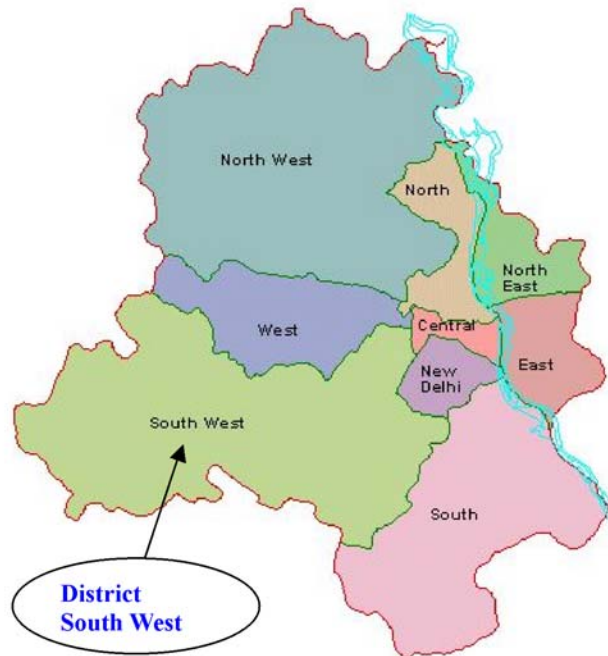


## Site specific reports

### 7.2 Delhi – District South West



Indicators (South West)	
Total Population	13,850,507
Population – Male	7,607,234
Population – Female	6,243,273
Sex-ratio	821
Total Literacy Rate	81.7%
Literacy Rate – Male	87.3%
Literacy Rate – Female	74.7%

As per 2001 Census

Sample Area (South West)			
	Rural	Urban	
1	Surera	Chhawala	Ward No. 55
2	Gomen Hera	DMC (U)	Ward No. 17 Ward No. 54
3	Ujwa	Roshan Pura	Ward No. 49
4	Jaffarpur Kalan		

## Introduction

Delhi, a state in itself, has New Delhi as the capital of India. It has a unique position among the various geographical units in which India is divided. Its small area (1483 sq. K.M.) borders the states of Haryana and Uttar Pradesh. Delhi's population was 4.1 million in 1971 and increased to 13.4 million in 2001. The annual number of migrants is more than its natural increase. It is often referred to as "Mini India", as people from all the States and Union Territories are represented here. Delhi comprises of people from almost all religions and castes, however the tribal population is nil. The average size of a household is 5.3.

The gender ratio of Delhi stands at 821 which is significantly lower than National average of 927. The birth rate of Delhi is 23.58 and death rate is 5.93 only. The infant mortality rate is 23.19 per 1000 live births.

## Medical Facilities

The medical facilities in the state are being provided by various agencies like, Municipal Council of Delhi, New Delhi Municipal Council, Central Govt. Health Services, Govt. of NCT of Delhi, Indian Army (Army Dental Corps), Central Health Services., Railways and other statutory bodies etc.

There are a total of 563 hospitals in Delhi with 30,267 beds. There are 937 dispensaries and only 8 PHCs in Delhi, since it has very small rural population. The Bed: Population Ratio (Per Thousand) is 2.22 only.

The Dental facilities in Delhi are basically part of each of the agencies mentioned for medical services. The dental care services are not well organized and there is lack of infrastructure and materials in these facilities. There are two dental teaching institutions within the state. It is estimated that there are about 119 dental surgeons in Govt. organizations in Delhi apart from the two teaching institutions for population of about 14 million.

## Profile of the study population

### *Occupation*

35-44 years Of the studied population, 43.4% were housewives, 4.2% were professionals/ businessman/skilled workers, whereas only 6.7% were non-skilled workers and 7.5% were in local occupation. Skilled workers were almost

double in urban than in rural areas (54.7 vs. 29.1%) and majority were men (73.5 vs. 10.6%).

In 65–74 age group, 23.6% were not working, 47.8% were housewives, 15.6% were non-skilled workers and only 13% were skilled professionals.

#### *Educational level*

35–44 years Only 17.5% had more than primary level education, 35% had less or till secondary level and a high 47.4% had education up to graduation level.

65–74 years As high as 54.% had more than primary level education, 27.4% had up to or higher than secondary level, while only 9.5% had graduate level education.

## Results of Children (12 and 15 years)

### Oral Health Perception

#### *Status of teeth and gums*

The various categories were summarized into three groups: good, average and poor

#### 12 years

Of the studied population, 61% of the total respondents rated the health of their teeth and gums as average, 25% as good and 14% ranked it as poor. It was seen that there were no significant differences between the urban: rural and male: female populations.

#### 15 years

In this age group, 70% of the total respondents rated the health of their teeth and gums as average, 9% as good and 11% ranked it as poor. It was seen that there were no marked differences between the urban: rural and male: female populations.

## Oral Health Seeking Behavior

### *Oral discomfort / pain*

12 years

Of the total respondents, 47% of the respondents of both the sexes reported toothache occasionally, whereas 44% had no complaint. It was seen that there were no marked differences between the urban: rural and male: female populations.

15 years

Same pattern were reported as in the 12 years age group.

### *Frequency of visiting a dentist in past 12 months*

12 years

Of the population, 74% respondents never visited the dentist, approx. 24% of the male and female respondents of both urban and rural populations visited dentist 1–3 times and only 2% of the population visited dentist e"4 times during the past 12 months. There were no differences between urban: rural and male: female population.

15 years

In this age group majority of the population (76%) had never visited a dentist, a small proportion (20%) of population had visited a dental health facility once or more times in last 12 months. There were no differences between urban: rural and male: female population with reference to reason for last visit.

### *Reason for the last visit to the dentist*

12 years

The numbers of respondents for this question were only 19.3% of 12 year old children. Of the respondents, 48%, had visited the dental service provider due to complain of pain while the rest visited for other reasons including routine check up. The proportion of urban children availing oral care services for pain were more then rural children (53% Vs. 43%).

There were no significant differences among male and female group.

15 years

Only 16–5% of the children responded to this question. In this age group, 42% of the respondents of both the sexes in the urban and rural area had visited a dentist in last 12 months with the complain of pain, It was seen that complaint of pain were more in the rural population (52.63%) then in the urban (35%), and more in males (49%) then in females (39%), whereas 50% respondents visited the dentist for other reasons including routine check up.

## Oral Health Practices

### *Methods and Frequency of teeth cleaning*

12 years

Of the studied population, 95% of the respondents used tooth brush to clean their teeth. Out of 4% of the population using charcoal/chew sticks or Miswak, majority were males (60%).

Of the studied population, 68% of the respondents cleaned their teeth at least once a day and 15% twice a day. It was observed that 72.32% of urban and 63.41% of the rural respondents cleaned their teeth once a day. There was a marked difference between urban and rural respondents who cleaned their teeth twice or more times/ day (21.70% Vs. 7.77%), and more females cleaned their teeth twice than the males (17.5 Vs. 12%).

15 years

In this age group, 95% of the respondents cleaned their teeth with tooth brush. Out of 5% of the population was using charcoal/chew sticks or Miswak, majority were males (65%) as compared to female (35%) respondents.

There were no significant differences between urban and rural respondents.

The children in 15 year old age group were having little better brushing habits. The proportion of children brushing once a day were about 75% while those brushing twice or more times a day were about 14%. There were marginal differences in brushing frequencies of male and female children. Whereas, 20% of urban were brushing twice daily as compared to only 8% rural children.

### *Use of tooth paste with or without fluoride*

#### 12 years

Only 25% of children in this age group responded to this question. Of these, 85% used fluoridated tooth paste.

#### 15 years

This particular question was replied by only 20% of children among 15 year olds. Of these, 75% reported use of Fluoridated toothpaste. It was also observed that 9% of rural respondents did not use toothpaste at all as compared to only 2% among urban respondents.

## Dietary Habits

### 12 and 15 year old children

Bakery products were consumed once or more than once a day by only one fifth (20%) and candies by about one fourth (24%) of schoolchildren in 12 and 15 year old age groups. Fresh fruit consumption was relatively low: only 36% and 39% of 12 and 15 years consumed fresh fruits. Regular use of colas and beverages was reported by only 17% among 12 year and 25% among 15 year old children. There were no significant differences in the eating habits between male: female and urban: rural population in both the age groups.

## Tobacco habits

### *Smoking cigarettes, cigars or pipe*

#### 12 years

Only 4 children in this age group admitted smoking habit. Out of these, 3 smoked occasionally and 1 smoked regularly. It was observed that more of the boys (3) were smoking than the girls (1). There was no significant difference between urban: rural population.

#### 15 years

In this age group, only 16 children responded positive, out of which 10 smoked occasionally, whereas 6 children reported regular smoking. It was observed that most of the smokers were males (15). There was no significant difference between urban: rural population.

### *Chewing tobacco or snuff*

12 years

Of the studied population, only 2 urban boys accepted tobacco chewing habit on occasional basis.

15 years

In this age group, only 6 children responded, of which 3 chewed tobacco occasionally and 3 chewed regularly. It was observed that more boys (5) than girls (1) and more rural (4) than urban (2) children were chewing tobacco.

### Oral Health Perception

#### *Number of natural teeth present*

35 – 44 years

Only 3% of the studied population had less than 20 natural teeth. There were only minor differences between urban: rural and male: female population.

65 – 74 years

Out In this age group, 28% respondents of both sexes and populations had more than 20 natural teeth present, 36% respondents had 10–19 natural teeth, whereas 37% of the respondents had no natural teeth. There were no marked differences in the %s of male: female and urban: rural populations.

#### *Oral discomfort / pain*

35 – 44 years

Of the studied population, 44% of the respondents reported toothache occasionally, whereas remaining 56% never complained of toothache. There were no marked differences in the male: female and urban: rural populations

65 – 74 years

Respondents showed the same pattern as 35 – 44 age groups.

### *Use of removable prosthesis*

#### 35–44 years

Of the studied population, 8% respondents were using partial dentures, and 1% were using upper and/or lowers complete dentures. It was observed that the prosthesis were more common with the urban (70%) than the rural (30%) population.

#### 65–74 years

In this age group, 8% respondents were using partial dentures, and 20% were using upper and/or lowers complete dentures. It was observed that the partial prosthesis were more common with the urban (80%) than the rural (20%) population. Same pattern was observed with complete prosthesis 70% Urban vs. 30% Rural.

### *Status of teeth and gums*

The various categories were summarized into three groups: good, average and poor

#### 35–44 years

Of the studied population, majority of the respondents of both the sexes and populations rated health of their gums and teeth as average (75%), 2.24% as good and 21% rated them as poor. There was no significant difference between urban: rural and male: female respondents.

#### 65 – 74 years

In this age group, 43% rated the health of their gums as average, 55% as poor and only 3.52% respondents rated as good. There were no significant differences between urban: rural and male: female respondents.

## **Oral Health Practices**

### *Frequency of teeth cleaning*

#### 35 – 44 years

Of the studied population, 70% of the total respondents clean their teeth once a day, whereas 31% urban, 11% rural, 16% males, and 26% of female respondents

clean their teeth two or more times a day. It was observed that out of 1% population not cleaning their teeth, majority were the rural (85%) as compared to urban (15%) respondents.

65–74 years

In this age group, 45% respondents clean their teeth once a day, whereas 9% respondents clean their teeth two or more times a day. It was observed that 30% population was not cleaning their teeth. There were no significant differences between urban: rural and male: female respondents.

#### *Methods of teeth cleaning*

35 – 44 years

Of the studied population, majority of the respondents clean their teeth with a tooth brush 91%, and out of 9% population using charcoal, chew sticks or Miswak, 8% were urban, 40% rural, 32% males and 20% females.

65 – 74 years

In this age group, 38% of the respondents clean their teeth with a tooth brush, and out of 8% population using charcoal, chew sticks or Miswak, 11% were urban, 46% rural, 30% males and 13% females.

#### *Use of tooth paste with or without fluoride*

35 – 44 years

Of the studied population, 60% of the respondents use fluoride tooth paste; It was observed that fluoride tooth paste were used extensively in the urban population (74%) then in the rural (34%). 20% of the total respondents did not use tooth paste at all, It was seen that 84% rural respondents were not using tooth paste as compared to the 14% urban respondents.

65–74 years

In this age group, 8% of the respondents use fluoride tooth paste; It was observed that fluoride tooth paste were used extensively in the urban population (84%) then in the rural (16%). 80% of the total respondents did not use tooth paste at all and there were no significant differences between urban: rural and male: female respondents.

## Oral Health Seeking Behaviour

### *Last visit to a Dentist*

#### 35–44 years

29% of the respondents had never received any dental care. 13% of the respondents had seen a dentist more than five years ago and another 15% had visited a dentist more than 2 years ago. 16% had visited a dentist more than one year ago and 26% of the respondents had visited a dentist in the past one year. There was no significant difference between Male: Female and Urban: Rural population.

#### 65–74 years

In this age group, 13% of the respondents had never received any dental care. 25% had visited a dentist more than 5 years ago, 15% had visited more than 2 years ago, 15% had visited more than one year ago and 24% had visited a dentist in the past one year. Among those who had never received any dental care it was seen that the rural respondents were almost five times the urban (46% vs. 8%). There was no significant sex difference.

## 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 23% of 35–44 year olds and 12% of the 65–74 year olds were found to be having habit of using it daily. Once or more than once use of candies and sweets was reported by only 10% and 4% of the respondents in adult and geriatric age group. About 27% of the adults and 8% 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

### *Smoking cigarettes, cigars or pipe*

#### 35–44 years

In this age group, about one third of the studied population reported their smoking habits, Most of them (31%) were regular smokers while only 2% reported

to be occasional smokers. Only 10% of the urban adults reported regular smoking as compared to 17% of rural adults. However, majority of reported regular smokers were males (36% Vs 1.7%)

65–74 years

In this age group, Bidi, Cigarettes etc. smoking habit was reported by about 13–18% of the respondents as regular users, however a little proportion (1–2%) reported occasional smoking habit. Rural population had more regular smokers (17–30%) than urban (10–12%) and significantly more males (23–30%) had regular and occasional smoking habits than females (0.2%).

#### *Chewing tobacco or snuff*

35–44 years

Of the studied population, only 4% reported regular tobacco chewing habits as compared to smoking. There were 1% occasional tobacco chewers and 4% regular users. There were no significant differences between urban: rural population.

65–74 years

In this age group, only 2% of the people accepted having regular tobacco chewing habits. There were no significant differences between urban: rural population.

### Oral Health Status

#### *Extra oral appearance*

12 years One fourth of the studied population had enlarged head and neck lymph nodes, which was a very significant finding. Either the children had chronic systemic illnesses such as viral or bacterial infection or tubercular infection, apart from any occasional dental cause.

Even in the 15 years age group, enlarged lymph nodes were reported in 19.8% of population.

In 35–44 years group, only 4% exhibited some or the other extra oral lesion in the form of ulcers, swelling or enlarged lymph nodes. Even in 64–74 years group, there were minor lesions. Hence extra oral lesions, particularly enlarged cervical lymph nodes, were the most predominant finding in 12 and 15 years as compared to adult age population.

### *Oral Mucosal Conditions*

12 years Oral mucosal ulceration was found in 4%, abscess in 1%, other conditions in 2.6% of the studied population

15 years No abnormal findings were reported in this age group.

35–44 years 12% of the group had some form of oral mucosal disorders. 3% had leukoplakia 2.4% had ulcers, 1.6% had ANUG and another 3% had other condition probably in the form of oral submucous fibrosis or melanoplakia/erythroplakia etc.

65–74 years In this group, almost 17% had mucosal lesions. Leukoplakia was found in 4% ulcerations in 4.5% abscesses in 1% but other lesion constituted the highest of 5.4%

With increasing age, it was noticed that prevalence of mucosal lesions increased, which could be due to cumulative effect of years of neglect, adverse oral habits, hygiene practices and tobacco use.

### *Denture wear*

In 35–44 years age group, only 6.6% were wearing partial dentures and 0.7% were wearing complete denture.

65–74 years In this group, 19% were wearing complete dentures and 7% were wearing partial dentures. Similarly, men were more than double the number of women denture wearers. However, there were double the number of denture wearers in urban compared to rural area.

### *Periodontal Status*

12 years In 61% of children, bleeding gums was recorded which was predominantly in rural than urban children (79 vs. 42 %)

15 years Bleeding gums was recorded in 59%, again much higher prevalence in rural children compared to urban was noted (72.6 vs. 45%).

35–44 years Bleeding gums were present in 70%, shallow pockets in 34% and deep pockets in 1% of the examined population. However, the urban: rural difference was not very significant.

65–74 years: Bleeding was present in 57.7% and shallow and deep pockets in only 1.7% of the examined population.. With advancing age, probably, with gingival recession and alveolar bone loss occurring simultaneously, periodontal pockets does not manifest as compared to younger persons.

#### *Loss of attachments*

35–44 years Loss of attachment of 4–5mm was recorded in 6.3% and more than 6 mm in another 1.3%. It was seen in more rural than urban adults (9.8 vs. 5.7).

65–74 years: About 14 % of the subjects could be evaluated for loss of attachment in this age group, out of which about 4% had loss of attachment to a clinical significant level.

#### *Fluorosis*

Questionable to very mild fluorosis was reported in 44.8, 43.5, 81.9 and 25.5% in the four index age groups in ascending order. It was observed that 16% of 12 and 15 years age group had mild to moderate fluorosis, which decreased to 4.2% and 2.2% in 35–44 and 65–44 years age group respectively. Severe fluorosis was not observed except in 4 individuals (0.2%) in the 12 years age group.

Probably, with advancing age, due to abrasion and attrition of teeth and extrinsic stains of tea, coffee tobacco and betel quid etc. effect of fluorosis was less noticeable. Other reason could be loss of teeth.

#### **Summary**

Being the commercial capital of the country, Delhi has the highest number of migrated population due to urbanization and growth, there are literally no rural areas left. However, for sampling purposes the term rural area has been used but in fact it is a peri urban area. The south west district of Delhi is a mixed population having urbanized colonies and villages which have been included into the National Capital.

The perception about own oral health was found to be good in more than 70% of the population. Dental Caries prevalence was about 50 % among children and 60–70% in the adult and geriatric age groups. The usage of sweet eatables and cola, beverages etc. was not much different in urban and rural population.

The proportion of population brushing their teeth at least once a day was quite high (70–80%). The average DMFT scores were higher in rural areas as compared to urban population. The proportion of population who have never availed dental services were about 70–80% in children, 30 % in adults and only 12% in geriatric age groups. As expected the rural population has higher prevalence of Dental Fluorosis. Although there were little differences in usage of sweets and beverages and brushing frequency, the difference in prevalence of gingival bleeding was very high in rural as compared to urban population indicating poor oral hygiene.

In adults, the prevalence of gingival bleeding was reported to be very high in both 35–44 and 65–74 years population. The loss of attachment was found to be >3 mm in over 50% of the population. These findings are very well in accordance with dental caries prevalence, since gingival bleeding is considered as a parameter for cumulated oral hygiene performance.

The use of tobacco in smokeless form was found to be less prevalent (3–5 %) than smoking which was found in 32% of the adults and 47% of geriatric population. The combined prevalence of leukoplakia, lichen planus and malignant conditions was 0.8% in this population out of which most of the subjects were rural males. This finding definitely proves the need of tobacco control interventions in the area.

Overall the geriatric population had poorer oral health indicators as compared to all other age groups. The level of edentulism was higher in this age group 4.6% however only 0.6% had received complete dentures.

The overall dental caries prevalence has shown increasing trend with increasing age except in the geriatric population which may be attributed to tooth loss among them. In brief, the site requires increase in awareness about oral hygiene practices, use of sugar and beverages and edentulism. The oral health care services need improvement and penetration upto the masses.