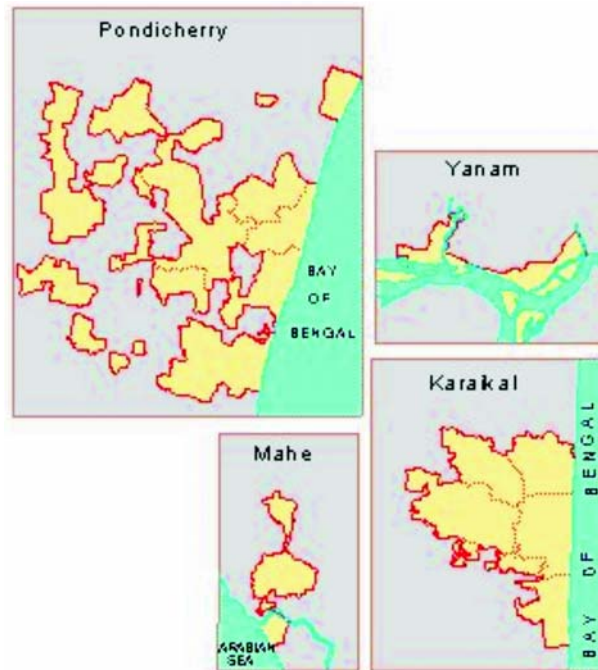


Site specific reports

7.5 Puducherry – Union Territory



Indicators (Puducherry)	Rate
Total Population	974,345
Population – Male	486,961
Population – Female	487,384
Sex-ratio	1001
Total Literacy Rate	81.2%
Literacy Rate – Male	88.6%
Literacy Rate – Female	73.9%

As per 2001 Census

	Sample Area	Sample Area	
		Rural	Urban
1	Thavala-kuppam	Ozhukarai	Ward No. 27
2	Bahour	Puducherry	Ward No. 40
3	Sorapet	Kurumbapet	Ward No. 08
4	Mangalam	Ariankuppam	Ward No. 04

Introduction

The Union Territory of Puducherry is situated in south east coast of the country with sharing on all sides with Tamilnadu and sea on other side.

Puducherry is a Union Territory with legislature Total area is 480 Sq.kms. comprising of four regions viz., Puducherry, Karaikal, Mahe and Yanam. There are 5 Municipalities and 10 commune panchayats. Total Population as per 2001 census is 9,74,345. According to Sample Registration System the Birth rate as on 2002 in the Union Territory of Puducherry works out to 17.9 while the Death rate is 6.7. The infant Mortality Rate is 25 per 1000 live births. Based on the decennial growth rate of 20.56 during 1991–2001, the projected population, as on March 2004, is 10,30,004.

SELECTED SOCIO-ECONOMIC INDICATORS

Item	Puducherry
Area in Sq. Kms.	480 sq km
Population	1 million
Density of Population (per Sq. Kms.)	2029
Sex Ratio (Females per '000 males)	1001
Rural Population (%)	33.43%
% Population below poverty line	21.67%
Birth Rate (SRS) (per '000 Population)	17.9
Death Rate (SRS) (per '000 Population)	6.7
Infant Mortality Rate (SRS)(per '000 Live Births)	25

HEALTH AND FAMILY WELFARE INDICATORS

Item / Division	Numbers
Hospitals	8
T.B. Chest Clinic	3
Primary Health Centres	39
Community Health Centres	4
Sub-Centres	75
E.S.I. Dispensaries	14
Hospital Beds (include chest clinic beds)	2041
Primary Health Centre Beds	197
Community Health Centre Beds	121

Profile of the Study Population



Occupation

35-44 years – 50% were house-wives. Of remaining 50%, only 18.1% were either professionals (9.3 urban and 6.8% rural) or businessmen (9 and 5.6%). Of these, women constituted a meager 0.6%.

65–74 years Almost 48% of the studied population was housewives. 17% of elderly were engaged in farm work or some form of local occupation against only 1.2% in urban area.

Educational Status

Parents of 12 and 15 years Parents of children in both the age groups had middle level of education – up to unfinished tertiary school. There was no difference recorded between urban: rural or male: female population.

35–44years Only 4.5% had below primary school level education, 21% had below secondary and 36.3% had secondary school level education. Education level below and up to secondary special level education was seen in 24.8% and 6.5% respectively, while 7% had graduate level education. Women’s literacy level was low compared to men at all levels. None of the women had tertiary level education.

65–74 years In this group, 54% had less than primary school education, 34% had less than secondary special level, while 12% had less than tertiary school level education. Higher educational level was found in significantly higher % of urban and higher % of men as compared to women.

Oral Health Perception (12 and 15 year age group)

Status of teeth and gums

12 years

14.8% urban and 45.2% rural respondents rated health of their gums and teeth as excellent or very good, 41.6% urban 40.9% rural as good or average and 45.6% urban and 13.9% rural respondents rated them as poor or very poor. 34.6% male and 25.6% females respondents rated health of their gums and teeth as excellent or very good, 35.9% males and 27.1% females as good or average and 29.5% males and 27.3% female respondents rated them as poor or very poor.

15 years

18.3% urban and 20.7% rural respondents rated health of their gums and teeth as excellent or very good, 60.7% urban and rural respondents as good or average and 20.9% urban and 17.9% rural respondents rated them as poor

or very poor. 23.2% male and 16.6% female respondents rated health of their gums and teeth as excellent or very good, 58.9% males and 62.5% females as good or average and 18% males and 20.8% females rated them as poor or very poor.

Most of the respondents in both the age groups rated the health of teeth and gums as Good or Average,

Pain in teeth during past one year

12 years

43.6% urban and 41.4% rural respondents reported of tooth ache occasionally, whereas 39.6% urban and 52.9% rural respondents reported that they never had a tooth ache. 45.8% males and 39% female reported tooth ache occasionally. 40.3% males and 52.6% of female respondents never complained of tooth ache.

15 years

34.2% urban and 38.6% rural respondents reported of tooth ache occasionally, whereas 58.5% urban and 55.6% rural respondents reported that they never had a tooth ache. 38.3% males reported tooth ache occasionally. 60.9% males respondents never complained of tooth ache.

40% of the respondents of both the sexes and in both the populations reported of tooth ache and/or discomfort during past 12 months

Oral Health seeking Behaviour

Visit to dentist in last one year

12 years

22.1% urban and 15.9% rural respondents visited dentist 1–3 times in last 12 months, whereas 72.7% urban and 81.7% rural respondents did not visit dentist in last 12 months. 21.1% of males and 16.9% females visited dentist 1–3 times in last 12 months, whereas 72.9% of males and 81.4% of females didn't visit dentist in last 12 months.

15 years

21% of the urban and rural respondents visited dentist 1–3 times in last 12 months, whereas 77.1% urban and 77% rural respondents did not visit dentist

in last 12 months. 21.8% of males and 20.3% females visited dentist 1–3 times in last 12 months, whereas 75.9% of males and 78.2% females did not visited dentist in last 12 months.

It was observed that in both the sexes and in both rural as well as urban population, most of the respondents (Approx. 80%), did not visited the trained dentist in past one year.

In spite of 40 % of the respondents of both the sexes and in both the populations reporting of tooth ache and/or discomfort during past 12 months, it was seen that, there were no regular visits to the trained dentist.

Reason of your last visit to the dentist

12 years

10% urban and 21% rural respondents visited dentist with the complain of pain in teeth or gums in last 12 months, whereas 87.3% urban and 84.3% rural respondents visited dentist for check up in last 12 months. 13.3% of males and 15.2% females visited dentist with the complain of pain in teeth or gums.

15 years

29.4% urban and 27% rural respondents visited dentist with the complain of pain in teeth or gums in last 12 months, whereas 67% of urban and rural respondents visited dentist for check up in last 12 months. 38.46% of females visited dentist with the complain of pain in teeth or gums

Approximately 40% of the respondents in both the populations and sexes, visited the dentist when in pain, it is observed that irrespective of 40 % of the population having dental related problems, the visits to the dentist for regular check ups was minimal (Approx 11%).

Oral Health Behavior

Frequency of teeth cleaning

12 years

72.32% urban and 63.4% of rural respondents clean their teeth once a day, 21.70% urban and 7.77% rural respondents clean their teeth two or more times a day, whereas 5.99% urban and 28.82% rural of the respondents did not

brush their teeth daily. 66.50% of males and 69.25% females clean their teeth once a day, 12% of males and 17.50% of females clean their teeth two or more times a day, 21.50% of males and 13.25% of females did not brush daily.

15 years

76.44% urban and 74% of the rural respondents clean their teeth once a day, 20.80% urban and 7.23% rural respondents clean their teeth two or more times a day, whereas 3.25% urban and 18.71% rural respondents were not brushing even one time a day. 71.25% of males and 79.25% females clean their teeth once a day, 11.75% of males and 16.25% of females clean their teeth two or more times a day, 17% of males and 4.50% of females were not brushing daily.

Approx. 97% of the total respondents cleaned their teeth at least once a day, though the number of respondents cleaning their teeth twice a day was also significant in both the populations (Approx. 25%) and more so in females by 8%.

Use of tooth paste containing fluoride

12 years

84% of urban and rural Respondent's uses Fluoridated tooth paste, whereas 3.17% rural respondents don't use tooth paste at all. 81.90% of males and 87.88% females used fluoride tooth paste, whereas 2.02% of females did not use tooth paste for cleaning their teeth.

15 years

70.83% urban and 75% rural respondents use Fluoridated tooth paste, whereas 2.08% urban and 8.45% rural respondents don't use tooth paste at all. In male and female population of 400, 75% of males and 73.13% females used fluoride tooth paste, whereas 8% of males and females did not use tooth paste for cleaning their teeth.

The use of fluoridated tooth paste was more in the rural population than in the urban. It was surprising to see that a large number of populations (Approx. 8%) did not use tooth paste at all.

Methods of teeth cleaning

12 years

98.75% urban their respondents clean their teeth with tooth brush, whereas 38.16% urban and 36% rural respondents use charcoal/chew sticks or Miswak to clean their teeth. 92.50% of males and 97.25% females clean their teeth with tooth brush, 16.25% of males and 10.25% of females used wooden or plastic tooth picks to clean their teeth.

15 years

92.50% of males and 96.25% females clean their teeth with tooth brush, 1.25% of females used wooden or plastic tooth picks to clean their teeth.

98.75% urban respondents clean there teeth with tooth brush, whereas 38.16% urban and 36.84% rural respondents use charcoal/chew sticks or Miswak to clean there teeth.

It was observed that irrespective of the sex, age and population approximately all of the respondents used tooth brush for cleaning there teeth. The use of Miswak, charcoal and chew sticks was significant (Approx 15%)

Dietary Habits

12 and 15 year old children

Bakery products were consumed once or more than once a day by 42% and 40 % and candies by 17% and 15% by 12 and 15 year old children respectively. Fresh fruit consumption was relatively low: about 35% of both age groups children consumed fresh fruits daily. An average of only 13% of children in both the age groups reported regular use of chewing gums. There were no significant differences in the eating habits between male: female and urban: rural population in both the age groups

Tobacco Habits

Smoke cigarettes, cigars or pipe

12 years

In this age group no respondent had smoking habits.

15 years

In this age group, 23 respondents responded, out of which 15 smoke occasionally, whereas 8 regularly. It was observed that only males in the rural area (22) were smoking.

Chew tobacco or snuff

In the age groups 12 ±1years and 15 ±1years no respondent had a tobacco chewing habit.

Oral Health Perception – Adults (35–44 and 65–74 years)

Number of natural teeth present

35 – 44 years

97% urban and 95% rural respondents had more than 20 natural teeth present, 2.3% urban and 4.3% rural respondents had 10–19 natural teeth. 98% males and 94% females had more than 20 natural teeth present, 1.5% of males and 5% females had 10–19 natural teeth present,

65 – 74 years

53% urban and 60% rural respondents had more than 20 natural teeth present, 16% urban and 13% rural respondents had 10–19 natural teeth whereas 14% urban and 12% rural respondents had no natural teeth.

56% males and females had more than 20 natural teeth present, 14% of males and 15% females had 10–19 natural teeth present, whereas 13% males and females had no natural teeth present.

Pain in teeth during past one year

35 – 44 years

23% urban and 11% rural respondents complain of pain, Whereas 75% urban and 89% rural respondents did not complained of any pain in past 12 months.

18% of males and 16% females complain of pain in teeth and gums in the past 12 months, whereas 81% of males and 82% of females did not complained of any pain in teeth and gums in the past 12 months.

65 – 74 years

23% urban and 12% rural respondents complain of pain, Whereas 74% urban and 82% rural respondents did not complain of any pain in past 12 month

21% of males and 13% females complain of pain in teeth and gums in the past 12 months, whereas 73% of males and 82.4% of females did not complain of any pain in teeth and gums in the past 12 months.

Use of removable prosthesis

35–44 years

1.5% urban respondents had a partial denture. 1.3 % of males and 0.8% of females have a partial denture.

65–74 years

1% urban and 1.5% rural respondents had a partial denture

1.3% of males and females have a partial denture, 0.5% of males have a full upper denture, whereas 0.8% of males have a full lower denture.

Status of teeth and gums

35–44 years

5.27 urban and 9.5% rural respondents rated health of there gums and teeth as excellent or very good, 85% urban and 86% rural as good or average and 10% urban and 4.5% rural respondents rated them as poor or very poor.

9% male and 6% female respondents rated health of there gums and teeth as excellent or very good, 82 males and 88.22% females as good or average and 8.52% males and 5.76% female respondents rated them as poor or very poor.

65 – 74 years

1.6% urban and 8.99% rural respondents rated health of there gums and teeth as excellent or very good, 83% urban and 77% rural as good or average and 15% urban and 14% rural respondents rated them as poor or very poor.

3.7% males and 7% female respondents rated health of there gums and teeth as excellent or very good, 85% males and 75% females as good or average and 11% males and 18.25% female respondents rated them as poor or very poor.

Oral Health Behavior

Frequency of teeth cleaning

35 – 44 years

99% of urban and 100% of the rural respondents clean their teeth once a day

In male and female population of 400, 100% of males and 99% females clean their teeth once a day and 1% of females clean their teeth less than once a day.

65–74 years

85% urban and 87% rural respondents clean their teeth once a day, whereas 2% urban and 12.7% of the rural respondents clean their teeth less than one time a day. 86% of males and females clean their teeth once a day 14% of males and females clean their teeth less than once a day.

Methods of teeth cleaning

35 – 44 years

97% urban and 98% rural respondents clean their teeth with a tooth brush, 2.75% urban and 1.5% rural respondents use charcoal, chew sticks or Miswak to clean their teeth. 97% of males and 98% females clean their teeth with tooth brush, 3% of males and 1.25% of females used charcoal, chew sticks or Miswak to clean their teeth.

65 – 74 years

55 % urban and rural respondents clean their teeth with a tooth brush, 28% urban and 31% rural respondents use charcoal, chew sticks or Miswak to clean their teeth. 55% of males and 56% females clean their teeth with tooth brush, 33% of males and 29% of females uses charcoal, chew sticks or Miswak to clean their teeth.

Use of tooth paste containing fluoride

35 – 44 years

77% urban and 89% rural respondents used fluoride tooth paste, whereas 3% urban respondents did not use tooth paste at all. 84% of males and females

used fluoride tooth paste, whereas 3% of males did not use tooth paste for cleaning their teeth.

65–74 years

47% urban and rural respondents used fluoride tooth paste, whereas 41% urban and rural respondents did not use tooth paste at all.

49% of males and 46% females used fluoride tooth paste , whereas 38% of males and 44% of females did not use tooth paste for cleaning their teeth.

Oral Health Seeking Behaviour

Last visit to a dentist

35–44 years - 82% of the respondents had never received any dental care, 2% of the respondents had seen a dentist more than five years ago and another 1% had visited a dentist more than 2 years ago. 5% had visited a dentist more than one year ago and 11% of the respondents had visited a dentist in the past one year.

The difference between the urban and rural populations not receiving the dental care was significant (89 vs. 70). There was no significant difference between male and female population.

65–74 years - 78% of the respondents had never received any dental care. 4% had visited a dentist more than 5 years ago, 2% had visited more than 2 years ago, 7% had visited more than one year ago and 9% had visited a dentist in the past one year. There was no significant difference between Urban: Rural and Male: Female populations

Dietary Habits

35–44 years and 65– 74 years

Among the adult and geriatric age groups, the use of bakery product was not popular and only 45% of 35–44 year olds and 25% of the 65–74 year olds were found to be having habit of using bakery foods daily. Once or more than once use of candies and sweets was reported by only 8–10% of the respondents in adult and geriatric age group. About 21% of the adults and 25% of the geriatric population used colas and beverages once of more times a day. There were

no significant differences in dietary habits among males, females and urban: rural population in both age groups.

Tobacco Habits

Smoke cigarettes, cigars or pipe

35 –44 years

Of the studied population, 0.1% respondents were occasional smokers whereas 32% were regular smokers.

65 – 74 years

In this age group, 0.5% respondents were occasional smokers whereas 28% were regular smokers

Chew tobacco or snuff

35 –44 years

Of the studied population, 0% were occasional tobacco chewers whereas 0.3% were regular chewers. There were no significant differences between urban: rural population.

65 – 74 years

In this age group, 0.3% were occasional tobacco chewers whereas 0.1% were regulars.

There were no significant differences between urban: rural population.

Oral Health Status

Dentition Status

12 years

More than 70% in this age group were affected with caries, girls having more than boys (74 % vs. 66.7%). There was no difference in caries prevalence between urban and rural children. Though caries prevalence was high, filled teeth were only 2.6%, signifying lack of oral care either due to lack of facility or affordability or simply lack of awareness regarding oral health.

15 years

With increase in age, caries prevalence and missing teeth increased. Caries prevalence increased from 70.5 to 82.9% and missing teeth from 2.4 to 5.7%. Overall, caries experience increased from 71.5 to 83.4%.

According to WHO, if DMFT is more than 4, the caries prevalence is taken as severe. Thus severe caries prevalence of more than 4 carious teeth was found in 36.3% and as high as almost 55% in the 12 and 15 years age groups. Higher prevalence was found in rural than urban (38.3 vs. 34.3%) in 12 years. This difference was more marked in 15 years age group—i.e. 60.8 % urban vs. 49 % rural, though the difference between boys and girls was small, higher in boys than girls – (57 Vs. 53 %).

35 – 44 years

In this age group, the findings were interesting. The caries prevalence decreased as compared to 12 and 15 years age group, probably due to proportionate increase in missing teeth component. Prevalence of dental caries was found in 48.6% where as missing teeth were present in 58.7%. Total caries experience was found in 73.2% and more than 4 DMFT was also present in 41.4%.

Overall, Dental caries experience across all age groups was very high and filled teeth were significantly low.

65–74 years

83% had bleeding, 47% had shallow pockets and 15.6% had deep pockets

LA – 35–44 years LA of 4–5 mm was recorded in 3.8, more than 2% and excluded in 31%. Excluded recording was significantly higher in rural and in females compared to urban and males (32 vs. 29 and 35 vs. 26.5% respectively)

65–74 years LA of 4–5 mm was recorded in 8.6%, 6 mm in 2% and excluded in 64% of this age group. However, there was no significant difference between urban:rural or male :Female population.

Average DMFT score in affected subjects

12 years:

The average DMFT score was 3.8, Rural children had a much higher score

than urban, with only a marginal difference between sexes; girls having higher score (Rural 4.9 vs. urban 3.7 and 3.9 in girls vs. 3.7 in boys).

15 years:

In this group, the DMFT score was 3.9. However, in this group, there was no significant difference in DMFT score in urban and rural area or between the sexes.

35–44 years:

DMFT score was 5.2. It was found that the score was higher in rural than urban population and in women more than in men (5.4 vs. 5.1% and 6 vs. 4.4% respectively.)

65–74 years

As the missing component in DMFT increased, the DMFT score increased very significantly in this age group, which could be due to increased missing (M) component of DMFT. The average score was 9.5, which was higher in urban than rural and in females than the males (10.7 vs. 8.1% and 10.5 vs. 8.5 %respectively)

Denture wear

35–44 years

Majority of the studied population, i.e. 97.5% was without any dentures. Only 2.4% and 0.2% were wearing partial denture and complete denture respectively. Surprisingly, women denture wearers (partial denture) were almost double than men (4% Vs.1.8%).

65–74 years

Only 1.8% were wearing dentures of which 1.4% wear having CDs and only 0.4% Partial denture. Most of the denture wearers were in urban area, except one in rural area.

Periodontal status

12 years 42.5% of children had bleeding gums.

15 years Almost 48% of children had bleeding

35–44years All healthy sextants were recorded only in 13.6% of population bleeding was found in 86% shallow pockets in 26.3% and deep pockets in 4.7%.

Loss of attachment

About 20 % of adults in 35–44 years age and 40 % of geriatric population had clinically significant loss of attachment

Fluorosis

Very mild evidence of fluorosis was observed in an insignificant percentage of studied population indicating that the studied population was not in endemic fluoride zone.

Summary

Puducherry is one of the smallest of all Union Territories with an area of only 480 sq. kms and a population of approx. 1 million persons (2001 census). It is a well-literate UT with high literacy rate of 81.2%. It has an excellent sex ratio; there are 1001 females/1000 males.

Oral health perception of population was average to good. Only 20% of the population had poor oral health perception. A high 80% of people having good oral health perception was probably the reason for not visiting a dentist regularly. Though 40% of the examined children population had toothache, only 20% had visited a dentist in the past 12 months. It was also very significant to note that they visited a dentist only when in pain.

Though use of fluoridated tooth paste and brush was used by majority of population (only 8% did not use brush/ paste at all), brushing was practiced only once a day. Also, a significant % used other tooth cleaning methods, such as chew stick/charcoal etc. Night brushing is not practiced and brushing after major meals and snacks is unheard of. Smoking tobacco regularly was found in 28–30% of the adult population but chewing tobacco was almost non-existent (0.1–0.3%)

Eating very frequent solid or sticky foods, not visiting a dentist unless in pain, having high oral health perception are some of the risk factors for oral diseases.

In 12 and 15 yr. groups, caries prevalence was approx. 75% and almost 45% of affected children had >4 carious teeth. In adult group, caries prevalence increased to 48.6% with >4 DMFT found in 41%.

Overall, caries experience (DMFT) kept increasing with increasing in age. With advancing age, M (missing) component increased significantly. The DMFT score was 3.8, 3.9, 5.2 and 9.5 in 12,15, 35–44 and 65–74 yr. age group. However, the filled tooth (component of DMFT) was very low in all age groups, highlighting/stressing the fact that oral health care delivery was far less than satisfactory.

Bleeding gums in 12 and 15 yrs. Age group was prevalent in 42 and 48% of 12 and 15 yrs. Old children an indicator of poor oral hygiene maintenance. In 35–44 yrs. Age group 86% had gingival periodontal disease. However, deep pocket an indicator of advanced periodontal disease was found in >5% of studied population. Loss of attachment was recorded in 20% of 35–44 yrs. Group and 40% of 65–74 yr. age group. Dental fluorosis was not-existent in the studied region being a non-endemic zone.