all of the families are middle class, with a considerable annual income.

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