**REPORT**

|  |  |
| --- | --- |
| **The number and gender distribution of persons with communication disorders as identified by ASHA workers through survey** | The total number and gender distribution of persons with communication disorders identified through survey by the ASHA workers across 4 phases in the three hoblis of the three districts is shown in Table 9. |
| Table 9*Total number and gender distribution of persons with communication disorders identified by ASHA workers*

|  |  |  |  |
| --- | --- | --- | --- |
| *Phases**(1 to 4)* | *Taluk & Hobli* | *Total Population* | *Persons with communication disorders identified by ASHA Workers* |
| *K.R.Pete Taluk* | *Male* | *Female* | *Total* |
| Hoblis  |
| Phase 1 | Kikkeri | 42,704 | 370 | 397 | 767 |
| Phase 2 | Bookanakere | 32,083 | 441 | 520 | 961 |
| Phase 3 | Sheelanere | 32,430 | 370 | 396 | 766 |
| Phase 4 | Santhebachahalli | 26,897 | 308255 | 316230 | 624485 |
| Kasaba | 21,072 |
| **Sub Total** |  | **1,55,186** | **1,744** | **1,859** | **3,603** |
|  | *Nanjangud Taluk* |  |  |  |  |
| Hoblis  |
| Phase 1 | Chikkayanachatra | 51,537 | 656 | 783 | 1,439 |
| Phase 2 | Biligere | 49,387 | 624 | 600 | 1,224 |
| Phase 3 | Kawlande | 81,568 | 977 | 1,025 | 2,002 |
| Phase 4 | Kasaba | 24,779 | 327 | 347 | 674 |
| **Sub Total** |  | **2,07,271** | **2584** | **2755** | **5,339** |
|  | YelandurTaluk |  |  |  |  |
| Phase 1 | Agara Hobli | 16,810 | 255 | 295 | 550 |
| **Total** |  | **3,79,267** | **4,583** | **4,909** | **9,492** |

 |
|  |  |
| **False positive identifications by** **the ASHA workers and number** **evaluated at OSCs and camps for** **diagnosis** | Comparisons were made to check for correct identifications and false positives by the ASHA workers against the diagnosis made after evaluation at the OSCs by the professionals. Table 10 provides the details of false positive referrals across the 3 districts (inclusive of 4 phases). Correct identifications were 98.82% and false positives were 1.18%. Series camps were held as shown in the table 10 to evaluate those persons who could not visit the Outreach Service Centers due to various reasons. |
| Table 10*False positive identifications by ASHA workers and total number evaluated at OSCs and Camps*

|  |  |  |
| --- | --- | --- |
|  | *Taluks in Districts* |  |
| *K.R.Pete in Mandya District* | *Nanjangudu in* *Mysuru District* | *Agara in Chamaraja-nagara District* | *Total* |
| Number of persons identified by ASHA Workers through survey | 3,603 | 5,339 | 550 | 9,492 |
| Number of persons evaluated at the Outreach Service Centers (OSCs) | 1457 | 1986 | 336 | 3,779 |
| Number of persons evaluated in Series Camps and Door to door screening | 2070 | 3201 | 200 | 5,471 |
| Total Number and % of persons identified with Communication disorders | 3527 | 5187 | 536 | 9,250(2.43%) |
| False Positive Identifications by the ASHA Workers  | 35 | 67 | 08 | 110 |
| Number of persons who expired and migrated (All Phases inclusive) | 5 | 38 | - | 43 |
| Clinically Normal and Psychological problems  | 36 | 47 | 6 | 89 |

 |
|  |  |
| **100% follow up** | ***In Level II of the project, 100% of the persons identified were followed up for evaluation.*** It was observed that 9,492 persons were identified with communication disorders. Out of this, 110 were false positive identifications, 43 were either migrated or expired, and 89 were diagnosed as clinically normal or having psychological problems. ***Hence, 9,250 persons were found to have communication disorders after evaluations. That is, overall in three districts surveyed, 2.43% of the population (n=3,79,267) were found to have communication disorders.*** |
|  |  |
| **PREVALENCE OF COMMUNICATION DISORDERS IN THE 3 HOBLIS SURVEYED** |
| The prevalence of persons with communication disorders established after evaluation at OSCs, camps and door to door evaluation in the three districts surveyed revealed that it was 2.27% in Mandya district, 2.50 % in Mysore district, and 2.43% in Chamarajanagara district. Details are shown in Table 11. |
| Table 11*Prevalence of communication disorders in the population surveyed in 3 districts*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Phases**(1 to 4)* | *Hoblis* | *Total villages* | *Total Houses* | *Total Population* | *Prevalence (No.& Percentage)* |
|  |  |  |  |  | *Male*  | *Female* | *Total* |
| **MANDYA DISTRICT (K.R.Pete Taluk)** |
| Phase 1 | Kikkeri | 62 | 5,855 | 42,704 | 361(0.84%) | 387(0.90%) | 748(1.75%) |
| Phase 2 | Bookanakere | 52 | 5,869 | 32,083 | 427(1.33%) | 508(1.58%) | 935(2.91%) |
| Phase 3 | Sheelanere | 50 | 5,362 | 32,430 | 366(1.12%) | 390(1.20%) | 756(2.33%) |
| Phase 4 | Santhebachahalli | 37 | 4,290 | 26,897 | 300(1.11%) | 311(1.15%) | 611(2.27%) |
| Kasaba | 25 | 4,079 | 21,072 | 250(1.18%) | 227(1.07%) | 477(2.26%) |
| **Sub Total** |  | **226** | **25,455** | **1,55,186** | **1,704****(1.09%)** | **1,823 (1.17%)** | **3,527** **(2.27%)** |
| **MYSURU DISTRICT (Nanjangudu Taluk)** |
| Phase 1 | Chikkayanachatra | 30 | 8,370 | 51,537 | 635(1.23%) | 753(1.46%) | 1388(2.69) |
| Phase 2 | Biligere | 35 | 10,149 | 49,387 | 598(1.21%) | 589(1.19%) | 1187(2.40%) |
| Phase 3 | Kawlande | 59 | 15,225 | 81,568 | 952(1.16%) | 1004(1.23%) | 1956(2.39%) |
| Phase 4 | Kasaba | 17 | 5,441 | 24,779 | 315(1.27%) | 341(1.37%) | 656(2.64%) |
| **Sub Total** |  | **141** | **39,185** | **2,07,271** | **2,500****(1.20%)** | **2,687 (1.29%)** | **5,187 (2.50%)** |
| **CHAMARAJANAGARA DISTRICT (Yelandur Taluk)** |
| Phase 1 | Agara | 7 | 3416 | 16,810 | 248(1.47%) | 288(1.71%) | 536(3.18%) |
| **Sub Total** |  | **7** | **3416** | **16,810** | **248****(1.47%)** | **288****(1.71%)** | **536****(3.18%)** |
| **Total in 3 dist-ricts** |  | **374** | **68,056** | **3,79,267** | **4,452****(1.17%)** | **4,798****(1.26%)** | **9,250****(2.43%)** |

 |
|  |  |
| **PREVALENCE OF TYPES OF** **COMMUNICATION DISORDERS** | Data was analyzed to study the prevalence of four groups of communication disorders, viz., Speech and Language disorders, Dual/Multiple disorders, Hearing Impairment & ENT diseases. It was noticed that 0.31% had speech and language disorders, 1.01% had hearing impairment, 1.08 % had ENT diseases and 0.03 % had dual and multiple disorders. Table 12 shows the details. |
| Table 12*Prevalence of Types of Communication Disorders across the 3 Districts*

|  |  |  |  |
| --- | --- | --- | --- |
| Sl. No | Disorders/Diseases | *Taluks in Districts* | Total Prevalence & %(N= 3,79,267 population) |
| K.R.Pete in Mandya District | Nanjangudu in Mysuru District | Yelandur in Chamaraja-Nagara District |
|  | Speech and Language Disorders | 450 (0.28%) | 668 (0.32%) | 69 (0.41%) | **1,187****(0.31%)** |
|  | Hearing Impairment | 1,405 (0.90%) | 2,293 (1.10%) | 139 (0.82%) | **3,837****(1.01%)** |
|  | ENT Diseases | 1,629 (1.04%) | 2,156 (1.04%) | 320 (1.90%) | **4,105****(1.08%)** |
|  | Dual & Multiple Disorders | 43 (0.02%) | 70 (0.03%) | 8 (0.04%) | **121****(0.03%)** |
|  | **Total** | **3,527 (2.27%)** | **5,187 (2.50%)** | **536** **(3.18%)** | ***9,250******(2.43%)*** |

 |
|  |  |
| **AGE AND GENDER DISTRIBUTION OF PERSONS WITH DIFFERENT TYPES OF COMMUNICATION DISORDERS** | Classification of age was carried out as follows: Children = < 12 years; Adult = > 12 to < 50 years; Geriatric = > 50 years. The survey indicated that (i) 0.190% were children, 0.487%were adults, 0.251% were geriatric, 0.449% were males and 0.480% were females in K.R.Pete Taluk (ii) 0.244% were children, 0.699%were adults, 0.423% were geriatric, 0.659% were males and 0.711% were females in Nanjangudu Taluk (iii) 0.026% were children, 0.139%were adults, 0.027% were geriatric, 0.028% were males and females in Yelanduru Taluk. Table 13 to 15 shows the details in K.R.Pete, Nanjangudu and Yelanduru Taluks respectively. |
| Table 13*Age and Gender distribution of types of communication disorders in K.R.Pete Taluk (Phase 1 to 4)*

|  |  |
| --- | --- |
| DISORDERS / DISEASES | GROUPS (N= 3,79,267 population) |
| Children | Adults | Geriatric | Total Prevalence & % |
| M  | F | Total | M  | F | Total | M  | F | Total | M  | F |
| Speech & Language disorders | 1660.043% | 820.021% | 2480.065% | 1070.028% | 790.020% | 1860.049% | 140.028% | 20.000% | 160.028% | 2870.075% | 1630.042% |
| Hearing Impairment | 150.003% | 170.004% | 320.008% | 2860.075% | 3290.086% | 6150.162% | 3860.101% | 3720.098% | 7580.199% | 6870.181% | 7180.189% |
| ENT Diseases | 2050.054% | 2140.056% | 4190.110% | 4120.108% | 6170.162% | 1,0290.271% | 840.022% | 970.025% | 1810.047% | 7010.184% | 9280.244% |
| Dual / Multiple disorders | 170.004% | 60.001% | 230.006% | 120.003% | 80.002% | 200.005% | - | - | - | 290.007% | 140.028% |
| Total | 4030.106% | 3190.084% | 7220.190% | 8170.215% | 10330.272% | 18500.487% | 4840.127% | 4710.124% | 9550.251% | 17040.449% | 18230.480% |

[Note M = Males F = Females] |
| Table 14*Age and Gender distribution of types of communication disorders in Nanjangudu Taluk (Phase 1 to 4)*

|  |  |
| --- | --- |
| DISORDERS / DISEASES | GROUPS (N= 3,79,267 population) |
| Children | Adults | Geriatric | Total Prevalence & % |
| M  | F | Total | M  | F | Total | M  | F | Total | M  | F |
| Speech & Language disorders | 1820.047% | 1290.034% | 3110.082% | 1870.049% | 1280.034% | 3150.083% | 240.006% | 180.004% | 420.011% | 3930.103% | 2750.072% |
| Hearing Impairment | 430.012% | 320.008% | 750.019% | 3910.103% | 5540.146% | 9350.246% | 6760.178% | 6070.160% | 12830.338% | 11100.292% | 11930.314% |
| ENT Diseases | 2830.074% | 2240.059% | 5070.133% | 5040.132% | 8660.228% | 13700.361% | 1620.042% | 1170.030% | 2790.073% | 9490.250% | 12070.318% |
| Dual / Multiple disorders | 240.006% | 100.002% | 340.008% | 230.005% | 110.003% | 340.009% | 10.000% | 10.000% | 20.000% | 480.012% | 220.004% |
| Total | 5320.140% | 3950.104% | 9270.244% | 11050.291% | 15590.411% | 26540.699% | 8630.227% | 7430.195% | 16060.423% | 25000.659% | 26970.711% |

[Note M = Males F = Females] |
| It may be noted that 4 children (1 M & 3 F), 2 male adults in K.R.Pete Taluk, and 3 children (2 M & 1 F), 13 adults (11 M & 2 F) and 1 female geriatric person in Nanjangudu taluk, who were identified with communication disorders did not undergo detailed evaluation. |
| **SPEECH –LANGUAGE** **DISORDERS** | Prevalence of Speech-Language disorders in the population of three taluks together was **0.318%**. Prevalence in K.R.Pete taluk was **0.118%**, Nanjangudu taluk was **0.180%** and Yelanduru taluk was **0.018%**. The speech-language disorders were found to be more prevalent in males compared to females in all the three taluks. Overall, the prevalence was **0.193%** in males and **0.124%** in females. Within the speech and language disorders, across the three taluks, percentage of (i) Specific language impairment, Mental retardation, Fluency disorders and Articulation/phonological disorders were found to be higher (ii) Aphasia, Cleft lip and palate, Learning disability and Cerebral Palsy were found to be lesser than the first four conditions, and (iii) Dysarthria/Apraxia, Traumatic Brain Injury, Attention deficit hyperactive disorder and Pervasive Developmental disorders were found to be very less. Details are shown in Table 15. Percentage of each disorder within speech and language disorders in K.R.Pete, Nanjangudu and Yelanduru Taluks is shown in Figures 11, 12 and 13 respectively. |
|  |  |
| Table 15*Types and Gender distribution of Speech and Language disorders in the population of K.R.Pete, Nanjangudu & Yelandur Taluks*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SPEECH & LANGUAGE DISORDERS** | Taluks | Males  | Females | Total | % Prevalence in population(N=3,79,267) | % Prevalence within speech and language disorders(N= 450 in K.R.P; 685 in N; 69 in Y) |
| **Specific Language Impairment** | K.R.P | 68 | 33 | 101 | 0.026 | 22.44 |
| N | 63 | 64 | 127 | 0.033 | 19.01 |
| Y | 10 | 14 | 24 | 0.006 | 34.78 |
| **Mental Retardation** | K.R.P | 52 | 44 | 96 | 0.025 | 21.33 |
| N | 130 | 83 | 213 | 0.056 | 31.09 |
| Y | 5 | 6 | 11 | 0.002 | 15.94 |
| **Fluency Disorders** | K.R.P | 63 | 26 | 89 | 0.023 | 19.77 |
| N | 97 | 33 | 130 | 0.034 | 19.46 |
| Y | 9 | 3 | 12 | 0.003 | 17.39 |
| **Articulation/Phonological disorders** | K.R.P | 40 | 28 | 68 | 0.017 | 15.11 |
| N | 37 | 19 | 56 | 0.014 | 8.38 |
| Y | 1 | 6 | 7 | 0.001 | 10.14 |
| **Aphasia** | K.R.P | 19 | 3 | 22 | 0.005 | 4.88 |
| N | 23 | 11 | 34 | 0.008 | 4.96 |
| Y | 2 | 0 | 2 | 0.000 | 2.89 |
| **Cleft Lip and palate** | K.R.P | 8 | 10 | 18 | 0.004 | 4.00 |
| N | 12 | 17 | 29 | 0.007 | 4.23 |
| Y | 3 | 0 | 3 | 0.000 | 4.34 |
| **Learning Disability** | K.R.P | 11 | 6 | 17 | 0.004 | 3.77 |
| N | 8 | 7 | 15 | 0.003 | 2.18 |
| Y | 1 | 0 | 1 | 0.000 | 1.44 |
| **Cerebral Palsy**  | K.R.P | 10 | 7 | 17 | 0.004 | 3.77 |
| N | 13 | 17 | 30 | 0.007 | 4.37 |
| Y | 3 | 3 | 6 | 0.001 | 8.69 |
| **Voice Disorders**  | K.R.P | 10 | 5 | 15 | 0.003 | 3.33 |
| N | 19 | 21 | 40 | 0.010 | 5.83 |
| Y | 2 | 1 | 3 | 0.000 | 4.34 |
| **Dysarthria / Apraxia** | K.R.P | 2 | 1 | 3 | 0.000 | 0.66 |
| N | 2 | 2 | 4 | 0.001 | 0.58 |
| Y | - | - | - | - | - |
| **Attention Deficit Hyperactive Disorder** | K.R.P | 3 | 0 | 3 | 0.000 | 0.66 |
| N | 2 | 0 | 2 | 0.000 | 0.29 |
| Y | - | - | - | - | - |
| **Traumatic Brain Injury** | K.R.P | 1 | 0 | 1 | 0.000 | 0.22 |
| N | - | - | - | - | - |
| Y |  | - | - | - | - |
| **Pervasive Developmental Disorder** | K.R.P | - | - | - | - | - |
| N | 4 | 1 | 5 | 0.001 | 0.72 |
| Y | - | - | - | - | - |
| **Sub Total** | K.R.P | 287 | 163 | 450 | 0.118 |  |
|  | N | 410 | 275 | 685 | 0.180 |  |
|  | Y | 36 | 33 | 69 | 0.018 |  |
| **Total in 3 Taluks** |  | **733****(0.193%)** | **471****(0.124%)** | **1204** | **0.318%** |  |

[Note: K.R.P = K.R.Pete Taluk, N = Nanjangudu Taluk & Y = Yelanduru Taluk] |
|  |  |
| *Figure 11*: Percentage of speech and language disorders in K.R.Pete Taluk (N=450) |
|  |  |
| *Figure 12*: Percentage of speech and language disorders in Nanjangudu Taluk (N=685) |
|  |  |
| *Figure 13*: Percentage of speech and language disorders in Yelanduru Taluk (N=69) |
|  |  |
| *Figure 14*: Percentage of speech and language disorders in K.R.Pete, Nanjangudu and Yelanduru Taluk (N=1204) |
|  |  |
| **HEARING DISORDERS** | Irrespective of the type and degree of hearing loss, the percentage of prevalence of hearing loss was **1.009%**. Amongst the types of hearing loss, the percentage of prevalence of sensorineural hearing loss was the highest (**0.644**%), followed by the mixed **(0.202%)** and conductive type of hearing loss **(0.162%).** As is represented in Table 16, with respect to degree of hearing loss, the percentage of prevalence of severe degree of hearing loss was highest, followed by Moderate degree, Mild and Profound degree of hearing loss in K.R.Pete and Nanjangud taluks. However, in Yelandur Taluk the prevalence was found to be lesser, with sever and moderate being greater than the mild and profound degree of hearing loss. In general, the percentage prevalence of hearing loss in females, irrespective of the type and degree of loss was higher **(0.517%)** compared to males **(0.491%).** The details are shown in Table 16. The percentage prevalence of types of hearing disorders in K.R.Pete, Nanjangud and Yelanduru Taluks are shown in Figures 15,16 and 17. The overall percentage prevalence of types of hearing disorders in the three taluks together is shown in Figure 18.  |
|  |  |
| Table 16*Gender distribution, type of hearing disorder and degree of hearing loss in the K.R.Pete, Nanjangudu and Yelanduru taluks.*

|  |  |  |
| --- | --- | --- |
| Taluks | Degreeof Hearing loss | **HEARING DISORDERS** |
| **Types of Hearing disorders** |
| Conductive | Mixed | Sensori neural | Total & % Prevalence in population(N=3,79,267) |
| M  | F | T | M  | F | T | M  | F | T | M | F |
| K.R.P | Mild | 61 | 59 | 120 | 39 | 50 | 89 | 39 | 56 | 95 | 139 (0.036%) | 165 (0.043%) |
| Moderate | 38 | 56 | 94 | 58 | 53 | 111 | 137 | 128 | 265 | 233 (0.061%) | 237(0.062%) |
| Severe | 10 | 11 | 21 | 46 | 59 | 105 | 202 | 197 | 399 | 258(0.068%) | 267(0.070%) |
| Profound | - | - | - | 9 | 8 | 17 | 48 | 41 | 89 | 57(0.015%) | 49(0.012%) |
| Sub Total | 109 | 126 | 235 | 152 | 170 | 322 | 426 | 422 | 848 | **687** | **718** |
| **1405** |
| % Prevalence in population(N=3,79,267) | 0.028% | 0.033% | **0.061%** | 0.040% | 0.045% | **0.084%** | 0.112% | 0.111% | **0.223%** | **(0.181%)** | **(0.189%)** |
| % Prevalence within hearing disorder(N=1405) | 7.75% | 8.96% | **16.72%** | 10.81% | 12.09% | **22.91%** | 30.32% | 30.03% | **60.35%** | - | - |
| N | Mild | 69 | 104 | 173 | 45 | 80 | 125 | 82 | 91 | 173 | 196 (0.036%) | 275 (0.043%) |
| Moderate | 87 | 74 | 161 | 76 | 77 | 153 | 278 | 270 | 548 | 441 (0.061%) | 421(0.062%) |
| Severe | 9 | 14 | 23 | 61 | 62 | 123 | 316 | 350 | 666 | 386(0.068%) | 426(0.070%) |
| Profound | - | - | - | 14 | 14 | 28 | 73 | 47 | 120 | 87(0.015%) | 61(0.012%) |
| Sub Total | 165 | 192 | 357 | 196 | 233 | 429 | 749 | 758 | 1507 | **1110** | **1183** |
| **2293** |
| % Prevalence in population(N=3,79,267) | 0.043% | 0.050% | **0.094%** | 0.051% | 0.061% | **0.113%** | 0.197% | 0.199% | **0.397%** | **(0.292%)** | **(0.311%)** |
| % Prevalence within hearing disorder(N=2293) | 7.19% | 8.37% | **15.56%** | 8.54% | 10.16% | **18.70%** | 32.66% | 33.05% | **65.72%** | - | - |
| Y | Mild | 5 | 7 | 12 | - | 1 | 1 | 3 | 6 | 9 | 8 (0.002%) | 14 (0.003%) |
| Moderate | 5 | 4 | 9 | 2 | 4 | 6 | 19 | 10 | 29 | 26 (0.006%) | 18(0.004%) |
| Severe | 1 | 1 | 2 | 4 | 1 | 5 | 20 | 16 | 36 | 25(0.005%) | 18(0.004%) |
| Profound | - | - | - | - | 5 | 5 | 8 | 8 | 16 | 8(0.002%) | 13(0.003%) |
| Sub Total | 11 | 12 | 23 | 6 | 11 | 17 | 50 | 40 | 90 | **67** | **63** |
| **130** |
| % Prevalence in population(N=3,79,267) | 0.002% | 0.003% | **0.006%** | 0.001% | 0.002% | **0.004%** | 0.013% | 0.010% | **0.023%** | **(0.017%)** | **(0.016%)** |
| % Prevalence within hearing disorder(N=130) | 8.46% | 9.23% | **17.69%** | 4.61% | 8.46% | **13.07%** | 38.46% | 30.76% | **69.23%** | - | - |
|  | **Total for 3 taluks** | 285 | 330 | 615 | 354 | 414 | 768 | 1225 |  1220 | 2445 | **1864****(0.491%)** | **1964****(0.517%)** |
| **3828****(1.009%)**  |
| % Prevalence in population(N=3,79,267) | 0.075% | 0.087% | **0.162%** | 0.093% | 0.109% | **0.202%** | 0.322% | 0.321% | **0.644%** |  |  |
| % Prevalence within hearing disorder(N=3828) | 7.44% | 8.62% | **16.06%** | 9.24% | 10.81% | **20.06%** | 32.00% | 30.76% | **63.87%** | - | - |

[Note: K.R.P = K.R.Pete Taluk, N = Nanjangudu Taluk & Y = Yelanduru Taluk] |
|  |  |
| *Figure 15:*Percentage of types of hearing disorders in K.R.Pete Taluk (N=1405) |
|  |  |
| *Figure 16:*Percentage of types of hearing disorders in Nanjangud Taluk (N=2293) |
|  |  |
| *Figure 17:*Percentage of types of hearing disorders in Yelandur Taluk (N=130) |
|  |  |
| *Figure 18:*Percentage of types of hearing disorders in K.R.Pete, Nanjangud and Yelandur Taluks (N=3828) |
|  |  |
| **ENT CONDITIONS &** **DISEASES** | The prevalence percentage of ENT conditions and diseases was 1.082% in the population surveyed. The details are shown in Table 17. Amongst the conditions and diseases, the prevalence % in all the three taluks was higher for ASOM/CSOM, followed by other conditions (which included complaints such as ear pain, tinnitus, vertigo etc). The next in the order was ear pain, throat pain and wax in the ear. The prevalence percentage of conditions such as rhinitis, itching and blocking sensation in the ear, tympanic membrane abnormalities, eustachean Tube malfunction, structural anomalies, foreign bodies in the ear, laryngitis and pharyngitis was observed to be less. In all the three taluks, the % prevalence in females was higher compared to males. Overall, it was 0.610% in females and 0.471% in males. Figures 19, 20 and 21 depict the distribution of ENT conditions and diseases in percentage in K.R.Pete, Nanjangudu and Yelanduru taluks respectively. Figure 22 shows the summary of all three taluks.  |
|  |  |
| Table 17*Types and Gender distribution of ENT conditions and diseases in the population of K.R.Pete, Nanjangudu & Yelandur Taluks*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ENT Conditions &Diseases  | Taluks | Male  | Female | Total | % Prevalence in population(N=3,79,267) | % Prevalence within ENT conditions & diseases(N=1629 in K.R.P; 2156 in N; 320 in Y) |
| ASOM/CSOM | K.R.P | 288 | 283 | 571 | 0.150 | 35.05 |
| N | 386 | 431 | 817 | 0.021 | 37.89 |
| Y | 53 | 72 | 125 | 0.032 | 39.06 |
| Wax | K.R.P | 46 | 40 | 86 | 0.022 | 5.27 |
| N | 90 | 58 | 148 | 0.039 | 6.86 |
| Y | 24 | 12 | 36 | 0.009 | 11.25 |
| Others | K.R.P | 181 | 275 | 456 | 0.120 | 27.99 |
| N | 170 | 273 | 443 | 0.116 | 20.54 |
| Y | 27 | 50 | 77 | 0.020 | 24.06 |
| Ear Pain | K.R.P | 82 | 134 | 216 | 0.056 | 13.25 |
| N | 107 | 173 | 280 | 0.073 | 12.98 |
| Y | 9 | 7 | 16 | 0.004 | 5.00 |
| Rhinitis | K.R.P | 36 | 44 | 80 | 0.021 | 4.91 |
| N | 35 | 56 | 91 | 0.023 | 4.22 |
| Y | 11 | 25 | 36 | 0.009 | 11.25 |
| Throat pain | K.R.P | 36 | 98 | 134 | 0.035 | 8.22 |
| N | 57 | 110 | 167 | 0.044 | 7.83 |
| Y | - | - | - | - | - |
| Itching/Blocking sensation in the ear | K.R.P | 15 | 21 | 36 | 0.009 | 2.20 |
| N | 28 | 29 | 57 | 0.015 | 2.64 |
| Y | - | - | - | - | - |
| TM Abnormalities | K.R.P | 6 | 7 | 13 | 0.003 | 0.79 |
| N | 9 | 10 | 19 | 0.005 | 0.88 |
| Y | 3 | 5 | 8 | 0.002 | 2.50 |
| ET Malfunction | K.R.P | - | 3 | 3 | 0.000 | 0.18 |
| N | - | 1 | 1 | 0.000 | 0.00 |
| Y | - | - | - | - | - |
| Structural anomalyof the ear | K.R.P | 2 | - | 2 | 0.000 | 0.12 |
| N | 38 | 29 | 67 | 0.017 | 3.10 |
| Y | - | - | - | - | - |
| Foreign bodies | K.R.P | 2 | 1 | 3 | 0.000 | 0.18 |
| N | 4 | 1 | 5 | 0.001 | 0.23 |
| Y | 2 | 1 | 3 | 0.000 | 0.93 |
| Laryngitis | K.R.P | 1 | 5 | 6 | 0.001 | 0.36 |
| N | 9 | 12 | 21 | 0.005 | 0.97 |
| Y | 3 | 1 | 4 | 0.001 | 1.25 |
| Pharyngitis | K.R.P | 6 | 17 | 23 | 0.006 | 1.41 |
| N | 16 | 24 | 40 | 0.015 | 1.85 |
| Y | 8 | 7 | 15 | 0.003 | 4.68 |
| Sub Total | K.R.P | 701(0.184%) | 928(0.244%) | 1,629 | 0.429 |  |
|  | N | 949(0.249%) | 1207(0.318%) | 2,156 | 0.568 |  |
|  | Y | 140(0.036%) | 180(0.047%) | 320 | 0.084 |  |
| Total in 3 Taluks |  | 1,790(0.471%) | 2,315(0.610 %) | 4,105 | 1.082 |  |

[Note: ET= Eustachian Tube; TM = Tympanic Membrane] |
|  |  |
| *Figure 19:*Percentage of types of ENT disorders in K.R.Pete Taluk (N=1629) |
|  |  |
| *Figure 20:*Percentage of types of ENT disorders in Nanjangud Taluk (N=2156) |
|  |  |
| *Figure 21:*Percentage of types of ENT disorders in Yelandur Taluk (N=320) |
|  |  |
| *Figure 22:*Percentage of types of ENT disorders in K.R.Pete, Nanjangudu and Yelanduru Taluks (N=4105) |
|  |  |
| **MULTIPLE** **DISORDERS OF COMMUNICATION** | The overall % perevalence of multiple disorders in the three taluks was less (0.031%). Multiple disorders were highest in Nanjangudu among the 3 taluks. Multiple disorders in the population across 3 taluks (K.R.Pete, Nanjangudu and Yelanduru respectively) is shown in Table 18. |
|  |  |
| Table 18*Total and Gender distribution of Multiple disorders in* K.R.Pete, Nanjangudu & Yelanduru Taluk

|  |  |  |  |
| --- | --- | --- | --- |
| Dual and Multiple DisordersIn the 3 Taluks | Gender Distribution | *Total* | % Prevalence(N=3,79,267) |
| Male | Female |
| K.R.Pete | 29 | 14 | 43 | 0.011 |
| Nanjangudu | 48 | 22 | 70 | 0.018 |
| Yelanduru (AgaraHobli) | 5 | 3 | 8 | 0.002 |
| **Total** | **82** | **39** | **121** | **0.031** |

 |
|  |  |
| **DETAILS REGARDING PERSONS RECOMMENDED FOR SPEECH-LANGUAGE THERAPY AS TERTIARY REHABILITATION MEASURE** | The persons identified with various communication disorders after evaluation were recommended speech language therapy (a) In K.R. Pete Taluk, in a population of 1,55,186 surveyed, 527 (0.33%) were identified with speech and language disorders. Out of these, 379 (0.24%) were recommended speech-language therapy, but only 17 (0.01%) attended speech-language therapy at the outreach service center of Akkihebbalu and 362 (0.23%) did not attend speech- language therapy. (b) In Nanjangudu Taluk, in a population of 2,07,271 surveyed, 788 (0.38%) were identified with speech and language disorders. Out of these, 563 (0.27%) were recommended speech-language therapy, but only 9 (0.004%) attended speech-language therapy at the outreach service center of Hullahalli and 554 (0.26%) did not attend speech- language therapy. (b) In Yelanduru Taluk, in a population of 16,810 surveyed, 82 (0.48%) were identified with speech and language disorders. Out of these, 60 (0.35%) were recommended speech-language therapy, but only 1 (0.005%) attended speech-language therapy at the outreach service center of Hullahalli and 59 (0.35%) did not attend speech- language therapy. |
| **DETAILS OF** **HEARING AIDS** **DISTRIBUTED BY** **THE INSTITUTE** | A total of 392 free body level hearing aids were distributed to persons identified with hearing impairment in this level of the survey through the Scheme for Assistance to Disabled Persons for Purchase/Fitting of Aids and Appliances (ADIP) through the Outreach Service Centres at Akkihebbalu, Hullahalli and Gumballi (133 in K.R.Pete Taluk, 259 in Nanjangudu Taluk and nil in Yelanduru Taluk). However, 746 persons with hearing impairment could not get hearing aids due to non-availability of funds under the ADIP Scheme (290 in K.R.Pete Taluk, 400 in Nanjangudu Taluk and 56 in Yelanduru Taluk). |
|  |  |
| **ANALYSES & RESULTS OF FEEDBACK OF ASHA WORKERS EXPERIENCE OF SURVEY** | The responses to the questionnaire administered on the ASHA workers were analyzed. The sum of raw scores per column (with 4 point rating scale) per person was computed. Group mean and median scores along with SD was computed for each question and compared across the type of personnel recruited for the survey (ASHA Workers) and 10 hoblis in the survey programme. The responses of ASHA Workers across ten hoblis of K.R.Pete Taluk of Mandya District, Nanjangudu Taluk of Mysuru district and YelandurTaluk in Chamarajanagara district were compared. The raw scores obtained by each ASHA Worker were cumulated to obtain the total scores of each hobli. Total scores of all the four phases were also computed separately. SPSS 21.0 software was used for analyses of the data. The mean, median and standard deviation values are presented in tables 19, 20, 21 and 22. As the median values were 4 for majority of the questions, Kruskal-Wallis test was run in order to compare across the three districts; Mysuru, Mandya & Chamarajanagara. The details are shown in table 23. Mann-Whitney U test was carried out to compare the ratings of ASHA Workers between the Districts and the |Z| scores are shown in table 24.By using the questionnaire procedure, the data collection followed a distribution-free method for studying the aspects of interest with assigned rank orders, but no clear [numerical](http://en.wikipedia.org/wiki/Numerical) interpretation, facilitating assessment of [preferences](http://en.wikipedia.org/wiki/Preferences). Since the data sample size was small and was derived on nominal scale, non parametric tests (Mann-Whitney U test and Kruskal-Wallis test) were used for the analysis. |
|  |  |
| The results (tables 19 and 20) indicated that the mean and SD for factors related to Outreach Service Centers (OSC’s) was 32.99 and 2.32 respectively and for factors related to the field supervisors (SUP), it was 18.93 and 1.122 respectively. The mean and SD for all 10 questions was 51.91 and 2.951 respectively. Further, the mean and SD of ASHA Workers of Biligere [52.92; (1.68)], Kowlande [52.85; (2.56)] and Kasaba [52.67; (3.50)] hoblis of Nanjangudu Taluk of Mysuru district was better than ASHA Workers belonging to the hoblis of K.R.Pete Taluk of Mandya District and Agara hobli of Yelandur Taluk in Chamarajanagara district. The means and SDs for the rest of the hoblis were as follows: Kikkeri [51.78; (1.47)], Bookanakere [50.96; (2.84)], Sheelanere [50.50; (2.34)], Santhebachahalli/Kasaba [50.68; (4.73)] hoblis of K.R.PeteTaluk of Mandya District), Chikkayanachatrahobli [51.92; (2.20)] of Nanjangud Taluk of Mysuru district and Agara hobli [50.07; (2.78)] of YelandurTaluk of Chamarajanagara district. Comparison across the ASHA workers of 3 ditricts revealed that ASHA Workers of Mysuru district with the total of 186 showed better scores than ASHA Workers of Mandya (111) and Chamarajanagara (15) district. The results (table 21 and 22) shows that the mean and SD for factors related to the Outreach Service Centre (OSC) is 32.99 and 2.32 respectively; and for factors related to the Field supervisors (SUP) is 18.93 and 1.122 respectively. The total mean and SD for all questions in 3 districts were 51.91 and 2.951 respectively. Further, the mean and SD of ASHA Workers of Mysuru district [52.65; (2.46)] were better than Mandya [50.94; (3.32)] and Chamarajanagara [50.07; (2.78)] districts.Results of Kruskal Wallis test (table 23) to compare across the three districts; Mysuru, Mandya & Chamarajanagara (Table 23) revealed significant differences for few questions: [Q1- χ2 (Z) =26.913 (0.000); Q2- χ2 (Z) =17.770 (0.000); Q3- χ2 (Z) =18.909 (0.000); Q4- χ2 (Z) =11.740 (0.003); Q6- χ2 (Z) =10.185 (0.006); the total of outreach service centre χ2 (Z) =34.952 (0.000); Q10- χ2 (Z) =14.115 (0.001); Q12- χ2 (Z) =7.611 (0.022); Q13- χ2 (Z) =7.044 (0.030); the total of supervisor χ2 (Z) =17.125 (0.000); overall total χ2 (Z) =32.335 (0.000), (p < 0.05)].Results of Mann Whitney U test (Table 24) revealed no significant difference for the questions 5, 7 and 9 (related to OSCs), 10 and 14 (related to Supervisor) indicating that the responses with respect to satisfaction index by the ASHA Workers of these two districts were similar. Comparison of Mandya and Chamarajanagara district revealed a significant difference in all the questions except for few questions 1, 3, 4, 10 and 12, indicating that ASHA Workers of these two districts responded in a similar way. Comparison of Mysuru and Chamarajanagara district revealed no significant difference for any of the questions except for questions 1, 2, 3 and 10, again indicating better satisfaction among the ASHA Workers of these two districts. The rating was better for the questions related to OSC’s than for the issues related to the SUP; viz., ASHA Workers were satisfied with the facilities and activities related to evaluation of persons with communication disorders at the OSC’s more so when compared to the activities of the respective field supervisors when they were involved in the house to house survey. The probable reason could be that there were only two supervisors and their itinerary visit in the surveyed villages to supervise the ASHA Workers was distributed in such a way that they could not supervise more than once for ASHA Worker per village. It is also possible that despite intensive training in a day’s orientation activity conducted at the Institute (AIISH) for the ASHA Workers and a one-on-one training provided to them in the field for house to house survey for a week’s period, the ASHA Workers were less satisfied. When compared across taluks, the rating was better for questions related to OSC’s, than for the issues related to the SUP in all the three taluks and ASHA Workers of Mysuru district showed better scores. |
| Table 19*Mean, Median and SD for types of questions in the questionnaire across ten hoblis.*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question No.** | **Hobli** | **Mean** | **SD** | **Median** |  **Question****No.** | **Hobli** | **Mean** | **SD** | **Median** |
| OSC Q1 | 1 | 3.96 | 0.20 | 4.00 | SUP Q10 | 1 | 4.00 | 0.00 | 4.00 |
| 2 | 3.67 | 0.55 | 4.00 | 2 | 3.96 | 0.19 | 4.00 |
| 3 | 3.71 | 0.55 | 4.00 | 3 | 4.00 | 0.00 | 4.00 |
| 4 | 3.81 | 0.46 | 4.00 | 4 | 3.78 | 0.41 | 4.00 |
| 5 | 3.97 | 0.16 | 4.00 | 5 | 3.92 | 0.27 | 4.00 |
| 6 | 3.96 | 0.20 | 4.00 | 6 | 3.92 | 0.27 | 4.00 |
| 7 | 3.82 | 0.39 | 4.00 | 7 | 3.94 | 0.23 | 4.00 |
| 8 | 3.89 | 0.32 | 4.00 | 8 | 4.00 | 0.00 | 4.00 |
| 9 | 3.40 | 0.50 | 3.00 | 9 | 3.67 | 0.48 | 4.00 |
| Mean | 3.83 | 0.39 | 4.00 | Mean | 3.92 | 0.27 | 4.00 |
| Q2 | 1 | 3.83 | 0.38 | 4.00 | Q11 | 1 | 3.74 | 0.44 | 4.00 |
| 2 | 3.48 | 0.50 | 3.00 | 2 | 3.52 | 0.50 | 4.00 |
| 3 | 3.33 | 0.56 | 3.00 | 3 | 3.50 | 0.51 | 3.50 |
| 4 | 3.57 | 0.60 | 4.00 | 4 | 3.68 | 0.47 | 4.00 |
| 5 | 3.67 | 0.47 | 4.00 | 5 | 3.72 | 0.45 | 4.00 |
| 6 | 3.92 | 0.27 | 4.00 | 6 | 3.80 | 0.40 | 4.00 |
| 7 | 3.70 | 0.46 | 4.00 | 7 | 3.66 | 0.50 | 4.00 |
| 8 | 3.89 | 0.32 | 4.00 | 8 | 3.93 | 0.26 | 4.00 |
| 9 | 3.47 | 0.51 | 3.00 | 9 | 3.67 | 0.48 | 4.00 |
| Mean | 3.68 | 0.48 | 4.00 | Mean | 3.70 | 0.46 | 4.00 |
| Q3 | 1 | 3.65 | 0.57 | 4.00 | Q12 | 1 | 3.65 | 0.48 | 4.00 |
| 2 | 3.59 | 0.50 | 4.00 | 2 | 3.63 | 0.49 | 4.00 |
| 3 | 3.46 | 0.50 | 3.00 | 3 | 3.83 | 0.38 | 4.00 |
| 4 | 3.38 | 0.68 | 3.00 | 4 | 3.62 | 0.49 | 4.00 |
| 5 | 3.54 | 0.50 | 4.00 | 5 | 3.79 | 0.40 | 4.00 |
| 6 | 3.90 | 0.30 | 4.00 | 6 | 3.61 | 0.49 | 4.00 |
| 7 | 3.66 | 0.47 | 4.00 | 7 | 3.89 | 0.31 | 4.00 |
| 8 | 3.59 | 0.50 | 4.00 | 8 | 3.85 | 0.36 | 4.00 |
| 9 | 3.00 | 0.75 | 3.00 | 9 | 3.93 | 0.25 | 4.00 |
| Mean | 3.59 | 0.54 | 4.00 | Mean | 3.76 | 0.43 | 4.00 |
| Q4 | 1 | 3.43 | 0.50 | 3.00 | Q13 | 1 | 3.61 | 0.49 | 4.00 |
| 2 | 3.59 | 0.50 | 4.00 | 2 | 3.70 | 0.46 | 4.00 |
| 3 | 3.58 | 0.50 | 4.00 | 3 | 3.63 | 0.49 | 4.00 |
| 4 | 3.49 | 0.69 | 4.00 | 4 | 3.62 | 0.54 | 4.00 |
| 5 | 3.46 | 0.50 | 3.00 | 5 | 3.72 | 0.45 | 4.00 |
| 6 | 3.84 | 0.37 | 4.00 | 6 | 3.80 | 0.40 | 4.00 |
| 7 | 3.75 | 0.49 | 4.00 | 7 | 3.82 | 0.39 | 4.00 |
| 8 | 3.74 | 0.52 | 4.00 | 8 | 3.78 | 0.42 | 4.00 |
| 9 | 3.87 | 0.35 | 4.00 | 9 | 3.67 | 0.48 | 4.00 |
| Mean | 3.65 | 0.52 | 4.00 | Mean | 3.73 | 0.45 | 4.00 |
| Q5 | 1 | 3.57 | 0.59 | 4.00 | Q14 | 1 | 3.91 | 0.28 | 4.00 |
| 2 | 3.70 | 0.54 | 4.00 | 2 | 3.67 | 0.48 | 4.00 |
| 3 | 3.58 | 0.71 | 4.00 | 3 | 3.75 | 0.44 | 4.00 |
| 4 | 3.68 | 0.58 | 4.00 | 4 | 3.78 | 0.41 | 4.00 |
| 5 | 3.69 | 0.46 | 4.00 | 5 | 3.90 | 0.30 | 4.00 |
| 6 | 3.76 | 0.43 | 4.00 | 6 | 3.92 | 0.27 | 4.00 |
| 7 | 3.77 | 0.42 | 4.00 | 7 | 3.76 | 0.46 | 4.00 |
| 8 | 3.63 | 0.62 | 4.00 | 8 | 3.96 | 0.19 | 4.00 |
| 9 | 3.60 | 0.50 | 4.00 | 9 | 3.80 | 0.41 | 4.00 |
| Mean | 3.69 | 0.52 | 4.00 | Mean | 3.83 | 0.38 | 4.00 |
| Q6 | 1 | 3.61 | 0.49 | 4.00 | **Total SUP** | 1 | 18.91 | 0.73 | 19.00 |
| 2 | 3.59 | 0.50 | 4.00 | 2 | 18.48 | 0.97 | 18.00 |
| 3 | 3.42 | 0.58 | 3.00 | 3 | 18.71 | 0.90 | 19.00 |
| 4 | 3.46 | 0.65 | 4.00 | 4 | 18.49 | 1.57 | 19.00 |
| 5 | 3.56 | 0.50 | 4.00 | 5 | 19.05 | 1.27 | 19.00 |
| 6 | 3.71 | 0.45 | 4.00 | 6 | 19.04 | 0.76 | 19.00 |
| 7 | 3.76 | 0.46 | 4.00 | 7 | 19.07 | 1.17 | 19.00 |
| 8 | 3.74 | 0.59 | 4.00 | 8 | 19.52 | 0.70 | 20.00 |
| 9 | 3.47 | 0.64 | 4.00 | 9 | 18.73 | 1.22 | 19.00 |
| Mean | 3.63 | 0.53 | 4.00 | Mean | **18.93** | **1.12** | **19.00** |
| Q7 | 1 | 3.43 | 0.66 | 4.00 |  |  |  |  |  |
| 2 | 3.67 | 0.48 | 4.00 |  |  |  |  |
| 3 | 3.58 | 0.65 | 4.00 |  |  |  |  |
| 4 | 3.62 | 0.59 | 4.00 |  |  |  |  |
| 5 | 3.59 | 0.49 | 4.00 |  |  |  |  |
| 6 | 3.67 | 0.51 | 4.00 |  |  |  |  |
| 7 | 3.72 | 0.45 | 4.00 |  |  |  |  |
| 8 | 3.56 | 0.64 | 4.00 |  |  |  |  |
| 9 | 3.53 | 0.51 | 4.00 |  |  |  |  |
| Mean | 3.63 | 0.54 | 4.00 |  |  |  |  |
| Q8 | 1 | 3.65 | 0.57 | 4.00 |  |  |  |  |  |
| 2 | 3.52 | 0.50 | 4.00 |  |  |  |  |
| 3 | 3.50 | 0.59 | 4.00 |  |  |  |  |
| 4 | 3.51 | 0.55 | 4.00 |  |  |  |  |
| 5 | 3.59 | 0.49 | 4.00 |  |  |  |  |
| 6 | 3.59 | 0.49 | 4.00 |  |  |  |  |
| 7 | 3.85 | 0.36 | 4.00 |  |  |  |  |
| 8 | 3.67 | 0.62 | 4.00 |  |  |  |  |
| 9 | 3.53 | 0.51 | 4.00 |  |  |  |  |
| Mean | 3.63 | 0.51 | 4.00 |  |  |  |  |
| Q9 | 1 | 3.74 | 0.54 | 4.00 |  |  |  |  |  |
| 2 | 3.67 | 0.48 | 4.00 |  |  |  |  |
| 3 | 3.63 | 0.57 | 4.00 |  |  |  |  |
| 4 | 3.68 | 0.58 | 4.00 |  |  |  |  |
| 5 | 3.79 | 0.57 | 4.00 |  |  |  |  |
| 6 | 3.51 | 0.50 | 4.00 |  |  |  |  |
| 7 | 3.76 | 0.43 | 4.00 |  |  |  |  |
| 8 | 3.44 | 0.69 | 4.00 |  |  |  |  |
| 9 | 3.47 | 0.64 | 4.00 |  |  |  |  |
| Mean | 3.65 | 0.54 | 4.00 |  |  |  |  |
| **Total OSC** | 1 | 32.87 | 0.92 | 33.00 |  |  |  |  |  |
| 2 | 32.48 | 2.04 | 32.00 |  |  |  |  |
| 3 | 31.79 | 2.02 | 32.00 |  |  |  |  |
| 4 | 32.19 | 3.53 | 33.00 |  |  |  |  |
| 5 | 32.87 | 1.43 | 33.00 |  |  |  |  |
| 6 | 33.88 | 1.33 | 34.00 |  |  |  |  |
| 7 | 33.79 | 1.88 | 34.00 |  |  |  |  |
| 8 | 33.15 | 3.39 | 34.00 |  |  |  |  |
| 9 | 31.33 | 2.69 | 31.00 |  |  |  |  |
| Mean | **32.99** | **2.32** | **33.00** |  |  |  |  |

Note: 1=Kikkeri, 2=Bookanakere,3=Sheelanere, 4=Santhebachahalli and Kasaba, 5=Chikkayanachatra, 6=Biligere, 7=Kowlande 8=Kasaba and 9=Agara; OSC= questions related to factors in Outreach Service Centre; SUP = questions related to Supervisor related factors |
|  |  |
| Table 20*Overall Mean, Median and SD for all questions in the questionnaire for ten hoblis.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Overall for all questions**  | **Hobli** | **Mean** | **SD** | **Median** |
|  | 1 | 51.78 | 1.47 | 52.00 |
|  | 2 | 50.96 | 2.84 | 50.00 |
|  | 3 | 50.50 | 2.34 | 51.00 |
|  | 4 | 50.68 | 4.73 | 52.00 |
|  | 5 | 51.92 | 2.20 | 52.00 |
|  | 6 | 52.92 | 1.68 | 53.00 |
|  | 7 | 52.85 | 2.56 | 53.00 |
|  | 8 | 52.67 | 3.50 | 54.00 |
|  | 9 | 50.07 | 2.78 | 50.00 |
|  | Mean | **51.91** | **2.95** | **52.00** |
|  |  |  |  |  |
| **Percentage OSC** | 1 | 91.29 | 2.55 | 91.66 |
|  | 2 | 90.22 | 5.68 | 88.88 |
|  | 3 | 88.30 | 5.61 | 88.88 |
|  | 4 | 89.40 | 9.81 | 91.66 |
|  | 5 | 91.30 | 3.98 | 91.66 |
|  | 6 | 94.10 | 3.70 | 94.44 |
|  | 7 | 93.85 | 5.22 | 94.44 |
|  | 8 | 92.07 | 9.42 | 94.44 |
|  | 9 | 87.03 | 7.47 | 86.11 |
|  | Mean | **91.63** | **6.44** | **91.66** |
|  |  |  |  |  |
| **Percentage SUP** | 1 | 94.56 | 3.66 | 95.00 |
|  | 2 | 92.40 | 4.87 | 90.00 |
|  | 3 | 93.54 | 4.53 | 95.00 |
|  | 4 | 92.43 | 7.87 | 95.00 |
|  | 5 | 95.25 | 6.38 | 95.00 |
|  | 6 | 95.20 | 3.81 | 95.00 |
|  | 7 | 95.35 | 5.87 | 95.00 |
|  | 8 | 97.59 | 3.50 | 100.00 |
|  | 9 | 93.66 | 6.11 | 95.00 |
|  | Mean | **94.63** | **5.60** | **95.00** |
|  |  |  |  |  |
| **Overall Percentage** | 1 | 92.46 | 2.63 | 92.85 |
|  | 2 | 91.00 | 5.08 | 89.28 |
|  | 3 | 90.17 | 4.17 | 91.07 |
|  | 4 | 90.21 | 8.48 | 92.85 |
|  | 5 | 92.71 | 3.93 | 92.85 |
|  | 6 | 94.49 | 3.00 | 94.64 |
|  | 7 | 94.36 | 4.57 | 94.64 |
|  | 8 | 94.04 | 6.26 | 96.42 |
|  | 9 | 89.40 | 4.98 | 89.28 |
|  | Mean | **92.66** | **5.28** | **92.85** |

Note: 1=Kikkeri, 2=Bookanakere, 3=Sheelanere, 4= Santhebachahalli and Kasaba, 5= Chikkayanachatra, 6=Biligere, 7=Kowlande 8=Kasaba and 9=Agara; OSC= questions related to factors in Outreach Service Centre; SUP = questions related to Supervisor related factors |
|  |  |
| Table 21*Mean, Median and SD for types of questions in the questionnaire across Mandya, Mysuru & Chamarajanagara districts*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ques-tion No | District | Mean | SD | Median | Ques-tion No | District | Mean | SD | Median |
| OSC Q1 | A | 3.78 | 0.47 | 4.00 | SUP Q10 | A | 3.92 | 0.27 | 4.00 |
| B | 3.90 | 0.30 | 4.00 | B | 3.94 | 0.23 | 4.00 |
| C | 3.40 | 0.50 | 3.00 | C | 3.67 | 0.48 | 4.00 |
| Total | 3.83 | 0.39 | 4.00 | Total | 3.92 | 0.27 | 4.00 |
| Q2 | A | 3.55 | 0.55 | 4.00 | Q11 | A | 3.61 | 0.48 | 4.00 |
| B | 3.78 | 0.41 | 4.00 | B | 3.75 | 0.44 | 4.00 |
| C | 3.47 | 0.51 | 3.00 | C | 3.67 | 0.48 | 4.00 |
| Total | 3.68 | 0.48 | 4.00 | Total | 3.70 | 0.46 | 4.00 |
| Q3 | A | 3.50 | 0.58 | 4.00 | Q12 | A | 3.68 | 0.47 | 4.00 |
| B | 3.69 | 0.46 | 4.00 | B | 3.79 | 0.40 | 4.00 |
| C | 3.00 | 0.75 | 3.00 | C | 3.93 | 0.25 | 4.00 |
| Total | 3.59 | 0.54 | 4.00 | Total | 3.76 | 0.43 | 4.00 |
| Q4 | A | 3.52 | 0.57 | 4.00 | Q13 | A | 3.64 | 0.50 | 4.00 |
| B | 3.71 | 0.48 | 4.00 | B | 3.78 | 0.41 | 4.00 |
| C | 3.87 | 0.35 | 4.00 | C | 3.67 | 0.48 | 4.00 |
| Total | 3.65 | 0.52 | 4.00 | Total | 3.73 | 0.45 | 4.00 |
| Q5 | A | 3.64 | 0.60 | 4.00 | Q14 | A | 3.77 | 0.42 | 4.00 |
| B | 3.73 | 0.46 | 4.00 | B | 3.86 | 0.36 | 4.00 |
| C | 3.60 | 0.50 | 4.00 | C | 3.80 | 0.41 | 4.00 |
| Total | 3.69 | 0.52 | 4.00 | Total | 3.83 | 0.38 | 4.00 |
| Q6 | A | 3.51 | 0.57 | 4.00 | **Total SUP** | A | 18.62 | 1.16 | 19.00 |
| B | 3.70 | 0.49 | 4.00 | B | 19.12 | 1.05 | 19.00 |
| C | 3.47 | 0.64 | 4.00 | C | 18.73 | 1.22 | 19.00 |
| Total | 3.63 | 0.53 | 4.00 | **Total** | **18.93** | **1.12** | **19.00** |
| Q7 | A | 3.59 | 0.59 | 4.00 |  |  |  |  |  |
| B | 3.66 | 0.50 | 4.00 |  |  |  |  |
| C | 3.53 | 0.51 | 4.00 |  |  |  |  |
| Total | 3.63 | 0.54 | 4.00 |  |  |  |  |
| Q8 | A | 3.54 | 0.55 | 4.00 |  |  |  |  |  |
| B | 3.70 | 0.48 | 4.00 |  |  |  |  |
| C | 3.53 | 0.51 | 4.00 |  |  |  |  |
| Total | 3.63 | 0.51 | 4.00 |  |  |  |  |
| Q9 | A | 3.68 | 0.54 | 4.00 |  |  |  |  |  |
| B | 3.66 | 0.54 | 4.00 |  |  |  |  |
| C | 3.47 | 0.64 | 4.00 |  |  |  |  |
| Total | 3.65 | 0.54 | 4.00 |  |  |  |  |
| **Total OSC** | A | 32.32 | 2.49 | 33.00 |  |  |  |  |  |
| B | 33.53 | 2.00 | 34.00 |  |  |  |  |
| C | 31.33 | 2.69 | 31.00 |  |  |  |  |
| **Total** | **32.99** | **2.32** | **33.00** |  |  |  |  |

Note: A=Mandya, B=Mysuru and C=Chamarajanagara; OSC= questions related to factors in OutreachService Centre; SUP = questions related to Supervisor related factors |
|  |  |
| Table 22*Overall Mean, Median and SD for all questions in the questionnaire for three taluks*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Overall for all questions  | Hobli | Mean | SD | Median |
|  | A | 50.94 | 3.32 | 52.00 |
|  | B | 52.65 | 2.46 | 53.00 |
|  | C | 50.07 | 2.78 | 50.00 |
|  | Total | 51.91 | 2.95 | 52.00 |
|  |  |  |  |  |
| Percentage OSC | A | 89.75 | 6.93 | 91.66 |
|  | B | 93.12 | 5.56 | 94.44 |
|  | C | 87.03 | 7.47 | 86.11 |
|  | Total | 91.63 | 6.44 | 91.66 |
|  |  |  |  |  |
| Percentage SUP | A | 93.10 | 5.80 | 95.00 |
|  | B | 95.61 | 5.25 | 95.00 |
|  | C | 93.66 | 6.11 | 95.00 |
|  | Total | 94.63 | 5.60 | 95.00 |
|  |  |  |  |  |
| Overall Percentage | A | 90.86 | 5.95 | 92.85 |
|  | B | 94.00 | 4.40 | 94.64 |
|  | C | 89.40 | 4.98 | 89.28 |
|  | Total | 92.66 | 5.28 | 92.85 |

Note: A=Mandya, B=Mysuru and C=Chamarajanagara; OSC= questions related to factors in Outreach Service Centre; SUP = questions related to Supervisor related factors. |
|  |  |
| Table 23*The Chi-Square values for Mandya, Mysuru & Chamarajanagara Districts*

|  |  |
| --- | --- |
| Question No. | Chi-Square |
| OSC Q1 | 26913 |
| Q2 | 17.770 |
| Q3 | 18.909 |
| Q4 | 11.740 |
| Q5 | 1.876 |
| Q6 | 10.185 |
| Q7 | 1.385 |
| Q8 | 7.229 |
| Q9 | 2.019 |
| Total OSC | 34.952 |
|  |  |
| SUP Q10 | 14.115 |
| Q11 | 6.332 |
| Q12 | 7.611 |
| Q13 | 7.044 |
| Q14 | 4.040 |
| Total SUP | 17.125 |
|  |  |
| Overall | 32.335 |
| Percentage OSC | 34.952 |
| Percentage SUP | 17.125 |
| Overall Percentage | 33.552 |

*Note:* Outreach service centre=OSC and Supervisor=SUP |
|  |  |
| Table 24*/z/ scores for responses to questions between the Mandya, Mysuru and Chamarajanagara Districts*

|  |  |  |  |
| --- | --- | --- | --- |
| Question Number | Mandya vs Mysuru |Z| | Mandya vs Chamarajanagar |Z| | Mysuru vs Chamarajanagar |Z| |
| OSC Q1 | 2.18 | 3.34 | 5.34 |
| Q2 | 3.80 | 0.69 | 2.70 |
| Q3 | 2.63 | 2.60 | 3.93 |
| Q4 | 2.97 | 2.28 | 1.20 |
| Q5 | 0.97 | 0.60 | 1.15 |
| Q6 | 3.02 | 0.21 | 1.61 |
| Q7 | 0.77 | 0.60 | 1.02 |
| Q8 | 2.53 | 0.15 | 1.38 |
| Q9 | 0.42 | 1.40 | 1.26 |
| Total OSC | 5.29 | 1.98 | 3.30 |
| SUP Q10 | 0.72 | 2.90 | 3.76 |
| Q11 | 2.50 | 0.40 | 0.71 |
| Q12 | 2.19 | 2.04 | 1.33 |
| Q13 | 2.60 | 0.15 | 1.05 |
| Q14 | 1.99 | 0.22 | 0.69 |
| Total SUP | 4.11 | 0.26 | 1.28 |
| Overall | 5.07 | 1.35 | 3.31 |
| Percentage OSC | 5.29 | 1.98 | 3.30 |
| Percentage SUP | 4.11 | 0.26 | 1.28 |
| Overall Percentage | 5.20 | 1.28 | 3.31 |

*Note:* Outreach service centre=OSC and Supervisor=SUP |
|  |  |
| **RESULTS ON FEEDBACK ABOUT** **AWARENESS OF COMMUNICATION** **DISORDERS AND RELATED ISSUES IN THE PUBLIC** | Out of 1500 questionnaires that were distributed, 75 questionnaires were not returned and hence the filled questionnaires included 1425. Table 25 shows the number of persons from the 7 target groups who filled the questionnaire. Table 26 shows the group mean and SD of the seven target groups and also the means and SDs of three domains across the target groups. |
|  |  |
| Table 25*Total Number of persons representing various target groups who responded to the questionnaire*

|  |  |
| --- | --- |
| Target Groups | Number (percentage)  |
| Agriculturists/Manual Laborers’ | 350 (24.6%) |
| Businessmen | 152 (10.7%) |
| Grampanchayat member | 75 (5.3%) |
| Students | 417 (29.3%) |
| Professionals | 144 (10.1%) |
| Government Employees | 115 (8.1%) |
| Home Makers | 172 (12.1%)  |
| **Total** | **1425 (100%)** |

 |
|  |  |
| Table 26*Group Mean and SDs across three question domains of the target groups.*

|  |  |  |
| --- | --- | --- |
| Target Group | Domains | Overall  |
| Hearing Impairment | Speech and language disorders | Lifestyle |  |
| Mean | SD | Mean | SD | Mean | SD | Mean  | SD |
| Agriculture/Manual Labourer | 11.97 | 3.05 | 41.83 | 6.97 | 14.93 | 3.77 | 68.72 | 8.25 |
| Business | 11.40 | 3.35 | 39.15 | 6.74 | 15.95 | 4.12 | 66.50 | 8.87 |
| Grampanchayat member | 11.00 | 3.65 | 38.44 | 7.27 | 14.44 | 7.29 | 63.88 | 11.16 |
| Students | 11.74 | 2.26 | 40.04 | 6.84 | 16.04 | 3.90 | 67.83 | 7.66 |
| Professional | 10.56 | 3.18 | 36.88 | 9.65 | 14.94 | 3.53 | 62.38 | 10.92 |
| Government Employee | 12.00 | 2.51 | 37.43 | 10.90 | 17.43 | 2.98 | 66.86 | 12.32 |
| Home Maker | 10.44 | 2.97 | 39.50 | 7.15 | 16.33 | 3.01 | 66.28 | 8.28 |
| **Total** | **11.37** | **3.00** | **39.39** | **7.80** | **15.65** | **4.23** | **66.41** | **9.45** |

 |
|  |  |
| Results revealed that the awareness for factors related to speech language disorders was higher among the 7 target groups. This was followed by factors related to lifestyle and hearing impairment. However, results of Kruskal – Wallis test showed no significant difference between the means of the target groups within each domain i.e., Speech and language disorders, Hearing Impairment and Lifestyle and between the domains at 0.05 level of significance (Table 27). As there was significant difference observed in the target groups within each domain, Mann-Whitney U test was administered to compare individual domains across the target groups. The results of the test at 0.05 level of significance, for individual domains are given in table 28 and overall comparison in given in table 29.Results of Mann Whitney U test (Table 28) revealed that awareness for hearing impairment and ear diseases among the Professionals was significantly higher than other target groups except for Government Employee. Awareness among Students was significantly lower compared to target groups such as Agriculture/Manual Laborer and Government Employee. Awareness for Speech and Language disorders among Professionals was significantly higher than other target groups except for Gram panchayat members. Awareness for Lifestyle & related issues revealed that Students were significantly poorer compared to other target groups such as Business, Professionals and Government Employees. Results also showed (Table 29) that on overall comparison of the 3 domains (Hearing Impairment, Speech-Language Disorders and Lifestyle) among the target groups, indicated that awareness among Professionals was significantly higher compared to other target groups such as Agriculture/Manual Laborer, Business, Students and Home Maker. Students showed significantly lower scores when compared to other target groups such as Agriculture/Manual Laborer, Professionals, Gram panchayat member and Government Employee. This indicates that Professionals were more aware and Students were less aware of the communication disorders. Awareness among the target groups in the three districts was computed and the mean and SDs for the same is shown in Table 30. Results of Kruskal-Wallis test (Table 31) showed significant difference in awareness level in the target groups between Mandya, Mysuru & Chamarajanagara Districts at 0.001 level of significance.Further, results of Mann-Whitney U test (Table 32) showed that although the overall scores indicates good awareness in all the three districts, there was a significant effect seen in Mandya district.The higher awareness for Speech and language disorders could probably be due to the overt signs and symptoms that are evident in most of these disorders when compared to Hearing impairment. Similarly the target groups were better aware of the effects of disorders on lifestyle of the person affected. The Mean awareness scores and SDs for each disorders under the domains of hearing impairment and ear diseases, speech and language disorders and lifestyle questions of the questionnaire is shown in Table 33.Friedman’s test showed significant difference between 3 sub domains of Hearing impairment (χ2 (2) =153.139, p < 0.001). Further, Wilcoxon’s Signed Rank test was run to compare the differences between the questions within a domain. There was a significant difference between HI 1 (Questions related to Risk factors leading to hearing impairment), HI 2 (Questions related to hearing impairment) and HI 3 (Questions related to General awareness of hearing impairment) at 0.001 level of significance, which suggested that the persons in the target groups were equally aware of the three domains HI 1, HI 2 and HI3.Friedman’s test revealed significant difference between the sub domains of Speech – language disorders (χ2 (9) =660.602, p < 0.001), suggesting that there was good awareness among the target groups for speech and language disorders in general. Further, Wilcoxon’s Signed Rank test was run and no significant difference was found between the different disorders of speech and language. This indicates that the target groups did not show specific trend with respect to awareness of individual disorders such as mental retardation, cerebral palsy etc, although there was a overall good awareness for the speech and language disorders. For the questions related to lifestyle, Friedman test showed significant difference between sub domains (χ2 (3) =229.590, p < 0.001), suggesting that the target groups were aware of the factors which affected lifestyle in persons with communication disorders. Further, Wilcoxon’s Signed Rank test revealed significant differences for LS1 (social aspects) and LS4 (vocational, entertainment, physical and economy aspects) when compared to LS2 (literacy aspects) and LS3 (personality aspects), indicating that the target groups were more aware of the effect of various communication disorders on the aspects related vocational, entertainment, physical, economy and social compared to the implications of communication disorders on literacy and personality related issues.  |
|  |  |
| Table 27*Chi-Square (χ2) values of 3 domains.*

|  |  |
| --- | --- |
| Domains | Chi-Square value |
| Hearing Impairment  | 24.618 |
| Speech and language disorders | 27.228 |
| Lifestyle | 13.654 |
| Overall | 33.989 |

 |
|  |  |
| Table 28*Comparison across the target groups for the three domains using Mann-Whitney U test.*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tar-get gp | A | B | GM | S | P | GE | HM |
| Dom-ain | HI | SLD | LS | HI | SLD | LS | HI | SLD | LS | HI | SLD | LS | HI | SLD | LS | HI | SLD | LS | HI | SLD | LS |
| A | - | - | - | NS | NS | NS | NS | NS | NS | S | NS | NS | S | S | NS | NS | NS | NS | NS | NS | NS |
| B | - | - | - | - | - | - | NS | NS | NS | NS | NS | S | S | S | NS | NS | NS | NS | NS | NS | NS |
| GM | - | - | - | - | - | - | - | - | - | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS |
| S | - | - | - | - | - | - | - | - | - | - | - | - | S | S | S | S | NS | S | NS | NS | NS |
| P | - | - | - | - | - | - | - | - | - | - | - |  | - | - | - | NS | S | NS | S | S | NS |
| GE | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | NS | NS | S |
| HM | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Note: HI=Hearing Impairment, SLD=Speech-Language Disorders, LS=Lifestyle; A=Agriculture/Manual Laborer, B=Business, GM=Grampanchayat member, S=Students, P=Professional, GE=Government Employee and HM=Home Maker; NS-Not significant & S-Significant |
|  |  |
| Table 29*Comparison across the target groups for the combined domains using Mann-Whitney U test.*

|  |  |  |
| --- | --- | --- |
|  | Overall (3 Domains) |  |
| Target group | A | B | GM | S | P | GE | HM |
| A | - | NS | NS | S | S | NS | NS |
| B | - | - | NS | NS | S | NS | NS |
| GM | - | - | - | S | NS | NS | NS |
| S | - | - | - | - | S | S | NS |
| P | - | - | - | - | - | NS | S |
| GE | - | - | - | - | - | - | NS |
| HM | - | - | - | - | -- | - | - |

Note: HI=Hearing Impairment, SLD=Speech-Language Disorders, LS=Lifestyle; A=Agriculture/Manual Laborer, B=Business, GM=Grampanchayat member, S=Students, P=Professional, GE=Government Employee and HM=Home Maker; NS-Not significant & S-Significant |
|  |  |
| Table 30*Awareness scores (Mean & SDs) across Mandya, Mysuru and Chamarajanagara districts.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Domains | Mandya | Mysuru | Chamarajanagara | Overall |
| Mean | SD | Mean | SD | Mean | SD | Mean | SD |
| Hearing Impairment | 13.77 | 2.22 | 13.07 | 2.43 | 12.97 | 2.41 | 13.41 | 2.36 |
| Speech and language disorders | 41.86 | 7.82 | 40.33 | 8.28 | 39.43 | 6.14 | 41.02 | 7.99 |
| Lifestyle  | 20.63 | 4.63 | 18.97 | 5.37 | 18.92 | 3.29 | 19.77 | 4.99 |
| Overall | 76.27 | 11.34 | 72.37 | 11.84 | 71.32 | 8.29 | 74.20 | 11.60 |

 |
|  |  |
| Table 31*Chi-Square (χ2) values of 3 domains.*

|  |  |
| --- | --- |
| Domains  | Chi-Square value |
| Hearing Impairment | 32.68 |
| Speech and language disorders | 14.18 |
| Lifestyle  | 50.41 |
| Overall | 45.99 |

 |
|  |  |
| Table 32*Comparison across three Districts (Mandya, Mysuru and Chamarajanagara) and domains (Hearing Impairment, Speech-Language Disorders and Lifestyle) using Mann-Whitney U test.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| District | Mandya | Mysuru | Chamarajanagara | Overall |
| HI | SLD | LS | HI | SLD | LS | HI | SLD | LS | Mandya | Mysuru | Chama-raja-nagara |
| Mandya | - | - | - | S | S | S | S | S | S | - | S | S |
| Mysuru | - | - | - | - | - | - | NS | S | NS | - | - | S |
| Chamarajanagara | - | - | - | - | - | - | - | - | - | - | - | - |

*Note: NS-Not significant & S-Significant* |
|  |  |
| Table 33*Awareness scores (Means and SDs) for various disorders in the three domains of the questionnaire*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Domains* | *Domain code* | *Questions related to* | *Mean*  | *SD* |
| *Hearing* *Impairment*  | HI 1  | Risk factors leading to hearing impairment | 74.22 | 19.09 |
| HI 2 | Hearing impairment | 70.49 | 19.62 |
| HI 3 | General awareness of hearing impairment | 78.84 | 19.01 |
| *Speech –* *Language Disorders* | SLD 1 | General awareness of Speech and language disorders | 81.50 | 20.28 |
| SLD 2 | General awareness of Mental retardation | 77.42 | 18.12 |
| SLD 3 | General awareness of Learning disability | 76.40 | 22.37 |
| SLD 4 | General awareness of Cerebral Palsy | 73.98 | 32.95 |
| SLD 5 | General awareness of Autism | 67.95 | 27.04 |
| SLD 6 | General awareness of Aphasia | 69.68 | 28.14 |
| SLD 7 | General awareness of Cleft lip and palate | 78.27 | 20.78 |
| SLD 8 | General awareness of Articulation disorders | 77.03 | 25.74 |
| SLD 9 | General awareness of Fluency disorders | 69.22 | 26.78 |
| SLD 10 | General awareness of Voice disorders | 71.38 | 18.40 |
| *Life style* | LS 1 | Social aspects | 71.77 | 19.93 |
| LS 2 | Literacy aspects | 67.59 | 22.84 |
| LS 3 | Personality aspects | 62.01 | 25.24 |
| LS 4 | Vocational, Entertainment, Physical & Economical aspects  | 68.79 | 23.86 |

 |
|  |  |
| **SUMMARY ON PREVALENCE OF COMMUNICATION DISORDERS**In level II of the survey, the population in Nanjangudu taluk of Mysuru District, K.R.Pete Taluk in Mandya District and Yelanduru Taluk in Chamarajanagara District (N= 3,79,267) were identified, screened and evaluated for communication disorders. The percentage prevalence of types of communication disorders in the three taluks of the three districts is as follows:1. **Speech and Language Disorders**

Prevalence of Speech-Language disorders in the population of three taluks together was **0.318%** (0.118% in K.R.Pete taluk, 0.180% in Nanjangudu taluk and 0.018% in Yelanduru taluk). The speech-language disorders were found to be more prevalent in males compared to females in all the three taluks (0.193% in males and 0.124% in females). Within the speech and language disorders, across the three taluks, percentage of Specific language impairment, Mental retardation, Fluency disorders and Articulation/phonological disorders were found to be higher followed by Aphasia, Cleft lip and palate, Learning disability and Cerebral Palsy. Prevalence of Dysarthria/Apraxia, Traumatic Brain Injury, Attention deficit hyperactive disorder and Pervasive Developmental disorders were found to be very less.1. **Hearing disorders**

The overall percentage of prevalence of hearing loss in the three taluks together was **1.009%**. Amongst the types of hearing loss, the percentage of prevalence of sensorineural hearing loss was the highest (0.644%), followed by the mixed (0.202%) and conductive type of hearing loss (0.162%). With respect to degree of hearing loss, the percentage of prevalence of severe degree of hearing loss was highest, followed by Moderate degree, Mild and Profound degree of hearing loss in K.R.Pete and Nanjangud taluks. However, in Yelandur Taluk the prevalence was found to be lesser, with severe and moderate degrees of hearing loss being greater than the mild and profound degree of hearing loss. In general, the percentage prevalence of hearing loss in females, irrespective of the type and degree of loss was higher (0.517%) compared to males (0.491%)**.**1. **ENT Conditions and Diseases**

The prevalence percentage of ENT conditions and diseases was in the three taluks put together was **1.082%.** Amongst the conditions and diseases, the prevalence % in all the three taluks were higher for ASOM/CSOM, followed by other conditions (which included complaints such as ear pain, tinnitus, vertigo etc). The next in the order was ear pain, throat pain and wax in the ear. The prevalence percentage of conditions such as rhinitis, itching and blocking sensation in the ear, tympanic membrane abnormalities, eustachean tube malfunction, structural anomalies, foreign bodies in the ear, laryngitis and pharyngitis was observed to be less. In all the three taluks, the % prevalence in females was higher (0.610%) compared to males (0.471%).  |
|  |  |
|  |  |
|  |  |
|  |  |