



**GOVERNMENT OF KERALA**

**Report based on NSS 71<sup>st</sup> round (Jan 2014-June 2014)**

**Central and State Sample Pooled Data**

# **Social Consumption Health**

**NSS DIVISION**

**Department of Economics and Statistics**

**Government of Kerala**



## **PREFACE**

*National Statistical Office (NSO) conducts nationwide socio-economic surveys covering various subjects on regular basis. Subjects are selected keeping in view of their importance and surveys are based on scientific sampling methods. The Department of Economics and Statistics (DES) had been participating these surveys with state samples on a matching basis from the very beginning itself. The state sample data alone cannot be used directly to produce reliable estimates at the micro level due to small sample size and there is an urge to develop a mechanism by which sample size will be increased and the pooling of Central and State sample data would enable better estimates at lower sub state level, particularly at district level.*

*DES Kerala has been performing the pooling exercise from 66th round itself with other few State in the country with technical guidance of MoSPI. The present report contains the district wise pooled estimates on various important parameters based on 71<sup>st</sup> round pooled data on the topic Social Consumption: Health*

*This report was prepared using the valuable data collected by field staff of DES and NSO under admirable co-operation extended by sample households and entrepreneurs of the selected enterprises. The technical assistance provided by National Statistical Office (NSO) is also acknowledged.*

*I hope that this report will found useful to policy makers, academicians and researchers.*



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## **HIGHLIGHTS**

\_ The report is based on information collected through NSS 71<sup>st</sup> round Central and State sample.

- ❖ In the age group, 60+ years (353 per 1000 persons) had the highest proportion of hospitalization cases during the 365 days reference period and the age group 0-14 years (145 per 1000 persons) had the least proportion of hospitalization cases
- ❖ Among 14 districts in the age group of 60+, Thrissur (435 per 1000) succeeded by Alappuzha (432 per 1000) had the highest proportion in the number of hospitalization cases during 365 days reference period and Idukki (236 per 1000) has the least proportion which is preceded by Thiruvananthapuram (285 per 1000).
- ❖ Average total medical expenditure for treatment per hospitalization case during stay at hospital over 365 days in Kerala is ₹15157 (₹ 14807 in Rural and ₹15703 in Urban).
- ❖ Out of 14 districts in Kerala, Thrissur (₹ 25838) has shown the highest medical expenditure for treatment per hospitalization case during stay at hospital over 365 days and Wayanad (₹ 4604) has the least expenditure.
- ❖ According to the average total medical expenditure for treatment per hospitalization case in rural areas, Thrissur (₹ 29827) has the highest medical expenditure and Wayanad (₹ 4356) has the least expenditure.
- ❖ In Urban areas, the average medical expenditure for treatment per hospitalization case during stay at hospital over 365 days, Kannur (₹ 24082) has shown the highest and Pathanamthitta (₹ 9272) has the least expenditure.
- ❖ Proportion of person reporting ailment (PAP) during the reference period of 15 days is 254 per 1000 in Kerala (247 per 1000 in rural and 264 per 1000 in urban)
- ❖ Proportion of person reporting ailment (PAP) during the reference period of 15 days is highest in the age group of 60+ years (548 per 1000) and lowest in the age group of 15 - 44 years (127 per 1000)

- ❖ Idukki (459 per 1000) has the highest Proportion of person reporting ailment (PAP) during the reference period of 15 days succeeded by Thrissur in which 404 persons per 1000. Palakkad has the least proportion which is 139 per 1000 preceded by Alappuzha has 163 per 1000.
- ❖ Average total medical expenditure for treatment per ailing person during a period of 15 days in Kerala is ₹416 (₹416 in rural and ₹415 in urban).
- ❖ Out of the districts in Kerala, among rural Ernakulum has the highest expenditure.
- ❖ Alappuzha has the least expenditure. Among urban, Kannur has the highest medical expenditure whereas Wayanad (226) has the least expenditure.
- ❖ 77 per 1000 women are pregnant at some time during the reference period of 365 days in Kerala (Rural 28 per 1000 and urban 69 per 1000) are the highest proportion. Among the rural areas, Palakkad (114) has the highest number of women pregnant and Pathanamthitta (40) has the lowest number of women. Among the urban areas, the highest number of pregnant women in Malappuram (104 per 1000) and least in Kottayam (42 per 1000).
- ❖ Women at the age group of 25 - 29 years (205 per 1000) has the highest proportion of pregnancy at some time during the reference period of 365 days and 45+ years have no pregnancy women during the reference period.
- ❖ Women in the age group of 45+ (857 per 1000) have the highest proportion that did not give birth at some time during the reference period of 365 days and age < 20 has the least proportion (142 per 1000) in Kerala.
- ❖ 219 per 1000 women did not give birth during the reference period of 365 days in Kerala (97 per 1000 in rural and 186 per 1000 in urban) with the highest proportion in Kottayam (486 per 1000) and lowest in Kasaragode (79 per 1000).
- ❖ Child birth is highest at private hospital (657 per 1000) and least at private clinic (12 per 1000) in Kerala.
- ❖ Thrissur (861 per 1000) has the highest proportion of child birth in private hospital succeeded by Ernakulum (823 per 1000) and Kozhikode has the least (374 per 1000) proportion of childbirth preceded by Kottayam (402 per 1000).
- ❖ Kollam (133 per 1000) has the highest proportion of child birth in private clinic.
- ❖ Palakkad (144 per 1000) has the highest proportion of childbirth at home.



## **Abbreviations**

Abbreviations	Description
PAP	Proportion of Ailing Persons
EC	Excluding Childbirth
AYUSH	Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy
ASHA	Accredited Social Health Activist
HSC	Health Sub Centre
AWW	Anganwadi worker
ANM	Auxiliary Nurse Midwives
PHC	Primary Health Centre
hh(s)	Household(s)
CHC	Community health Centre
MMU	Mobile Medical Unit
MPCE	Monthly Per Capita Consumer Expenditure
UMPCE	Usual Monthly Per Capita Consumer Expenditure
RSBY	Rashtriya Swasthya Bimayojana
KSD	Kasaragod
KNR	Kannur
WYD	Wayanad
KKD	Kozhikode
MLP	Malappuram
PKD	Palakkad
TSR	Thrissur
EKM	Eranakulam
KTM	Kottayam
IDI	Idukki
ALY	Alappuzha
PTA	Pathanamthitta
KLM	Kollam
TVM	Thiruvananthapuram





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# **Chapter 1**

## **Introduction**



## **Introduction**

### **1.1 Introduction**

The National Sample Survey Office (NSSO) was set up in 1950, with the idea of having a permanent survey organisation to collect data on various facets of the economy. In order to assist in socio-economic planning and policy making, NSSO conducts nationwide sample surveys known as National Sample Survey (NSS). The NSS is a continuing survey in the sense that it is carried out in the form of successive 'rounds', each round usually of a year's duration covering several topics of current interest.

The Survey on Social Consumption relating to Health, conducted by NSSO are primary source of data on basic quantitative information on Health sector like morbidity, hospitalisation, extent of receipt of pre-natal and post-natal care by women, expenditure incurred on treatment received from health services in public and private sectors, use of cost of treatment by AYUSH etc.

As the National Sample Survey samples were small, the state governments were invited to participate with matching samples so as to enable the preparation of estimates at sub-state level which was not possible with the 'Central Sample' alone. Considering the demands for district level estimates, Kerala has been participating in the National Sample Surveys from the very beginning with matching samples to provide more disaggregated results at regional level.

The present report titled 'Health in Kerala' is based on the household survey on 'Consumption relating to Health' during the period January to June 2014 was carried out by the Department of Economics and Statistics, Kerala as part of the 71st round of National Sample Survey (NSS). The data were collected through a schedule of enquiry (Schedule 25.0).

### **1.2 Objective of 71st Round Survey:**

The survey on Social Consumption: Health in 71st round aimed to generate basic quantitative information on the health sector. One of the vital components of the schedule was dedicated to collect information which was relevant for determination of the prevalence rate of different diseases among various age-sex groups in different regions of the country. Further, measurement of the extent of use of health services provided by the Government was an indispensable part of this exercise. Special attention was given to hospitalisation, or medical care received as inpatient of medical institutions. The ailments for which such medical care was sought, the extent of use of Government hospitals as well as different (lower) levels of public health care institutions, and the expenditure incurred on treatment received from public and private sectors, were investigated by the survey. Break-up of expenditure by various heads was estimated for expenses on medical care received both as in-patient and otherwise. Emphasis was laid on collecting information on average 'out of pocket' expenditure for various episodes of illness. For the first time in an NSS health survey, the data collected had enabled assessment of the role of alternative schools of medicine in respect of prevalence of use, cost of treatment and type of ailments covered. Besides, the survey was meant to ascertain the extent of use of private and public hospitals for childbirth, the cost incurred and the extent of receipt of pre-natal and postnatal care by women who gave childbirth. Finally, information on certain aspects of the condition of the 60-plus population was

also obtained which have a bearing on their state of health, economic independence, and degree of isolation.

### **1.3 Comparability with Previous Round Survey**

Due to the change in coverage and difference in concepts and definitions in respect of some important parameters followed in the two rounds, the results of NSS 71st round are not strictly comparable with the results of NSS 60th round. While making any comparison, these differences may be taken into consideration.

In the 60th round and earlier surveys on health, persons with disabilities were regarded as ailing persons. In this round, pre-existing disabilities were considered as chronic ailments provided they were under treatment for a month or more during the reference period, but otherwise were not recorded as ailments. Disabilities acquired during the reference period (that is, whose onset was within the reference period) were, however, recorded as ailments.

In the earlier NSS health surveys, only treatment of ailments administered on medical advice was considered as medical treatment. Self-medication, use of medicines taken on the advice of persons in chemists' shops, etc. were not considered as medical treatment and ailments for which only such medication was taken were considered as untreated ailments. In this round, all such treatment was considered as medical treatment. But for each ailment treated, it was ascertained whether the treatment was taken on medical advice or not.

Childbirths were given a dummy ailment code so that details of treatment and expenditure of childbirth could be recorded. However, childbirths were, as usual, not considered in generating estimates of Proportion of Ailing Persons (PAP). In addition, in the light of the experience of earlier surveys, more emphasis has been laid on identification of chronic ailments and information was collected in such a way as to enable to estimate separately for the incidence of chronic ailments.

Information on expenditure incurred on treatment was collected with a 'paid' instead of a 'payable' approach; as such information was considered to be much more readily available.

In the earlier surveys, for each person aged 60 years or more, the ailments reported on the date of survey and the nature of treatment of such ailments was recorded in addition to information on ailments during the reference period of last 15 days. In this round, the additional information on ailments as on the date of survey was not collected for any age group.

A more detailed and updated code list for ailments was adopted in the current round as per the requirements of the Ministry of Health and Family Welfare. Whenever information on nature of treatment was collected, the options 'Indian System of Medicine' (including Ayurveda, Unani and Siddha), Homeopathy and 'Yoga or Naturopathy' were provided in the list of responses to enable tabulation of data separately for treatments by different systems of medicine.

In this round NSS has marginally deviated from its definition of Household. As usual, a group of persons normally lived together and taking food from a common kitchen constituted a household. It included temporary stay-aways (those whose total period of absence from the household is

expected to be less than 6 months) but excluded temporary visitors and guests (expected total period of stay less than 6 months). This time, assuming that expenditure related information could be better collected from the person who actually funded it, some exceptions were allowed as follows:

(i) Students residing in student hostels were considered as members of the household to which they belonged before moving to the hostel irrespective of the period of absence from the household they belonged. Hence, they were not regarded as forming single-member households unlike previous rounds.

(ii) Any woman who has undergone childbirth during last 365 days was considered a member of the household which incurred the cost of childbirth irrespective of her place of residence during the last 365 days.

(iii) A child aged less than 1 year was considered a member of the household to which its mother belongs.

#### **1.4 Layout of the Report**

This document brings out the key results of NSS 71st round within a year of completion of the field work for use in decision support, policy inferences and economic analysis. This report contains four chapters and three appendices including the present chapter giving the introduction and background of this report. The concepts and definitions of some important terms used in the survey and relevant to this report are explained in chapter two. Results of poolability test are presented in chapter three. Pooled estimates of selected indicators of health are given in chapter four. Detailed tables at district level generated from the pooled data are given in Appendix A. Sample design and estimation procedure for central/state sample is presented in Appendix B. Schedule 25.2 used for collecting information on Education are given in Appendix C.

#### **1.5 Schedules of enquiry**

The survey period of the 71st round was from January to June 2014. The required information was collected from a set of sample households using schedule 25.0 (see Appendix C for details)

In addition to the household characteristics and demographic particulars, the following information was collected in this round from each household:

I. Particulars of medical treatment received as in-patient of a medical institution during the last 365 days and expenses incurred during the last 365 days for treatment of members as in-patient of medical institution.

II. Particulars of spells of ailment of household members during the last 15 days (including hospitalisation) and expenses incurred during the last 15 days for treatment of members (not as an in-patient of medical institution).

III. Particulars of economic independence and state of health of persons aged 60 years and above

~~IV. Particulars of pre-natal and post-natal care for pregnant women of age 15-49 years during the last 365 days~~



## 1.6 Scope and coverage

Geographical coverage: The survey covered the whole of the Indian Union.

Population coverage: The following rules regarding the population coverage were adhered to compile listing of households and persons:

Under-trial prisoners in jails and indoor patients of hospitals, nursing homes etc., were excluded, but residential staffs therein were listed whenever listing was done in such institutions. The persons of the first category was considered as members of their parent households and counted there. Convicted prisoners undergoing sentence was outside the coverage of the survey.

Floating population, i.e., persons without any normal residence were not listed. But households residing in open space, roadside shelter, under a bridge, etc., more or less regularly in the same place, were listed.

Neither the foreign nationals nor their domestic servants were listed, if by definition the latter belong to the foreign national's household. If, however, a foreign national became an Indian citizen for all practical purposes, he or she was covered.

Persons residing in barracks of military and paramilitary forces (like police, BSF, etc.) were kept outside the survey coverage due to difficulty in conduct of survey therein. However, civilian population residing in their neighbourhood, including the family quarters of service personnel, were covered.

Orphanages, rescue homes, ashrams and vagrant houses were outside the survey coverage. However, persons staying in old age homes, ashrams/hostels (other than students) and the residential staff (other than monks/ nuns) of these ashrams were listed. For orphanages, although orphans were not listed, the persons looking after them and staying there were considered for listing.

Students residing in the students' hostels were excluded from the hostel as they were considered as members of the household to which they belonged before moving to the hostel. However, residential staff was listed in the hostel. In this round, however, following exceptions in the definition of household was integrated:

1. Students residing in students' hostels were considered as members of the household to which they belonged before moving to the hostel irrespective of the period of absence from the household they belonged.

- 2 Any woman who has undergone childbirth during last 365 days before the date of survey was considered a member of the household which incurred the cost of childbirth irrespective of her place of residence during the last 365 days.3. A child aged less than 1 year was considered a member of the household to which its mother belongs.

## SAMPLE SIZE

I. First-stage units: As usual, most States and Union Territories participated in the survey: a “State sample” was surveyed by State Government officials in addition to the “Central sample” surveyed by NSSO. For rural sector, the number of FSU’ surveyed in the State sample was 158 and the number of urban sector surveyed was 160. This document is based on the estimates obtained from the State sample only.

II. Second-stage units: Stratification of households was done on the basis of (i) with at least one child of age less than 1 year, and (ii) households with at least one member (including deceased former member) hospitalised during last 365 day. For the survey, from each sample FSU and urban block, 8 households were surveyed. Detailed sampling design and estimation procedure is presented in Appendix C of this document. In 1264 households in rural areas and 1280 households in urban areas this schedule 25.0 schedule was canvassed.

Total Sample size during NSS 71st round in Kerala state:

In Kerala, 320 samples were covered consisting of 158 rural villages (samples), and 160 urban blocks (UFS). The total numbers of households surveyed in rural villages were 1223 and 864 in urban blocks.

Sample size: Total sample size of state for central and state sample is given below

Table below shows the numbers of rural and urban sample households, and also the number of persons surveyed.

Sector	Number of Surveyed					
	Central sample			State sample		
	FSU	House-holds	persons	FSU	House-holds	persons
<b>RURAL</b>	160	1199	5484	158	1264	5851
<b>URBAN</b>	160	1279	5745	160	1280	5892
<b>RURAL+ URBAN</b>	320	2479	11229	318	2544	11743

## 1.8 Conceptual Framework

The estimates of number of households presented in this report are based on data with a moving reference point, from 1.1.2014 to 30.6.2014, which spans a period of six months. These estimates, therefore, may be taken to represent the number of households existing as on 31.03.2014, the mid-point of the six-month period.

Reference period: Details of all ailments (as in-patient or otherwise) during last 15 days were collected for all current members and former members. On the other hand, the number of 'hospitalised' members and the number of 'death occurred' were collected with a different reference period as follows:

I. Details of hospitalisation for all current and former members were collected for last 365 days (hospitalisation occurred from January 2013 to June 2014).

II. Details of death were collected for last 365 days (death occurred from January 2013 to June 2014). Thus the estimates of number of 'hospitalised' members as well as number of 'death occurred' may be taken to represent the same as on 30.09.2014.

Using current population plus estimated former members during last 365 days as denominator cannot represent the actual size of population that suffered from ailment at a particular time during the reference period or the population exposed to the risk during the same time point. Thus to determine PAP, ratio of current population (excluding former/deceased members) reporting ailment and the current population exposed to the risk is considered for this report.

Rate of hospitalisation for any population category is calculated as a ratio of hospitalised members among current population & the former members and estimated current population (plus estimated former members) during last 365 days.

Quintile class of UMPCE (Usual Monthly Per Capita Expenditure):

This refers to the 5 quintile classes of the Rural/Urban distribution (estimated distribution) of households by MPCE. In the tables, the different quintile classes are referred to simply as 1 (lowest quintile class), 2, 3, 4 and 5.

Thus, for example, the words "quintile class 2" (or "20-40%") in a table for the State KERALA, RURAL sector, means households of the rural Kerala falling in the second (second lowest) quintile class of the estimated distribution of RURAL households by MPCE of KERALA. These 5 classes are demarcated separately for each sector based on the amount of usual consumer expenditure of the household in a month.

Following table shows the lower and upper limits of all –kerala quintiles to have an idea of level of living of the households belonging to these quintile classes

**Lower and upper limits of UMPCE in different quintile classes for each sector**

Quintile class of MPCE	MPCE in Rs.			
	Rural		Urban	
	Lower limit	Upper limit	Lower limit	Upper limit
1	0	800	0	1182
2	800	1000	1182	1600
3	1000	1264	1600	2200
4	1264	1667	2200	3200
5	1667		3200	



# **Chapter-2**

## **Concepts and Definitions**

## Concepts and Definitions

### 1.0 Household and related terms:

**1.1 Household:** A group of person normally living together and taking food from a common kitchen constitutes a household. The word "normally" means that temporary visitors are excluded but temporary stay-aways are included. "Living together" is usually given more importance than "sharing food from a common kitchen" in drawing the boundaries of a household in case the two criteria are in conflict; however, in the special case of a person taking food with his family but sleeping elsewhere (say, in a shop or a different house) due to space shortage, the household formed by such a person's family members is taken to include that person also. Under-trial prisoners in jails and indoor patients of hospitals, nursing homes, etc., are considered as members of the households to which they last belonged. In this round, however, following exceptions in the definition of household was integrated:

- (a) **students residing in students' hostels was considered as members of the household to which they belonged before moving to the hostel irrespective of the period of absence from the household they belonged. Hence, they were not regarded as forming single-member households unlike previous rounds.**
- (b) **any woman who has undergone childbirth during last 365 days was considered a member of the household which incurred the cost of childbirth irrespective of her place of residence during the last 365 days.**
- (c) **a child aged less than 1 year was considered a member of the household to which its mother belongs.**

**1.2 Household size:** The size of a household is the total number of persons in the household.

### 2.0 NATURE OF TREATMENT

**2.1 Allopathy:** In this survey the term 'allopathy' is used to refer to the broad category of medical practice that is sometimes called Western medicine, biomedicine, evidence-based medicine, or modern medicine. According to MedTerms Dictionary, allopathic medicine is defined as 'the system of medical practice which treats disease by the use of remedies which produce effects different from those produced by the disease under treatment'. The term 'allopathy' was coined in 1842 by C.F.S. Hahnemann to designate the usual practice of medicine (allopathy) as opposed to homeopathy.

**2.2 Indian System of Medicines (ISM):** This includes Ayurveda, Siddha, Unani and Sowa-Rig-Pa medicines. These medicines are also called *Desi Dawaiyan* in India. Herbal medicines are also included in this category of medicines. The practitioners of these systems — may be called Vaidji, Vaidya, Siddha Vaidya, Hakim, etc. (Sometimes people also say *Jadi-*

*Booti wale* Vaidji, Hakimji, etc.) This category also includes Home-made medicines and Gharelu Nuskhe, Herbal Medicines (*Jadi-Bootiyan or Desi Dawa*), and the medicines given by local Vaidya/Hakim. e.g. Neem leaves for skin diseases, Tulsi leaves for common cold, Haldi turmeric) for injuries and fracture, Adarak (ginger) for cough, cold, throat problem etc., Lahasun (Garlic) for gathiya/ joint pain, Kali Mirch (pepper) and honey for dry and productive cough, Ashwagandha, Chyawanprash as tonic /Rasayana for energy, Gulab Jal for eye diseases and face wash, Saunf for indigestion, Ajowain and Hing for stomach pain, *Methi seeds, Ajawain, Pudina* (mint), *Jeera, Sunthi* (dry ginger), *Laung* (clove), *Triphala* powder for problems like indigestion, loss of appetite, constipation, *Laung* (clove) oil for toothache, *Bilva* (Bel) powder for diarrhoea, etc.

**2.3 Homoeopathy:** Homeopathy is a system of medicine that uses highly diluted doses from the plant, mineral and animal kingdoms to stimulate natural defenses in the body. Oral Homoeopathy medicine is available in many forms, including the traditional homoeopathic pellets (balls), liquid dilution, tablets (lactose-based) and mother tincture.

**2.4 Yoga and Naturopathy:** Yoga is a combination of breathing exercises (*pranayam*), physical postures (*asanas*) and meditation for curing illness and releasing stress, both physical and mental. In Naturopathy treatments are based on five elements of nature, namely,

(i) Earth (mud baths, mud packs, mud wraps) (ii) Water (hydrotherapy methods like baths, jets, douches, packs, immersions, compresses/fomentations) (iii) Air (breathing exercises, outdoor walking, open-air baths) (iv) Fire (sun baths, magnetized water) (v) Ether (fasting therapy).

**2.5 AYUSH:** Each letter of the word AYUSH represents a specific system of medicine: A for Ayurveda, Y for Yoga and Naturopathy, U for Unani, S for Siddha, and H for Homeopathy. Thus AYUSH encompasses the Indian System of Medicines, Yoga and Naturopathy, and Homeopathy. Treatment by any of these systems were therefore qualify as **AYUSH treatment**, and medicines used by any of these systems were called **AYUSH medicines**.

### **3.0 LEVEL OF CARE: EXPLANATIONS OF ASSOCIATED TERMS**

**3.1 Medical institution:** This refers to any medical institution having provision for admission of sick persons as in-patients for treatment. Thus it covers all HSC, PHC, CHC, public dispensaries with facilities for in-patient treatment, any public hospital (district hospital/state general hospitals/ medical college hospitals etc), and private hospital of any kind (private nursing home, day care centre, private medical college and hospital, super- speciality hospital, etc.).

**3.2 ASHA (Accredited Social Health Activist):** ASHAs are local women trained to act as health educators and promoters in their communities. There is one ASHA for every 1000



population. Their tasks include motivating women to give birth in hospitals, bringing children to immunization clinics, encouraging family planning (e.g., usage of condoms, IUDs, surgical sterilization), treating basic illness and injury with first aid, keeping demographic records, and improving village sanitation. They have a drug kit – which has tablets like paracetamol, anti-malarials, oral contraceptives, co-trimoxazole (an antibiotic), etc. **AWW (Anganwadi worker):** These are the staff of the Anganwadi centre in the village. There is one Anganwadi centre for every 1000 population. These centres provide supplementary nutrition, non-formal pre-school education, nutrition and health education, immunization, health check-up and referral services. They are provided with a drug kit and may give tablets for about 1 to 3 children in a day.

**3.3 HSC (Health Sub-Centre):** This is the most peripheral facility in the primary health care system. There is one sub-centre for every 3000 population in hilly/tribal/difficult areas and 5000 population in plains. Each Sub-Centre is staffed by one or two

**3.4 Auxiliary Nurse Midwives (ANM<sup>1</sup>)** (female health worker) and may have a male health worker. Their main task (as perceived) is to provide immunization to children and antenatal care. Some sub-centres also conduct normal delivery but they have no beds and the sub-centre is not considered as an institution with in-patients. They perform some outpatient care largely in the form of treatment for basic illnesses. Any treatment taken from ANM during her visit to the village can be considered as treatment taken at sub-centre.

**3.5 Dispensary:** This is a public institution from which medical supplies, preparations, and treatments are dispensed, but which does not have facilities for treatment of in-patients. Dispensaries are staffed by one or more doctors.

**3.6 PHC (Primary Health Centre)** is staffed by a Medical Officer (MBBS or AYUSH) and Para medical staff. They provide curative OPD services and ante natal checkups and deliveries. They usually have 4-6 beds to conduct delivery. They may or may not have facilities for in-patient treatment. There is one PHC for every 30000 population in the plains and for every 20,000 populations in hilly/tribal/difficult areas. The terms ‘additional PHC’, ‘mini-PHC’ and ‘new PHC’ are considered synonymous to ‘PHC’.

PHCs in Bihar and Uttar Pradesh are the equivalent of CHCs in other States that their area of coverage is a block and may even have 30 beds. Admissions/in-patients are always there in this facility type. Their equivalent of a PHC in these States is called an additional PHC.

**3.7 CHC (Community Health Centre):** CHC is usually located at block/division or *taluk* level and serves as a referral centre for PHCs. It is to be staffed by medical specialists and medical officers and AYUSH doctors – but in practice there are usually only medical officers. It always has provision for in-patients and 10 to 30 beds. It usually has an OT, X- Ray, Labour Room and laboratory facilities.

**3.8 Public Hospital:** All other government hospitals, including district hospitals in the district headquarters town (which acts as referral site for all the CHCs and PHCs and sub-centers),

government medical college hospitals, ESI hospitals, other government hospitals like maternity hospitals, cancer hospitals, TB or leprosy hospitals, railway hospitals, etc. run

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<sup>1</sup> An ANM is a nurse, usually with 18 months training, who is expected to provide a range of services as required in a health sub-centre. In some States the post is called village health nurse, or junior public health nurse by the government covered under the category 'public hospital' for the purposes of this survey.

**3.9 Private Hospital, private clinic:** Any other hospital/ nursing home/ day care centre with facilities for in-patient treatment called a private hospital. A private clinic with facilities for consultation with private doctor(s) but no in-patient facility.

#### **4.0 Ailment and Related Terms:**

**4.1 Ailment – illness or injury:** Ailment, i.e. illness or injury, meant any deviation from the state of physical and mental well-being. In this round whether a person suffered an ailment during a particular period, it was judged by some deviation from physical or mental well-being **was felt**<sup>2</sup> by the person during the period subject to the following inherent limitations:

- An ailment may not cause any necessity of hospitalisation, confinement to bed or restricted activity.
- An ailment may be untreated or treated.

For the purpose of this survey, ailments are INCLUSIVE of:

- All types of injuries, such as cuts, wounds, haemorrhage, fractures and burns caused by an accident, including bites to any part of the body
- Cases of abortion – natural or accidental. However, following
  - Cases of sterilisation, insertion of IUD, getting MTP etc.
  - A state of normal pregnancy without complications
  - Cases of pre-existing visual, hearing, speech, locomotor and mental disabilities. were NOT INCLUDED in ailment

**4.2 Spell of ailment:** A spell is a continuous period of sickness due to a specific ailment.

**4.3 Hospitalisation:** Admission as in-patient to a medical institution (as defined above) for treatment of some ailment or injury, or for childbirth, was called hospitalisation. The birth of a baby in a hospital was not a case of hospitalisation of the baby. If, however, a baby who had never left the hospital after birth contracts an illness for which it had to stay in hospital,

was regarded as a case of hospitalisation. *Surgeries undergone in temporary camps set up for treatment of ailments (say, eye ailments) were treated as cases of hospitalisation for the purpose of the survey.* For such cases it was possible for admission and discharge to take place on the same day.

**5.0 Medical expenditure for treatment:** The total expenditure during the last 365 days for medical treatment during the stay in the hospital or not as inpatient was accounted against the following items:

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<sup>2</sup> Note that the identification of ailments is necessarily subjective as it depends on the feeling or perception of the person concerned. This is a problem inherent in all surveys of general morbidity or illness. **Package component (Rs.):** “Packages” of treatment involving specific surgical or non- surgical medical procedures, inclusive of different items like operation theatre (OT) charges, OT consumables, medicines, doctor’s fees, bed charges, etc. are common nowadays in all private hospitals. Normally, packages do not include additional diagnostic tests, attendant charges, physiotherapy, personal medical appliances, blood, oxygen, etc. When some treatment is received as a package (with pre-determined total cost) from the hospital, the information for constituent for this treatment, were not separately available. The total cost of the package treatment received will, however, as informed by the informant was recorded against “package component”. However, even when treatment has a package component, some extra medical expenses might have been incurred over and above the package component and those information were also recorded.

**5.1 Doctor’s/surgeon’s fee:** This was inclusive of the total amount paid on account of doctor’s/surgeon’s fees chargeable for the period of treatment within the reference period during the stay in hospital.

**5.2 Medicines:** The total amount paid for medicines (including drips) used for treatment whether of AYUSH or other – were recorded.

**5.3 Diagnostic tests:** The total amount paid for diagnostic tests carried out on the patient as inpatient or otherwise within the reference period – whether using the hospital’s diagnostic facilities or not – were recorded here.

**5.4 Bed charges:** Amount paid for bed charges during stay in hospital within the reference period was recorded here.

**5.5 Other medical expenses (attendant charges, physiotherapy, personal medical appliances, blood, oxygen, etc.):** All other expenditure involved in medical treatment were recorded as ‘Other’.

**5.5.1 Attendant charges:** This refers to charges for services of hired attendant(s) (caregivers) who stay with the patient in the hospital or not otherwise to attend to their needs. If any household member or relative attends to the patient, no imputation of charges for his/her services was made.

**5.5.2 Physiotherapy:** If the patient had any physiotherapy during the stay at hospital, the amount chargeable was included in this 'Other'

**5.5.3 Personal medical appliances:** This refers to personal medical appliances of durable nature like spectacles, contact lenses, intro-ocular lenses, hearing aids, trusses, crutches, catheter, nebulizer, artificial limbs, pacemaker, etc. for the purpose of treatment.

**5.5.4 Blood, oxygen cylinder, etc.:** Charges for blood, oxygen cylinders and other consumables such as gloves, bandages, plaster, etc., used.

**5.5.5** Apart from these, expenses on any other item used in medical treatment or diagnosis during stay in the hospital, or otherwise such as thermometer, infra-red lamp, blood pressure measuring equipment, blood sugar measuring kit, bed-pan, urinal, etc., were included in 'Other' if borne by the household.

## **6.0 Non-Medical expenditure**

**6.1 transport for patient:** Here the amount paid for transport charges (by ambulance or other vehicle) for the patient – whether accompanied by other household members or not – for the journey to hospital, Clinic or any other and for the return journey, were recorded in addition to the expenditure incurred to undergo a diagnostic test which the doctor advised.

**6.2 Other non-medical expenses incurred by the household (food, transport for others, expenditure on escort, lodging charges if any, etc.):** All other non-medical expenses were recorded here. Some important ones are:

- **Food:** will include expenses incurred on food supplied by the hospital for in-patient treatment and/or purchased from outside for the patient. The cost of meals supplied from home for the patient will not be included.
- **Transport (other than ambulance):** This includes transport expenses incurred by household members for travelling to the hospital to visit the patient and attend to the patient's needs, and for return journeys, including travel for procuring medicines, blood, oxygen, etc. for the hospitalized person or just to accompany the ailing person. **Lodging charges of escort(s):** Charges for lodging incurred by those household members who were required to stay in a hotel or a lodge for attending to the patient's needs during hospital stay were included.

- ***Other expenses incurred by the household:*** Other incidental charges paid and expenses incurred due to hospitalization, such as telephone charges made from PCO, and expenditure on soap, towel, toothpaste, etc. for the patient and escort(s), were included

**7.0 Total amount reimbursed by medical insurance company or employer:** The following points are important in this regard:

1. Expenses incurred, as recorded here are basically the expenditure made by the household (“out-of-pocket” expenditure) even if it was reimbursed later.
2. However, expenses met through “cashless facility” of medical insurance (paid directly to hospital by the insurance company) and expenses directly met by the employer to the hospital was excluded.

Thus, of the out-of-pocket expenditure as recorded, the amount reimbursed or expected to be reimbursed by the employer (public/private) or any insurance companies (public/private) or any other agencies was defined as ‘amount reimbursed by medical insurance company or employer’. Entry was made only in those situations where the household initially bears the medical expenditure, which the employer or the insurance company subsequently reimbursed partly or fully.

**8.0 Source of finance for expenses:** The total expenditure exclusive of the amount reimbursed was borne by the household. The money needed for this might have been spent from current household income or accumulated household savings. It might have been partly or wholly spent from the proceeds of sale of cattle or draught animals, jewellery or other physical assets or financed by borrowing. Part of it might have been contributed by friends and relatives as outright assistance.

# Chapter3

Pooling and

Poolabilty test

## **Pooling and poolability test**

### **3.1 Main Objectives of Pooling**

The main objective of pooling of central and state sample data is to provide a mechanism by which sample size will be increased and the pooling of the two sets of data would enable better estimates at lower sub state level, particularly at district level. At the State level, this will result in increased precision of the estimates and at disaggregated level, estimates will be more stable. But the major benefit will be derived in the case of estimates generated at sub-state level like NSS region/districts.

The Directorate of Economics and Statistics, Kerala, has undertaken the pooling exercise of validated sample data of NSS 71st round by applying the pooling software Poolability tests, received from DPD, NSSO, through the official of DES.

### **3.2 Parameters considered for pooling:**

Considering the smaller sample size at district level following broad parameters were considered for pooling:-

a) District level per 1000 distribution of population by age-group for each gender. b) District level per 1000 distribution of hospitalization cases (EC) during last 365 days over broad age-groups. c) District level per thousand persons reporting ailments (PAP) during the last 15 days by gender and age-group d) Average total medical expenditure (Rs.) for treatment per ailing person during a period of 365 days by gender for each district

### **3.3 Testing the poolability of two sets of data:**

District wise following tests were undertaken.

a) District wise Wald-Wolfowitz run test for [non parametric Z-test] b) District wise discrete data such as status of activity, educational level and categorical variable such as land possessed etc, standard tests of equality of sample proportions of two sets of data based on multinomial distributions, relevant chi-square tests has been used after grouping the attributes/categorical variables, where two sets of data are to be pooled as below and use chi-square test State sample and Central sample have identical distribution. c) Summing up: For the characteristics which are known to be distributed as Normal, poolability of the two sets of central and state data was tested by standard parametric tests such as Z-test. For those characteristics for which transformation makes them Normal, such methodology was adopted. In most of the situations where the distribution is non-normal and unknown, the two sets of data was tested through various non-parametric tests such as those laid down in para of above. For discrete data, a Standard test of equality of proportions based on binomial distribution was used and for multinomial distributions relevant chi-square tests was used.

### 3.4 Testing poolability and Methodology for pooling

#### 3.4.1 Testing poolability of central and state sample:

Though the central sample and state sample are drawn independently following identical sampling design with same concepts, definitions and instructions to collect the state sample data but due to lack of adequate training of field and processing staff of State DES, unit level data in some cases are not properly validated. There is also expected agency bias in the two sets of data generated by different agencies. As such they cannot be merged for generating pooled estimate without testing that the samples are realized from identical distribution function. Since the parametric distribution of the sample mean is unknown one may adopt non-parametric tests such Run test, Median test, chi-square test etc to test that the samples are coming from identical distribution function.

#### 3.4.2 Median test

In statistics, the median test is a special case of Pearson's Chi-square test. It tests the null hypothesis that the medians of the populations from which two samples are drawn, are identical. Observations in each sample are assigned to two groups, one consisting of data whose values are higher than the median value in the two groups combined, and the other consisting of data whose values are at the median or below. A Pearson's Chi-square test is then used to determine whether the observed frequencies in each group differ from expected frequencies derived from a distribution combining the two groups.

Let  $m^*$  be the median of the pooled sample data. Construct 2 X 2 contingency table as below and use chi-square test if State sample and Central sample have identical median.

Sample -type	No of sample observation		Total
	$\leq m^*$	$> m^*$	
State sample	$N_{11}$	$N_{12}$	$N_{1.}$
Central sample	$N_{21}$	$N_{22}$	$N_{2.}$
Total	$N_{.1}$	$N_{.2}$	$N_{..}$

Observed frequency of each cell  $O_{ij} = N_{ij}$  where  $i = 1$  to 2,  $j = 1$  to 2.

Expected frequency of each cell  $E_{ij} = (N_{i.} * N_{.j}) / N$ . where  $i = 1$  to 2,  $j = 1$  to 2.

Value = with degrees of freedom =  $(2-1)*(2-1) = 1$

The statistical power of this test may sometimes be improved by using a value other than the median to define the groups say quintile classes – that is, by using a value which divides the groups into more nearly equal groups than the median would.

#### 3.4.3 Multinomial distribution test or test



For discrete data such as status of activity, educational level and categorical variable such as land possessed etc, standard tests of equality of sample proportions of two sets of data based on multinomial distributions, relevant chi-square tests may be used after grouping the attributes/categorical variables in to a suitable number of classes so that each class contains adequate number of sample observations. Construct 2 X k contingency table for k classes at the domain where two sets of data are to be pooled as below and use chi-square test if State sample and Central sample have identical distribution.

Sample-type	no of sample observation					Total
	Class-1	Class-2	...	Class-k-1	Class-k	
<b>State Sample</b>	N <sub>11</sub>	N <sub>12</sub>	...	N <sub>1k-1</sub>	N <sub>1k</sub>	N <sub>1.</sub>
<b>Central Sample</b>	N <sub>21</sub>	N <sub>22</sub>	...	N <sub>2k-1</sub>	N <sub>2k</sub>	N <sub>2.</sub>
<b>Total</b>	N <sub>.1</sub>	N <sub>.2</sub>	...	N <sub>.k-1</sub>	N <sub>.k</sub>	N <sub>..</sub>

Observed frequency of each cell  $O_{ij} = N_{ij}$  where  $i = 1$  to  $2$ ,  $j = 1$  to  $k$ .

Expected frequency of each cell  $E_{ij} = (N_{i.} * N_{.j}) / N_{..}$  where  $i = 1$  to  $2$ ,  $j = 1$  to  $k$ .

$$\chi^2 \text{ Value} = \sum_{i=1}^2 \sum_{j=1}^k (O_{ij} - E_{ij})^2 / O_{ij} \text{ with degrees of freedom} = (2-1)*(k-1) = k-1$$

#### 3.4.4 Wald-Wolfowitz run test

Suppose X and Y are independent random samples with cumulative distribution function (CDF) as  $F_s(x)$  and  $F_c(y)$ . Null Hypothesis to be tested is  $H_0: F_s(x) = F_c(x)$  for all x against alternative Hypothesis is  $H_1: F_s(x) \leq F_c(x)$  for all x and  $F_s(x) < F_c(x)$  for some x. Let  $x_1, x_2, \dots, x_m$  be iid observation from state sample with distributive function  $F_s$  and  $y_1, y_2, \dots, y_n$  be iid observation from central sample with distributive function  $F_c$ . Pool the data and order them with respect to comparable characteristic under consideration say monthly per capita expenditure (MPCE). In the pooled order sequence put "1" for X and "0" for Y. Let U be the total runs observed where 'run' is a sequence of adjacent equal symbols. For example, following sequence: 111100011100111110000 is divided in six runs, three of them are made out of "1" and the others are made out of "0". The number of runs U is a random variable whose distribution for large sample can be treated as normal with:

$$\text{mean: } \frac{2mn}{m+n} + 1$$

$$\text{variance: } \frac{2mn(2mn - m - n)}{(m+n)^2(m+n-1)}$$

After normalizing the variable U one may use one sided z-test for testing the Null hypothesis. In extreme case the value of U will be 2 meaning by observed characteristic of all the observation of one sample is less than the other samples.

One of the limitations of this test is when there is a tie between two samples in the observed value. One has to resolve ties in usual manner. However if there is large number of ties which is bound to occur specially for qualitative attributes like education level, activity status etc, this test is not recommended. This test can be well applied for a continuous variable such as MPCE which are less prone to ties. For discrete variable chi-square test is recommended.

### 3.4.5 Parametric test

**Aggregate estimate:** Let  $t_{yc}$  and  $t_{ys}$  be the estimate of Y at domain level of pooling based on central and state sample respectively with corresponding variances  $V(t_{yc})$  and  $V(t_{ys})$ . For large sample, making all assumption of parametric test, one may use Z-Statistic to test the null hypothesis  $H_0 E(t_{yc}) = E(t_{ys})$  where E stands for expectation.

$$Z = \frac{(t_{yc} - t_{ys})}{\sqrt{(V(t_{yc}) + V(t_{ys}))}}$$

$V(t_{yc})$  and  $V(t_{ys})$  could be estimated as

$$\hat{V}(t_{yc}) = \sum_l (t_{yc1} - t_{yc2})^2 / 4, \quad \hat{V}(t_{ys}) = \sum_l (t_{ys1} - t_{ys2})^2 / 4 \quad \text{based on sub-sample 1 \& 2}$$

estimates where  $\sum_l$  stands for summing over stratum x sub-stratum level variance at the domain of pooling.

**Estimate of rate:** Let  $r_c$  and  $r_s$  be the estimate of population rates  $R_c$  and  $R_s$  ie Y/X based on central and state sample respectively with corresponding mean square error  $MSE(r_c)$  and  $MSE(r_s)$ . For large sample, making all assumption of parametric test, one may use Z-Statistic to test the null hypothesis  $H_0 E(r_c) = E(r_s)$  where E stands for expectation.

$$Z = \frac{(r_c - r_s)}{\sqrt{(MSE(r_c) + MSE(r_s))}}$$

$MSE(r_c)$  and  $MSE(r_s)$  are estimated as follows:

$$mse(r_c) = (\hat{V}(t_{yc}) - 2 * r_c \hat{Cov}(t_{yc}, t_{xc}) + r_c^2 * \hat{V}(t_{xc})) / t_{xc}^2$$

$$mse(r_s) = (\hat{V}(t_{ys}) - 2 * r_s \hat{Cov}(t_{ys}, t_{xs}) + r_s^2 * \hat{V}(t_{xs})) / t_{xs}^2$$

Where

$$\hat{V}(t_{yc}) = \sum_l (t_{yc1} - t_{yc2})^2 / 4, \quad \hat{V}(t_{ys}) = \sum_l (t_{ys1} - t_{ys2})^2 / 4$$

$$\hat{V}(t_{xc}) = \sum_l (t_{xc1} - t_{xc2})^2 / 4, \quad \hat{V}(t_{xs}) = \sum_l (t_{xs1} - t_{xs2})^2 / 4$$

$$\hat{Cov}(t_{yc}, t_{xc}) = \sum_l (t_{yc1} - t_{yc2})(t_{xc1} - t_{xc2})/4 \text{ based on sub-sample 1 \& 2 estimates.}$$

Where  $\sum_l$  stands for summing over stratum x sub-stratum level variance, covariance at the domain of pooling.

## Methodology for pooling

### 3.5 Pooling by inverse weight of the variance of the estimates

**3.5.1 Aggregate estimate:** For any characteristic, consider the state sample [s] in the form of two independent sub- sample s1 and s2 and the central sample [c] in the form of two independent sub- sample c1 and c2. Based on this, the respective estimates for state and central can be computed as:

$$t_s = \sum_l (t_{s1} + t_{s2})/2 \text{ and } t_c = \sum_l (t_{c1} + t_{c2})/2$$

Pooled estimate leading to optimum combination of these two estimates is given by weighing with inverse of the variance of the estimate. Thus the pooled estimate is given by:

$$T_p = \frac{V(t_c)t_s + V(t_s)t_c}{V(t_c) + V(t_s)} \text{ with } V(T_p) = \frac{V(t_c)V(t_s)}{V(t_c) + V(t_s)}$$

In general  $V(t_c)$  and  $V(t_s)$  are unknown and can be estimated as

$$\hat{V}(t_c) = \sum_l (t_{c1} - t_{c2})^2 / 4, \hat{V}(t_s) = \sum_l (t_{s1} - t_{s2})^2 / 4$$

where  $\sum_l$  stands for summing over stratum x sub-stratum level variance at the domain of pooling.

Thus pooled estimate and estimate of pooled variance is given by

$$t_p = \frac{\hat{V}(t_c)t_s + \hat{V}(t_s)t_c}{\hat{V}(t_c) + \hat{V}(t_s)}, \hat{V}(t_p) = \frac{\hat{V}(t_c)\hat{V}(t_s)}{\hat{V}(t_c) + \hat{V}(t_s)}$$

**3.5.2** By virtue of weighing the two estimates at the domain level at which two estimates are pooled, the pooled estimate will always lie between the central and state sample estimates.

**3.5.3 Estimate of rate:** Let  $r_c$  and  $r_s$  be the estimate of  $R_c$  and  $R_s$  ie Y/X based on central and state sample respectively with corresponding estimated mean square error  $mse(r_c)$  and  $mse(r_s)$ . The pooled estimate and estimate of variance of pooled ratio estimate may be given by:

$$r_p = \frac{mse(r_c)r_s + mse(r_s)r_c}{mse(r_c) + mse(r_s)}, mse(r_p) = \frac{mse(r_c)mse(r_s)}{mse(r_c) + mse(r_s)}$$

Where  $mse(r_c)$  and  $mse(r_s)$  are calculated using formula given in para 1.5.2 above. Alternatively one can generate the pooled estimate of aggregate by inverse weight of estimate of variance obtained from central and state sample using formula given in para 2.1.1 for the characteristics x as well as y and obtain the pooled estimate of ratio as ratio of pooled estimate of aggregate. This will ensure consistency between pooled estimates of aggregate and the pooled estimate of ratio.

Let  $t_{xp}$  and  $t_{yp}$  be the pooled estimate of aggregate for the parameter X and Y. The pooled estimate of R (i.e Y/X) is given by

$$r_p = t_{yp} / t_{xp}$$

where  $t_{yp} = at_{yc} + bt_{ys}$  and  $t_{xp} = ct_{xc} + dt_{xs}$  and (a, b), (c, d) are the estimated inverse variance weight pair of the characteristic x and y respectively.

The estimated mse of pooled ratio estimate  $r_p$  is given by:

$$mse(r_p) = (\hat{V}(t_{yp}) - 2 r_p \hat{Cov}(t_{yp}, t_{xp}) + r_p^2 \hat{V}(t_{xp})) / t_{xp}^2$$

$$\text{where } \hat{V}(t_{yp}) = \frac{ab}{a+b}, \hat{V}(t_{xp}) = \frac{cd}{c+d} \text{ and}$$

$$\hat{Cov}(t_{yp}, t_{xp}) = ac \hat{Cov}(t_{yc}, t_{xc}) + bd \hat{Cov}(t_{ys}, t_{xs}).$$

$$\hat{Cov}(t_{yc}, t_{xc}) = \sum_l (t_{yc1} - t_{yc2})(t_{xc1} - t_{xc2}) / 4 \text{ based on sub-sample 1 \& 2 estimates.}$$

$$\text{Similarly, } \hat{Cov}(t_{ys}, t_{xs}) = \sum_l (t_{ys1} - t_{ys2})(t_{xs1} - t_{xs2}) / 4$$

where  $\sum_l$  stands for summing over stratum x sub-stratum level covariance at the domain of pooling.

**3.5.4** Method laid down in para 2.1.1 and 2.1.2 requires calculation of estimate of variance of the estimates before pooling them. Reliability of estimate of variance should be ascertained with due consideration of sample size. Besides the complex calculations of variances and covariances for each cell of the table, one needs to address the issue of non-additivity of the component estimates with the estimate of marginal total. For e.g. pooled estimate of MPCE of FOOD and NON-FOOD may not add up to MPCE of TOTAL. To obviate this problem one may generate the pooled estimates of components first and then derive the estimate of total as sum of estimates of components.

### 3.6 Pooling by simple average of the estimates

**3.6.1** Many of the States are not fully equipped with complex calculation of estimate of variance especially when cells of the table contains ratio of two characteristics which is usually presented in the NSS reports. When the State's participation is equal matching of central samples, the simple average of two estimates may be a way of combining the estimates considering central and state samples as independent samples. The pooled estimate will always lie between the estimates based on central and state sample separately.

**3.6.2** When the State's participation is of unequal matching of central samples, the weighted average of two estimates with weights being matching ratio of central and state sample may be a better way of combining the estimates considering central and state samples as independent samples. For any characteristic, consider the state sample [s] in the form of two independent sub-sample s1 and s2 and the central sample [c] in the form of two independent sub-sample c1 and c2. Let matching ratio of state and central sample be m : n. Based on this, the respective estimates for state and central can be computed as:

$$t_s = \sum_l (t_{s1} + t_{s2})/2 \text{ and } t_c = \sum_l (t_{c1} + t_{c2})/2$$

Pooled estimate of these two estimates is given by weighing with matching participation rate m:n. Thus the pooled estimate is given by:

$$t_p = \frac{mt_s + nt_c}{m+n} \text{ with } V(t_p) = \frac{m^2 V(t_s) + n^2 V(t_c)}{(m+n)^2}$$

In general  $V(t_c)$  and  $V(t_s)$  can be estimated as  $\hat{V}(t_c) = \sum_l (t_{c1} - t_{c2})^2 / 4$ ,

$$\hat{V}(t_s) = \sum_l (t_{s1} - t_{s2})^2 / 4 \text{ and thus } \hat{V}(t_p) = \frac{m^2 \hat{V}(t_s) + n^2 \hat{V}(t_c)}{(m+n)^2}$$

The pooled estimate will always lie between the estimates based on central and state sample separately.

**3.7 Summing up:** For those characteristics which are known to be distributed as Normal, poolability of the two sets of central and state data may be tested by standard parametric tests such as Z-test. For those characteristics for which transformation makes them Normal, such methodology may be adopted. In most of the situations where the distribution is non-normal and unknown, the two sets of data may be tested through various non-parametric tests such as those laid down in para 1 of above. For discrete data, Standard tests of equality of proportions based on binomial distribution may be used and for multinomial distributions relevant chi-square tests may be used.

### Pooled Results of Sch.25.0

Non Parametric Poolability Test: Wald Wolfowitz Runtest & Chi square test

State: KERALA

Sector: Rural

District wise result of run test of Hospital expenditure for pooled sample  $Z_{0.01} = -2.33$  (one sided test) reject if  $z\text{-value} < Z_{0.01}$

Sl.No	District	Z-value	Status
1	Kasaragod	-0.11	Accept
2	Kannur	-0.36	Accept
3	Wayanad	-2.46	<b>Reject</b>
4	Kozhikode	0.23	Accept
5	Malappuram	-1.28	Accept
6	Palakkad	-2.53	<b>Reject</b>
7	Thrissur	-1.81	Accept
8	Eranakulam	-1.06	Accept
9	Idukki	-3.49	<b>Reject</b>
10	Kottayam	-1.01	Accept
11	Alappuzha	-1.71	Accept
12	Pathanamthitta	-1.3	Accept
13	Kollam	0.61	Accept
14	Thiruvananthapuram	-0.26	Accept

District wise result of run test of Hospital expenditure for pooled sample  $Z_{0.01} = -2.33$   
 (one sided test) reject if  $z\text{-value} < Z_{0.01}$

Sl.No	District	Z-value	Status
1	Kasaragod	-0.44	Accept
2	Kannur	-1.78	Accept
3	Wayanad	-1.97	Accept
4	Kozhikode	-2.39	<b>Reject</b>
5	Malappuram	-1.70	Accept
6	Palakkad	-0.27	Accept
7	Thrissur	-5.27	<b>Reject</b>
8	Eranakulam	-4.23	<b>Reject</b>
9	Idukki	-1.45	Accept
10	Kottayam	0.48	Accept
11	Alappuzha	-0.97	Accept
12	Pathanamthitta	-0.43	Accept
13	Kollam	1.75	Accept
14	Thiruvananthapuram	-2.68	<b>Reject</b>

District wise result of Chi square test of Social group wise no. of hospitalization for pooled sample Table value=9.2, reject if Chi square value>9.2

Sl.No	District	Chi Square value	Status
1	Kasaragod	4.03	Accept
2	Kannur	1.32	Accept
3	Wayanad	14.91	<b>Reject</b>
4	Kozhikode	6.54	Accept
5	Malappuram	2.32	Accept
6	Palakkad	0.99	Accept
7	Thrissur	4.10	Accept
8	Eranakulam	6.84	Accept
9	Idukki	10.67	<b>Reject</b>
10	Kottayam	15.67	<b>Reject</b>
11	Alappuzha	0.99	Accept
12	Pathanamthitta	5.91	Accept
13	Kollam	19.38	<b>Reject</b>
14	Thiruvananthapuram	4.07	Accept



District wise result of Chi-square test of Social group wise no. of hospitalization for pooled sample

Table value=9.2, reject if Chi square value>9.2

Sl.No	District	Chi square value	Status
1	Kasaragod	6.73	Accept
2	Kannur	1.62	Accept
3	Wayanad	0.58	Accept
4	Kozhikode	1.17	Accept
5	Malappuram	2.85	Accept
6	Palakkad	5.15	Accept
7	Thrissur	3.40	Accept
8	Eranakulam	7.40	Accept
9	Idukki	2.30	Accept
10	Kottayam	1.01	Accept
11	Alappuzha	7.49	Accept
12	Pathanamthitta	0.53	Accept
13	Kollam	4.83	Accept
14	Thiruvananthapuram	2.22	Accept

District wise results of pooled data by applying Run test on “Hospitalization Expenditure” shows that out of 14 districts if Kerala, 11 districts in Rural and 10 districts in Urban satisfy the poolability test.

Chi Square method applied on district wise pooled data shows that out of 14 districts in Kerala, 10 districts in rural satisfy the test whereas in urban sector all districts accepted the Chi Square test. It indicates the fact that the State and Central Sample data is poolable

# Chapter 4

## Summary of findings



## Morbidity and Hospitalization

### General

This chapter summarises the major findings of the survey and discusses the salient features unfolding indicators of ailments, hospitalization and expenditure incurred as well as indicators describing childbirth and related issues. The observations are mainly confined to all-Kerala estimates followed by an examination of the gender and age differentials across districts and rural-urban sectors. This may be important to note in this perspective that, households (or persons within households) are segregated in sector (rural/urban) by their place of domicile, and not by the place of treatment. This may be also kept in mind that all these data are summarised based on the information ‘as reported by the informant.’ The deviation (if any) from common idea of health practices may primarily be attributed to the perception of the informant. In this regard, difference between public-private and/or rural-urban may be interpreted cautiously`.

### Proportion (number per 1000) of Ailing persons (PAP) during last 15 days

The main morbidity rate that this report presents is termed the estimated proportion (number per 1000) of Ailing persons (PAP). It may be noted in this connection that hospitalization in the last 15 days is included in estimating PAP though we exclude it when we are estimating costs of care.

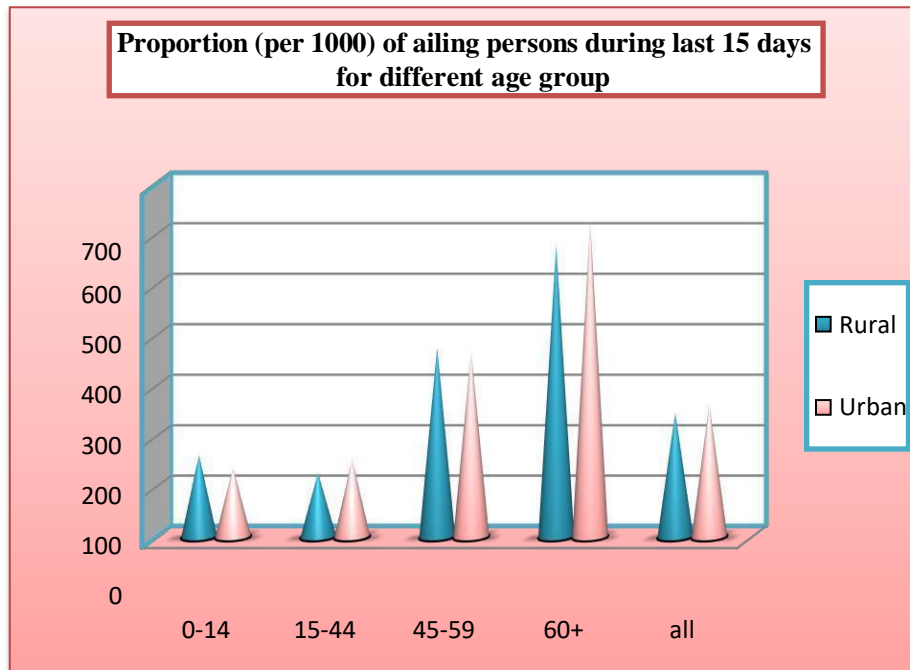
#### Level of Morbidity for different age groups

The survey estimates on Proportion (number per 1000) of Ailing Persons (PAP) for different age-groups by sector. The PAPs were found to be higher for 60 + age group. The lowest being the PAPs for the youth age bracket 15-44 years. The PAP for age group 0-14 and 45-59 in urban area is less than that in rural area. The age bracket 15-44 in urban area, the proportion was higher than in rural area

### Proportion (per 1000) of ailing persons during last15days for different age group

Age-group	Rural	Urban
0-14	163	138
15-44	127	155
45-59	376	369
60+	578	626
all	247	264

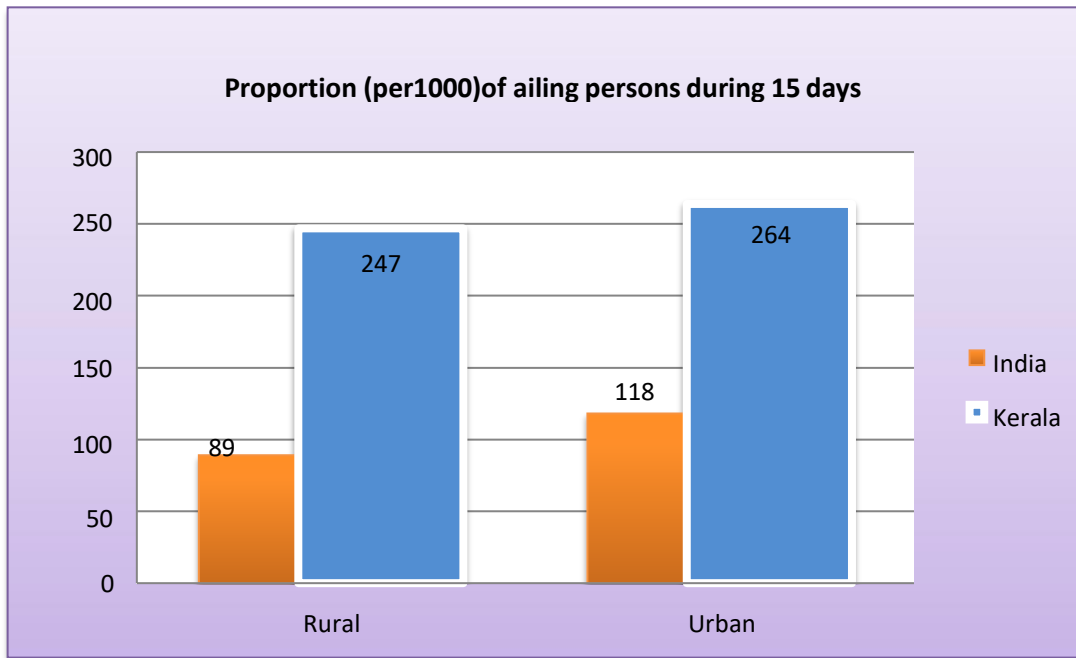
For children of 0-14 years, the reported morbidity prevalence rate was found more in rural i.e.16.3%, than in urban (13.8%). The reported morbidity prevalence rate was higher for children of 0-14 years, followed by a declining trend till age group 15-44 with a rising trend again at higher ages in rural sector. But in urban sector, a uniform rise in morbidity rate as age increases. For both the sectors morbidity rate recorded a sharp rise for 60 years and above age groups.



### Comparison of proportion of Ailing persons between Kerala and all India

Proportion of Ailing persons (PAP) during last 15 days: India, Kerala

Sector	India	Kerala
<b>Rural</b>	89	247
<b>Urban</b>	118	264



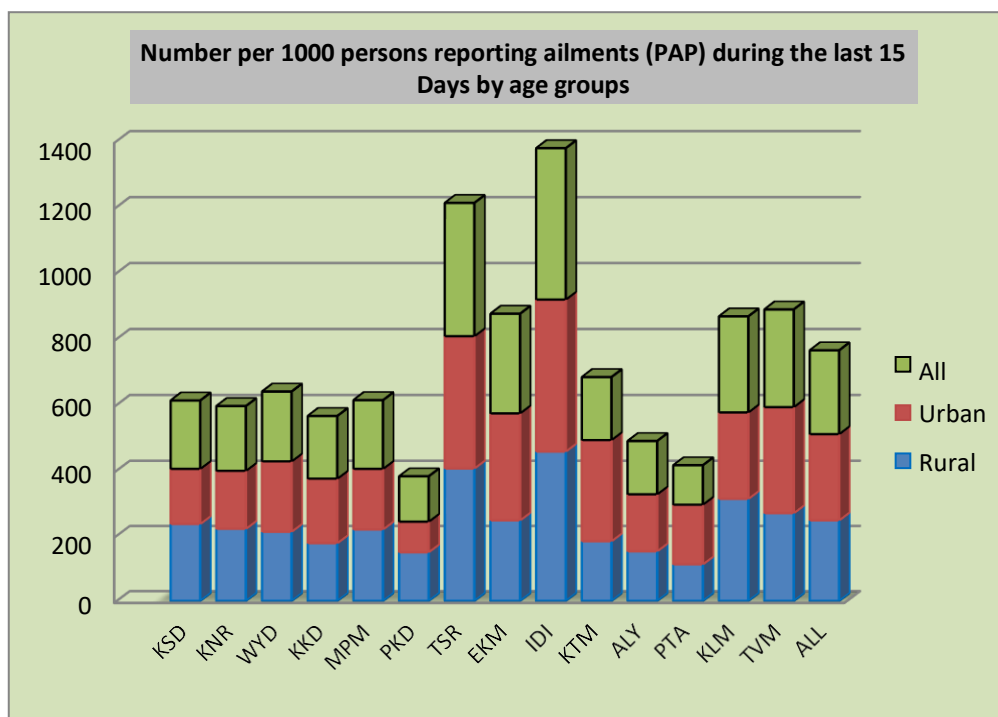
The above figure distinctly exhibit that Kerala stands out to be higher morbidity rate in both sectors in comparison to All India according the last15 days reference period of survey.

**District wise Proportion (Number per1000) of Ailing persons (PAP) during the last 15 days**

For rural area of Kerala, the reported morbidity rate was highest in Idukki district ie 45.8% followed by Thrissur district (40.6%) and Kollam district (31.3%) whereas for urban areas, the reported morbidity rate was highest in Idukki district ie 46.1% followed by Thrissur district(40.2%)and Ernakulam district (32.7%)

District	Rural	Urban	All	No. of ail. Person	
				Estd (00)	Sample
KSD	236	169	208	2184	197
KNR	221	178	197	4532	381
WYD	212	216	212	1728	146
KKD	177	198	191	6164	374
MPM	219	186	209	8249	608

PKD	149	94	139	3327	236
TSR	406	402	404	13432	870
EKM	247	327	302	9469	536
IDI	458	461	459	8620	584
KTM	183	310	191	2124	183
ALY	152	175	163	3292	218
PTA	112	183	121	1341	172
KLM	313	264	291	7106	494
TVM	269	324	296	10859	669
ALL	247	264	254	82425	5668



The above figure shows district-wise PAP separately for both rural and urban sectors. Among the district, 9 districts shows PAP below all-Kerala average whereas 9 districts showed higher in rural. Among the rural Kerala, Ernakulam has the same PAP as State. For urban areas 8 districts shows below and 5 districts above State PAP. Thrissur, Idukki, Ernakulam and Thiruvananthapuram showed the highest PAP in both the sectors.

## Hospitalized Treatment of Ailments:

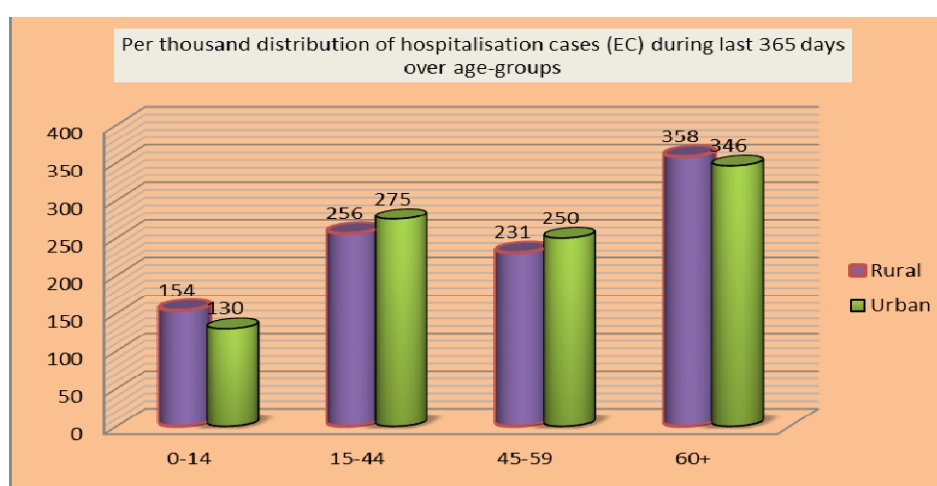
### State level Proportion of Persons Hospitalized:

Medical treatment of an ailing person as an inpatient in any medical institution having provision for treating the sick as in-patients was considered as hospitalized treatment. Here all hospitalization for child-birth were excluded.

Sector wise per thousand distribution of hospitalization cases (EC) during last 365 days over age-groups

Age-group	Rural	Urban	All
0-14	154	130	145
15-44	256	275	263
45-59	231	250	238
60+	358	346	353

The above table gives the estimates of number (per 1000) of persons hospitalized during a reference period of 365 days for different age group. There is no substantial difference between the rural and the urban areas in estimated proportion of hospitalized persons. Percentage of children (below 14 years) hospitalized were 14.5





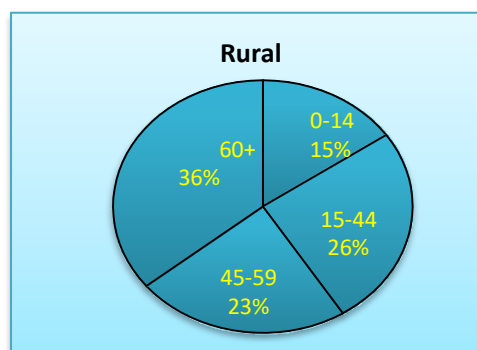
As per the survey results, maximum per cent hospitalization reported for 60+ age group, both in rural and urban areas. It is remarkable that for both sectors the rate of hospitalization of age group 15-44 is higher than that of 45-59. In both rural and urban sectors it was found lowest for 0-14years age group.

**District wise Hospitalized Treatment of Ailments:**

**Hospitalization cases by broad age group (rural)**

It was observed that in rural sector, the highest proportion for hospitalization cases was recorded for the age group 60+. For the age group 60+, highest percentage of hospitalization cases was found in Alappuzha (50%) followed by Thrissur (45.5%) and Malappuram (39.9%) least in Kannur (21.8%). In rural sector, the lowest proportion for hospitalization cases was recorded for the age group 0-14 in which the

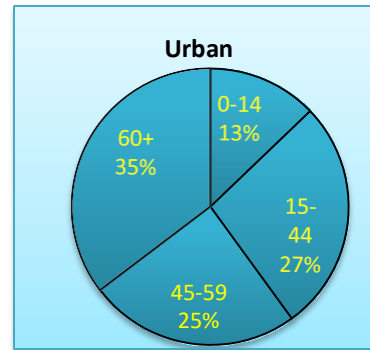
percentage was found in Kannur (31.1%) and least in Kasaragod (5.1%)



Per 1000 distribution of hospitalization cases (EC) during last 365 days over Broad age-groups (p)				
Sector : Rural				
District	Per 1000 distribution of hospitalization cases in age group			
	0-14	15-44	45-59	60+
KSRD	51	231	360	358
KNNR	311	316	155	218
WYD	244	298	145	313
KKD	132	181	315	372
MLPM	164	263	175	399
PKKD	209	193	221	378
TSR	166	183	196	455
EKM	66	200	346	388
IDKI	191	361	216	231
KTTM	173	279	208	339
ALPY	145	210	144	500
PTA	79	301	261	360
KLM	100	287	304	308
TVPM	127	318	253	302
All	154	256	231	358

### Hospitalization cases by broad age group (urban)

In urban sector, the highest proportion for hospitalization cases was recorded for the age group 60+. For the age group 60+, highest percentage of hospitalization cases was found in Kottayam (49.6%) followed by Kannur (47.6%). In urban sector, the lowest proportion for hospitalization cases was recorded for the age group 0-14 in which the highest percentage was found in Wayanad (36.7%) and least in Alappuzha (8.2%).



Per 1000 distribution of hospitalization cases (EC) during last 365 days over broad age-groups (p)				
Sector : urban				
District	Per 1000 distribution of hospitalization cases in age group			
	0-14	15-44	45-59	60+
KSRD	122	400	227	250
KNNR	129	204	191	476
WYD	367	161	109	362
KKD	118	250	279	354
MLPM	203	349	165	283
PKKD	108	230	267	395
TSR	119	223	258	400
EKM	143	329	213	315
IDKI	109	244	352	294
KTTM	100	131	273	496
ALPY	82	246	302	370
PTA	167	150	307	377
KLM	117	306	276	302
TVPM	157	323	256	264
All	130	275	250	346

### Hospitalization cases by broad age group (rural + urban)

In the combined sector, the highest proportion for hospitalization cases was recorded for the age group 60+. For the age group 60+, highest percentage of hospitalization cases was found in Thrissur (43.5 %) followed by Alappuzha (43.2%) and the lowest cases in Idukki (23.6%). In this sector, the lowest proportion for hospitalization cases was recorded for the age group 0-14 in which the highest percentage was found in Wayanad (25%) and least in Kasaragod (7.8%).

Per 1000 distribution of hospitalization cases (EC) during last 365 days Over broad age-groups (p)				
Sector: All				
District	Per 1000 distribution of hospitalization cases in age group			
	0-14	15-44	45-59	60+
KSRD	78	295	310	317
KNNR	213	256	175	357
WYD	250	292	143	315
KKD	122	227	291	360
MLPM	174	285	172	369
PKKD	191	199	229	381
TSR	149	198	218	435
EKM	114	281	263	343
IDKI	184	352	227	236
KTTM	158	247	222	373
ALPY	112	229	227	432
PTA	87	287	265	361
KLM	108	296	291	305
TVPM	140	320	254	285
All	145	263	238	353

### Cost of Treatment: Hospitalization and Other

For the hospitalized treatments, information on expenses was collected separately for each different event of hospitalization during the reference period. Besides the expenses treated as medical expenses for non-hospitalized treatment, expenditure on items like bed charges, and cost of medicines and other materials and services supplied by the hospital, charges for diagnostic tests done at the hospital were included in the medical expenditure for a hospitalized treatment. The 'other expenses' constituted all expenses relating to treatment of an ailment incurred by the household in connection with treatment of an ailing member of the household, but other than the exclusive expenditure regarding medical

treatment. This category of expenditure included all transport charges paid by the household members in connection with the treatment, food and lodging charges of the escort (s) during the reference period. The estimates of ‘total expenditure’ were arrived at as the sum of ‘medical expenditure’ and ‘other expenditure’.

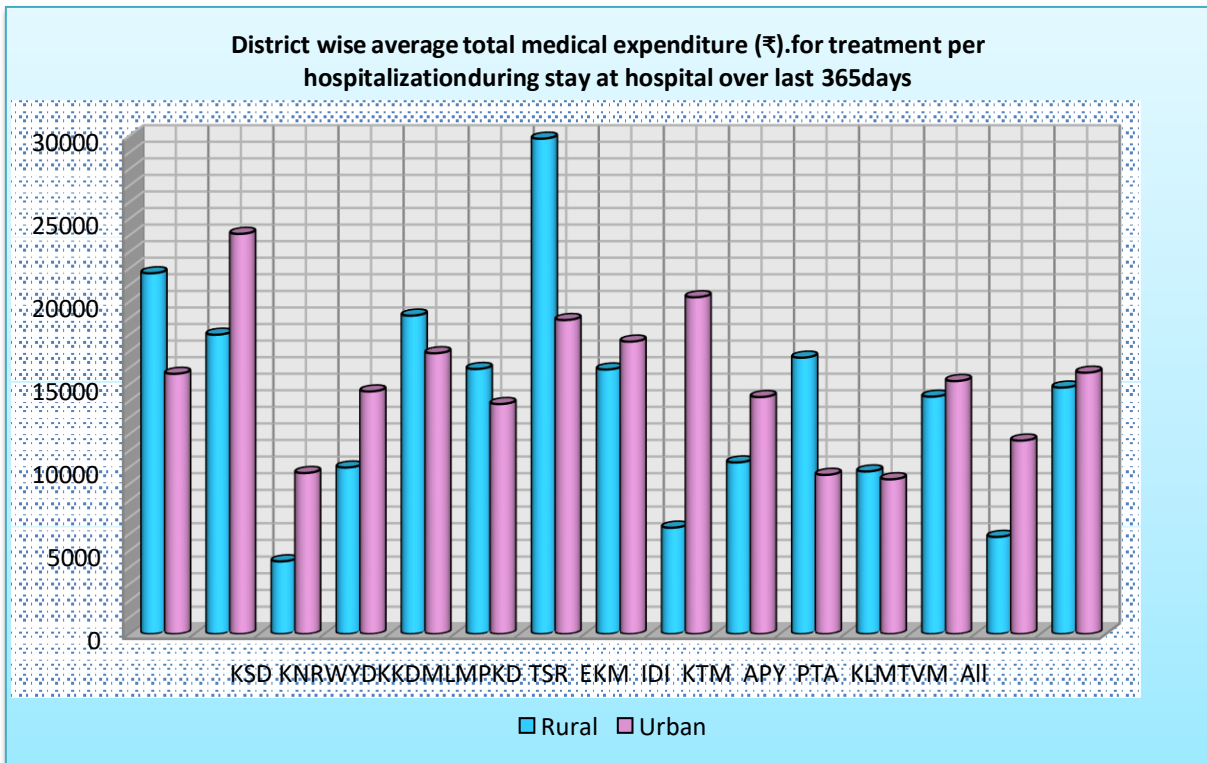
### Cost of Hospitalized Treatment

#### Average Expenditure for Medical Treatment per Hospitalization:

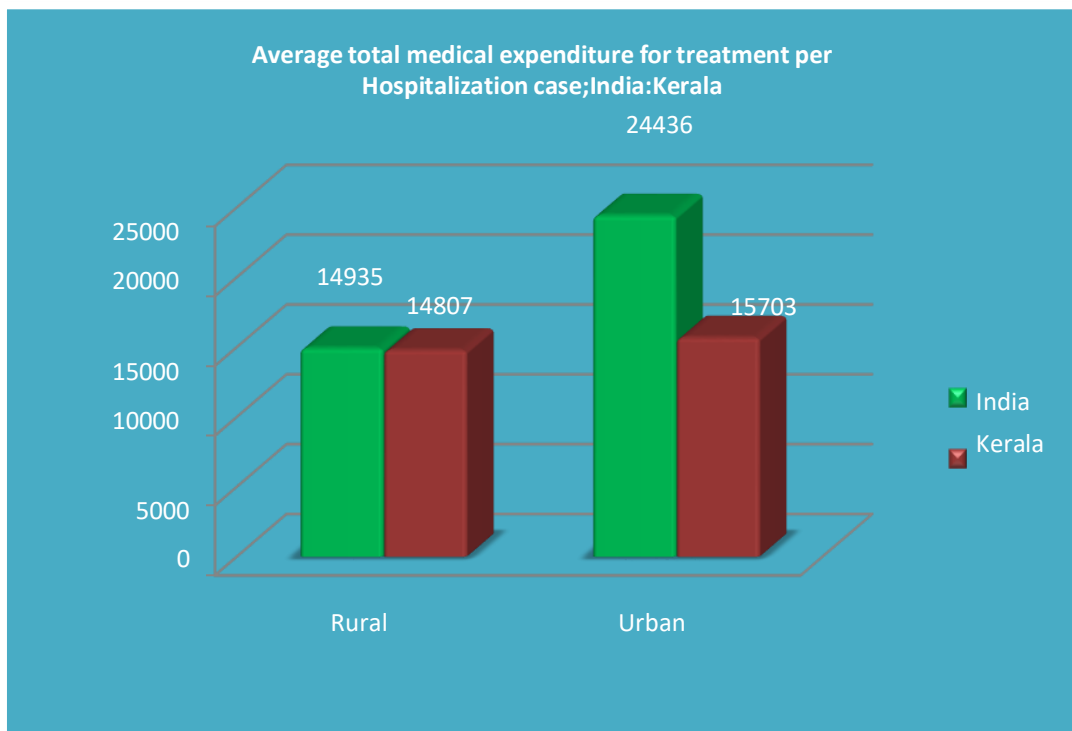
Table below gives the estimates of average medical expenditure incurred per hospitalized case of treatment excluding childbirth ‘during the reference period of 365 days.

<b>Average total medical expenditure (₹) for treatment per hospitalization case (EC) during stay at hospital over last 365 days by district (p)</b>					
<b>District</b>	Average total medical expenditure for treatment (₹) per case			Cases of hospitalization	
	Rural	Urban	ALL	Estd (00)	sample
<b>KSD</b>	21702	15636	19406	520	167
<b>KNR</b>	17996	24082	21281	1716	293
<b>WYD</b>	4356	9649	4604	1002	157
<b>KKD</b>	9980	14571	13063	2828	344
<b>MPM</b>	19147	16876	18565	2715	421
<b>PKD</b>	15927	13811	15563	2575	336
<b>TSR</b>	29827	18881	25838	5250	530
<b>EKM</b>	15897	17579	16950	4723	423
<b>IDI</b>	6373	20256	7500	1748	207
<b>KTM</b>	10287	14233	11144	3298	358
<b>APY</b>	16611	9538	12899	2059	267
<b>PTA</b>	9744	9272	9701	1345	221
<b>KLM</b>	14255	15199	14687	3812	440
<b>TVM</b>	5822	11606	8374	4520	461
<b>All</b>	14807	15703	15157	38112	4625

The table provides average total medical expenditure (₹) for treatment per hospitalization case during stay at hospital in rural and urban areas. It is seen that, on an average, a higher amount was spent for hospitalized treatment by the urban population than the rural population. All such hospitalization cases are excluding child birth (EC).



**Comparison of average medical expenditure incurred per hospitalized case of treatment 'excluding child birth' during the reference Period of 365 days between India and Kerala**



The above figure distinctly exhibit that in Kerala the average total medical expenditure for treatment per hospitalization case (EC) during stay at hospital over last 365 days was found lower than the all India average.

## State level average total medical expenditure for hospitalized treatment per ailment

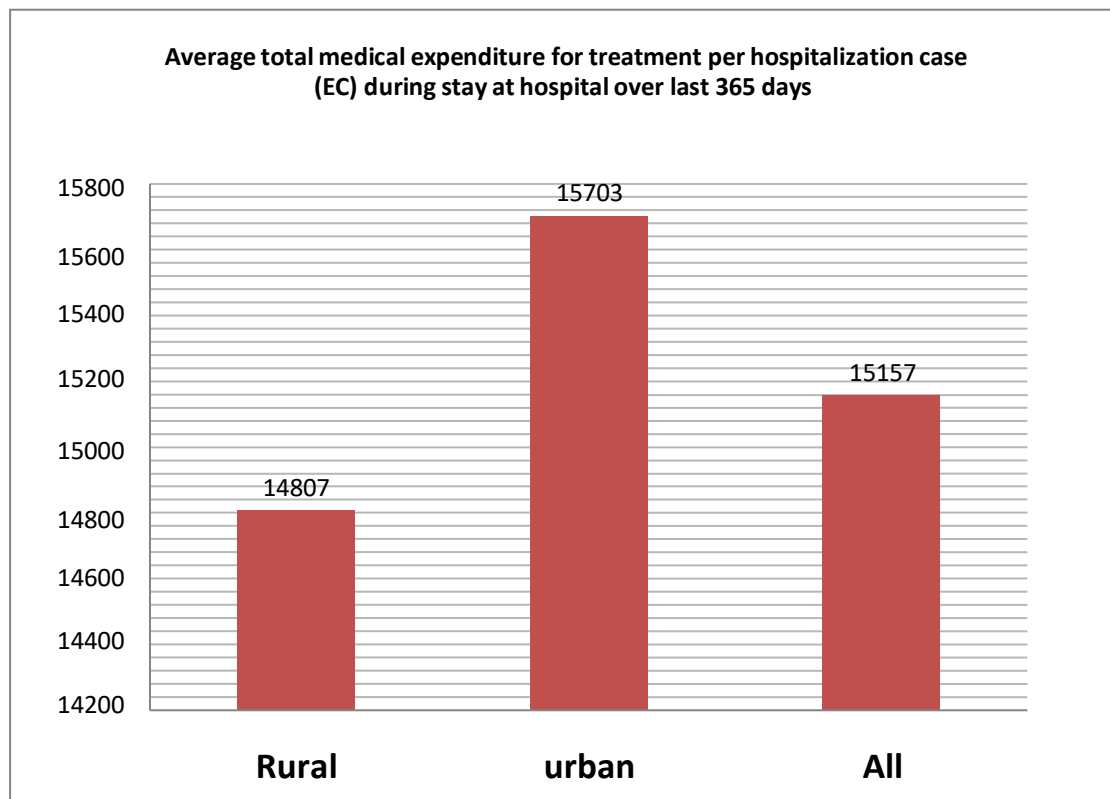
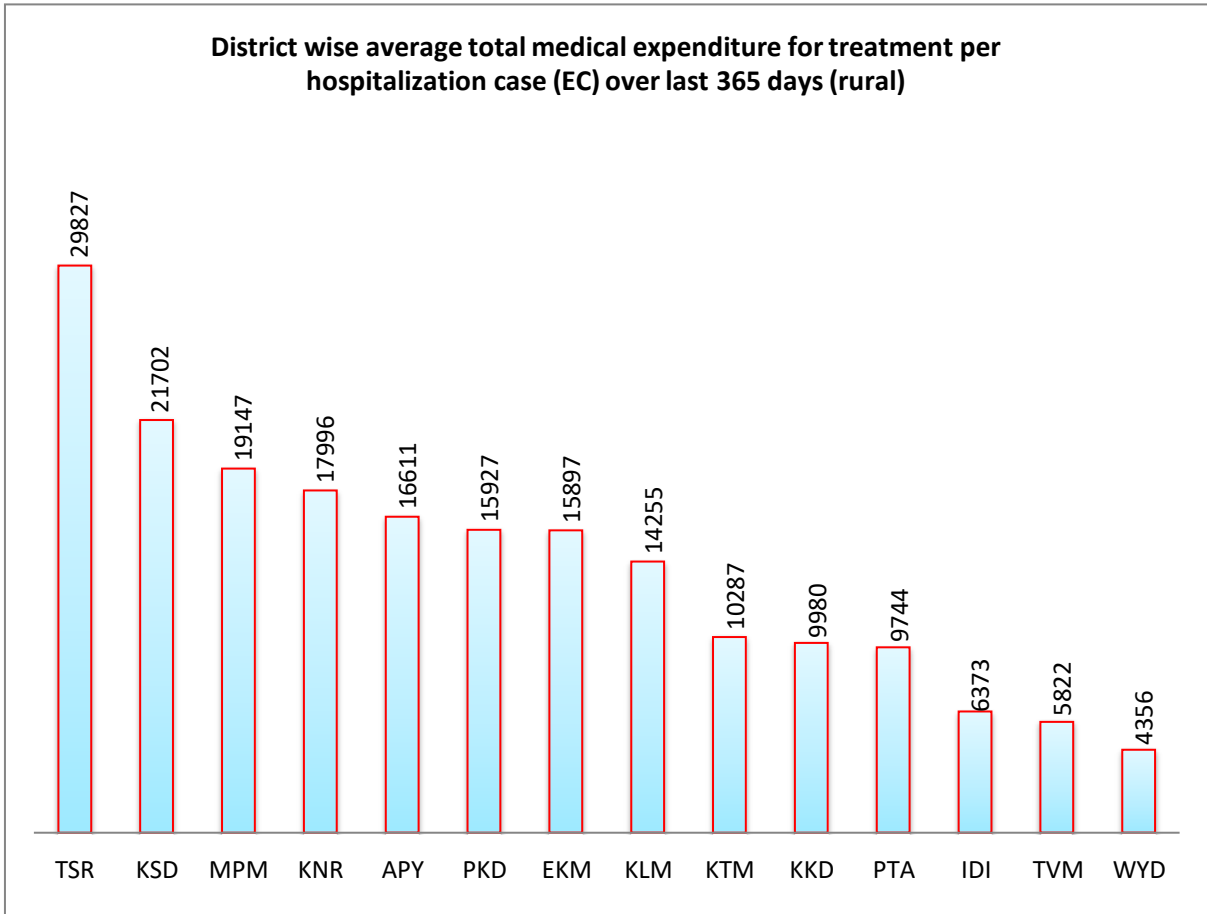


Figure gives the estimates of total medical expenditure incurred for hospitalized treatment during the reference period of 365 days. It provides separate estimates for patients of rural and urban areas. It is seen that, on an average, a higher amount was spent for hospitalized treatment by the urban population (₹15703/-) than the rural population (₹.14807/-). All such hospitalization cases are excluding childbirth (EC).

### **District wise Cost of hospitalized treatment:**

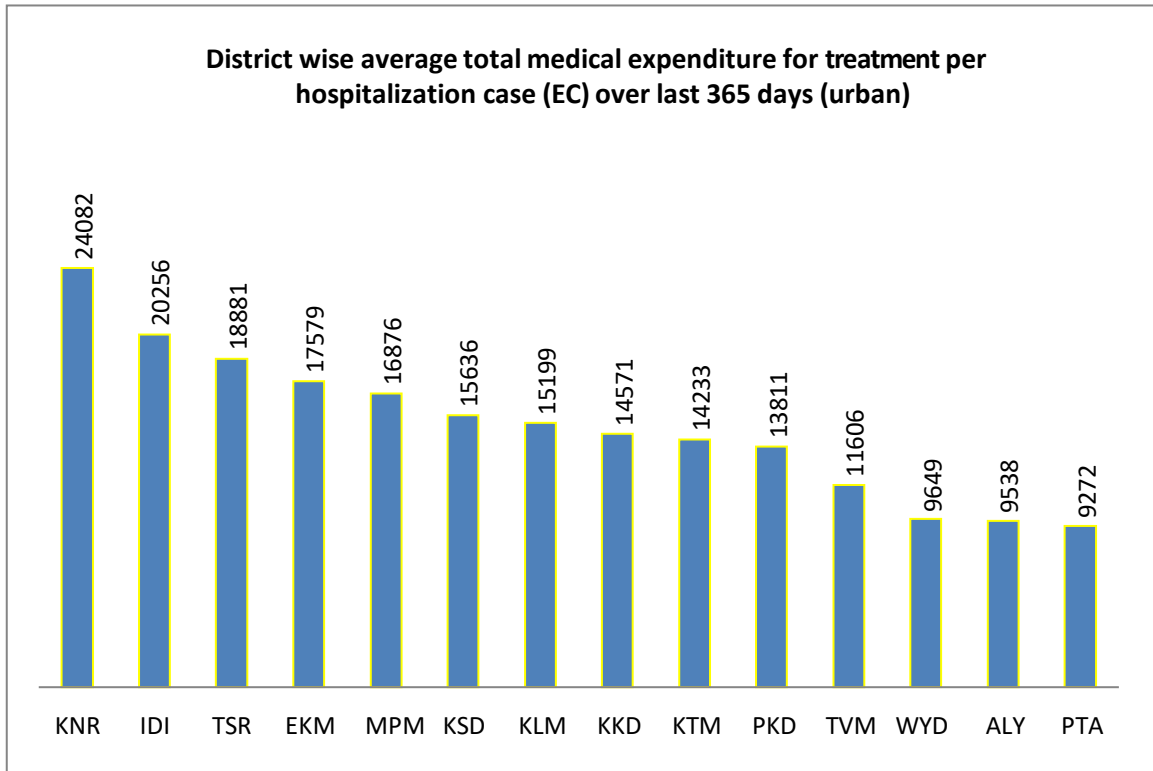
#### **District wise average total medical expenditure (₹) for treatment per Hospitalization case (EC) in rural:**

The figure below shows the average total medical expenditure ((₹)) for treatment per hospitalization case (EC) during stay at hospital over last 365 days in Rural Kerala. It was found that in Rural area of Kerala, Thrissur district had highest medical expenditure for treatment per hospitalization case with (₹.29827/-) followed by Kasaragod (₹.21702/-) and Malappuram (₹.19147/-). Where as lowest expenditure was found in Wayanad district (₹.4356/-) preceded by Thiruvananthapuram (₹.5822/-) and Idukki (₹.6373/-).



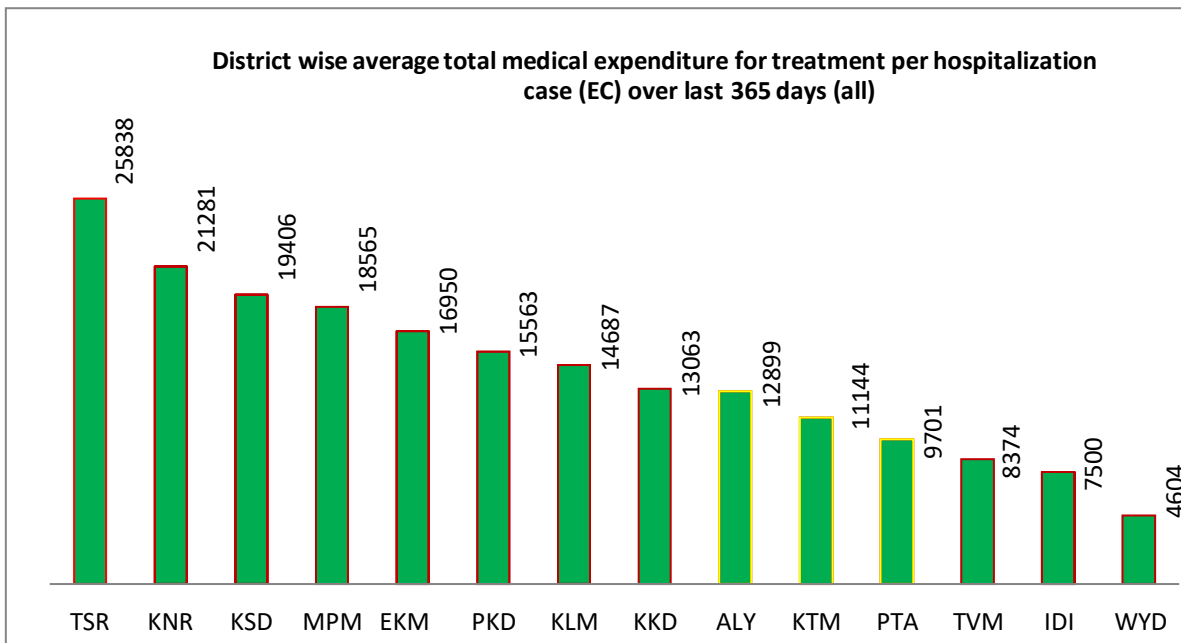
**District wise average total medical expenditure for treatment (₹) per ailing person (urban)**

For Urban areas, it was found that Kannur district had highest average total medical expenditure for hospitalized treatment per ailing person with ₹.24082/- followed by Idukki (₹.20256/-) and Thrissur (₹.18881/-) district during a period of 15 days. Pathanamthitta (₹.9272/-) and Alappuzha (₹.9538/-) were bottom districts.



**District wise average total medical expenditure for treatment (₹) per ailing person (rural + urban):**

In the combined sector, Thrissur district had highest average total medical expenditure for treatment per ailing person with (₹.25838/-) followed by Kannur (₹.21281/-) and Kasaragod (₹.19406/-). On the other hand, Wayanad (₹.4604/-), Idukki (₹.7500/-) and Thiruvananthapuram (₹.8374/-) were bottom three districts.



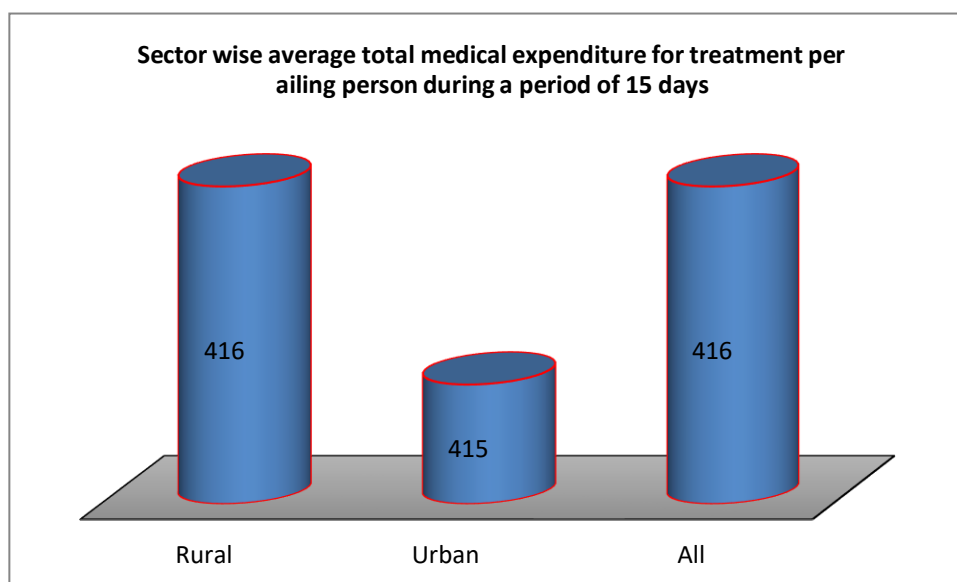


### State wise Cost of Non-hospitalized Treatment:

In the present survey, data on expenses incurred for medical treatment was collected separately for each case of hospitalization for hospitalized treatment, but in the case of non-hospitalized treatment, expenditure for the ailing person irrespective of the number of spells and type of ailment was recorded. Medical expenses included expenditure on items like cost of medicines (for non-hospitalized treatment cost of medicine was split into AYUSH and non-AYUSH), charges for diagnostic tests, and fees for doctor/surgeon etc.

### Average total medical expenditure for treatment (₹) per ailing person:

Figure below gives the estimates of average total expenditure per-ailment incurred for medical treatment during the reference period of 15 days. The statement provides separate estimates for treatment of patients of rural and urban separately. The figure shows presence of rural urban difference in respect of expenses incurred per ailment. It is seen that, a higher amount was spent for treatment by the rural population (₹ 416/-) than the urban population (₹ 415/-).

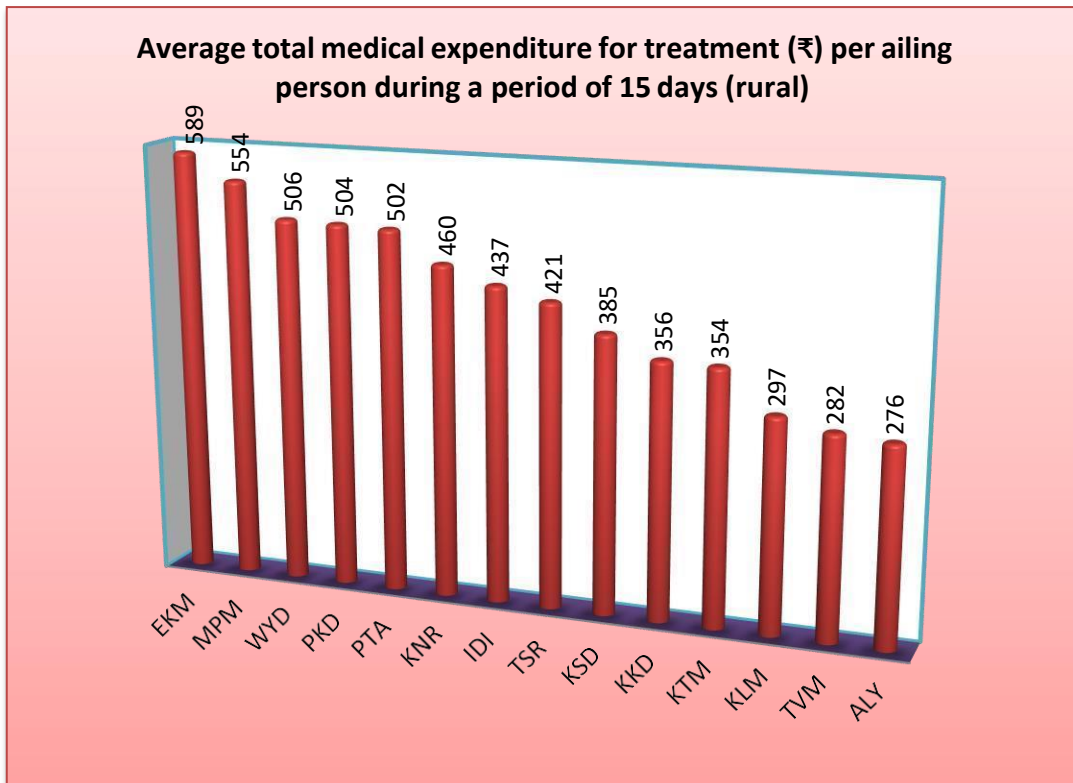


District wise average total medical expenditure (₹.) for treatment per ailing person during a period of 15 days			
District	Average total medical expenditure for treatment(₹)per ailing person		
	Rural	urban	All
KSD	385	296	354
KNR	460	529	495
WYD	506	226	494
KKD	356	382	374
MPM	554	319	493
PKD	504	507	504
TSR	421	511	462
EKM	589	449	484
IDI	437	285	420
KTM	354	320	345
ALY	276	493	388
PTA	502	493	501
KLM	297	327	310
TVM	282	360	325
ALL	416	415	416

#### District wise Cost of Non-hospitalized Treatment:

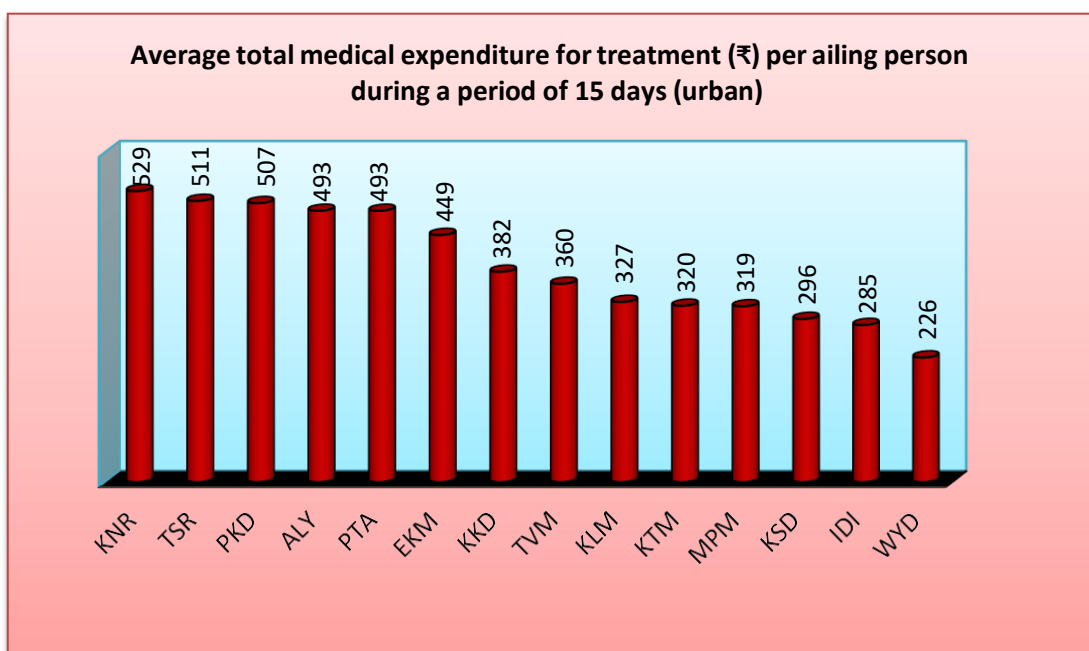
##### Average total medical expenditure for treatment (₹) per ailing person (rural):

Figure below presents district wise average total medical expenditure (₹) for non-hospitalized treatment per ailing person during a period of 15 days for rural area. It was found that Ernakulam district had highest medical expenditure for treatment per ailing person with (₹.589/-) followed by Malappuram (₹.554/-) and Wayanad (₹.506/-). On the other hand, Alappuzha (₹.276/-), Thiruvananthapuram (₹.282/-) and Kollam (₹.297/-) were bottom three districts in rural.



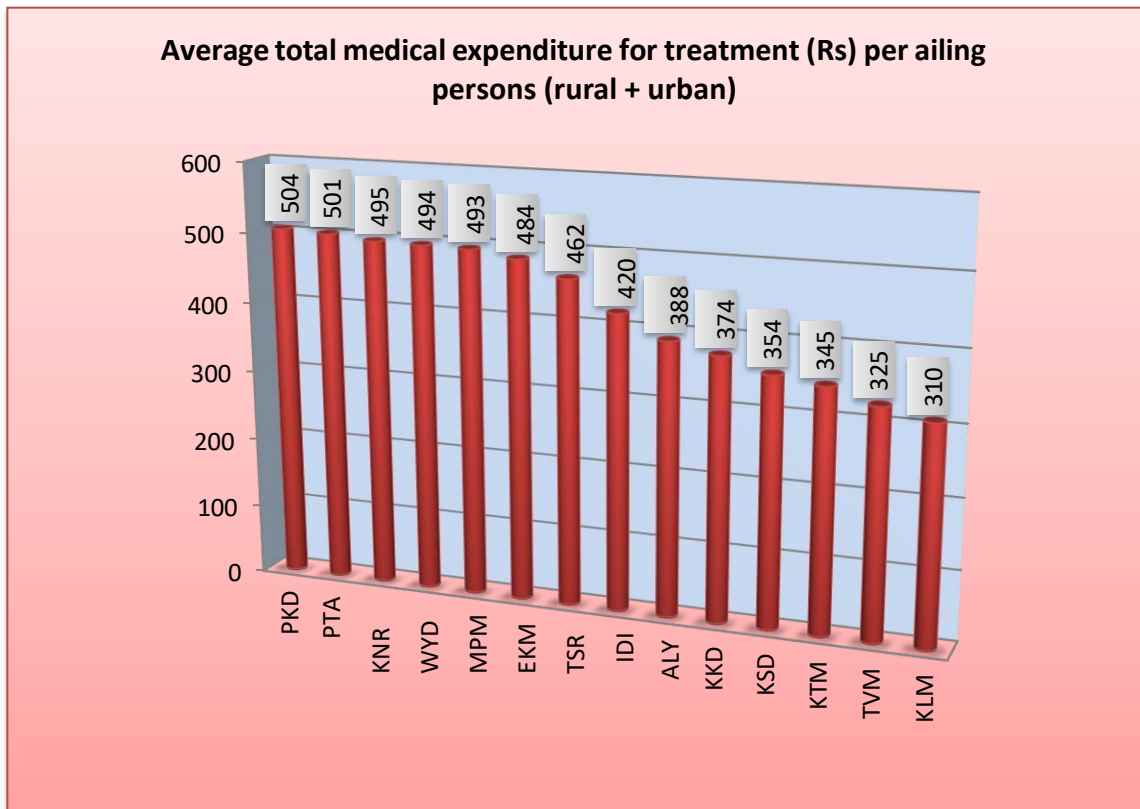
**Average total medical expenditure for treatment (₹) per ailing person (urban):**

For Urban Kerala, it was found that Kannur district had highest average total medical expenditure for non-hospitalized treatment per ailing person with (₹.529/-) followed by Thrissur (₹.511/-) and Palakkad (₹.507/-) district during a period of 15 days. Wayanad (₹.226/-) and Idukki (₹.285/-) were bottom districts.



### Average total medical expenditure for treatment (₹) per ailing person (rural + urban):

In the combined sector, Palakkad district had highest average total medical expenditure for treatment per ailing person with (₹.504/-) followed by Pathanamthitta (₹.501/-) and Kannur (₹.495/-). On the other hand, Kollam (₹.310/-), Thiruvananthapuram (₹.325/-) and Kottayam (₹.345/-) were bottom three districts.



## Childbirth and Maternity healthcare services

### Incidence of ChildBirth

The survey results on issues related to child birth and maternity health care services received before and after childbirth and expenditure incurred on these services will be discussed in this chapter. In 71st round, for the first time, comprehensive information regarding institutional childbirth was collected, and therefore there is more detailed information available on this as compared to the previous rounds.

### Incidence of pregnancy of women of age 15-49 years:

This survey results on issues related to child birth and maternity health care services received. The information collected includes detailed information on incidence of childbirth, and proportion of child births that happen in institutional settings.

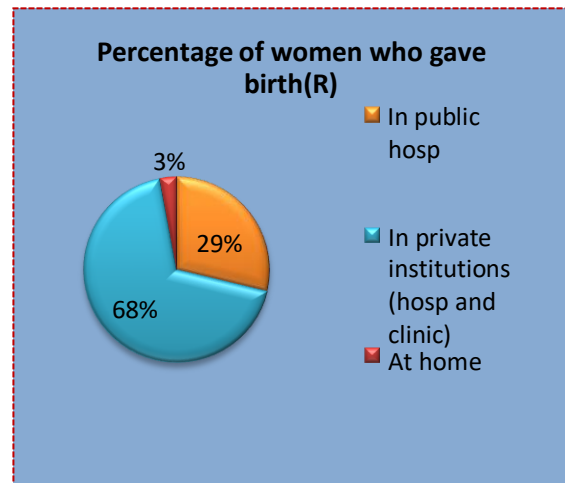
**Incidence of Childbirth and place of birth:**

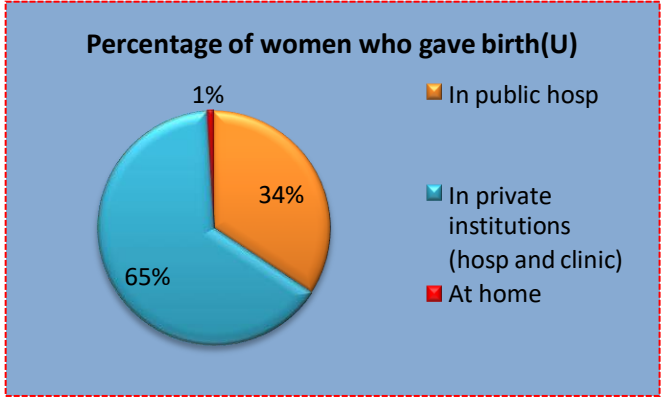
This survey gives the distribution of women of age 15 to 49 by the place of childbirth separately for the rural and urban areas visa-vis level of living (State/UT wise fig. in Appendix table 12R/U) along with proportion) of pregnant women in each quintile class of MPCE

Percentage of women who were pregnant, percentage distribution of women aged 15-49 by place of childbirth during last 365 days for rural, urban

Quantile class of MPCE (ALL)	Percentage of pregnant women (aged 15 to 49)	Percentage of women who gave birth		
		In public hosp	In private institutions (hosp and clinic)	At home
Rural	8.3	28.8	68	2.9
Urban	6.9	34.5	65.3	1
All	7.7	31	66.9	1.8

In rural area 8.3% women were pregnant at any time during the reference period of 365 days; for urban this proportion was 6.9%. In the rural areas, about 3% of the childbirths were at home or any other place other than the hospitals. The same for urban areas was about 1%. Among the institutional childbirth, 28.6% took place in public hospital and 68% in private institutions in rural area. In urban area, however, the corresponding figures were 34.5% and 65.3% respectively.





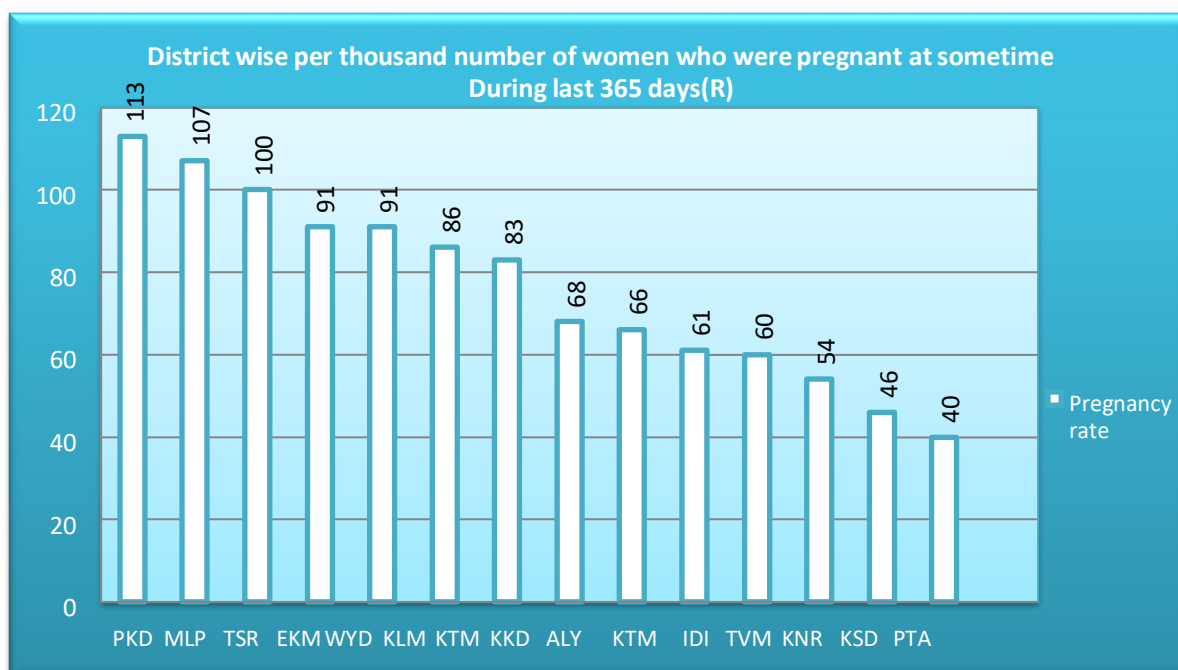
**District-wise thousand number of women aged 15-49 who were pregnant any time during last 365 days**

District	No. per 1000 of women who were pregnant at sometime during last 365 days		
	Rural	Urban	All
<b>KSD</b>	46	78	60
<b>KNR</b>	54	59	57
<b>WYD</b>	91	78	90
<b>KKD</b>	68	75	73
<b>MLP</b>	107	104	106
<b>PKD</b>	113	57	102
<b>TSR</b>	100	60	82
<b>EKM</b>	91	79	82
<b>KTM</b>	83	42	80
<b>IDI</b>	61	59	61
<b>ALY</b>	66	53	60
<b>PTA</b>	40	87	45
<b>KLM</b>	86	75	81
<b>TVM</b>	60	47	74
<b>ALL</b>	83	69	77

## Pregnancy of women of age 15-49 years: District Level Result

### Pregnancy Rate in rural Kerala:

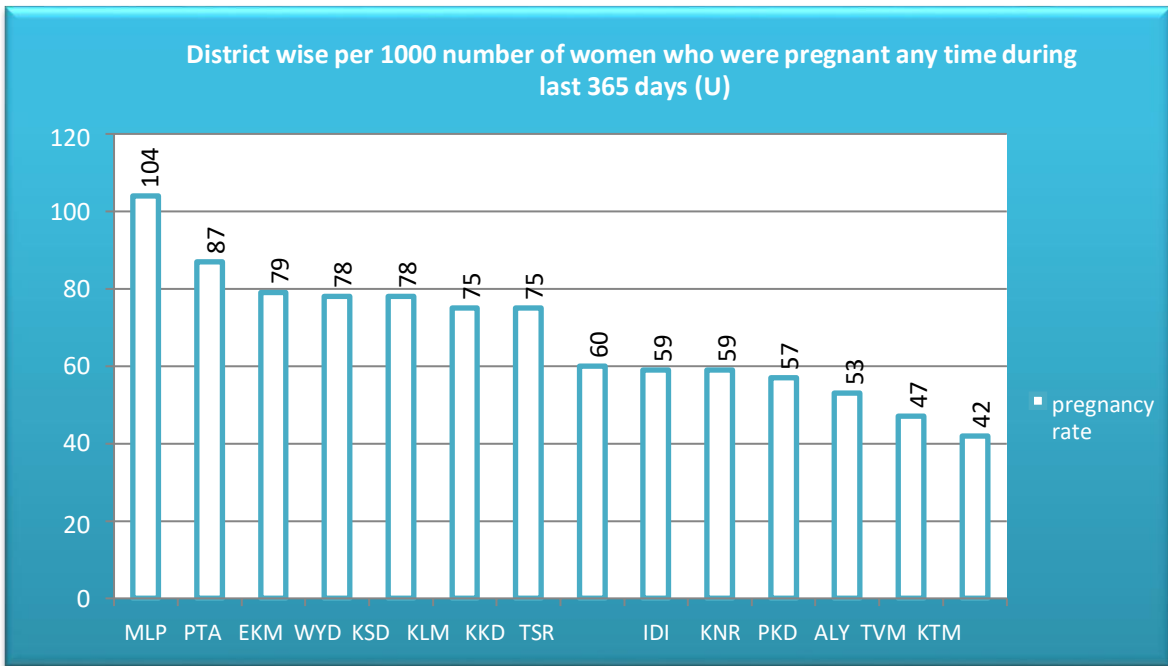
Figure below presents district wise per 1000 number of women aged 15-49 years who were pregnant any time during last 365 days in rural Kerala. It can be seen that among women in the age group 15–49 years, Palakkad (113) was highest pregnancy rate during last 365 days preceding the date of survey followed by Malappuram (107) and Thrissur (100). On the other hand, Pathanamthitta (40), Kasaragod (46) and Kannur (54) were bottom three districts.



### Pregnancy Rate in urban Kerala:

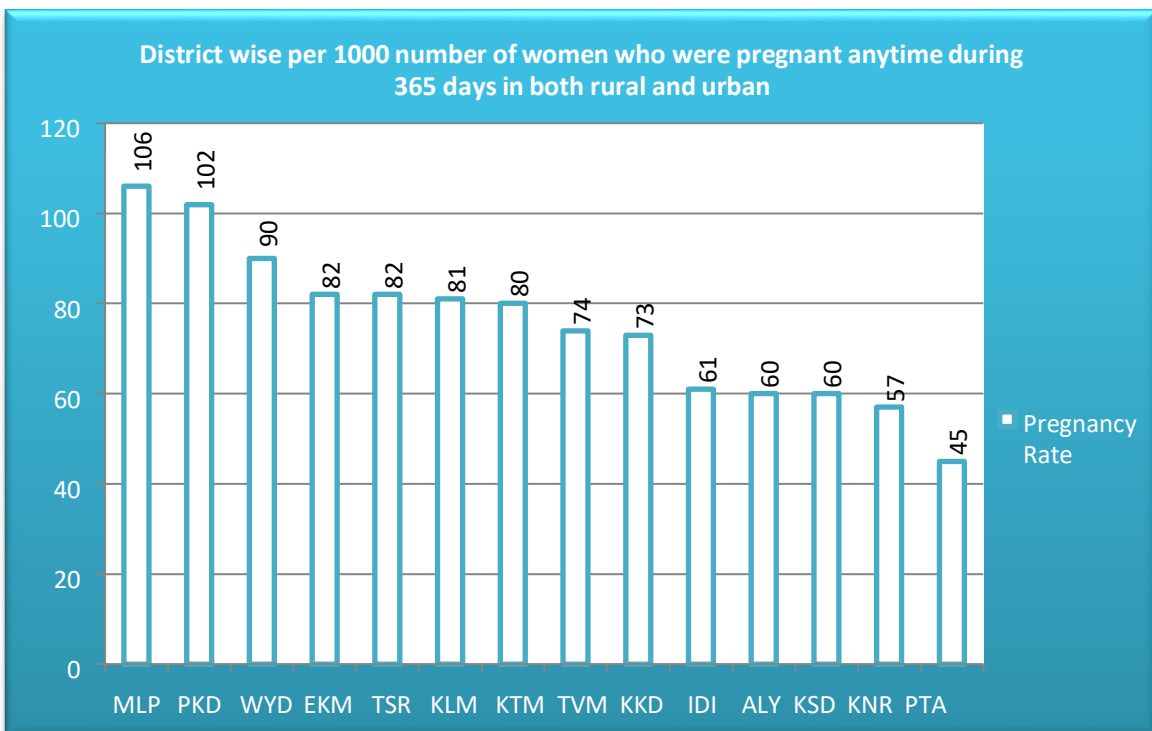
Figure presents district wise per 1000 number of women aged 15-49 years who were pregnant any time during last 365 days in urban Kerala. It can be seen that among women in the age group 15–49 years, Malappuram (104) was highest pregnancy rate during last 365 days preceding the date of survey followed by Pathanamthitta (87) and Ernakulum (79). On the other hand, Kottayam (42), Thiruvananthapuram (47) and Alappuzha (53) were bottom three districts.





**Pregnancy Rate in Rural + urban:**

Figure presents district wise per 1000 number of women aged 15-49 years who were pregnant any time during last 365 days in urban Kerala. It can be seen that among women in the age group 15–49 years, Malappuram (106) was highest pregnancy rate during last 365 days preceding the date of survey followed by palakkad (102) and Wayanad (90). On the other hand, Pathanamthitta (45), Kannur (57) and Kasaragod (60) were bottom three districts.

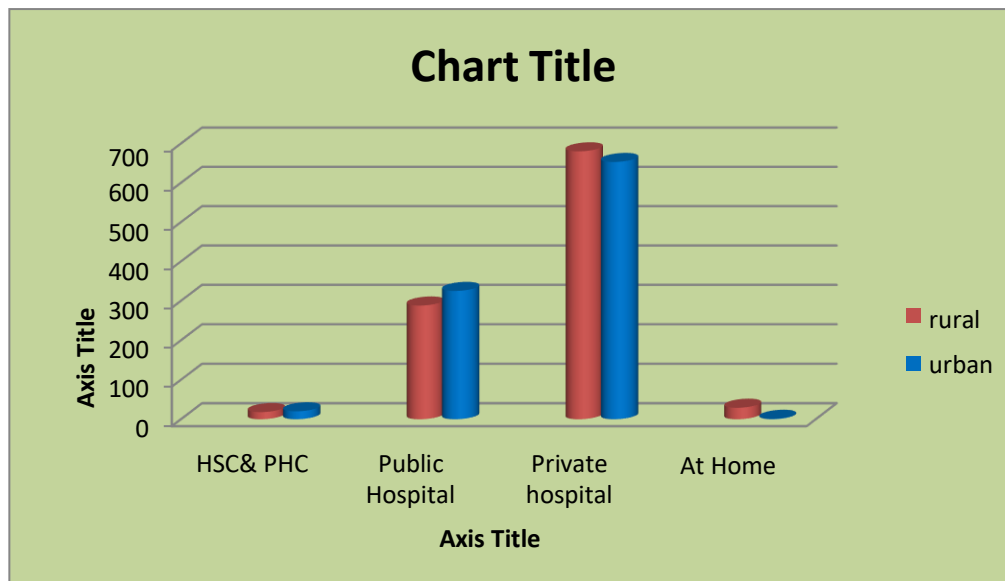


## Place of child birth

The table shows the percentage break-up of childbirths (includes normal, caesarean and other type of delivery) by type of hospital, separately for different quintile class of household expenditure of rural and urban population.

**Table (4.8): Sector wise Per Thousand number of women aged 15-49 who were pregnant any time during last 365 days and their place of childbirth**

Sector	HSC& PHC	Public Hospital	Private hospital	At Home
rural	18	288	680	29
urban	20	325	653	1
All	19	291	669	18



In rural area 2.8 % women were pregnant at any time during the reference period of 365 days; for urban this proportion was 6.9%. Evidence of inter relation with level of living is noted both in rural and urban area. In the rural areas, no childbirth was noted at home or any other place other than the hospitals. The same for urban areas was 0.01 %. Among the institutional

child birth, 8 % took place in public hospital and 91.2 % in private hospital in rural area. In urban area, however, the corresponding figures were 32.5% and 65.3% respectively.



# **Appendix A**

## **Detailed**

### **pooled Tables**



Table (1a): Per 1000 distribution of population by age-group for each gender (p)

District : Kasaragod				Sector: Rural					
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	66	38	52	199	115	314	35	28	63
5-9	84	52	68	253	158	411	30	16	46
10-14	89	45	67	269	137	407	22	10	32
0-14	238	135	186	721	411	1131	87	54	141
15-19	77	56	66	232	171	403	19	21	40
20-24	58	67	63	176	206	381	16	37	53
25-29	30	108	69	92	330	422	23	30	53
15-29	165	231	198	499	706	1205	58	88	146
30-34	85	51	68	256	157	413	28	20	48
35-39	33	81	57	99	248	347	22	26	48
40-44	76	77	77	231	235	466	27	15	42
30-44	194	210	202	587	640	1226	77	61	138
45-49	64	89	76	193	271	465	10	23	33
50-59	113	167	140	342	511	853	28	37	65
60-64	108	84	96	328	256	583	23	17	40
65-69	97	68	83	293	208	501	13	12	25
45-69	382	408	395	1156	1246	2402	74	89	163
70 & above	20	16	18	60	49	109	9	12	21
60 & above	225	168	196	681	512	1193	45	41	86
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	3023	3051	6074	305	304	609
est. no. of person (00)	3023	3051	6074						
sam. no. of person	305	304	609						

Table(1b): Per 1000 distribution of population by age-group for each gender (p)									
District : Kannur					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	98	51	75	501	264	765	43	36	79
5-9	87	33	60	445	172	617	22	22	44
10-14	98	64	81	497	332	829	23	24	47
0-14	283	149	215	1443	767	2211	88	82	170
15-19	59	117	88	303	602	905	19	28	47
20-24	73	72	73	372	374	746	25	32	57
25-29	66	77	72	337	397	734	25	34	59
15-29	199	266	233	1013	1373	2386	69	94	163
30-34	97	121	109	495	626	1121	32	27	59
35-39	54	42	48	275	218	493	22	18	40
40-44	81	89	85	411	459	870	19	20	39
30-44	232	252	242	1181	1303	2484	73	65	138
45-49	56	51	53	284	261	545	14	17	31
50-59	91	159	126	466	822	1288	31	43	74
60-64	49	43	46	250	219	469	11	12	23
65-69	60	15	37	308	76	385	11	12	23
45-69	257	267	262	1308	1379	2687	67	84	151
70 & above	30	65	48	154	338	491	21	14	35
60 & above	140	123	131	712	633	1345	43	38	81
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	5099	5159	10258	318	339	657
est. no. of person (00)	5099	5159	10258						
sam. no. of person	318	339	657						



Table(1c): Per 1000 distribution of population by age-group for each gender (p)									
District: Wayanad					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	80	66	73	324	246	571	32	41	73
5-9	59	60	60	242	221	463	21	20	41
10-14	117	57	89	477	212	689	27	14	41
0-14	256	183	221	1044	680	1723	80	75	155
15-19	103	116	109	419	429	848	23	23	46
20-24	73	68	71	299	253	552	19	32	51
25-29	79	60	70	322	221	542	25	28	53
15-29	255	243	250	1040	903	1943	67	83	150
30-34	38	76	56	153	283	436	30	26	56
35-39	90	118	103	368	438	805	23	23	46
40-44	113	89	102	462	330	792	24	17	41
30-44	241	283	261	983	1051	2034	77	66	143
45-49	74	85	79	301	317	618	14	22	36
50-59	78	84	81	316	313	629	29	32	61
60-64	21	65	42	85	241	326	6	18	24
65-69	31	21	26	128	77	205	11	11	22
45-69	204	256	228	831	948	1778	60	83	143
70 & above	44	34	39	179	128	307	14	11	25
60 & above	96	120	108	393	445	838	31	40	71
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	4076	3709	7785	298	318	616
Est. no. of person (00)	4076	3709	7785						
sam. no. of person	298	318	616						

Table(1d):Per 1000 distribution of population by age-group for each gender (p)									
District: Kozhikode						Sector: Rural			
age-group	gender			estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	85	131	112	377	794	1172	40	47	87
5-9	64	125	99	283	758	1042	27	28	55
10-14	103	44	69	456	266	722	23	21	44
0-14	253	299	279	1116	1819	2935	90	96	186
15-19	57	49	53	253	300	554	21	21	42
20-24	50	67	60	220	410	630	18	44	62
25-29	42	100	75	184	606	790	19	34	53
15-29	149	216	188	658	1316	1974	58	99	157
30-34	81	84	83	357	514	871	33	25	58
35-39	93	58	73	410	354	763	22	20	42
40-44	42	30	35	187	185	371	16	19	35
30-44	216	173	191	954	1052	2006	71	64	135
45-49	83	56	67	368	338	706	19	23	42
50-59	91	89	90	401	542	944	33	44	77
60-64	60	68	65	265	414	678	17	17	34
65-69	104	13	51	458	79	537	16	8	24
45-69	338	226	273	1492	1373	2865	85	92	177
70&above	45	87	69	197	527	724	14	25	39
60&above	208	167	185	920	1020	1939	47	50	97
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	4417	6087	10504	318	376	694
est. no. of person (00)	4417	6087	10504						
sam. no. of person	318	376	694						

Table(1e):Per 1000 distribution of population by age-group for each gender (p)									
District: Malappuram					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	103	80	91	1347	1180	2527	102	103	205
5-9	81	96	89	1064	1421	2485	67	75	142
10-14	180	117	146	2354	1726	4080	81	64	145
0-14	365	292	326	4765	4327	9092	250	242	492
15-19	82	66	73	1069	975	2044	59	62	121
20-24	105	84	94	1375	1250	2625	63	92	155
25-29	68	77	73	884	1141	2025	56	74	130
15-29	255	227	240	3328	3366	6694	178	228	406
30-34	58	105	83	757	1553	2310	64	72	136
35-39	90	81	85	1171	1193	2364	50	43	93
40-44	81	52	65	1056	765	1821	35	41	76
30-44	228	237	233	2984	3511	6495	149	156	305
45-49	34	44	40	445	658	1103	28	45	73
50-59	42	46	44	545	684	1230	46	54	100
60-64	13	50	32	165	734	899	19	37	56
65-69	31	53	43	406	791	1198	15	26	41
45-69	120	194	159	1562	2868	4430	108	162	270
70&above	33	49	41	432	724	1155	30	25	55
60&above	77	152	117	1003	2249	3252	64	88	152
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	13071	14796	27866	715	813	1528
est. no. of person (00)	13071	14796	27866						
sam. no. of person	715	813	1528						

Table(1f): Per 1000 distribution of population by age-group for each gender (p)									
District: Palakkad					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	91	89	90	856	895	1750	65	77	142
5-9	78	60	68	732	601	1333	43	34	77
10-14	120	77	98	1132	782	1914	48	36	84
0-14	289	226	256	2720	2278	4998	156	147	303
15-19	59	51	55	560	519	1079	33	34	67
20-24	47	95	71	439	955	1394	30	59	89
25-29	93	90	91	874	904	1778	49	65	114
15-29	199	236	218	1873	2378	4251	112	158	270
30-34	94	84	89	887	844	1731	48	47	95
35-39	71	79	76	672	802	1474	44	38	82
40-44	21	63	43	199	634	833	21	30	51
30-44	187	226	207	1758	2280	4038	113	115	228
45-49	86	66	75	808	662	1470	30	48	78
50-59	94	99	97	882	1001	1883	56	67	123
60-64	50	80	65	468	808	1276	29	25	54
65-69	56	15	35	527	150	677	23	21	44
45-69	285	260	272	2684	2621	5306	138	161	299
70&above	40	53	47	378	536	914	26	39	65
60&above	146	148	147	1373	1494	2866	78	85	163
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	9413	10093	19506	545	620	1165
est. no. of person (00)	9413	10093	19506						
sam. no. of person	545	620	1165						

Table(1g) :Per 1000 distribution of population by age-group for each gender( p)									
District: Thrissur					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	137	74	105	1213	673	1886	53	45	98
5-9	76	47	62	674	431	1105	32	16	48
10-14	49	51	50	435	461	896	7	19	26
0-14	263	172	217	2323	1565	3888	92	80	172
15-19	52	44	48	459	404	863	21	16	37
20-24	78	119	99	690	1079	1768	25	55	80
25-29	87	121	104	768	1102	1870	32	50	82
15-29	217	284	251	1916	2585	4502	78	121	199
30-34	84	34	59	742	308	1050	27	12	39
35-39	41	38	39	363	343	707	15	16	31
40-44	23	80	52	207	730	937	7	28	35
30-44	149	152	150	1313	1381	2694	49	56	105
45-49	43	126	85	383	1143	1526	17	35	52
50-59	127	104	115	1123	942	2066	50	42	92
60-64	62	56	59	548	508	1056	18	18	36
65-69	42	35	38	369	318	687	13	10	23
45-69	274	320	298	2424	2912	5335	98	105	203
70 & above	97	71	84	859	646	1506	24	26	50
60 & above	201	162	181	1776	1473	3249	55	54	109
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	8835	9090	17925	341	388	729
est. no. of person (00)	8835	9090	17925						
sam. No. of person	341	388	729						

Table(1h): Per 1000 distribution of population by age-group for each gender (p)									
District: Ernakulam					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	68	47	58	334	229	562	30	25	55
5-9	74	56	65	363	271	633	16	15	31
10-14	94	73	84	460	354	815	17	12	29
0-14	235	177	206	1157	854	2010	63	52	115
15-19	46	20	33	229	95	324	8	5	13
20-24	60	67	64	294	326	620	12	19	31
25-29	44	87	65	218	420	639	16	30	46
15-29	151	174	162	741	842	1582	36	54	90
30-34	91	91	91	448	442	890	22	25	47
35-39	94	63	79	462	305	767	21	14	35
40-44	44	31	38	218	150	368	9	11	20
30-44	229	186	208	1128	897	2025	52	50	102
45-49	91	74	83	448	359	807	19	12	31
50-59	102	214	157	500	1033	1533	29	46	75
60-64	84	61	73	414	296	710	15	12	27
65-69	44	33	38	214	161	375	12	8	20
45-69	320	383	351	1576	1849	3425	75	78	153
70 & above	65	81	73	320	390	710	15	23	38
60 & above	193	175	184	948	847	1795	42	43	85
n. r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	4922	4831	9753	241	257	498
est. no. of person (00)	4922	4831	9753						
sam. no. of person	241	257	498						

Table(1i):Per 1000 distribution of population by age-group for each gender (p)

District: Idukki									
Sector: Rural									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	61	25	44	330	125	455	41	31	72
5-9	102	71	87	552	350	902	28	26	54
10-14	80	98	89	436	482	918	19	25	44
0-14	243	194	220	1319	957	2276	88	82	170
15-19	90	89	90	490	439	929	19	23	42
20-24	57	41	49	309	201	511	14	29	43
25-29	95	98	96	513	484	997	27	35	62
15-29	242	228	235	1312	1124	2437	60	87	147
30-34	52	52	52	282	256	538	30	20	50
35-39	71	153	110	384	754	1138	16	36	52
40-44	139	57	100	753	284	1036	33	19	52
30-44	262	262	262	1418	1293	2712	79	75	154
45-49	53	73	63	289	360	649	25	22	47
50-59	106	129	117	573	635	1208	34	38	72
60-64	33	37	35	180	185	365	16	15	31
65-69	31	39	35	166	193	360	9	13	22
45-69	223	278	249	1208	1373	2581	84	88	172
70 & above	30	39	34	161	192	353	12	10	22
60 & above	94	115	104	507	570	1078	37	38	75
n. r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	5419	4940	10359	323	342	665
est. no. of person (00)	5419	4940	10359						
sam. no. of person	323	342	665						

Table(1j):Per 1000 distribution of population by age-group for each gender (p)

District: Kottayam									
Sector: Rural									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	55	54	55	372	370	742	48	51	99
5-9	97	84	91	661	570	1231	30	27	57
10-14	69	68	68	467	460	927	24	28	52
0-14	221	206	213	1499	1400	2900	102	106	208
15-19	105	43	74	710	292	1003	31	24	55
20-24	49	71	60	335	483	818	25	34	59
25-29	34	55	45	233	375	609	21	47	68
15-29	188	169	179	1279	1151	2429	77	105	182
30-34	46	66	56	313	450	764	34	40	74
35-39	81	88	84	550	596	1145	32	31	63
40-44	83	85	84	564	577	1140	29	31	60
30-44	210	238	224	1426	1623	3049	95	102	197
45-49	90	94	92	614	641	1255	33	33	66
50-59	101	101	101	685	685	1370	51	58	109
60-64	40	42	41	270	283	553	20	26	46
65-69	34	47	40	231	319	550	22	16	38
45-69	265	283	274	1800	1928	3728	126	133	259
70 & above	116	103	110	790	703	1493	42	52	94
60 & above	190	192	191	1291	1306	2597	84	94	178
n. r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	6794	6805	13599	442	498	940
est. no. of person (00)	6794	6805	13599						
sam. No. of person	442	498	940						



Table(1k):Per 1000 distribution of population by age-group for each gender (p)									
District: Alappuzha					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	44	69	58	193	400	593	35	42	77
5-9	106	78	90	460	454	914	24	30	54
10-14	99	60	77	431	351	781	22	20	42
0-14	249	207	225	1084	1205	2288	81	92	173
15-19	67	64	65	290	371	662	18	14	32
20-24	74	94	85	319	548	868	17	28	45
25-29	37	58	49	161	341	502	17	33	50
15-29	177	216	200	771	1260	2032	52	75	127
30-34	45	75	62	195	436	631	21	29	50
35-39	112	65	85	486	379	866	28	27	55
40-44	72	85	79	314	494	807	22	23	45
30-44	229	224	226	996	1308	2304	71	79	150
45-49	109	91	99	474	533	1007	18	23	41
50-59	126	92	106	549	534	1083	35	52	87
60-64	30	70	53	130	409	539	20	26	46
65-69	37	41	39	162	239	402	15	10	25
45-69	303	294	298	1316	1715	3031	88	111	199
70 & above	41	59	51	179	343	521	16	22	38
60 & above	108	170	144	471	991	1462	51	58	109
n. r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	4345	5831	10176	308	379	687
est. no. of person (00)	4345	5831	10176						
sam. no. of person	308	379	687						

Table(1I):Per 1000 distribution of population by age-group for each gender (p)

District: Pathanamthitta									
Sector: Rural									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	74	35	54	342	178	520	33	28	61
5-9	32	48	40	148	240	388	13	19	32
10-14	74	49	61	343	247	590	19	15	34
0-14	180	132	155	833	666	1498	65	62	127
15-19	99	90	94	458	453	911	26	26	52
20-24	72	73	73	334	368	702	25	22	47
25-29	99	64	81	460	321	781	21	31	52
15-29	271	226	247	1252	1142	2394	72	79	151
30-34	31	84	59	143	425	567	15	34	49
35-39	52	84	69	241	425	666	12	23	35
40-44	128	75	100	590	377	967	28	28	56
30-44	210	243	227	973	1228	2201	55	85	140
45-49	87	53	69	404	266	670	20	23	43
50-59	121	170	147	558	860	1419	39	55	94
60-64	52	65	58	239	326	565	10	25	35
65-69	26	33	30	120	168	288	12	15	27
45-69	286	321	304	1321	1620	2941	81	118	199
70&above	53	79	67	247	399	645	16	18	34
60&above	131	177	155	605	893	1498	38	58	96
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	4625	5054	9680	289	362	651
est. no. of person (00)	4625	5054	9680						
sam. no. of person	289	362	651						

Table(1m):Per 1000 distribution of population by age-group for each gender (p)									
District: Kollam					Sector: Rural				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	67	93	81	434	649	1083	63	57	120
5-9	55	47	51	356	328	684	32	24	56
10-14	83	30	56	538	207	745	30	18	48
0-14	206	170	187	1327	1185	2512	125	99	224
15-19	70	65	67	451	455	906	28	24	52
20-24	82	89	86	531	622	1152	22	58	80
25-29	80	65	72	513	450	963	33	42	75
15-29	232	219	225	1495	1527	3021	83	124	207
30-34	69	77	73	443	538	981	41	41	82
35-39	72	85	78	461	592	1053	37	29	66
40-44	63	77	70	409	535	944	22	32	54
30-44	204	239	222	1313	1664	2977	100	102	202
45-49	52	96	75	336	667	1003	20	37	57
50-59	156	107	130	1007	743	1750	58	66	124
60-64	68	49	58	438	341	778	32	19	51
65-69	28	57	43	178	396	573	12	20	32
45-69	304	308	306	1957	2147	4104	122	142	264
70 & above	55	65	60	356	451	807	22	38	60
60 & above	151	170	161	971	1187	2158	66	77	143
n. r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	6449	6973	13422	452	505	957
est. no. of person (00)	6449	6973	13422						
sam. no. of person	452	505	957						

Table(1n):Per 1000 distribution of population by age-group for each gender (p)									
District: Thiruvananthapuram						Sector: Rural			
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	105	59	80	885	583	1469	58	59	117
5-9	33	104	71	276	1025	1301	25	37	62
10-14	77	32	53	653	314	967	29	19	48
0-14	215	196	205	1814	1922	3736	112	115	227
15-19	67	42	54	566	417	983	27	21	48
20-24	80	93	87	675	917	1592	30	53	83
25-29	93	104	99	787	1019	1806	36	58	94
15-29	240	240	240	2028	2353	4381	93	132	225
30-34	95	91	93	800	895	1694	40	41	81
35-39	68	34	50	575	333	908	31	23	54
40-44	62	80	72	526	786	1313	25	31	56
30-44	225	205	214	1901	2014	3915	96	95	191
45-49	41	63	53	343	620	963	18	28	46
50-59	132	189	163	1118	1857	2975	47	80	127
60-64	35	58	47	297	566	863	27	30	57
65-69	58	29	43	489	287	776	18	12	30
45-69	266	339	306	2247	3331	5578	110	150	260
70 & above	54	20	35	453	195	648	18	18	36
60 & above	147	107	125	1239	1049	2287	63	60	123
N .r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	8442	9816	18258	429	510	939
est. no. of person(00)	8442	9816	18258						
sam. no. of person	429	510	939						

Table(1o) :Per 1000 distribution of population by age-group for each gender (p)

District: all										Sector: Rural									
age-group	gender			Estimated no.(00)			sample												
	male	female	Person	male	female	Person	male	female	Person										
0-4	87	70	78	7707	6701	14408	678	670	1348										
5-9	73	73	73	6509	7002	13511	410	389	799										
10-14	101	66	83	8948	6332	15280	391	325	716										
0-14	260	208	233	23165	20035	43199	1479	1384	2863										
15-19	73	62	67	6489	5924	12413	352	342	694										
20-24	72	83	78	6369	7992	14361	341	594	935										
25-29	71	84	78	6347	8111	14457	400	591	991										
15-29	216	229	223	19205	22026	41231	1093	1527	2620										
30-34	71	80	76	6271	7726	13997	465	459	924										
35-39	73	73	73	6518	6979	13497	375	367	742										
40-44	69	68	68	6126	6541	12667	317	345	662										
30-44	213	221	217	18915	21245	40160	1157	1171	2328										
45-49	64	74	69	5690	7096	12786	285	391	676										
50-59	102	116	109	9066	11164	20230	566	714	1280										
60-64	46	58	52	4074	5587	9661	263	297	560										
65-69	46	36	41	4052	3462	7514	202	194	396										
45-69	257	284	271	22882	27309	50191	1316	1596	2912										
70 & above	54	58	56	4764	5620	10383	279	333	612										
60 & above	145	152	149	12889	14669	27558	744	824	1568										
n.r.	0	0	0	0	0	0	0	0	0										
Total	1000	1000	1000	88930	96235	185164	5324	6011	11335										
est. no. of person (00)	88930	96235	185164																
sam. no. of person	5324	6011	11335																

Table(2a):Per 1000 distribution of population by age-group for each gender( p)									
District: Kasaragod					Sector: Urban				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	123	59	89	252	142	394	41	26	67
5-9	125	107	115	257	254	511	25	21	46
10-14	65	41	52	133	98	231	16	13	29
0-14	313	207	256	642	494	1136	82	60	142
15-19	105	83	93	216	198	414	23	15	38
20-24	26	66	47	53	158	211	9	29	38
25-29	31	112	75	65	266	331	12	39	51
15-29	162	261	215	333	622	956	44	83	127
30-34	91	101	96	187	241	428	20	23	43
35-39	79	80	79	162	191	352	19	15	34
40-44	74	59	66	152	140	292	14	9	23
30-44	244	240	242	500	572	1072	53	47	100
45-49	42	35	38	86	83	170	9	11	20
50-59	82	125	105	169	298	467	18	32	50
60-64	89	54	70	182	130	312	12	11	23
65-69	54	52	53	111	123	235	6	6	12
45-69	267	266	267	548	635	1184	45	60	105
70 & above	14	26	21	28	63	91	3	8	11
60 & above	157	132	144	322	316	638	21	25	46
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	2052	2386	4438	227	258	485
est. no. of person (00)	2052	2386	4438						
sam. no. of person	227	258	485						

Table(2b):Per 1000 distribution of population by age-group for each gender( p)									
District: Kannur					Sector: Urban				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	65	72	69	388	486	874	68	73	141
5-9	67	59	63	400	403	803	44	37	81
10-14	107	21	61	635	143	778	46	22	68
0-14	240	152	193	1422	1033	2455	158	132	290
15-19	82	85	84	485	578	1062	44	37	81
20-24	93	99	96	550	669	1219	36	71	107
25-29	72	81	76	426	546	972	32	61	93
15-29	246	264	256	1461	1793	3254	112	169	281
30-34	61	66	64	361	448	810	50	48	98
35-39	80	95	88	475	647	1122	57	58	115
40-44	81	87	84	480	588	1068	41	45	86
30-44	222	248	236	1317	1683	3000	148	151	299
45-49	25	42	34	151	286	437	26	35	61
50-59	100	138	120	593	938	1532	47	79	126
60-64	66	60	63	392	404	796	33	48	81
65-69	21	38	30	123	256	378	17	29	46
45-69	212	278	247	1259	1885	3144	123	191	314
70 & above	81	57	68	478	386	864	43	43	86
60 & above	167	154	160	993	1046	2039	93	120	213
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	5938	6779	12717	584	686	1270
est. no. of person (00)	5938	6779	12717						
sam. no. of person	584	686	1270						

Table(2c):Per 1000 distribution of population by age-group for each gender (p)									
District: Wayanad					Sector: Urban				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	113	83	96	17	17	34	7	10	17
5-9	31	52	43	5	11	15	4	6	10
10-14	86	89	88	13	18	31	4	7	11
0-14	230	224	226	35	46	81	15	23	38
15-19	113	25	63	17	5	23	6	4	10
20-24	110	128	120	17	26	43	7	8	15
25-29	104	53	75	16	11	27	4	6	10
15-29	327	206	258	50	42	93	17	18	35
30-34	69	112	94	11	23	34	6	10	16
35-39	81	45	61	12	9	22	4	2	6
40-44	120	67	90	18	14	32	8	6	14
30-44	271	224	244	42	46	88	18	18	36
45-49	23	76	53	4	16	19	3	8	11
50-59	94	107	102	14	22	36	8	7	15
60-64	21	139	88	3	29	32	3	7	10
65-69	17	6	11	3	1	4	2	1	3
45-69	155	329	254	24	68	91	16	23	39
70 & above	19	17	18	3	4	6	3	3	6
60 & above	56	163	117	9	33	42	8	11	19
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	154	205	359	69	85	154
est. no. of person (00)	154	205	359						
sam. no. of person	69	85	154						



Table(2d):Per 1000 distribution of population by age-group for each gender(p)

District: Kozhikode									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	72	74	73	794	795	1589	78	71	149
5-9	48	48	48	529	519	1048	45	43	88
10-14	100	59	80	1092	637	1729	49	45	94
0-14	220	181	201	2415	1951	4366	172	159	331
15-19	107	81	94	1176	872	2048	40	44	84
20-24	65	59	62	716	633	1350	36	53	89
25-29	82	88	85	903	952	1855	62	68	130
15-29	255	228	242	2795	2458	5253	138	165	303
30-34	71	56	63	775	601	1376	70	57	127
35-39	44	81	62	483	876	1359	45	49	94
40-44	94	111	102	1025	1194	2219	39	51	90
30-44	208	248	228	2283	2671	4954	154	157	311
45-49	92	60	76	1005	650	1655	41	42	83
50-59	91	116	103	996	1248	2244	61	84	145
60-64	46	66	56	499	713	1212	32	46	78
65-69	35	45	40	384	487	872	25	18	43
45-69	263	287	275	2884	3099	5982	159	190	349
70 & above	53	56	55	580	607	1187	34	38	72
60 & above	134	168	150	1463	1807	3270	91	102	193
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	10957	10785	21742	657	709	1366
est. no. of person (00)	10957	10785	21742						
sam. no. of person	657	709	1366						

Table(2e): Per 1000 distribution of population by age-group for each gender (P)

District: Malappuram									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	127	76	99	679	468	1146	113	82	195
5-9	116	104	110	624	642	1266	81	76	157
10-14	89	112	101	475	694	1169	62	74	136
0-14	332	292	310	1778	1803	3581	256	232	488
15-19	93	72	82	499	447	946	67	50	117
20-24	84	98	92	453	604	1057	69	87	156
25-29	70	121	98	375	751	1126	61	104	165
15-29	248	291	271	1327	1801	3129	197	241	438
30-34	78	77	78	419	478	897	54	73	127
35-39	86	65	74	458	401	860	54	44	98
40-44	48	47	48	260	289	549	27	36	63
30-44	212	189	200	1137	1168	2306	135	153	288
45-49	37	46	42	201	283	484	34	35	69
50-59	67	74	71	359	458	817	52	74	126
60-64	34	48	42	184	300	483	24	33	57
65-69	26	39	33	142	243	384	21	26	47
45-69	165	208	188	885	1283	2168	131	168	299
70 & above	44	21	31	234	128	362	22	25	47
60 & above	104	108	106	559	670	1229	67	84	151
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	5361	6184	11545	741	819	1560
est. no. of person (00)	5361	6184	11545						
sam. no. of person	741	819	1560						

Table(2f):Per 1000 distribution of population by age-group for each gender (p)

District: Palakkad									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	55	27	41	122	62	184	36	24	60
5-9	34	36	35	74	82	157	17	14	31
10-14	75	83	79	166	189	354	13	15	28
0-14	164	147	155	362	333	695	66	53	119
15-19	205	67	135	452	151	603	30	20	50
20-24	51	93	73	113	212	325	22	39	61
25-29	54	42	48	119	96	215	24	16	40
15-29	310	202	256	684	459	1143	76	75	151
30-34	73	60	67	162	137	299	26	16	42
35-39	56	62	59	124	141	265	19	18	37
40-44	61	116	89	135	264	399	9	20	29
30-44	191	239	215	421	542	963	54	54	108
45-49	105	92	98	232	209	440	21	23	44
50-59	147	112	129	323	254	577	30	33	63
60-64	26	62	45	57	142	199	10	17	27
65-69	30	18	24	67	40	106	9	10	19
45-69	308	284	296	679	644	1323	70	83	153
70 & above	27	128	78	59	290	349	12	17	29
60 & above	83	208	146	183	472	655	31	44	75
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	2203	2270	4473	278	282	560
est. no. of person (00)	2203	2270	4473						
sam. no. of person	278	282	560						

Table(2g):Per 1000 distribution of population by age-group for each gender(p)

District: Thrissur									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	91	32	63	715	242	956	102	82	184
5-9	62	43	53	487	316	803	44	38	82
10-14	69	52	61	545	385	930	39	32	71
0-14	222	127	176	1747	942	2690	185	152	337
15-19	65	107	86	514	796	1310	32	47	79
20-24	94	56	76	742	414	1156	39	60	99
25-29	63	76	69	493	567	1061	37	81	118
15-29	223	239	231	1749	1777	3526	108	188	296
30-34	90	68	79	710	502	1212	65	55	120
35-39	44	62	53	349	458	807	46	40	86
40-44	66	115	90	519	858	1377	37	47	84
30-44	201	245	222	1577	1819	3396	148	142	290
45-49	45	67	55	350	498	848	36	45	81
50-59	117	117	117	919	869	1788	74	93	167
60-64	49	90	69	385	672	1057	36	47	83
65-69	54	64	59	421	478	899	37	40	77
45-69	264	339	300	2075	2517	4592	183	225	408
70 & above	90	51	71	706	379	1085	55	40	95
60 & above	193	206	199	1513	1528	3041	128	127	255
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	7855	7433	15289	679	747	1426
est. no. of person(00)	7855	7433	15289						
sam. no. of person	679	747	1426						

Table(2h): Per 1000 distribution of population by age-group for each gender (pooled)

District: Ernakulam Sector : Urban

age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	48	54	51	515	586	1101	59	74	133
5-9	83	68	75	891	733	1624	37	36	73
10-14	71	89	80	760	968	1728	33	26	59
0-14	201	211	206	2166	2287	4453	129	136	265
15-19	99	87	93	1066	937	2003	44	36	80
20-24	82	72	77	880	781	1660	48	67	115
25-29	64	43	53	686	464	1151	50	67	117
15-29	245	202	223	2632	2182	4814	142	170	312
30-34	58	97	78	627	1048	1675	55	52	107
35-39	80	101	90	856	1093	1949	52	43	95
40-44	87	67	77	938	727	1666	40	34	74
30-44	225	265	245	2422	2869	5291	147	129	276
45-49	91	88	90	975	958	1933	34	52	86
50-59	116	79	97	1249	854	2103	86	85	171
60-64	46	76	61	489	821	1310	43	52	95
65-69	44	27	36	477	296	772	22	19	41
45-69	297	271	284	3190	2929	6118	185	208	393
70 & above	32	51	42	341	555	897	22	41	63
60 & above	122	154	138	1308	1672	2979	87	112	199
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	10751	10821	21572	625	684	1309
est. no. of person (00)	10751	10821	21572						
sam. no. of person	625	684	1309						

Table(2i):Per 1000 distribution of population by age-group for each gender (pooled)

District: Idukki									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	33	31	32	12	12	24	8	6	14
5-9	45	121	86	16	48	64	2	6	8
10-14	154	9	77	54	3	57	7	1	8
0-14	232	162	195	82	64	145	17	13	30
15-19	112	62	86	39	25	64	5	2	7
20-24	92	121	107	32	48	80	3	7	10
25-29	33	45	40	12	18	30	5	6	11
15-29	237	229	233	83	90	173	13	15	28
30-34	30	92	63	11	36	47	6	3	9
35-39	127	43	83	45	17	62	3	5	8
40-44	86	97	92	30	38	69	5	4	9
30-44	243	233	238	85	92	177	14	12	26
45-49	61	116	90	21	46	67	4	6	10
50-59	146	52	96	51	20	71	6	4	10
60-64	21	25	23	7	10	17	2	3	5
65-69	0	108	57	0	43	43	0	7	7
45-69	227	301	266	80	119	199	12	20	32
70 & above	60	75	68	21	30	51	8	5	13
60 & above	81	208	148	28	82	111	10	15	25
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	351	395	746	64	65	129
est. no. of person (00)	351	395	746						
sam. no. of person	64	65	129						

Table(2j):Per 1000 distribution of population by age-group for each gender (pooled)

District: Kottayam										Sector: Urban									
age-group	gender			Estimated no.(00)			sample												
	male	female	Person	male	female	Person	male	female	Person										
0-4	30	49	39	80	122	202	12	27	39										
5-9	96	43	70	256	107	364	17	11	28										
10-14	24	36	30	64	90	154	4	7	11										
0-14	150	128	139	400	320	720	33	45	78										
15-19	127	48	89	341	120	461	15	10	25										
20-24	40	48	44	108	121	229	7	15	22										
25-29	61	34	48	164	85	249	12	14	26										
15-29	229	130	181	612	326	938	34	39	73										
30-34	52	52	52	139	131	270	11	11	22										
35-39	74	76	75	198	191	389	15	13	28										
40-44	66	80	73	175	200	376	9	14	23										
30-44	192	209	200	512	523	1035	35	38	73										
45-49	69	109	88	184	273	457	9	13	22										
50-59	136	153	144	364	382	746	27	33	60										
60-64	68	54	61	183	135	318	15	11	26										
65-69	36	72	54	96	181	277	10	10	20										
45-69	309	388	347	827	971	1798	61	67	128										
70 & above	121	145	132	322	364	686	21	19	40										
60 & above	225	271	247	601	680	1281	46	40	86										
n.r.	0	0	0	0	0	0	0	0	0										
Total	1000	1000	1000	2674	2503	5177	184	208	392										
est. no. of person (00)	2674	2503	5177																
sam. no. of person	184	208	392																

Table(2k):Per 1000 distribution of population by age-group for each gender (pooled)

District: Alappuzha										Sector: Urban									
age-group	gender			Estimated no.(00)			sample												
	male	female	Person	male	female	Person	male	female	Person										
0-4	56	29	43	285	143	428	36	31	67										
5-9	10	101	54	52	490	542	12	25	37										
10-14	103	61	82	527	295	822	25	13	38										
0-14	169	191	180	864	928	1792	73	69	142										
15-19	60	53	57	308	258	566	13	18	31										
20-24	106	94	100	543	457	1000	27	40	67										
25-29	97	28	64	499	137	636	29	26	55										
15-29	263	176	221	1350	852	2202	69	84	153										
30-34	30	54	41	152	262	414	18	19	37										
35-39	64	98	81	327	477	804	23	24	47										
40-44	82	79	80	418	384	802	16	21	37										
30-44	175	232	202	897	1123	2020	57	64	121										
45-49	60	85	73	310	413	723	17	27	44										
50-59	123	135	129	633	654	1287	51	50	101										
60-64	92	83	88	473	401	874	19	18	37										
65-69	40	44	42	207	213	419	14	17	31										
45-69	316	347	331	1623	1681	3304	101	112	213										
70&above	77	54	66	393	264	657	24	21	45										
60&above	209	181	196	1073	878	1951	57	56	113										
n.r.	0	0	0	0	0	0	0	0	0										
Total	1000	1000	1000	5128	4847	9975	324	350	674										
est. no. of person (00)	5128	4847	9975																
sam. no. of person	324	350	674																



Table(2I):Per 1000 distribution of population by age-group for each gender (pooled)

District : Pathanamthitta									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	34	143	95	21	111	132	11	18	29
5-9	65	59	62	40	46	85	4	5	9
10-14	65	142	108	40	110	150	7	13	20
0-14	165	343	265	100	267	367	22	36	58
15-19	106	27	62	64	21	85	8	8	16
20-24	90	39	62	55	31	85	5	5	10
25-29	54	133	99	33	104	137	10	18	28
15-29	250	199	222	152	155	307	23	31	54
30-34	160	81	116	97	63	160	11	8	19
35-39	49	31	39	29	24	54	7	7	14
40-44	17	72	48	10	56	66	4	10	14
30-44	225	184	202	137	144	280	22	25	47
45-49	118	47	78	71	37	108	8	7	15
50-59	167	117	139	101	91	192	12	19	31
60-64	13	25	20	8	19	27	6	7	13
65-69	16	17	17	10	14	23	7	5	12
45-69	313	206	253	190	161	351	33	38	71
70 & above	47	67	58	28	52	80	13	9	22
60 & above	75	109	94	46	85	131	26	21	47
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	607	779	1386	113	139	252
est. no. of person (00)	607	779	1386						
Sam .no. of person	113	139	252						

Table(2m):Per 1000 distribution of population by age-group for each gender(p)

District: Kollam									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	68	51	59	340	308	647	48	44	92
5-9	46	69	59	227	419	647	17	28	45
10-14	65	109	89	325	659	984	26	32	58
0-14	179	230	207	891	1386	2278	91	104	195
15-19	79	42	59	392	253	644	21	16	37
20-24	77	90	84	381	545	926	25	42	67
25-29	78	107	94	385	647	1032	29	41	70
15-29	233	239	237	1158	1445	2603	75	99	174
30-34	59	65	63	295	395	690	32	33	65
35-39	73	62	67	361	372	733	28	30	58
40-44	61	57	59	305	346	651	23	24	47
30-44	193	184	188	960	1113	2073	83	87	170
45-49	78	104	92	387	631	1017	23	26	49
50-59	174	106	137	866	641	1507	48	61	109
60-64	60	44	51	300	263	563	20	20	40
65-69	21	61	43	105	367	472	13	28	41
45-69	334	315	323	1659	1901	3560	104	135	239
70 & above	61	31	45	302	189	491	33	22	55
60 & above	142	136	139	708	818	1526	66	70	136
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	4971	6034	11005	386	447	833
est. no. of person (00)	4971	6034	11005						
sam. no. of person	386	447	833						

Table(2n):Per 1000 distribution of population by age-group for each(p)

District: Thiruvananthapuram									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	61	58	60	530	563	1094	76	75	151
5-9	52	64	58	454	618	1072	34	36	70
10-14	68	43	55	595	414	1009	26	27	53
0-14	181	166	173	1579	1596	3175	136	138	274
15-19	69	93	81	601	892	1493	31	35	66
20-24	133	96	114	1162	927	2089	54	64	118
25-29	66	55	60	574	533	1108	52	59	111
15-29	267	244	255	2337	2353	4689	137	158	295
30-34	66	86	77	579	828	1407	46	60	106
35-39	69	41	55	606	396	1002	51	26	77
40-44	62	77	70	544	746	1290	27	37	64
30-44	198	204	201	1729	1970	3699	124	123	247
45-49	75	116	96	652	1116	1768	26	54	80
50-59	148	121	134	1295	1168	2463	73	82	155
60-64	66	62	64	579	598	1177	30	33	63
65-69	19	34	27	167	325	492	22	19	41
45-69	308	333	321	2692	3207	5899	151	188	339
70 & above	46	53	50	399	512	912	34	38	72
60 & above	131	149	140	1145	1435	2580	86	90	176
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	8736	9638	18374	582	645	1227
est. no. of person (00)	8736	9638	18374						
sam. no. of person	582	645	1227						

Table(2o): Per 1000 distribution of population by age-group for each gender(p)

District: ALL									
Sector: Urban									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	70	57	63	4750	4057	8807	695	643	1338
5-9	64	66	65	4312	4689	9001	383	382	765
10-14	80	66	73	5422	4703	10125	357	327	684
0-14	214	189	201	14484	13449	27933	1435	1352	2787
15-19	91	78	84	6169	5552	11721	379	342	721
20-24	86	79	82	5805	5625	11430	387	587	974
25-29	70	73	72	4751	5179	9930	419	606	1025
15-29	247	230	238	16725	16356	33081	1185	1535	2720
30-34	67	73	70	4524	5195	9719	470	468	938
35-39	66	75	70	4485	5295	9780	423	374	797
40-44	74	82	78	5010	5844	10854	299	358	657
30-44	207	230	219	14019	16335	30354	1192	1200	2392
45-49	68	77	73	4628	5499	10127	291	384	675
50-59	117	111	114	7932	7899	15831	593	736	1329
60-64	55	65	60	3742	4635	8377	285	353	638
65-69	34	43	39	2312	3065	5377	205	235	440
45-69	275	297	286	18613	21099	39713	1374	1708	3082
70 & above	58	54	56	3896	3821	7717	327	329	656
60 & above	147	162	155	9950	11521	21471	817	917	1734
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	67737	71060	138797	5513	6124	11637
est. no. of person(00)	67737	71060	138797						
sam. no. of person	5513	6124	11637						

Table (3a): Per 1000 distribution of population by age-group for each gender (p)

District: Kasaragod			Sector: ALL						
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	89	47	67	451	257	708	76	54	130
5-9	100	76	88	509	412	922	55	37	92
10-14	79	43	61	402	235	638	38	23	61
0-14	268	166	216	1363	904	2267	169	114	283
15-19	88	68	78	448	369	816	42	36	78
20-24	45	67	56	229	363	592	25	66	91
25-29	31	110	72	156	596	753	35	69	104
15-29	164	244	206	833	1328	2161	102	171	273
30-34	87	73	80	443	398	841	48	43	91
35-39	51	81	67	261	438	699	41	41	82
40-44	75	69	72	383	375	758	41	24	65
30-44	214	223	219	1087	1211	2298	130	108	238
45-49	55	65	60	280	354	634	19	34	53
50-59	101	149	126	511	809	1320	46	69	115
60-64	100	71	85	510	386	895	35	28	63
65-69	80	61	70	404	332	736	19	18	37
45-69	336	346	341	1705	1881	3586	119	149	268
70 & above	17	20	19	89	111	200	12	20	32
60 & above	198	152	174	1003	828	1831	66	66	132
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	5076	5436	10512	532	562	1094
est. no. of person(00)	5076	5436	10512						
sam. no. of person	532	562	1094						

Table(3b):Per 1000 distribution of population by age-group for each gender(p)

District: Kannur										Sector: ALL									
age-group	gender			Estimated no.(00)			sample												
	male	female	Person	male	female	Person	male	female	Person										
0-4	81	63	71	889	750	1639	111	109	220										
5-9	77	48	62	844	575	1419	66	59	125										
10-14	103	40	70	1132	475	1607	69	46	115										
0-14	260	151	203	2866	1800	4666	246	214	460										
15-19	71	99	86	788	1180	1968	63	65	128										
20-24	84	87	86	923	1043	1966	61	103	164										
25-29	69	79	74	764	943	1707	57	95	152										
15-29	224	265	245	2474	3166	5640	181	263	444										
30-34	78	90	84	856	1074	1931	82	75	157										
35-39	68	72	70	750	865	1615	79	76	155										
40-44	81	88	84	891	1047	1938	60	65	125										
30-44	226	250	239	2498	2986	5484	221	216	437										
45-49	39	46	43	435	547	982	40	52	92										
50-59	96	147	123	1060	1761	2820	78	122	200										
60-64	58	52	55	642	624	1266	44	60	104										
65-69	39	28	33	431	332	763	28	41	69										
45-69	233	273	254	2567	3263	5831	190	275	465										
70 & above	57	61	59	632	723	1355	64	57	121										
60 & above	154	141	147	1705	1679	3384	136	158	294										
n.r.	0	0	0	0	0	0	0	0	0										
Total	1000	1000	1000	11037	11938	22975	902	1025	1927										
est. no. of person(00)	11037	11938	22975																
sam. no. of person	902	1025	1927																

Table(3c):Per 1000 distribution of population by age-group for each gender(p)

District: Wayanad										Sector: ALL									
age-group	gender			Estimated no.(00)			sample												
	male	female	Person	male	female	Person	male	female	Person										
0-4	81	67	74	342	263	605	39	51	90										
5-9	58	59	59	247	231	479	25	26	51										
10-14	116	59	89	490	231	721	31	21	52										
0-14	255	185	222	1079	725	1805	95	98	193										
15-19	103	111	107	436	435	871	29	27	56										
20-24	75	71	73	316	279	596	26	40	66										
25-29	80	59	70	338	232	569	29	34	63										
15-29	258	242	250	1090	945	2035	84	101	185										
30-34	39	78	58	164	306	470	36	36	72										
35-39	90	114	102	380	447	827	27	25	52										
40-44	114	88	101	481	344	824	32	23	55										
30-44	242	280	260	1025	1097	2122	95	84	179										
45-49	72	85	78	305	332	637	17	30	47										
50-59	78	86	82	330	335	666	37	39	76										
60-64	21	69	44	88	270	358	9	25	34										
65-69	31	20	26	131	78	209	13	12	25										
45-69	202	259	230	854	1015	1870	76	106	182										
70 & above	43	34	38	182	131	313	17	14	31										
60 & above	95	122	108	402	479	880	39	51	90										
n.r.	0	0	0	0	0	0	0	0	0										
Total	1000	1000	1000	4230	3914	8145	367	403	770										
est. no. of person(00)	4230	3914	8145																
sam. no. of person	367	403	770																

Table(3d):Per 1000 distribution of population by age-group for each gender(p)									
District: Kozhikode					Sector: ALL				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	76	94	86	1172	1589	2761	118	118	236
5-9	53	76	65	812	1278	2090	72	71	143
10-14	101	54	76	1548	903	2451	72	66	138
0-14	230	223	226	3532	3770	7301	262	255	517
15-19	93	70	81	1429	1173	2602	61	65	126
20-24	61	62	61	937	1043	1980	54	97	151
25-29	71	92	82	1087	1558	2646	81	102	183
15-29	225	224	224	3453	3774	7228	196	264	460
30-34	74	66	70	1132	1115	2247	103	82	185
35-39	58	73	66	893	1229	2122	67	69	136
40-44	79	82	80	1212	1379	2590	55	70	125
30-44	211	221	216	3237	3723	6960	225	221	446
45-49	89	59	73	1373	988	2361	60	65	125
50-59	91	106	99	1397	1791	3188	94	128	222
60-64	50	67	59	763	1127	1890	49	63	112
65-69	55	34	44	843	566	1408	41	26	67
45-69	285	265	274	4376	4471	8847	244	282	526
70 & above	51	67	59	777	1134	1911	48	63	111
60 & above	155	168	162	2383	2826	5209	138	152	290
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	15374	16872	32246	975	1085	2060
est. no. of person(00)	15374	16872	32246						
sam. no. of person	975	1085	2060						



Table(3e):Per 1000 distribution of population by age-group for each gender(p)									
District: Malappuram						Sector: ALL			
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	110	79	93	2025	1648	3673	215	185	400
5-9	92	98	95	1689	2063	3751	148	151	299
10-14	153	115	133	2829	2420	5249	143	138	281
0-14	355	292	322	6542	6130	12673	506	474	980
15-19	85	68	76	1568	1422	2990	126	112	238
20-24	99	88	93	1828	1854	3682	132	179	311
25-29	68	90	80	1259	1891	3151	117	178	295
15-29	253	246	249	4655	5167	9822	375	469	844
30-34	64	97	81	1176	2031	3207	118	145	263
35-39	88	76	82	1630	1594	3224	104	87	191
40-44	71	50	60	1315	1054	2370	62	77	139
30-44	224	223	223	4122	4680	8801	284	309	593
45-49	35	45	40	646	941	1587	62	80	142
50-59	49	54	52	904	1142	2046	98	128	226
60-64	19	49	35	348	1034	1382	43	70	113
65-69	30	49	40	548	1034	1582	36	52	88
45-69	133	198	167	2447	4151	6598	239	330	569
70 & above	36	41	38	666	852	1517	52	50	102
60 & above	85	139	114	1562	2919	4481	131	172	303
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	18431	20980	39411	1456	1632	3088
est. no. of person(00)	18431	20980	39411						
sam. no. of person	1456	1632	3088						

Table(3f): Per 1000 distribution of population by age-group for each gender (p)									
District: Palakkad					Sector: ALL				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	84	77	81	978	957	1934	101	101	202
5-9	69	55	62	806	684	1490	60	48	108
10-14	112	79	95	1298	971	2268	61	51	112
0-14	265	211	237	3082	2611	5693	222	200	422
15-19	87	54	70	1012	670	1682	63	54	117
20-24	48	94	72	552	1166	1718	52	98	150
25-29	85	81	83	992	1000	1993	73	81	154
15-29	220	229	225	2557	2837	5394	188	233	421
30-34	90	79	85	1048	981	2030	74	63	137
35-39	69	76	73	796	943	1739	63	56	119
40-44	29	73	51	334	898	1233	30	50	80
30-44	188	228	209	2178	2822	5001	167	169	336
45-49	89	70	80	1039	871	1911	51	71	122
50-59	104	102	103	1205	1255	2460	86	100	186
60-64	45	77	62	525	950	1475	39	42	81
65-69	51	15	33	594	189	783	32	31	63
45-69	290	264	276	3363	3266	6629	208	244	452
70 & above	38	67	53	437	826	1263	38	56	94
60 & above	134	159	147	1555	1966	3521	109	129	238
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	11616	12362	23979	823	902	1725
est. no. of person(00)	11616	12362	23979						
Sam. no. of person	823	902	1725						

Table(3g):Per 1000 distribution of population by age-group for each gender(p)									
District: Thrissur					Sector: ALL				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	116	55	86	1928	914	2843	155	127	282
5-9	70	45	57	1162	747	1909	76	54	130
10-14	59	51	55	980	846	1826	46	51	97
0-14	244	152	198	4070	2507	6577	277	232	509
15-19	58	73	65	973	1200	2173	53	63	116
20-24	86	90	88	1432	1492	2924	64	115	179
25-29	76	101	88	1261	1670	2931	69	131	200
15-29	220	264	242	3666	4362	8028	186	309	495
30-34	87	49	68	1452	810	2262	92	67	159
35-39	43	49	46	712	802	1513	61	56	117
40-44	44	96	70	726	1588	2315	44	75	119
30-44	173	194	183	2890	3200	6090	197	198	395
45-49	44	99	71	732	1642	2374	53	80	133
50-59	122	110	116	2042	1811	3854	124	135	259
60-64	56	71	64	933	1180	2113	54	65	119
65-69	47	48	48	791	796	1586	50	50	100
45-69	270	329	299	4499	5429	9927	281	330	611
70 & above	94	62	78	1566	1025	2591	79	66	145
60 & above	197	182	189	3289	3001	6290	183	181	364
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	16690	16523	33213	1020	1135	2155
est. no. of person (00)	16690	16523	33213						
sam. no. of person	1020	1135	2155						

Table(3h):Per 1000 distribution of population by age-group for each gender (p)									
District: Ernakulam					Sector: ALL				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	54	52	53	849	814	1664	89	99	188
5-9	80	64	72	1254	1004	2257	53	51	104
10-14	78	84	81	1220	1322	2542	50	38	88
0-14	212	201	206	3323	3140	6463	192	188	380
15-19	83	66	74	1294	1032	2327	52	41	93
20-24	75	71	73	1174	1107	2280	60	86	146
25-29	58	57	57	904	885	1789	66	97	163
15-29	215	193	204	3373	3024	6396	178	224	402
30-34	69	95	82	1075	1490	2565	77	77	154
35-39	84	89	87	1318	1398	2717	73	57	130
40-44	74	56	65	1156	878	2034	49	45	94
30-44	226	241	234	3550	3766	7315	199	179	378
45-49	91	84	87	1423	1316	2740	53	64	117
50-59	112	121	116	1748	1887	3636	115	131	246
60-64	58	71	64	903	1117	2020	58	64	122
65-69	44	29	37	691	456	1148	34	27	61
45-69	304	305	305	4766	4777	9543	260	286	546
70 & above	42	60	51	661	945	1606	37	64	101
60 & above	144	161	152	2256	2519	4774	129	155	284
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	15672	15652	31325	866	941	1807
est. no. of person (00)	15672	15652	31325						
sam. no. of person	866	941	1807						

Table(3i):Per 1000 distribution of population by age-group for each gender(p)

District: Idukki										Sector: ALL									
age-group	gender			Estimated no.(00)			sample												
	male	female	Person	male	female	Person	male	female	Person										
0-4	59	26	43	342	137	479	49	37	86										
5-9	99	75	87	568	398	966	30	32	62										
10-14	85	91	88	490	486	976	26	26	52										
0-14	243	191	218	1400	1021	2421	105	95	200										
15-19	92	87	89	529	464	993	24	25	49										
20-24	59	47	53	342	249	591	17	36	53										
25-29	91	94	92	525	502	1026	32	41	73										
15-29	242	228	235	1396	1215	2610	73	102	175										
30-34	51	55	53	292	293	585	36	23	59										
35-39	74	144	108	429	771	1200	19	41	60										
40-44	136	60	100	783	322	1105	38	23	61										
30-44	261	260	260	1504	1385	2889	93	87	180										
45-49	54	76	64	310	406	716	29	28	57										
50-59	108	123	115	624	655	1279	40	42	82										
60-64	32	37	34	188	195	382	18	18	36										
65-69	29	44	36	166	236	402	9	20	29										
45-69	223	280	250	1288	1492	2780	96	108	204										
70 & above	32	42	36	182	222	404	20	15	35										
60 & above	93	122	107	536	653	1188	47	53	100										
n.r.	0	0	0	0	0	0	0	0	0										
Total	1000	1000	1000	5770	5335	11104	387	407	794										
est. no. of person (00)	5770	5335	11104																
sam. no. of person	387	407	794																

Table(3j):Per 1000 distribution of population by age-group for each gender (p)									
District: Kottayam					Sector: ALL				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	48	53	50	452	492	944	60	78	138
5-9	97	73	85	917	678	1595	47	38	85
10-14	56	59	58	530	550	1081	28	35	63
0-14	201	185	193	1899	1720	3619	135	151	286
15-19	111	44	78	1051	412	1463	46	34	80
20-24	47	65	56	443	604	1047	32	49	81
25-29	42	49	46	397	460	857	33	61	94
15-29	200	159	179	1891	1477	3368	111	144	255
30-34	48	62	55	452	582	1034	45	51	96
35-39	79	85	82	748	787	1535	47	44	91
40-44	78	83	81	739	777	1516	38	45	83
30-44	205	231	218	1939	2146	4085	130	140	270
45-49	84	98	91	798	914	1712	42	46	88
50-59	111	115	113	1049	1067	2115	78	91	169
60-64	48	45	46	453	418	871	35	37	72
65-69	35	54	44	327	500	828	32	26	58
45-69	277	311	294	2627	2899	5526	187	200	387
70 & above	117	115	116	1112	1067	2179	63	71	134
60 & above	200	213	207	1892	1985	3878	130	134	264
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	9468	9309	18777	626	706	1332
est. no. of person (00)	9468	9309	18777						
sam. no. of person	626	706	1332						

Table(3k):Per 1000 distribution of population by age-group for each gender(p)									
District: Alappuzha					Sector: ALL				
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	50	51	51	478	543	1021	71	73	144
5-9	54	88	72	512	944	1457	36	55	91
10-14	101	60	80	958	645	1603	47	33	80
0-14	206	200	203	1948	2133	4081	154	161	315
15-19	63	59	61	598	629	1227	31	32	63
20-24	91	94	93	862	1006	1867	44	68	112
25-29	70	45	57	661	478	1139	46	59	105
15-29	224	198	210	2121	2112	4233	121	159	280
30-34	37	65	52	347	697	1045	39	48	87
35-39	86	80	83	813	856	1670	51	51	102
40-44	77	82	80	732	877	1609	38	44	82
30-44	200	228	215	1893	2431	4324	128	143	271
45-49	83	89	86	784	946	1731	35	50	85
50-59	125	111	118	1183	1188	2370	86	102	188
60-64	64	76	70	602	810	1413	39	44	83
65-69	39	42	41	369	452	821	29	27	56
45-69	310	318	314	2939	3396	6335	189	223	412
70 & above	60	57	58	572	606	1178	40	43	83
60 & above	163	175	169	1544	1869	3412	108	114	222
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	9473	10678	20151	632	729	1361
est. no. of person (00)	9473	10678	20151						
sam. no. of person	632	729	1361						

Table(3I):Per 1000 distribution of population by age-group for each gender (p)

District : Pathanamthitta									
Sector: ALL									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	69	50	59	362	290	652	44	46	90
5-9	36	49	43	188	286	474	17	24	41
10-14	73	61	67	383	357	740	26	28	54
0-14	178	160	169	933	933	1866	87	98	185
15-19	100	81	90	522	474	997	34	34	68
20-24	74	68	71	389	399	787	30	27	57
25-29	94	73	83	493	425	918	31	49	80
15-29	268	222	244	1404	1298	2702	95	110	205
30-34	46	84	66	240	488	728	26	42	68
35-39	52	77	65	270	450	720	19	30	49
40-44	115	74	93	600	433	1033	32	38	70
30-44	212	235	224	1110	1371	2481	77	110	187
45-49	91	52	70	475	303	778	28	30	58
50-59	126	163	146	659	952	1611	51	74	125
60-64	47	59	53	246	345	592	16	32	48
65-69	25	31	28	130	181	311	19	20	39
45-69	289	305	297	1511	1781	3292	114	156	270
70 & above	53	77	66	275	451	726	29	27	56
60 & above	124	168	147	651	978	1628	64	79	143
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	5232	5834	11065	402	501	903
est. no. of person (00)	5232	5834	11065						
sam. no. of person	402	501	903						



Table(3m):Per 1000 distribution of population by age-group for each gender(p)

District: Kollam									
Sector: ALL									
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	68	74	71	773	957	1730	111	101	212
5-9	51	57	54	583	748	1331	49	52	101
10-14	76	67	71	862	866	1729	56	50	106
0-14	194	198	196	2219	2571	4790	216	203	419
15-19	74	54	63	843	708	1550	49	40	89
20-24	80	90	85	912	1166	2078	47	100	147
25-29	79	84	82	899	1097	1996	62	83	145
15-29	232	228	230	2653	2971	5624	158	223	381
30-34	65	72	68	738	933	1671	73	74	147
35-39	72	74	73	822	964	1786	65	59	124
40-44	62	68	65	713	881	1594	45	56	101
30-44	199	214	207	2273	2778	5051	183	189	372
45-49	63	100	83	723	1298	2020	43	63	106
50-59	164	106	133	1873	1384	3257	106	127	233
60-64	65	46	55	738	603	1341	52	39	91
65-69	25	59	43	283	762	1045	25	48	73
45-69	317	311	314	3616	4048	7664	226	277	503
70 & above	58	49	53	658	639	1298	55	60	115
60 & above	147	154	151	1679	2005	3684	132	147	279
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	11419	13007	24426	838	952	1790
est. no. of person (00)	11419	13007	24426						
sam. no. of person	838	952	1790						

Table(3n):Per 1000 distribution of population by age-group for each gender(p)									
District: Thiruvananthapuram						Sector: ALL			
age-group	gender			Estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	82	59	70	1416	1147	2562	134	134	268
5-9	42	84	65	730	1643	2373	59	73	132
10-14	73	37	54	1247	728	1976	55	46	101
0-14	198	181	189	3393	3518	6911	248	253	501
15-19	68	67	68	1167	1309	2476	58	56	114
20-24	107	95	100	1836	1845	3681	84	117	201
25-29	79	80	80	1361	1552	2913	88	117	205
15-29	254	242	248	4365	4706	9070	230	290	520
30-34	80	89	85	1379	1723	3102	86	101	187
35-39	69	37	52	1181	729	1910	82	49	131
40-44	62	79	71	1070	1532	2602	52	68	120
30-44	211	205	208	3630	3985	7614	220	218	438
45-49	58	89	75	995	1737	2732	44	82	126
50-59	140	156	148	2412	3025	5438	120	162	282
60-64	51	60	56	876	1164	2040	57	63	120
65-69	38	31	35	656	612	1268	40	31	71
45-69	288	336	313	4939	6539	11477	261	338	599
70 & above	50	36	43	852	708	1559	52	56	108
60 & above	139	128	133	2383	2484	4867	149	150	299
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	17178	19454	36632	1011	1155	2166
est. no. of person (00)	17178	19454	36632						
sam. no. of person	1011	1155	2166						

Table(3o):Per 1000 distribution of population by age-group for each gender(p)

District: ALL Sector: ALL									
age-group	gender			estimated no.(00)			sample		
	male	female	Person	male	female	Person	male	female	Person
0-4	80	64	72	12457	10757	23214	1373	1313	2686
5-9	69	70	69	10822	11691	22512	793	771	1564
10-14	92	66	78	14370	11036	25405	748	652	1400
0-14	240	200	220	37648	33484	71132	2914	2736	5650
15-19	81	69	74	12658	11476	24134	731	684	1415
20-24	78	81	80	12173	13617	25790	728	1181	1909
25-29	71	79	75	11098	13289	24387	819	1197	2016
15-29	229	229	229	35929	38382	74312	2278	3062	5340
30-34	69	77	73	10795	12921	23716	935	927	1862
35-39	70	73	72	11003	12274	23277	798	741	1539
40-44	71	74	73	11136	12385	23521	616	703	1319
30-44	210	225	218	32934	37580	70514	2349	2371	4720
45-49	66	75	71	10318	12595	22913	576	775	1351
50-59	108	114	111	16998	19063	36061	1159	1450	2609
60-64	50	61	56	7816	10223	18038	548	650	1198
65-69	41	39	40	6364	6528	12891	407	429	836
45-69	265	289	278	41496	48408	89904	2690	3304	5994
70 & above	55	56	56	8660	9440	18100	606	662	1268
60 & above	146	157	151	22839	26190	49030	1561	1741	3302
n.r.	0	0	0	0	0	0	0	0	0
Total	1000	1000	1000	156667	167294	323961	10837	12135	22972
est. no. of person (00)	156667	167294	323961						
sam. no. of person	10837	12135	22972						

Table (4): District wise per 1000 distribution of population by age-group for each gender

District Name	Age Group	Rural			Urban		
		Male	Female	Persons	Male	Female	Persons
Kasaragode	0-14	238	135	186	313	207	256
	15-29	165	231	198	162	261	215
	30-44	194	210	202	244	240	242
	45-69	382	408	395	267	266	267
	70 & above	20	16	18	14	26	21
Kannur	0-14	283	149	215	240	152	193
	15-29	199	266	233	246	264	256
	30-44	232	252	242	222	248	236
	45-69	257	267	262	212	278	247
	70 & above	30	65	48	81	57	68
Wayanad	0-14	256	183	221	230	224	226
	15-29	255	243	250	327	206	258
	30-44	241	283	261	271	224	244
	45-69	204	256	228	155	329	254
	70 & above	44	34	39	19	17	18
Kozhikode	0-14	253	299	279	220	181	201
	15-29	149	216	188	255	228	242
	30-44	216	173	191	208	248	228
	45-69	338	226	273	263	287	275
	70 & above	45	87	69	53	56	55
Malappuram	0-14	365	292	326	332	292	310
	15-29	255	227	240	248	291	271
	30-44	228	237	233	212	189	200
	45-69	120	192	159	165	208	188
	70 & above	33	49	41	44	21	31
Palakkad	0-14	289	226	256	164	147	155
	15-29	199	236	218	310	202	256
	30-44	187	226	207	191	239	215
	45-69	285	260	272	308	284	296
	70 & above	40	53	47	27	128	78
Thrissur	0-14	263	172	217	222	127	176
	15-29	217	284	251	223	239	231
	30-44	149	152	150	201	245	222
	45-69	274	320	298	264	339	300
	70 & above	97	71	84	90	51	71
Ernakulam	0-14	235	177	206	201	211	206
	15-29	151	174	162	245	202	223
	30-44	229	186	208	225	265	245
	45-69	320	383	351	297	271	284
	70 & above	65	81	73	32	51	42
Idukki	0-14	243	194	220	232	162	195
	15-29	242	228	235	237	229	233

	30-44	262	262	262	243	233	238
	45-69	223	278	249	227	301	266
	70 & above	30	39	34	60	75	68
Kottayam	0-14	221	206	213	150	128	139
	15-29	188	169	179	229	130	181
	30-44	210	238	224	192	209	200
	45-69	265	283	274	309	388	347
	70 & above	116	103	110	121	145	132
Alappuzha	0-14	249	207	225	169	191	180
	15-29	177	216	200	263	176	221
	30-44	229	224	226	175	232	202
	45-69	303	294	298	316	347	331
	70 & above	41	59	51	77	54	66
Pathanamthitta	0-14	180	132	155	165	343	265
	15-29	271	226	247	250	199	222
	30-44	210	243	227	225	184	202
	45-69	286	321	304	313	206	253
	70 & above	53	79	67	47	67	58
Kollam	0-14	206	170	187	179	230	207
	15-29	232	219	225	233	239	237
	30-44	204	239	222	193	184	188
	45-69	304	308	306	334	315	323
	70 & above	55	65	60	61	31	45
Thiruvananthapuram	0-14	215	196	205	181	166	173
	15-29	240	240	240	267	244	255
	30-44	225	205	214	198	204	201
	45-69	266	339	306	308	333	321
	70 & above	54	20	35	46	53	50
ALL	0-14	260	208	233	214	189	201
	15-29	216	229	223	247	230	238
	30-44	213	221	217	207	230	219
	45-69	257	284	271	275	297	286
	70 & above	54	58	56	58	54	56

Table (5): Distribution of population by age group for each gender: Rural, Urban

Age group	Rural						Urban					
	No. of estimated Persons			No. of sample persons			No. of estimated Persons			No. of sample persons		
	M	F	P	M	F	P	M	F	P	M	F	P
0-4	7707	6701	14408	678	670	1348	4750	4057	8807	695	643	1338
5-9	6509	7002	13511	410	389	799	4312	4689	9001	383	382	765
10-14	8948	6332	15280	391	325	716	5422	4703	10125	357	327	684
<b>0-14</b>	<b>23165</b>	<b>20035</b>	<b>43199</b>	<b>1479</b>	<b>1384</b>	<b>2863</b>	<b>14484</b>	<b>13449</b>	<b>27933</b>	<b>1435</b>	<b>1352</b>	<b>2787</b>
15-19	6489	5924	12413	352	342	694	6169	5552	11721	379	342	721
20-24	6369	7992	14361	341	594	935	5805	5625	11430	387	587	974
25-29	6347	8111	14457	400	591	991	4751	5179	9930	419	606	1025
<b>15-29</b>	<b>19205</b>	<b>22026</b>	<b>41231</b>	<b>1093</b>	<b>1527</b>	<b>2620</b>	<b>16725</b>	<b>16356</b>	<b>33081</b>	<b>1185</b>	<b>1535</b>	<b>2720</b>
30-34	6271	7726	13997	465	459	924	4524	5195	9719	470	468	938
35-39	6518	6979	13497	375	367	742	4485	5295	9780	423	374	797
40-44	6126	6541	12667	317	345	662	5010	5844	10584	299	358	657
<b>30-44</b>	<b>18915</b>	<b>21245</b>	<b>401600</b>	<b>1157</b>	<b>1171</b>	<b>2328</b>	<b>14019</b>	<b>16335</b>	<b>30354</b>	<b>1192</b>	<b>1200</b>	<b>2392</b>
45-49	5690	7096	12786	285	391	676	4628	5499	10127	291	384	675
50-59	9066	11164	20230	566	714	1280	7932	7899	15831	593	736	1329
60-64	4074	5587	9661	263	297	560	3742	4635	8377	285	353	638
65-69	4052	3462	7514	202	194	396	2312	3065	5377	205	235	440
<b>45-69</b>	<b>22882</b>	<b>27309</b>	<b>50191</b>	<b>1316</b>	<b>1596</b>	<b>2912</b>	<b>18613</b>	<b>21099</b>	<b>39713</b>	<b>1374</b>	<b>1708</b>	<b>3082</b>
70 & above	4764	5620	10383	279	333	612	3896	3821	7717	327	329	656
60 & above	12889	14669	27558	744	824	1568	9950	11521	21471	817	917	1734
<b>TOTAL</b>	<b>88930</b>	<b>96235</b>	<b>185164</b>	<b>5324</b>	<b>6011</b>	<b>11335</b>	<b>67737</b>	<b>71060</b>	<b>138797</b>	<b>5513</b>	<b>6124</b>	<b>11637</b>

Table (6): Distribution of population by gender for each district: Rural, Urban

Districts	Rural						Urban					
	No. of estimated Persons			No. of sample persons			No of estimated Persons			No. of sample persons		
	M	F	P	M	F	P	M	F	P	M	F	P
KSRD	3023	3051	6074	305	304	609	2052	2386	4438	227	258	485
KNNR	5099	5159	10258	318	339	657	5938	6779	12717	584	686	1270
WYD	4076	3709	7785	298	318	616	154	205	359	69	85	154
KKD	4417	6087	10504	318	376	694	10957	10785	21742	657	709	1366
MLPM	13071	14796	27866	715	813	1528	5361	6184	11545	741	819	1560
PKKD	9413	10093	19506	545	620	1165	2203	2270	4473	278	282	560
TSR	8835	9090	17925	341	388	729	7855	7433	15289	679	747	1426
EKM	4922	4831	9753	241	257	498	10751	10821	21572	625	684	1309
IDKI	5419	4940	10359	323	342	665	351	395	746	64	65	129
KTTM	6794	6805	13599	442	498	940	2674	2503	5177	184	208	392
ALPZHA	4345	5831	10176	308	379	687	5128	4847	9975	324	350	674
PTA	4625	5054	9680	289	362	651	607	779	1386	113	139	252
KLM	6449	6973	13422	452	505	957	4971	6034	11005	386	447	833
TVPM	8442	9816	18258	429	510	939	8736	9638	18374	582	645	1227
ALL	88930	96235	185164	5324	6011	11335	67737	71060	138797	5513	6124	11637

Table(7a): Per 1000 distribution of hospitalization cases (EC) during last 365 days over broad age-groups(p)							
Sector: Rural							
District	per 1000 distribution of hospitalization cases in age group					Cases of hospitalization	
	0-14	15-44	45-59	60+	all	Estd (00)	sample
KSRD	51	231	360	358	1000	323	102
KNNR	311	316	155	218	1000	790	103
WYD	244	298	145	313	1000	955	124
KKD	132	181	315	372	1000	929	115
MLPM	164	263	175	399	1000	2020	223
PKKD	209	193	221	378	1000	2132	237
TSR	166	183	196	455	1000	3336	193
EKM	66	200	346	388	1000	1766	123
IDKI	191	361	216	231	1000	1606	167
KTTM	173	279	208	339	1000	2581	262
ALPZHA	145	210	144	500	1000	979	132
PTA	79	301	261	360	1000	1222	156
KOLLAM	100	287	304	308	1000	2070	230
TVPM	127	318	253	302	1000	2526	201
All	154	256	231	358	1000	23234	2368



Table(7b):Per 1000 distribution of hospitalization cases (EC) during last 365 days over broad age-groups(p)							
Sector: Urban							
District	Per 1000 distribution of hospitalization cases in age group					Cases of hospitalization	
	0-14	15-44	45-59	60+	all	Estd (00)	sample
KSRD	122	400	227	250	1000	197	65
KNNR	129	204	191	476	1000	926	190
WYD	367	161	109	362	1000	47	33
KKD	118	250	279	354	1000	1900	229
MLPM	203	349	165	283	1000	695	198
PKKD	108	230	267	395	1000	443	99
TSR	119	223	258	400	1000	1913	337
EKM	143	329	213	315	1000	2957	300
IDKI	109	244	352	294	1000	142	40
KTTM	100	131	273	496	1000	717	96
ALPZHA	82	246	302	370	1000	1081	135
PTA	167	150	307	377	1000	123	65
KOLLAM	117	306	276	302	1000	1743	210
TVPM	157	323	256	264	1000	1995	260
ALL	130	275	250	346	1000	14878	2257

Table(7c): Per 1000 distribution of hospitalization cases (EC) during last 365 days over broad age-groups(p)							
Sector: All							
District	Per 1000 distribution of hospitalization cases in age group					Cases of hospitalization	
	0-14	15-44	45-59	60+	all	Estd (00)	sample
KSRD	78	295	310	317	1000	520	167
KNNR	213	256	175	357	1000	1716	293
WYD	250	292	143	315	1000	1002	157
KKD	122	227	291	360	1000	2828	344
MLPM	174	285	172	369	1000	2715	421
PKKD	191	199	229	381	1000	2575	336
TSR	149	198	218	435	1000	5250	530
EKM	114	281	263	343	1000	4723	423
IDKI	184	352	227	236	1000	1748	207
KTTM	158	247	222	373	1000	3298	358
ALPZHA	112	229	227	432	1000	2059	267
PTA	87	287	265	361	1000	1345	221
KOLLAM	108	296	291	305	1000	3812	440
TVPM	140	320	254	285	1000	4520	461
ALL	145	263	238	353	1000	38112	4625

Table (8): Per 1000 distribution of hospitalization cases (EC) during last 365 days  
Over broad age-groups (p)

District	Rural				Urban			
	0-14	15-44	45-59	60+	0-14	15-44	45-59	60+
KSRD	51	231	360	358	122	400	227	250
KNNR	311	316	155	218	129	204	191	476
WYD	244	298	145	313	367	161	109	362
KKD	132	181	315	372	118	250	279	354
MLPM	164	263	175	399	203	349	165	283
PKKD	209	193	221	378	108	230	267	395
TSR	166	183	196	455	119	223	258	400
EKM	66	200	346	388	143	329	213	315
IDKI	191	361	216	231	109	244	352	294
KTTM	173	279	208	339	100	131	273	496
ALPZHA	145	210	144	500	82	246	302	370
PTA	79	301	261	360	167	150	307	377
KLM	100	287	304	308	117	306	276	302
TVPM	127	318	253	302	157	323	256	264
ALL	154	256	231	358	130	275	250	346

Table(9a): Average total medical expenditure (Rs.) for treatment per hospitalization case (EC) during stay at hospital over last 365 days by district(p)

District	average total medical expenditure for treatment (Rs.) per case			cases of hospitalization	
	Rural	Urban	ALL	Estd.(00)	sample
KSRD	21702	15636	19406	520	167
KNNR	17996	24082	21281	1716	293
WYD	4356	9649	4604	1002	157
KKD	9980	14571	13063	2828	344
MLPM	19147	16876	18565	2715	421
PKKD	15927	13811	15563	2575	336
TSR	29827	18881	25838	5250	530
EKM	15897	17579	16950	4723	423
IDKI	6373	20256	7500	1748	207
KTTM	10287	14233	11144	3298	358
ALPZHA	16611	9538	12899	2059	267
PTA	9744	9272	9701	1345	221
KOLLAM	14255	15199	14687	3812	440
TVPM	5822	11606	8374	4520	461
All	14807	15703	15157	38112	4625

Table (10 a): Number per thousand persons reporting ailments (PAP) during the Last 15 days by age-group (p)						
DISTRICT: Kasaragode						
		No: of all persons				
1		Rural	Urban	All	Estd (00)	sample
1	0-14	166	167	167	378	40
1	15-44	114	64	91	407	49
1	45-59	327	225	294	575	48
1	60+	450	449	450	824	60
1	all	236	169	208	2184	197
DISTRICT: Kannur						
2	0-14	189	57	119	557	56
2	15-44	142	88	112	1246	82
2	45-59	331	215	271	1030	79
2	60+	408	565	502	1700	164
2	all	221	178	197	4532	381
DISTRICT: Wayanad						
3	0-14	151	218	154	279	31
3	15-44	151	120	150	623	32
3	45-59	331	426	335	437	36
3	60+	447	347	442	389	47
3	all	212	216	212	1728	146
DISTRICT: Kozhikode						
4	0-14	67	129	104	758	73
4	15-44	77	155	133	1889	97
4	45-59	307	204	235	1302	82
4	60+	438	418	425	2216	122
4	all	177	198	191	6164	374

Table(10a):Number per thousand persons reporting ailments (PAP) during the last 15 days by age-group (p)						
DISTRICT: Malappuram						
		no: of all persons				
5		Rural	Urban	All	Estd (00)	sample
5	0-14	160	113	146	1855	131
5	15-44	98	93	96	1791	145
5	45-59	416	254	358	1300	125
5	60+	737	737	737	3302	207
5	all	219	186	209	8249	608
DISTRICT: Palakkad						
6	0-14	114	63	108	614	40
6	15-44	76	46	70	730	50
6	45-59	235	141	213	932	64
6	60+	319	209	298	1051	82
6	all	149	94	139	3327	236
DISTRICT: Thrissur						
7	0-14	277	222	254	1673	126
7	15-44	231	249	240	3391	211
7	45-59	564	549	558	3474	233
7	60+	775	781	778	4894	300
7	all	406	402	404	13432	870
DISTRICT: Eranakulam						
8	0-14	25	190	139	896	63
8	15-44	63	199	163	2240	110
8	45-59	443	492	474	3021	169
8	60+	609	745	694	3313	194
8	all	247	327	302	9469	536

Table (10 a): Number per thousand persons reporting ailments (PAP) during the Last 15 days by age-group` (p)						
DISTRICT: Kottayam						
		no: of all persons				
		Rural	Urban	All	Estd. (00)	sample
9	0-14	151	339	162	392	35
9	15-44	97	155	101	556	47
9	45-59	303	475	315	629	50
9	60+	450	560	460	546	51
9	all	183	310	191	2124	183
DISTRICT: Idukki						
10	0-14	410	265	382	1381	80
10	15-44	295	314	300	2236	137
10	45-59	521	476	507	1941	146
10	60+	793	783	789	3061	221
10	all	458	461	459	8620	584
DISTRICT: Alappuzha						
11	0-14	30	135	76	310	33
11	15-44	104	73	89	759	39
11	45-59	196	244	219	900	68
11	60+	426	359	388	1323	78
11	all	152	175	163	3292	218
DISTRICT: Pathanamthitta						
12	0-14	49	10	42	78	9
12	15-44	33	67	37	190	28
12	45-59	126	389	159	380	49
12	60+	401	715	426	693	86
12	all	112	183	121	1341	172

Table(10a):Number per thousand persons reporting ailments (PAP ) during the last 15 days by age-group (p)						
DISTRICT: Kollam						
		Rural	Urban	no: of all persons		
				All	Estd (00)	sample
13	0-14	248	95	175	838	58
13	15-44	143	142	143	1522	99
13	45-59	516	391	457	2410	153
13	60+	599	683	634	2336	184
13	all	313	264	291	7106	494
DISTRICT: Thiruvananthapuram						
14	0-14	148	107	129	895	79
14	15-44	133	179	156	2603	149
14	45-59	411	482	448	3659	224
14	60+	713	804	761	3703	217
14	all	269	324	296	10859	669
DISTRICT: All						
	0-14	163	138	153	10902	854
	15-44	127	155	139	20183	1275
	45-59	376	369	373	21989	1526
	60+	578	626	599	29351	2013
	all	247	264	254	82425	5668



Table (11) Number Per 1000 persons reporting ailments (PAP) during the last 15 days by age-groups (p)

District	Rural					Urban				
	0-14	15-44	45-59	60+	all	0-14	15-44	45-59	60+	all
KSRD	166	114	327	450	236	167	64	225	449	169
KNNR	189	142	331	408	221	57	88	215	565	178
WYD	151	151	331	408	221	218	120	426	347	216
KKD	67	77	307	438	177	129	155	204	418	198
MLPM	160	98	416	737	219	113	93	254	737	186
PKKD	114	76	235	319	149	63	46	141	209	94
TSR	277	231	564	775	406	222	249	549	781	402
EKM	25	63	443	609	247	190	199	492	745	327
IDKI	410	295	521	793	458	265	314	476	783	461
KTTM	151	97	303	450	183	339	155	475	560	310
ALPY	30	104	196	426	152	135	73	244	359	175
PTA	49	33	126	401	112	10	67	389	715	183
KLM	248	143	516	599	313	95	142	391	683	264
TVPM	148	133	411	713	269	107	179	482	804	324
ALL	163	127	376	578	247	138	155	369	626	264

Table (12): Average total medical expenditure (Rs.) for treatment per ailing Person during a period of 15 days by district					
District	average total medical expenditure for treatment (Rs) per ailing person			No. of ail. persons	
	Rural	Urban	ALL	Estd (00)	sample
KSRD	385	296	354	2184	197
KNNR	460	529	495	4532	381
WYD	506	226	494	1728	146
KKD	356	382	374	6164	374
MLPM	554	319	493	8255	609
PKKD	504	507	504	3327	236
TSR	421	511	462	13443	871
EKM	589	449	484	9472	537
IDKI	437	285	420	2124	183
KTTM	354	320	345	8620	584
ALPZHA	276	493	388	3363	219
PTA	502	493	501	1341	172
KOLLAM	297	327	310	7111	496
TVPM	282	360	325	10859	669
All	416	415	416	82522	5674

Table (13) Per Thousand number of women aged 15- 49 who were pregnant any time during last 365 days and their place of childbirth, separately for each age group

Age group	No. per1000 of women who were pregnant at some time during last 365 days	Per1000 no. who did not give birth	Per 1000 no. of women who gave birth in						No of pregnant women aged 15-49	
			HSC & PHC	Public Hospital	Private Clinic	Private Hospital	At Home	Total	Estd (00)	sample
<b>RURAL</b>										
<20	28	97	8	80	0	912	0	1000	168	27
20-24	184	248	24	253	3	717	0	1000	1471	240
25-29	207	249	22	327	0	583	68	1000	1678	269
30-34	93	192	3	232	102	631	15	1000	715	136
35-39	20	411	8	206	0	787	0	1000	139	19
40-44	3	682	0	230	0	770	0	1000	19	4
>45	0	0	0	0	0	0	0	0	0	0
ALL	83	240	18	268	20	660	29	1000	4191	695
<b>URBAN</b>										
<20	15	237	0	375	0	625	0	1000	81	17
20-24	149	122	12	314	0	67	0	1000	840	230
25-29	203	221	8	337	0	655	0	1000	1050	276
30-34	89	205	0	360	0	640	0	1000	463	128
35-39	28	105	214	235	0	551	0	1000	149	45
40-44	6	615	0	0	0	1000	0	1000	33	5
>45	0	857	0	0	0	0	1000	1000	3	1
ALL	69	186	20	325	0	653	1	1000	2618	702
<b>ALL</b>										
<20	21	142	6	165	0	829	0	1000	249	44
20-24	170	202	19	277	2	700	0	1000	2311	470
25-29	205	238	16	331	0	612	41	1000	2729	545
30-34	91	197	2	282	62	634	9	1000	1178	264
35-39	23	253	135	224	0	641	0	1000	288	64
40-44	4	639	0	73	0	927	0	1000	51	9
>45	0	857	0	0	0	0	1000	1000	3	1
ALL	77	219	19	291	12	657	18	1000	6809	1397

Table (14): Per thousand of women aged 15-49 who were pregnant any time during last 365 days by quintile class of MPCE

District	Quintile class of MPCE	No. per 1000 of women who were pregnant at sometime during last 365 days		
		Rural	Urban	All
Kasaragode	1	53	149	90
	2	54	114	86
	3	268	48	81
	4	44	25	36
	5	5	35	7
	All (incl.n.r)	46	78	60
Kannur	1	45	64	56
	2	47	37	40
	3	54	50	52
	4	69	102	87
	5	77	21	59
	All (incl.n.r)	54	59	57
Wayanad	1	150	79	147
	2	58	105	61
	3	24	76	26
	4	47	179	51
	5	39	23	38
	All (incl.n.r)	91	78	90
Kozhikode	1	169	105	119
	2	37	55	48
	3	100	89	92
	4	26	72	55
	5	64	40	49
	All (incl.n.r)	68	75	73
Malappuram	1	82	87	84
	2	132	139	134
	3	89	88	89
	4	146	82	125
	5	94	142	110
	All (incl.n.r)	107	104	106
Palakkad	1	55	87	64
	2	127	37	116
	3	92	77	90
	4	47	51	48
	5	247	17	191
	All (incl.n.r)	113	57	102
Thrissur	1	89	118	101
	2	69	38	58
	3	105	68	86
	4	107	94	103
	5	117	38	77
	All (incl.n.r)	100	60	82

Ernakulam	1	43	141	110
	2	109	42	61
	3	108	107	107
	4	66	91	84
	5	129	55	71
	All (incl.n.r)	91	79	82
Kottayam	1	199	211	200
	2	48	0	44
	3	29	32	29
	4	21	25	22
	5	112	15	96
	All (incl.n.r)	83	42	80
Idukki	1	70	92	74
	2	69	78	71
	3	82	73	80
	4	36	48	40
	5	55	38	51
	All (incl.n.r)	61	59	61
Alappuzha	1	287	144	224
	2	37	39	38
	3	88	80	83
	4	16	36	24
	5	35	14	26
	All (incl.n.r)	66	53	60
Pathanamthitta	1	13	3	12
	2	69	0	68
	3	42	29	39
	4	39	203	55
	5	42	66	45
	All (incl.n.r)	40	87	45
Kollam	1	103	78	91
	2	38	149	82
	3	116	51	89
	4	89	87	88
	5	54	54	54
	All (incl.n.r)	86	75	81
Thiruvananthapuram	1	138	87	184
	2	49	44	53
	3	41	46	36
	4	41	36	46
	5	52	31	93
	All (incl.n.r)	60	47	74
All	1	104	95	100
	2	76	61	70
	3	81	71	77
	4	67	72	69
	5	88	45	69
	All (incl.n.r)	83	69	77

Table (15a): District wise Per Thousand number of women aged 15-49 who were pregnant anytime during last 365 days and their place of childbirth, separately for each age group

Rural

District	No. per 1000 Of women who were pregnant at some time during last 365 days	Per 1000 no. who did not give birth	Per 1000 no. of women who gave birth in						No of pregnant women aged 15-49	
			HSC & PHC	Public Hospital	Private Clinic	Private Hospital	At Home	Total	Estd (00)	sample
KSRD	46	54	44	238	0	718	0	1000	75	32
KNNR	54	52	0	256	4	730	0	1000	158	33
WYD	91	321	20	398	0	582	0	1000	206	38
KKD	68	176	0	512	0	418	0	1000	185	44
MLPM	107	115	0	285	0	710	0	1000	805	90
PKKD	113	176	8	100	3	725	164	1000	599	71
TSR	100	381	26	64	0	910	0	1000	509	44
EKM	91	357	0	61	0	866	72	1000	190	35
KTM	83	496	125	445	0	402	29	1000	230	42
IDKI	61	174	109	164	0	727	0	1000	210	54
ALPY	66	469	0	377	0	623	0	1000	205	45
PTA	40	0	0	533	0	467	0	1000	106	42
KLM	86	214	0	425	226	349	0	1000	331	65
TVPM	74	309	22	387	0	592	0	1000	383	60
ALL	83	240	18	268	20	660	29	1000	4191	695

Table (15 b): District wise Per Thousand number of women aged 15-49 who were pregnant anytime during last 365 days and their place of child birth, separately for each age group

Urban

District	No. per 1000 of women who were pregnant at some time during last 365 days	Per 1000 no. who did not give birth	Per 1000 no. of women who gave birth in						No of pregnant women aged 15-49	
			HSC & PHC	Public hospital	Private Clinic	Private Hospital	At Home	Total	Estd (00)	sample
KSRD	78	97	2	190	0	738	0	1000	99	29
KNNR	59	116	0	263	0	737	0	1000	221	68
WYD	78	239	0	297	0	703	0	1000	8	10
KKD	75	131	0	643	0	357	0	1000	436	79
MLPM	104	214	0	187	0	813	0	1000	338	88
PKKD	57	0	0	301	0	699	0	1000	69	30
TSR	60	162	136	77	0	87	0	1000	246	91
EKM	79	252	0	192	0	808	0	1000	74	91
KTM	42	243	593	0	0	407	0	1000	10	8
IDKI	59	125	0	188	0	770	42	1000	66	25
ALPY	53	20	0	625	0	375	0	1000	126	37
PTA	87	633	0	137	0	863	0	1000	29	16
KLM	75	238	0	200	0	800	0	1000	238	52
TVPM	47	279	18	555	0	427	0	1000	257	78
ALL	69	186	20	325	0	653	1	1000	2618	702

Table (15 c): District wise Per Thousand number of women aged 15-49 who were pregnant anytime during last 365 days and their place of child birth, separately for each age group

All

District	No. per 1000 of women who were pregnant at some time during last 365 days	Per 1000 no. who did not give birth	Per 1000 no. of women who gave birth in						No of pregnant women aged 15-49	
			HSC & PHC	Public Hspital	Private Clinic	Private Hospital	At Home	Total	Estd (00)	sample
KSRD	60	79	60	211	0	730	0	1000	174	61
KNNR	57	89	0	260	6	734	0	1000	379	101
WYD	90	318	19	394	0	587	0	1000	214	48
KKD	73	144	0	607	0	374	0	1000	621	123
MLPM	106	144	0	258	0	739	0	1000	1142	178
PKKD	102	157	7	125	3	722	144	1000	668	101
TSR	82	310	70	69	0	861	0	1000	755	135
EKM	82	282	0	158	0	823	19	1000	665	126
KTM	80	486	160	411	0	402	27	1000	240	50
IDKI	61	162	80	170	0	738	11	1000	276	79
ALPY	60	298	0	509	0	491	0	1000	331	82
PTA	45	137	0	497	0	503	0	1000	135	58
KLM	81	224	0	332	133	535	0	1000	569	117
TVPM	60	297	20	459	0	521	0	1000	639	138
ALL	77	219	19	291	12	657	18	1000	6809	1397



Table (16 a): Per thousand of women aged 15-49 who were pregnant any time during last 365 days by quintile class of MPCE

Rural

Districts	No. per 1000 of women who were pregnant at some time during last 365 days	Per 1000 no. who did not give birth	Per1000 no. of women who gave birth in						No of pregnant women aged 15-49	
			HSC & PHC	Public Hspital	Private Clinic	Private Hospital	At Home	Total	Estd (00)	sample
KSRD	46	54	44	238	0	718	0	1000	75	32
KNNR	54	52	0	256	14	730	0	1000	158	33
WYD	91	321	20	398	0	582	0	1000	206	38
KKD	68	176	0	512	0	418	0	1000	185	44
MLPM	107	115	0	285	0	710	0	1000	805	90
PKKD	113	176	8	100	3	725	164	1000	599	71
TSR	100	381	26	64	0	910	0	1000	509	44
EKM	91	357	0	61	0	866	72	1000	190	35
KTTM	83	496	125	445	0	402	29	1000	230	42
IDKI	61	174	109	164	0	727	0	1000	210	54
ALPY	66	469	0	377	0	623	0	1000	205	45
PTA	40	0	0	533	0	467	0	1000	106	42
KLM	86	214	0	425	226	349	0	1000	331	65
TVPM	74	309	22	387	0	592	0	1000	383	60
All (Incl.nr)	83	240	18	268	20	660	29	1000	4191	695





Table (16 b): Per thousand of women aged 15-49 who were pregnant any time during last 365 days by quintile class of MPCE

Urban

Districts	No. per 1000 of women who were pregnant at some time during last 365 days	Per 1000 no. who did not give birth	Per 1000 no. of women who gave birth in						No of pregnant women aged 15-49	
			HSC & PHC	Public Hospital	Pvt Clinic	Pvt Hospital	At Home	Total	Estd (00)	sample
KSRD	78	97	72	190	0	738	0	1000	99	29
KNNR	59	116	0	263	0	737	0	1000	221	68
WYD	78	239	0	297	0	703	0	1000	8	10
KKD	75	131	0	643	0	357	0	1000	436	79
MLPM	104	214	0	187	0	813	0	1000	338	88
PKKD	57	0	0	301	0	699	0	1000	69	30
TSR	60	162	136	77	0	787	0	1000	246	91
EKM	79	252	0	192	0	808	0	1000	474	91
KTM	42	243	593	0	0	407	0	1000	10	8
IDKI	59	125	0	188	0	770	42	1000	66	25
ALPY	53	20	0	625	0	375	0	1000	126	37
PTA	87	633	0	137	0	863	0	1000	29	16
KLM	75	238	0	200	0	800	0	1000	238	52
TVPM	47	279	18	555	0	427	0	1000	257	78
All (Incl.nr)	69	186	20	325	0	653	1	1000	2618	702

Table (16 c): Per thousand of women aged 15-49 who were pregnant any time during last 365 days by quintile class of MPCE

ALL

Districts	No. per 1000 of women who were pregnant at some time during last 365 days	Per 1000 no. who did not give birth	Per 1000 no. of women who gave birth in						No of pregnant women aged 15-49	
			HSC & PHC	Public Hospital	Private Clinic	Private Hospital	At Home	Total	Estd (00)	sample
KSRD	60	79	60	211	0	730	0	1000	174	61
KNNR	57	89	0	260	6	734	0	1000	379	101
WYD	90	318	19	394	0	587	0	1000	214	48
KKD	73	144	0	607	0	374	0	1000	621	123
MLPM	106	144	0	258	0	739	0	1000	1142	178
PKKD	102	157	7	125	3	722	144	1000	668	101
TSR	82	310	70	69	0	861	0	1000	755	135
EKM	82	282	0	158	0	823	19	1000	665	126
KTM	80	486	160	411	0	402	27	1000	240	50
IDKI	61	162	80	170	0	738	11	1000	276	79
ALPY	60	298	0	509	0	491	0	1000	331	82
PTA	45	137	0	497	0	503	0	1000	135	58
KLM	81	224	0	332	133	535	0	1000	569	117
TVPM	60	297	20	459	0	521	0	1000	639	138
All (Incl.nr)	77	219	19	291	12	657	18	1000	6809	1397

**Appendix B**

**Note on**

**Sample Design**

**And**

**Estimation Procedure**

