

# Gender Differences in the Prevalence and Patterns of Diseases in Kerala, India

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ARTICLE DETAILS	ABSTRACT			
Article History Published Online: 16 Jan 2020	When we examine the extent of diseases affected in Kerala, with a specific for gender, a higher incidence of gender related health disparity in Kerala societ females being more deprived compared to their male counter parts. These are			
<b>Keywords</b> Gender, Health, Kerala, Morbidity, Lifestyle diseases.	visible in the case of outcome indicators like the type of ailments they are suffering and its extent. The elderly among the females suffer more compared to males. A wide variation in morbidity rate and diseases among gender can be seen in Kerala.			
<sup>•</sup> Corresponding Author Email: tdsimon[at]gmail.com	Females are more prone in these cases. As far as gender gap in morbidity is concerned, it is comparatively lower in Kerala when compared to All India. There is a need for comprehensive policy conceptualization and programme implementation for women in Kerala to achieve equal health status in the near future. The gender inequality in health status can be overcome through improving some of the major socio-economic variables like education, decision making power, economic participation etc. Programmes to achieve gender equality should not only focus on the provision of equal or greater opportunities for women but should also concentrate on achieving equality in gender outcomes. To accomplish this, all plans and projects need to be examined through a gender lens.			

## 1. Introduction

The term inequity as used in WHO documents refers to the differences in health which are not only unnecessary and avoidable but, in addition, are considered unfair and unjust (Whitehead 1990: 7). Health disparities are unjust and are directly related to unequal distribution of economic, social and environmental resources. People are disadvantaged due to their gender, caste, income, education or geographic location. Health inequalities emanate due to inadequate access to health care, educational inequalities, poverty etc. One major health disparity is gender health disparity, which is significantly influenced by gender norms, relations and roles. "In many societies, women still have less access to health information, care, services and resources to protect their health. Furthermore, gender interacts with race, ethnicity and social strata, resulting in unequal benefits among various social groups and between men and women" (WHO 2010: 7). The importance of gender inequality as a critical determinant of health has been widely acknowledged (CSDH 2008).

India ranks 131st out of 188 countries with 0.624 Human Development Index point. India holds the same rank in gender inequality with 0.530 points. Though there is a slight improvement in Gender Inequality Index from 0.687 in 1995 to 0.530 in 2015, the situation is still pathetic considering the world trends (UNDP 2016). Gender inequality adversely affects the access to quality health services. "Women's health is profoundly affected by the ways in which they are treated and the status they are given by society as a whole" (WHO 2009: xiv).

Gender inequality in health and survival in India has been increasing. The Global Gender Gap Report indicates that India came down from the 103rd position in 2006 (with 0.962 score) to 141st rank in 2017 in the health and survival index (with score of 0.942). The report ranked 144 countries (The Global Gender Gap Report 2017: 176).

A state wise analysis in India shows that Kerala ranks first in Gender Disparity Index (GDI), while Assam holds the last position out of 32 state/UTs in 1981. In the case of undivided Andhra Pradesh, though it held 10th position in 1981, the position worsened to 23rd Rank in 1991 (Planning Commission 2002).

Women go through unique health problems and circumstances. Some other issues affect men also but these affect women primarily or more seriously. For example, special cases like mental ill health, where there is a specific concern about mental ill health among women in Kerala, and it is reported that the rate stress, depression, anxiety disorders were high and psychological well-being is comparatively low (Eapen 2002; Mukhopadyay *et al.* 2007). The studies conducted in Kerala shows that morbidity is higher among women than men (Suryanarayana 2008; Navaneetham et al. 2009). There is dearth of empirical studies which concentrate on the extent of morbidity and its pattern in Kerala, giving emphasis on gender issues. It is against this background that the present study is making an attempt to examine the disease pattern of Kerala population with a specific focus on gender.

# 2. Materials and Methods

The present study is based on the unit level data of National Sample Survey Organisation"s 71st Round "Key Indicators of Social Consumption in India: Health". Apart from percentage and ratio analysis, various indices, like gender gap have been used for the analysis.

### 3. Results: Morbidity Pattern in Kerala

Morbidity is defined as the number of living persons reporting ailment (per 100 persons) during a 15-day reference period. There are two major streams of argument for the high morbidity in Kerala - one questioning the comparability of the reported rates of morbidity and the other admitting the higher rates of morbidity as actually representing the situation. In other words, the former argument highlights that the higher rate of morbidity is mainly arisen through higher reportability of cases of sickness which in turn is indebted to the higher educational levels and health care institutions prevailing in the state. On the contrary, the latter argument holds that there are ill-health

conditions prevailing in the state which in turn causes higher morbidity (Simon 2017).

A wide variation in morbidity rate can be seen in Kerala (30.8) and India (9.8). As far as gender gap in morbidity is concerned, it is comparatively lower in Kerala (14 points) when compared to All India (26.4). In Kerala, not much divide can be seen in rural-urban morbidity rate, but a higher gender gap has been reported in rural Kerala (19.4) than rural Kerala (3.3) (Table 1).

Morbidity Rate by Gender and Habitation, Kerala and India, 2014					
Sector	Gender	Morbidity (percentage)			
Secior	Gender	Kerala	All India		
	Male	30.5	8.00		
Rural	Female	31.5	9.90		
Nulai	Total	31.0	8.90		
	Gender Gap	3.3	23.8		
	Male	27.8	10.10		
Urban	Female	33.2	13.60		
Ulball	Total	30.6	11.80		
	Gender Gap	19.4	34.7		
	Male	29.2	8.70		
Total	Female	33.3	11.00		
IUIAI	Total	30.8	9.80		
	Gender Gap	14.0	26.4		

	Table-1	
Morbidity Ra	te by Gender and Habit	ation, Kerala and India, 2014

A wide variation in morbidity rate can be seen in Kerala (30.8). Socio-economic background of morbidity reporting shows that it is higher in rural (31.0 per cent) other social group (33.5 per cent), higher MPCE group (32 per cent), 3 and below household size group (41.4 per cent) and 60 and above age group (67.2 per cent), confirming the finding that the first argument that the higher rate of morbidity is mainly arisen through higher reportability of cases of sickness.

Morbidity is higher among STs, low MPCE class, smaller households and among older population (Table 2). Males among OBCs have low morbidity, while among females it is low in the 'Others' social group category (9.9 percent). Females in smaller households reported lower morbidity (12.2 percent). As

far as gender gap in morbidity is concerned, a striking feature is that among ST group a negative gender gap has been estimated, i.e., only a low rate of females (10.4 per cent) have reported morbidity when compared to males (35.6 per cent). A higher degree of equality can be seen among the other social aroup, despite the highest morbidity. Relatively a higher gender has been reported in lower MPCE groups (11.3 points), while a negative gender gap (-7.9 per cent) has been reported in '8 and above' household size group. Age group classification shows that lower the age group, smaller is the gender gap, i.e, females have reported lower morbidity.

Morbidity Rate across Socio-economic Groups, Kerala, 2014							
Background	Attributes	Mc	Morbidity (percentage)				
variables	Aundules	М	F	Т	GG		
Place of	Rural	30.5	31.5	31.0	3.3		
residence	Urban	27.8	33.2	30.6	19.4		
	ST	35.6	10.4	23.3	-70.8		
Social	SC	24.4	32.2	28.4	32.0		
Group	OBC	28.3	32.0	30.3	13.1		
	Others	33.5	33.5	33.5	0.0		
MPCE	Low MPCE	29.1	34.5	31.9	18.6		
Group	Medium MPCE	26.3	30.4	28.4	15.6		

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wordiality R	ate across Socio-econ	omic Gr	oups, r	eraia, 20	J14
Background	Attributes	Mc	orbidity (	percenta	age)
variables	Allibules	М	F	Т	G

Source: Unit level data of NSS 71st Round, Key Indicators of Social Consumption in India: Health, 2014

	High MPCE	30.9	32.9	32.0	6.5
	3 & below	39.1	43.5	41.4	11.3
Household	4 – 5	26.9	29.8	28.3	10.8
size	6 – 7	26.4	29.9	28.3	13.3
	8 & Above	25.2	23.2	24.2	-7.9
	0 – 4	28.4	23.0	25.8	-19.0
	5 – 14	19.3	12.0	15.8	-37.8
Age Group	15 – 34	12.2	13.9	13.1	13.9
C. cup	35 – 59	33.4	41.5	37.7	24.3
	60 & above	66.3	68.0	67.2	2.6
Total		29.2	32.3	30.8	10.6

Note: M-Male; F-Female; T-Total; GG-Gender Gap

Source: Unit level data of NSS 71st Round, Key Indicators of Social Consumption in India: Health, 2014

# 4. Discussion: Nature of Diseases

### 4.1 Chronic Nature of Ailment

About 21 per cent of the respondents in Kerala suffered from chronic ailment which is well above the all India figure that stands at 4.8 percent (Table 3). A gender disparity of 23.8 per cent can be seen in Kerala, where females had more chronic ailment (22.9 per cent) than males (18.5 per cent). The socioeconomic background analysis shows that the occurrence of chronic ailment is highest among 60 & above age group (58.1 per cent) where females had little higher chronic ailment than males (57.3 per cent) with a small gender gap of 2.4 points. The highest MPCE group (22.7 percent) reported higher level of chronic ailment, but the highe gender gap has been reported in low MPCE group (36.1 points). Caste group analysis shows that 'Other' caste group (25.9 percent), while the highest gender gap has been reported in SC with 67.8 points. In case of ST households, as against other social group, females reported higher level of chronic ailment (6.6 per cent) than females (6.1 per cent) with a gender gap of -7.6 points, though the rate of chronic ailment is comparatively lower in this group (6.4 per cent) (Table 3).

Table-3	
Gender Gap in Chronic Ailment in Kerala and All India, 201	4

Gender Gap in Chronic Ailment in Kerala and All India, 2014							
Background	Attributes	Chronic	Chronic ailment (percentage)				
variables	Aunouces	М	F	Т	GG		
Place of	Rural	18.3	21.6	20.0	18.0		
residence	Urban	18.8	24.6	21.8	30.9		
	ST	6.6	6.1	6.4	-7.6		
Social	SC	14.9	25.0	20.1	67.8		
Group	OBC	17.1	21.1	19.2	23.4		
	Others	24.2	27.5	25.9	13.6		
	Low MPCE	16.6	22.6	19.7	36.1		
MPCE Group	Medium MPCE	15.4	19.4	17.5	26.0		
C.cap	High MPCE	20.5	24.8	22.7	21.0		
	3 & below	28.0	33.1	30.7	18.2		
Household	4 – 5	16.5	21.1	18.8	27.9		
size	6 – 7	15.4	19.8	17.8	28.6		
	8 & Above	14.0	15.0	14.5	7.1		
	0 – 4	2.2	2.0	2.1	-9.1		
	5 – 14	3.6	2.9	3.3	-19.4		
Age Group	15 – 34	5.2	5.5	5.4	5.8		
Croup	35 – 59	25.1	33.6	29.6	33.9		
	60 & above	57.3	58.7	58.1	2.4		
Kerala		18.5	22.9	20.8	23.8		
All India		4.2	5.5	4.8	31.0		

Note: M-Male; F-Female; T-Total; GG-Gender Gap

Source: Unit level data of NSS 71st Round, Key Indicators of Social Consumption in India: Health, 2014

## 4.2 Lifestyle Diseases

Lifestyle diseases are permanent and require long periods of excessive care and attention and hence they are termed chronic diseases by medical practitioners and are often identified as exerting too much pressure on healthcare system."If uncurbed, a new generation of 'diseases of comfort' (chronic diseases caused by obesity and physical inactivity) will become a major public health problem in this and the next century" (Choi et al. 2005: 1030).

For the sake of analysis, seven lifestyle diseases from a list of 61 in the NSSO Report have been selected. They are; (i) hypertension, (ii) diabetes, (iii) heart disease: chest pain, breathlessness, (iv) stroke / hemiplegia / sudden onset of weakness or loss of speech in half of body, (v) bronchial asthma/ recurrent episode of wheezing and breathlessness with or without cough over long periods or known asthma), (vi) obesity, and (vii) cancers.

The occurrence of lifestyle diseases is higher in Kerala (42.9 percent) when compared to the national average (27.7 percent). Prevalence of lifestyle diseases is high in rural areas (43.9 percent) than urban areas (41.8 percent); but both in rural and urban areas males reported more lifestyle diseases than females with a gender gap of 5.7 and 15.9 points in rural and urban habitations respectively (Table 4).

Table-4 Distribution of Morbid Persons with Lifestyle Diseases across Gender, Kerala, 2014								
Lifestyle diseases (Percentage)								
Place of residence	Kerala			India				
	М	F	Т	GG	М	F	Т	GG
Rural	45.3	42.7	43.9	-5.7	23.0	20.9	21.9	-9.1
Urban	45.9	38.6	41.8	-15.9	40.2	35.4	37.5	-11.9
Total	45.6	40.8	42.9	-10.5	29.2	26.5	27.7	-9.2

Note: M-Male; F-Female; T-Total; GG-Gender Gap Source: Unit level data of NSS 71st Round, Key Indicators of Social Consumption in India: Health, 2014 Note: R-Rural; U-Urban; T-Total

Source: Unit level data of NSS 71st Round, Key Indicators of Social Consumption in India: Health, 2014

### 5. Conclusion

The main objective of this paper is to examine the extent of diseases affected in Kerala, with a specific focus on gender. The results indicate a higher incidence of gender related health disparity in Kerala society, with females being more deprived compared to their male counter parts. These are clearly visible in the case of outcome indicators like the type of ailments they are suffering and its extent. The elderly among the females suffer more compared to males.

A wide variation in morbidity rate and diseases among gender can be seen in Kerala. Females are more prone in these cases. As far as gender gap in morbidity is concerned, it is comparatively lower in Kerala when compared to All India. A gender disparity of 23.8 per cent can be seen in Kerala, where females had more chronic ailment than males. The socioeconomic background analysis shows that the occurrence of chronic ailment is highest among 60 & above age group. A significantly higher level of gender gap can be seen in 'Joint or

### References

- 1. Choi, Bernard C.K., Hunter, David J., Tsou, Walter & Sainsburgy, Peter (2005), "Diseases of comfort: primary causes of death in the 22nd century", *Journal of Epidemiology and Community Health*, Vol. 59, No.12, pp.1030-1034.
- CSDH (2008), Closing the gap in a generation: health equity through action on the social determinants of health, Final Report of the Commission on Social Determinants of Health. Geneva, World Health Organization.

bone disease' group with 81 points gender gap, where its rate is higher in females (10 per cent) than males (5 per cent). The females are affected more by Endocrine, metabolic, nutritional, while in the case of cardio-vascular diseases the males outnumber the females.

There is а need for comprehensive policy conceptualization and programme implementation for women in Kerala to achieve equal health status in the near future. The gender inequality in health status can be overcome through improving some of the major socio-economic variables like education, decision making power, economic participation etc. Programmes to achieve gender equality should not only focus on the provision of equal or greater opportunities for women but should also concentrate on achieving equality in gender outcomes. To accomplish this, all plans and projects need to be examined through a gender lens.

- Eapen, M. (2002), "Mental Health of Women in Kerala: The Need for a Gender Perspective", Samyukta: A Journal of Womens Studies, 2 (2): 25-38.
- Mukhopadyay, S, J Basu and SI Rajan (2007), "Mental Health, Gender Ideology and Women's Status in Kerala" in S Mukhopadyay (ed.), *The Enigma of the Kerala Women: A Failed Promise of Literacy* (New Delhi: Social Science Press).
- 5. Navaneetham K., Kabir M. & Krishnakumar, C.S. (2009), Morbidity Patterns in Kerala: Levels And Determinants,

*Working Paper*, No. 411, Centre for Development Studies, Thiruvananthapuram.

- 6. Planning Commission (2002), *National Human Development Report 2001,* Government of India.
- Simon, T.D. (2017), "Morbidity Pattern and its Determinants among Tribal People in Kerala", *Artha-Journal of Social Sciences*, 2017, Vol. 16, No. 2, 39-55.
- Suryanarayana, M.H. (2008), Morbidity and health Care in Kerala: A Distributional profile and implications, WP-2008-004, Indira Gandhi Institute of Development Research, Mumbai.
- UNDP (2016), Human Development Report 2016-Human Development for Everyone, 1 UN Plaza, New York, NY 10017 USA.
- Whitehead, Margaret (1990), The Concepts and Principles of Equity in Health, World Health Organization, Regional Office for Europe, Copenhagen
- 11. WHO (2009), Women and Today's Evidence Tomorrow's Agenda, 20 Avenue Appia, 1211 Geneva 27, Switzerland
- WHO (2010), Social and Gender Inequalities in Environment and Health, Fifth Ministerial Conference on Environment and Health "Protecting children's health in a changing environment", Parma, Italy, 10–12 March 2010.