During the last century, Kerala witnessed a drastic decline in mortality and consequent improvement in Life Expectancy (LE) as referred to as epidemiological transition, which is comparable to that of many developed countries. Some scholars argued that such improvements were a result of state intervention through primary healthcare facilities, which minimized deaths among infants, children and young mothers. On the contrary, others argued that the mortality reduction started long before Kerala formation and pointed this to social and cultural improvements. The recent experience from the developed countries shows a further shift in death from these ages to oldest ages mainly due to the reduction of death from chronic/degenerative diseases termed as the ‘stage of delayed degenerative diseases’. However, it is not clear as to how far Kerala is experiencing shifts in mortality and causes of death. Even, detailed inquiries about changing morbidity patterns and quality of life with mortality decline are not yet available. Such an enquiry can help in understanding the intensity of the burden of diseases and the effectiveness of healthcare measures in the context of the epidemiological transition.

Since Kerala has already crossed early stages of epidemiological transition, it needs to re-orient its health strategy towards curative and preventive measures against chronic/degenerative diseases, mainly in the adult and old ages. So far, comprehensive studies are not available on the public health expenditure and policies that can help the state to reorient its health systems. Considering the above research gaps, this study explores the following objectives- (i) What is the pattern of mortality and causes of deaths in Kerala. (ii) How does the quality of life influence mortality and morbidity changes (ii) What is the pattern of state intervention and its causal impacts with epidemiological transition?

In order to understand the epidemiological transition, the study followed the methodology suggested by Olshansky and Ault in 1986. It also used the methodology by Sullivan (1971) for analyzing the quality of life with an increase in LE by estimating Disability-Free Life Expectancy (DFLE). The state policies on health and expenditure were critically reviewed and factors that determine epidemiological transition were carried out using regression analysis. The study based its analysis using data from secondary sources such as Census, SRS, CDS-R, MCCD, VRS, NSSO and various budget documents of the government.
The analysis of data showed that the death rate (CDR) in Kerala was very high in the early decades of 20th century, which hovered around 35-40 per thousand population, making it is in the early stages of epidemiological transition. The decomposition of improvement in LE for identifying the possibility of ‘delayed degenerative stage’ - shows that younger ages still contribute more than half the share in increment in LE (until 2000). Nevertheless, there is an overall tendency in progression in the percentage contribution of adult and older population especially for females showing signs of advanced stages.

While analyzing the causes of deaths, the study found that the infectious diseases were mostly controlled before 1970s and the causes of death shifted to non-communicable diseases, accidents and injuries in both rural and urban areas. Infectious and parasitic diseases were prominent contributors to LE increment in 1976 to 1990-94 and while diseases of the circulatory system were highest contributor during 1990-94 and 2000-04. The DFLE shows a decline in the quality of life in the state over the years indicating a paradoxical movement with increase in human longevity and quality of life in both rural and urban areas. An examination on contributory factors by decomposition analysis showed the prominent role of non-communicable diseases in the loss of healthy years especially towards the older ages.

There was no clear evidence on the role of the state in addressing new challenges arising from epidemiological transition until the beginning of the last decade. An exploration of expenditure sub-heads clearly show shrinking funds for new schemes and a growing focus on medical education in urban areas. The Local Self Governments have been successful in expanding medical infrastructure, provision of safe drinking water and sanitation at the grass root level. However, their intervention towards addressing non-communicable diseases and healthcare for elderly is quite miniscule. The causal analysis shows that state health expenditure does not have significant impact on ongoing epidemiological transition for its advanced stages, where socio-economic factors have significantly influenced the same. The study concludes that the government of Kerala needs to re-orient its policies towards addressing the growing health challenges arising from non-communicable diseases especially among adults and older ages, emanating from the ongoing process of epidemiological transition, to attain its advance stages.