**REPORT**

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| **The number and gender distribution of persons with communication disorders as identified by ASHA workers & ANMs through survey** | | | | | The total number and gender distribution of persons with communication disorders identified through survey by the ASHA Workers and ANMs in Level III (villages and town of Srirangapattana Taluk) is shown in Table 6. | | | |
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| Table 6  *Total number and gender distribution of persons with communication disorders identified by ASHA workers & ANMs in Srirangapattana Taluk.*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Srirangapatna Taluk | *Total Population* | *Persons with communication disorders identified by ASHA Workers* | | | | *Male* | *Female* | *Total* | | Hoblis in Srirangapattana (Rural) | | | | | | Arakere | 43,783 | 447 | 465 | 912 | | K.Shettahalli | 37,042 | 358 | 386 | 744 | | Belagola | 42,498 | 361 | 392 | 753 | | Kasaba | 29,595 | 251 | 257 | 508 | | Srirangapattana Town (Urban) | | | | | |  | 25,514 | 340 | 370 | 710 | | **Total** | **1,78,432** | **1,757** | **1,870** | **3,627** | | | | | | | | | |
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| **Number of persons**  **evaluated at AIISH, Camps and Door to Door, Percent follow up and False positive identifications by ASHA workers** | | | | | Table 7 provides the details of persons evaluated at AIISH, Camps and door to door evaluations, percent follow up and false positive identifications by ASHA workers. A total of 3778 persons were identified by ASHA workers as having communication disorders. The false positive identifications was limited to 45 (1.19% - normal and mental illness) and correct identifications was 3733 (98.81%). Out of 3733 persons, 1966 (52.66%) were evaluated at AIISH and Camps and 968 (25.94%) were evaluated in door to door evaluation. Despite all the efforts made to meet 100% follow up criteria, only 2934 (78.60%) were evaluated and 799 (21.40%) did not report for evaluation, or evaluations were incomplete or these patients consulted other institutions / centers. | | | |
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| Table 7  *Number of persons evaluated at AIISH, Camps and Door to Door, Percent follow up and False positive identifications by ASHA workers in Srirangapattana Taluk.*   |  |  | | --- | --- | | *Details* | *No of persons identified & evaluated* | | Number of persons identified with communication disorders by ASHA Workers through survey | 3,778 | | False positive identifications by the ASHA workers | 45  (1.19%) | | Number of persons with communication disorders (after evaluation- Correct identification by the ASHA workers) | 3733  (98.81%) | | Number evaluated at AIISH and Camps | 1,966  (52.66%) | | Number of persons evaluated – door to door | 968  (25.94%) | | Number of persons who could not be evaluated either at AIISH, Camps or Door to Door evaluation | 799  (21.40%) | | | | | | | | | |
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| **PREVALENCE OF COMMUNICATION DISORDERS IN SRIRANGAPATTANA TALUK OF MANDYA DISTRICT** | | | | | | | | |
| The prevalence of persons with communication disorders in Srirangapattana taluk was **2.09 %**. On comparison across the rural and urban population, the % prevalence was 1.60% in rural population and 0.48% in urban population. The % prevalence was slightly higher in females (1.07%) compared to males (1.01%), and this was reflected in both rural and urban population. Details are shown in Table 8. | | | | | | | | |
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| Table 8  *Prevalence of communication disorders in Srirangapattana Taluk of Mandya district*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | *Hoblis* | *Total villages* | *Total Houses* | *Total Population* | *Prevalence (No.& Percentage)*  *(N=1,78,432)* | | | | *Male* | *Female* | *Total* | | *Srirangapattana Taluk (Rural)* | | | | | | | | Arakere | 40 | 10,351 | 43,783 | 440 (0.24%) | 459 (0.25%) | 899  (0.50%) | | K.Shettahalli | 41 | 8,702 | 37,042 | 355  (0.19%) | 382  (0.21%) | 737  (0.41%) | | Belagola | 23 | 10,214 | 42,498 | 355  0.19% | 381  (0.21%) | 736  (0.41%) | | Kasaba | 23 | 6,223 | 29,595 | 246  (0.13%) | 254  (0.14% ) | 500  (0.28%) | | Sub Total | 127 | 35,490 | 1,52,918 | 1396  (0.78%) | 1476  (0.82%) | 2872  (1.60%) | | *Srirangapattana Town (Urban)* | | | | | | | | Identified through survey | *-* | 4,818 | 25,514 | 340  (0.19%) | 370  (0.20%) | 710  (0.39%) | | Self registered in camps | *-* | *-* | *-* | 73  (0.04%) | 78  (0.04%) | 151  (0.08%) | | Sub Total |  | 4,818 | 25,514 | 413  (0.23%) | 448  (0.25%) | 861  (0.48%) | | **Total** | | | | | | | |  | **127** | **40,308** | **1,78,432** | **1,809**  **(1.01%)** | **1,924**  **(1.07%)** | **3,733**  **(2.09% )** | | | | | | | | | |
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| **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 0.16% had speech and language disorders, 0.52% had hearing impairment, 0.37% had ENT diseases and 0.01% had dual and multiple disorders. The % prevalence in the rural population for communication disorders in general ranged from 0.15% to 0.30%, and it was 0.19% in the urban population. Table 9 shows the details. | | | |
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| Table 9  *Prevalence of Types of Communication Disorders in Srirangapattana Taluk*   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | *Sl. No* | *Disorders/*  *Diseases* | *Hoblis in Srirangapattana Taluk (Rural)* | | | | *Srirangapattana Town*  *(Urban)* | *Total Prevalence*  *& %*  *(N=1,78,432)* | | *Belagola* | *Kasaba* | *K.Shettahalli* | *Arakere* | |  | Speech and Language Disorders | 44  (0.02%) | 46  (0.02%) | 69  (0.03%) | 89  (0.04%) | 46  (0.02%) | 294  (0.16%) | |  | Hearing Impairment | 164  (0.09%) | 126  (0.07%) | 208  (0.11%) | 274  (0.15%) | 161  (0.09%) | 933  (0.52%) | |  | ENT Diseases | 98  (0.05%) | 93  (0.05%) | 166  (0.09%) | 179  (0.10%) | 139  (0.07%) | 675  (0.37%) | |  | Dual & Multiple Disorders | 7  (0.003%) | 3  (0.001%) | 5  (0.002%) | 5  (0.002%) | 5  (0.002%) | 25  (0.01%) | |  | **Total** | **313**  **(0.17%)** | **268**  **(0.15%)** | **448**  **(0.25%)** | **547**  **(0.30%)** | **351**  **(0.19%)** | **1927**  **(1.07%)** | | | | | | | | | |
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| **AGE AND GENDER DISTRIBUTION OF PERSONS WITH DIFFERENT TYPES OF COMMUNICATION DISORDERS** | | | | | Based on the reports from United Nation Department of Economic and Social Affairs (UNDESA-2012), United Nations International Children’s Emergency Funds (UNICEF), World Health Organization (WHO) and United Nations Fund for Population Activities (UNFPA), a criteria to classify the population according to age was followed. The population was classified into 8 age groups (in years) as follows: (i) Children = >0≤4.0; >4.0≤10.0; and >10.0≤15.0 (ii) Adults = >15.0≤25.0; >25.0≤60.0; (iii) Geriatric = >60.0≤69.0; >69.1≤79.0; >80.0 (for the sake of convenience and longevity observed in the older age groups). The percentage prevalence of communication disorders in Srirangapattana taluk (Table 15) was (i) 0.239% in children, 0.473% in adults, 0.367% in geriatric. There was no clear trend with respect to gender distribution. It was 0.108% in males and 0.056% in females for speech and language impairment; 0.239% in males and 0.283% in females for hearing impairment; 0.153% in males and 0.250% in females for ENT conditions and diseases and 0.008% in males and 0.005% in females for dual and multiple disorders. Tables 10 to 13 shows the age and gender distribution of communication disorders in Belagola, Kasaba, K. Shettihalli and Arakere Hoblis of Srirangapattana Taluk respectively and Table 14 shows the age and gender distribution of communication disorders in Srirangapattana town. Table 15 reflects the overall age and gender distribution of communication disorders in Srirangapattana Taluk. | | | |
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| Table 10  *Age and Gender distribution of types of communication disorders in Belagola Hobli of Srirangapattana Taluk*   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | DISOR-DERS / DISEASES | GEN-DER | AGE GROUPS IN YEARS | | | | | | | | Total Prevalence  & %  (N= 1,78,432) | | | Children | | | Adults | | Geriatric | | | Total & % | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | Speech & Lang-uage dis-orders | M | 02  (0.001%) | 06  (0.003%) | 08  (0.004%) | 07  (0.003%) | 07  (0.003%) | - | - | - | 30 | 0.016% | | F | 02  (0.001%) | 01  (0.000%) | 02  (0.001%) | 02  (0.001%) | 06  (0.003%) | 01  (0.000%) | - | - | 14 | 0.007% | | Hearing Impair-ment | M | - | 01  (0.000%) | 01  (0.000%) | 02  (0.001%) | 15  (0.008%) | 12  (0.006%) | 19  (0.010%) | 07  (0.003%) | 57 | 0.031% | | F | - | 01  (0.000%) | 01  (0.000%) | 05  (0.002%) | 38  (0.021%) | 30  (0.016%) | 22  (0.012%) | 10  (0.005%) | 107 | 0.059% | | ENT Diseases | M | 02  (0.001%) | 07  (0.003%) | 04  (0.002%) | 02  (0.001%) | 19  (0.010%) | 01  (0.000%) | 05  (0.002%) | - | 40 | 0.022% | | F | 04  (0.002%) | 04  (0.002%) | 05  (0.002%) | 05  (0.002%) | 31  (0.017%) | 06  (0.003%) | 02  (0.001%) | 01  (0.000%)) | 58 | 0.032% | | Dual / Multiple disor-ders | M | - | 02  (0.001%) | 02  (0.001%) | 01  (0.000%) | - | - | - | - | 05 | 0.002% | | F | - | 02  (0.001%) | - | - | - | - | - | - | 02 | 0.001% | |  | Sub Tot | 10  0.005% | 24  0.013% | 23  0.012% | 24  0.013% | 116  0.065% | 51  0.028% | 48  0.026% | 18  0.010% | 313 | 0.175% | |  | **Total** | **57**  **(0.031%)** | | | **140**  **(0.078%)** | | **117**  **(0.065%)** | | |  | |   [Note M = Males F = Females, Age groups [1]=>0≤4.0; [2]=>4.0≤10.0; [3]=>10.0≤15.0; [4]=>15.0≤25.0; [5]=>25.0≤60.0; [6]=>60.0≤69.0; [7]=>69.1≤79.0; [8]= >80.0.] | | | | | | | | |
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| Table 11  *Age and Gender distribution of types of communication disorders in Kasaba Hobli of Srirangapattana Taluk.*   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | DISORDERS / DISEASES | GEN-DER | AGE GROUPS IN YEARS | | | | | | | | Total Prevalence  & %(N= 1,78,432) | | | Children | | | Adults | | Geriatric | | | Total & % | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | Speech & Lang-  uage disorders | M | 04  (0.002%) | 05  (0.002%) | 04  (0.002%) | 04  (0.002%) | 08  (0.004%) | - | - | - | 25 | 0.014% | | F | 01  (0.000%) | 07  (0.003%) | 03  (0.001%) | 06  (0.003%) | 04  (0.002%) | - | - | - | 21 | 0.011% | | Hearing Impair-ment | M | - | 01  (0.000%) | 01  (0.000%) | 01  (0.000%) | 13  (0.007%) | 19  (0.010%) | 19  (0.010%) | 07  (0.003%) | 61 | 0.034% | | F | - | 02  (0.001%) | - | 03  (0.001%) | 25  (0.014) | 14  (0.007%) | 18  (0.010%) | 03  (0.001%) | 65 | 0.036% | | ENT Diseases | M | - | 09  (0.005%) | 09  (0.005%) | 01  (0.000%) | 14  (0.007%) | 03  (0.001%) | 01  (0.000%) | 02  (0.001%) | 39 | 0.021% | | F | 05  (0.002%) | 17  (0.009%) | 02  (0.001%) | 06  (0.003%) | 21  (0.011%) | 03  (0.001%) | - | - | 54 | 0.030% | | Dual / Multiple disorders | M | 01  (0.000%) | 01  (0.000%) | - | - | - | - | - | - | 02 | 0.001% | | F | 01  (0.000%) | - | - | - | - | - | - | - | 01 | 0.000% | |  | Sub Total | 12  (0.006%) | 42  (0.023%) | 19  (0.010%) | 21  (0.011%) | 85  (0.047%) | 39  (0.021%) | 38  (0.021%) | 12  (0.006%) | 268 | 0.150% | |  | **Total** | **73**  **(0.040%)** | | | **106**  **(0.059%)** | | **89**  **(0.049%)** | | |  | |   [Note M = Males F = Females, Age groups [1]=>0≤4.0; [2]=>4.0≤10.0; [3]=>10.0≤15.0; [4]=>15.0≤25.0; [5]=>25.0≤60.0; [6]=>60.0≤69.0; [7]=>69.1≤79.0; [8]= >80.0.] | | | | | | | | |
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| Table 12  *Age and Gender distribution of types of communication disorders in K.Shettihalli Hobli of Srirangapattana Taluk.*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | DISORDERS / DISEASES | Gen-der | AGE GROUPS IN YEARS | | | | | | | | | | Total Prevalence  & %(N= 1,78,432) | | | Children | | | | | Adults | | Geriatric | | | Total | | | 1 | 2 | | 3 | | 4 | 5 | 6 | 7 | 8 | | Speech & Language disorders | M | 08  (0.004%) | | 14  (0.007%) | | 07  (0.003%) | 09  (0.005%) | 09  (0.005%) | 03  (0.001%) | - | - | 50 | 0.028% | | F | 03  (0.001%) | | 04  (0.002%) | | 05  (0.002%) | 01  (0.000%) | 05  (0.002%) | 01  (0.0005%) | - | - | 19 | 0.010% | | Hearing Impairment | M | - | | - | | 01  (0.000%) | 06  (0.003%) | 30  (0.016%) | 25  (0.014%) | 22  (0.012%) | 06  (0.003%) | 90 | 0.050% | | F | - | | 03  (0.001%) | | 02  (0.001%) | 03  (0.001%) | 44  (0.024%) | 33  (0.018%) | 29  (0.016%) | 04  (0.002%) | 118 | 0.066% | | ENT Diseases | M | 03  (0.001%) | | 12  (0.006%) | | 10  (0.005%) | 05  (0.002%) | 28  (0.015%) | 07  (0.003%) | 03  (0.001%) | 01  (0.000%) | 69 | 0.038% | | F | 03  (0.001%) | | 10  (0.005%) | | 14  (0.007%) | 01  (0.000%) | 48  (0.026%) | 13  (0.007%) | 06  (0.003%) | 02  (0.001%) | 97 | 0.054% | | Dual / Multiple disorders | M | 02  (0.001%) | | - | | - | 02  (0.001%) | - | - | - | - | 04 | 0.002% | | F | - | | 01  (0.0005%) | | - | - | - | - | - | - | 01 | 0.0005% | |  | Sub Total | 19  (0.010%) | | 44  (0.024%) | | 39  (0.021%) | 27  (0.015%) | 164  (0.091%) | 82  (0.045%) | 60  (0.033%) | 13  (0.007%) | 448 | 0.251% | |  | **Tot-al** | **102**  **(0.057%)** | | | | | **191**  **(0.107%)** | | **155**  **(0.086)** | | |  | |   [Note M = Males F = Females, Age groups [1]=>0≤4.0; [2]=>4.0≤10.0; [3]=>10.0≤15.0; [4]=>15.0≤25.0; [5]=>25.0≤60.0; [6]=>60.0≤69.0; [7]=>69.1≤79.0; [8]= >80.0.] | | | | | | | | |
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| Table 13  *Age and Gender distribution of types of communication disorders in Arakere Hobli of Srirangapattana Taluk.*   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | DISORDERS / DISEASES | Gen-der | AGE GROUPS IN YEARS | | | | | | | | Total Prevalence  & %(N= 1,78,432) | | | Children | | | Adults | | Geriatric | | | Total | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | Speech & Language disorders | M | 06  (0.003%) | 20  (0.011%) | 20  (0.011%) | 10  (0.005%) | 03  (0.001%) | 02  (0.001%) | - | - | 61 | 0.034% | | F | 02  (0.001%) | 04  (0.002%) | 08  (0.004%) | 05  (0.002%) | 09  (0.005%) | - | - | - | 28 | 0.015% | | Hearing Impair-ment | M | - | 03  (0.001%) | 02  (0.001%) | 04  (0.002%) | 48  (0.026%) | 36  (0.020%) | 34  (0.019%) | 10  (0.005%) | 137 | 0.076% | | F | - | 01  (0.000%) | 01  (0.000%) | 01  (0.000%) | 49  (0.027%) | 45  (0.025%) | 32  (0.017%) | 08  (0.004) | 137 | 0.076% | | ENT Diseases | M | 02  (0.001%) | 15  (0.008%) | 06  (0.003%) | 06  (0.003%) | 29  (0.016%) | 04  (0.002%) | 09  (0.005%) | - | 71 | 0.039% | | F | 01  (0.00%) | 12  (0.006%) | 16  (0.008) | 06  (0.003%) | 52  (0.029%) | 12  (0.006%) | 08  (0.004) | 01  (0.00%) | 108 | 0.060% | | Dual / Multiple disorders | M | - | - | 01  (0.00%) | - | 01  (0.00%) | - | - | - | 02 | 0.001% | | F | - | 02  (0.001%) | - | - | 01  (0.00%) | - | - | - | 03 | 0.001% | |  | Sub Total | 11  (0.006%) | 57  (0.031%) | 54  (0.030%) | 32  (0.017%) | 192  (0.107%) | 99  (0.055%) | 83  (0.046%) | 19  (0.010%) | 547 | 0.306 | |  | **Total** | **122**  **(0.068%)** | | | **224**  **(0.125%)** | | **201**  **(0.112%)** | | |  | |   [Note M = Males F = Females, Age groups [1]=>0≤4.0; [2]=>4.0≤10.0; [3]=>10.0≤15.0; [4]=>15.0≤25.0; [5]=>25.0≤60.0; [6]=>60.0≤69.0; [7]=>69.1≤79.0; [8]= >80.0.] | | | | | | | | |
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| Table 14  *Age and Gender distribution of types of communication disorders in Srirangapattana Town.*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | DISOR-DERS / DISEASES | Gen-der | AGE GROUPS IN YEARS | | | | | | | | | | Total Prevalence  & %(N= 1,78,432) | | | Children | | | | Adults | | | Geriatric | | | Total | | | 1 | 2 | | 3 | 4 | 5 | | 6 | 7 | 8 | | Speech & Language disorders | M | 06  (0.003%) | | 08  (0.004%) | 04  (0.002%) | 03  (0.001%) | | 07  (0.003%) | - | - | - | 28 | 0.015% | | F | 03  (0.001%) | | 05  (0.002%) | 03  (0.001%) | 01  (0.0%) | | 06  (0.003%) | - | - | - | 18 | 0.010% | | Hearing Impair-ment | M | - | | 01  (0.000%) | 01  (0.000%) | 03  (0.001%) | | 29  (0.016%) | 20  (0.011%) | 17  (0.009%) | 11  (0.006%) | 82 | 0.045% | | F | 01  (0.000%) | | 02  (0.001%) | - | 02  (0.001%) | | 37  (0.020%) | 19  (0.010%) | 12  (0.006%) | 06  (0.003) | 79 | 0.044% | | ENT Diseases | M | 04  (0.002%) | | 02  (0.001%) | 05  (0.002%) | 08  (0.004%) | | 31  (0.0173%) | 04  (0.002%) | - | - | 54 | 0.030% | | F | 04  (0.002%) | | 10  (0.005%) | 10  (0.005%) | 16  (0.008%) | | 39  (0.021%) | 05  (0.002%) | 01  (0.000%) | - | 85 | 0.047% | | Dual / Multiple disorders | M | - | | 01  (0.000%) | 01  (0.000%) | - | | 01  (0.000%) | - | - | - | 03 | 0.001% | | F | 02  (0.001%) | | - | - | - | | - | - | - | - | 02 | 0.001% | |  | Sub Total | 20  (0.011%) | | 29  (0.016%) | 24  (0.013%) | 33  (0.018%) | | 150  (0.084%) | 48  (0.026%) | 30  (0.016%) | 17  (0.009%) | 351 | 0.196% | |  | **Total** | **73**  **(0.040%)** | | | | **183**  **(0.102%)** | | | **95**  **(0.053%)** | | |  | |   [Note M = Males F = Females, Age groups [1]=>0≤4.0; [2]=>4.0≤10.0; [3]=>10.0≤15.0; [4]=>15.0≤25.0; [5]=>25.0≤60.0; [6]=>60.0≤69.0; [7]=>69.1≤79.0; [8]= >80.0.] | | | | | | | | |
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| Table 15  *Age and Gender distribution of types of communication disorders in Srirangapattana Taluk of Mandya District.*   |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | DISORDERS / DISEASES | Gen-der | AGE GROUPS IN YEARS | | | | | | | | | Total Prevalence  & %(N= 1,78,432) | | | Children | | | | Adults | | Geriatric | | | Total | | | 1 | 2 | | 3 | 4 | 5 | 6 | 7 | 8 | | Speech & Language disorders | M | 26  (0.014%) | | 53  (0.029%) | 43  (0.024%) | 33  (0.018%) | 34  (0.019%) | 05  (0.002%) | - | - | 194 | 0.108% | | F | 11  (0.006%) | | 21  (0.011%) | 21  (0.011%) | 15  (0.008%) | 30  (0.016%) | 02  (0.001%) | - | - | 100 | 0.056% | | Hearing Impairment | M | - | | 06  (0.003%) | 06  (0.003%) | 16  (0.008%) | 135  (0.075%) | 112  (0.062%) | 111  (0.062%) | 41  (0.022%) | 427 | 0.239% | | F | 01  (0.000%) | | 09  (0.005%) | 04  (0.002%) | 14  (0.007) | 193  (0.108%) | 141  (0.079%) | 113  (0.063%) | 31  (0.017%) | 506 | 0.283% | | ENT Diseases | M | 11  (0.006%) | | 45  (0.025%) | 34  (0.019%) | 22  (0.012%) | 121  (0.067%) | 19  (0.010%) | 18  (0.10%) | 03  (0.001%) | 273 | 0.153% | | F | 17  (0.009%) | | 53  (0.029%) | 47  (0.026%) | 34  (0.019%) | 191  (0.107%) | 39  (0.021%) | 17  (0.009%) | 04  (0.002%) | 402 | 0.25% | | Dual / Multiple disorders | M | 03  (0.001%) | | 04  (0.002%) | 04  (0.002%) | 03  (0.001%) | 02  (0.001%) | - | - | - | 16 | 0.008% | | F | 3  (0.001%) | | 5  (0.002%) | - | - | 01  (0.0%) | - | - | - | 09 | 0.005% | |  | Sub Tot-al | 72  (0.040%) | | 196  (0.109%) | 159  (0.089%) | 137  (0.076%) | 707  (0.396%) | 318  (0.178%) | 259  (0.145) | 79  (0.044%) | **1,927** | **1.079%** | |  | **Tot-al** | **427**  **(0.239%)** | | | | **844**  **(0.473%)** | | **656**  **(0.367%)** | | |  | |   [Note M = Males F = Females, Age groups [1]=>0≤4.0; [2]=>4.0≤10.0; [3]=>10.0≤15.0; [4]=>15.0≤25.0; [5]=>25.0≤60.0; [6]=>60.0≤69.0; [7]=>69.1≤79.0; [8]= >80.0.] | | | | | | | | |
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| **SPEECH –LANGUAGE**  **DISORDERS** | | | | | Prevalence of Speech-Language disorders in the hoblis of Srirangapattana (Rural) was **0.138% (0.024% in** Belagola Hobli, **0.025% in** Kasaba Hobli, **0.038%** in K.Shettahalli Hobli and **0.058%** in Arakere Hobli) and in Srirangapattana Town (urban) was **0.025%.**The speech-language disorders were found to be more prevalent in males compared to females in Srirangapattana taluk (**0.093%** in males and **0.045%** in females in Sriranagapattana Rural and **0.015%** in males and **0.010%** in females of Srirangapatna Town respectively). Within the speech and language disorders, in the rural population, percentage prevalence of (i) Mental retardation and Fluency disorders were found to be higher (ii) Traumatic Brain Injury, Slow learner, Language disorders with Seizures and Global Developmental Delay were found to be very less than the first two conditions, and other speech and language disorders showed similar prevalence percentage. In Srirangapatna Town, percentage prevalence of (i) Mental retardation and Articulation/Phonological disorders were found to be higher (ii) Voice disorders, Pervasive Developmental Disorder and Expressive Language Delay were found to be very less than the first two conditions, and other speech and language disorders showed similar prevalence percentage. Details are shown in Table 16 (Srirangapattana –Rural) and Table 17 (Srirangapattana – Urban). Percentage distribution of each disorder within speech and language disorders in the four Srirangapattana hoblis together (Rural) is shown in Figures 5 and Srirangapattana Town (Urban) is shown in Figure 6. | | | |
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| Table 16  *Types and Gender distribution of Speech and Language disorders in the four hoblis of Srirangapattana Taluk (Rural)*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | SPEECH & LANGUAGE DISORDERS | Hoblis | Male | Female | Total | % Prevalence in population  (N= 1,78,432) | % Prevalence within speech and language disorders  (N=44 in Be; 46 in Ka; 69 in KS;89 in Ar) | | Mental Retardation | Be | 15 | 6 | 21 | 0.011% | 47.72% | | Ka | 12 | 12 | 24 | 0.013% | 52.17% | | KS | 15 | 8 | 23 | 0.012% | 33.33% | | Ar | 12 | 13 | 25 | 0.014% | 28.08% | | Fluency Disorders | Be | 3 | 1 | 4 | 0.002% | 9.09% | | Ka | 6 | - | 6 | 0.003% | 13.04% | | KS | 11 | 1 | 12 | 0.006% | 13.48% | | Ar | 22 | 5 | 27 | 0.015% | 30.33% | | Articulation/  Phonological disorders | Be | 1 | 1 | 2 | 0.001% | 4.54% | | Ka | 3 | 5 | 8 | 0.004% | 17.39% | | KS | 7 | 2 | 9 | 0.005% | 13.04% | | Ar | 13 | 1 | 14 | 0.007% | 15.73% | | Aphasia | Be | 1 | 1 | 2 | 0.001% | 4.54% | | Ka | - | 1 | 1 | 0.000% | 2.17% | | KS | 2 | - | 2 | 0.001% | 2.89% | | Ar | 1 | - | 1 | 0.000% | 1.12% | | Cleft Lip and palate | Be | 1 | 1 | 2 | 0.001% | 4.54% | | Ka | - | - | - | - | - | | KS | 2 | 2 | 4 | 0.002% | 5.79% | | Ar | 1 | - | 1 | 0.000% | 1.12% | | Learning Disability | Be | - | - | - | - | - | | Ka | 1 | - | 1 | 0.000% | 2.17% | | KS | - | - | - | - | - | | Ar | 1 | 1 | 2 | 0.001% | 2.24% | | Cerebral Palsy | Be | 2 | - | 2 | 0.001% | 4.54% | | Ka | - | 1 | 1 | 0.000% | 2.17% | | KS | 1 | 1 | 2 | 0.001% | 2.89% | | Ar | - | - | - | - | - | | Voice Disorders | Be | - | 1 | 1 | 0.000% | 2.27% | | Ka | 1 | - | 1 | 0.000% | 2.17% | | KS | - | 1 | 1 | 0.000% | 1.44% | | Ar | 1 | 1 | 2 | 0.001% | 2.24% | | Dysarthria / Apraxia | Be | 1 | 1 | 2 | 0.001% | 4.54% | | Ka | - | - | - | - | - | | KS | 2 | - | 2 | 0.001% | 2.89% | | Ar | 4 | 1 | 5 | 0.002% | 5.61% | | Laryngectomy | Be | - | - | - | - | - | | Ka | - | - | - | - | - | | KS | - | 1 | 1 | 0.000% | 1.44% | | Ar | - | - | - | - | - | | Traumatic Brain Injury | Be | - | - | - | - | - | | Ka | - | - | - | - | - | | KS | - | - | - | - | - | | Ar | - | 1 | 1 | 0.000% | 1.12% | | Delayed Speech and Language | Be | 4 | - | 4 | 0.002% | 9.09% | | Ka | 1 | - | 1 | 0.000% | 2.17% | | KS | 7 | 1 | 8 | 0.004% | 11.59% | | Ar | 4 | 4 | 8 | 0.004% | 8.98% | | Delayed Speech and Language with Hearing Loss | Be | 2 | - | 2 | 0.001% | 4.54% | | Ka | - | 1 | 1 | 0.000% | 2.17% | | KS | 1 | 2 | 3 | 0.001% | 3.37% | | Ar | - | 1 | 1 | 0.000% | 1.12% | | Language disorder with Seizures | Be | 1 | - | 1 | 0.000% | 2.27% | | Ka | - | - | - | - | - | | KS | - | - | - | - | - | | Ar | 1 | - | 1 | 0.000% | 1.12% | | Expressive Language Delay | Be | - | - | - | - | - | | Ka | 1 | - | 1 | 0.000% | 2.17% | | KS | 1 | - | 1 | 0.000% | 1.44% | | Ar | 1 | - | 1 | 0.000% | 1.12% | | Slow Learner | Be | - | - | - | - | - | | Ka | - | - | - | - | - | | KS | 1 | - | 1 | 0.000% | 1.44% | | Ar | - | - | - | - | - | | Global Developmental Delay | Be | - | 1 | 1 | 0.000% | 2.27% | | Ka | - | 1 | 1 | 0.000% | 2.17% | | KS | - | - | - | - | - | | Ar | - | - | - | - | - | | **Sub Total** | Be | 31 | 13 | 44 | 0.024% | - | |  | Ka | 25 | 21 | 46 | 0.025% | - | |  | KS | 50 | 19 | 69 | 0.038% | - | |  | Ar | 61 | 28 | 89 | 0.049% | - | | **Total** | **-** | **167**  **(0.093%)** | **81**  **(0.045%)** | **248**  **(0.138%)** |  |  |   [Note:Be=Belagola, Ka=Kasaba, KS=K.Shettahalli & Ar=Arakere Hoblis] | | | | | | | | |
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| Table 17  *Types and Gender distribution of Speech and Language disorders in Srirangapattana Town (Urban)*   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | SPEECH & LANGUAGE DISORDERS | Male | Female | Total | % Prevalence in population  (N= 1,78,432)) | % Prevalence within speech and language disorders  (N=46 in Sriranga-pattana Town) | | Mental Retardation | 2 | 5 | 7 | 0.003% | 15.21% | | Fluency Disorders | 7 | 2 | 9 | 0.005% | 19.56% | | Articulation/  Phonological disorders | 7 | 3 | 10 | 0.005% | 21.73% | | Cleft Lip and palate | 1 | 2 | 3 | 0.001% | 6.52% | | Cerebral Palsy | 2 | 1 | 3 | 0.001% | 6.52% | | Voice Disorders | - | 1 | 1 | 0.000% | 2.17% | | Dysarthria | 2 | - | 2 | 0.001% | 4.34% | | Pervasive Developmental Disorder | 1 | - | 1 | 0.000% | 2.17% | | Delayed Speech and Language | 2 | 2 | 4 | 0.002% | 8.69% | | Delayed Speech and Language with Hearing Loss | 3 | 2 | 5 | 0.002% | 10.86% | | Expressive Language Delay | 1 | - | 1 | 0.000% | 2.17% | | **Total** | **28**  **(0.015%)** | **18**  **(0.010%)** | **46**  **(0.025%)** |  |  | | | | | | | | | |
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| *Figure 5*: Percentage of Speech and language disorders in the four hoblis of Srirangapattana Taluk (Rural)(N= 772) | | | | | | | | |
|  | | | | |  | | | |
| *Figure 6*: Percentage of Speech and language disorders in the Srirangapattana Town (Urban)(N= 46) | | | | | | | | |
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| **HEARING DISORDERS** | | | | The percentage of prevalence of hearing loss (Irrespective of the type and degree of hearing loss was **0.504%** in the population of Srirangapatna Rural (Four hoblis) and **0.090%** in Srirangapatna Town. Amongst the types of hearing loss, the percentage of prevalence of sensorineural hearing loss was the highest (**0.275**%), followed by the mixed **(0.105%)** and conductive type of hearing loss **(0.051%) in** Srirangapattana Rural**.** Similar pattern was observed in Srirangapattana town, wherein sensorineural hearing loss was the highest (**0.067**%), followed by the mixed **(0.014%)** and conductive type of hearing loss **(0.008%).** With respect to degree of hearing loss, the percentage prevalence of Moderate degree of hearing loss was highest, followed by Mild degree, Severe and Profound degree of hearing loss in all the four hoblis and Srirangapatna Town, except for K.Shettahalli Hobli wherein, Moderate degree of hearing loss was highest, followed by Severe degree, 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 compared to males**.** The details are shown in Table 18 and 19. The percentage prevalence of types of hearing disorders are shown in Figures 7 and 8. | | | | |
|  | | | |  | | | | |
| Table 18  *Gender distribution, type of hearing disorder and degree of hearing loss in the Srirangapattana Taluk (Rural).*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Hob-  lis | Degree  of Hearing loss | **HEARING DISORDERS** | | | | | | | | | | | | | | **Types of Hearing disorders** | | | | | | | | | | | | | | Conductive | | | Mixed | | | | Sensori neural | | | Total & % Prevalence in population  (N=1,78,432) | | | | M | F | T | M | F | | T | M | F | T | M | F | | | Be | Mild | 3 | 6 | 9 | 1 | 1 | | 2 | 7 | 14 | 21 | 11 (0.006%) | 21 (0.011%) | | | Moderate | 1 | 7 | 8 | 8 | 15 | | 23 | 23 | 38 | 61 | 32 (0.017%) | 60 (0.033%) | | | Severe | - | - | - | 1 | 7 | | 8 | 7 | 9 | 16 | 8 (0.004%) | 16 (0.008%) | | | Profound | - | - | - | 4 | 3 | | 7 | 3 | 6 | 9 | 7 (0.003%) | 9 (0.005%) | | | Sub Total | 4 | 13 | 17 | 14 | 26 | | 40 | 40 | 67 | 107 | **58**  **(0.032%)** | **106**  **(0.059%)** | | | **164**  **(0.091%)** | | | | % Preva-lence in popula-tion  (N=  1,78,432) | 0.002% | 0.0072% | 0.009% | 0.0078% | 0.014% | | 0.022% | 0.022% | 0.037% | 0.059% | - | - | | | % Prevalence within hearing disorder  (N=164) | 2.43% | 7.92% | 10.36% | 8.53% | 15.85% | | 24.39% | 24.39% | 40.85% | 65.24% | **35.365%** | **64.634%** | | | Ka | Mild | 4 | 6 | 10 | - | - | | - | 9 | 12 | 21 | 13  (0.007 %) | 18  (0.010 %) | | | Moderate | 1 | 1 | 2 | 2 | 6 | | 8 | 23 | 24 | 47 | 26  (0.014%) | 31  (0.017 %) | | | Severe | - | - | - | 6 | 2 | | 8 | 7 | 8 | 15 | 13  (0.007 %) | 10  (0.005%) | | | Profound | - | - | - | 5 | 3 | | 8 | 4 | 3 | 7 | 9  (0.005%) | 6  (0.003 %) | | | Sub Total | 5 | 7 | 12 | 13 | 11 | | 24 | 43 | 47 | 90 | **61**  **(0.034%)** | **65**  **(0.036%)** | | | **126**  **(0.070%)** | | | | % Prevalence in population  (N=1,78,432) | 0.002% | 0.003% | 0.006% | 0.007% | | 0.006% | 0.013% | 0.024% | 0.026% | 0.050% |  |  | | | % Prevalence within hearing disorder  (N=126) | 3.96% | 5.55% | **9.52%** | 10.31% | | 8.73% | **19.04%** | 34.12% | 37.30% | **71.42%** | **48.412%** | **51.587%** | | | KS | Mild | 4 | 9 | 13 | - | 1 | | 1 | 14 | 21 | 35 | 18  (0.010%) | 31  (0.017%) | | | Moderate | 7 | 4 | 11 | 6 | 13 | | 19 | 27 | 43 | 70 | 40  (0.022%) | 60  (0.033%) | | | Severe | - | - | - | 11 | 9 | | 20 | 12 | 10 | 22 | 23  (0.012%) | 19  (0.010%) | | | Profound | - | - | - | 2 | 4 | | 6 | 7 | 4 | 11 | 9  (0.005%) | 8  (0.004%) | | | Sub Total | 11 | 13 | 24 | 19 | 27 | | 46 | 60 | 78 | 138 | **90**  **(0.050% )** | **118**  **(0.066%)** | | | 208  (0.116%) | | | | % Prevalence in population  (N=1,78,432) | 0.006% | 0.007% | 0.013% | 0.010% | 0.015 | | 0.025% | 0.033% | 0.043% | 0.077% |  | |  | | % Prevalence within hearing disorder  (N=208) | 5.28% | 6.25% | 11.53% | 9.13% | 12.18% | | 22.11% | 28.84% | 37.5% | 66.34% | **43.269%** | | **56.73%** | | Ar | Mild | 11 | 14 | 25 | 1 | - | | 1 | 20 | 22 | 42 | 32  (0.017%) | | 36  (0.020%) | | Moderate | 9 | 5 | 14 | 13 | 21 | | 34 | 41 | 42 | 83 | 63  (0.035%) | | 68  (0.038%) | | Severe | - | - | - | 11 | 14 | | 25 | 13 | 10 | 23 | 24  (0.013%) | | 24  (0.013%) | | Profound | - | - | - | 11 | 8 | | 19 | 7 | 1 | 8 | 18  (0.010%) | | 9  (0.005%) | | Sub Total | 20 | 19 | 39 | 36 | 43 | | 79 | 81 | 75 | 156 | **137**  **(0.076%)** | | **137**  **(0.076 %)** | | **274**  **(0.153%)** | | | | % Prevalence in population  (N=1,78,432) | 0.011% | 0.010% | 0.021% | 0.020% | 0.024% | | 0.044% | 0.045% | 0.042% | 0.087% |  | |  | | % Prevalence within hearing disorder  (N=274) | 7.29% | 6.93% | **14.23%** | 13.13% | 15.67% | | **28.83%** | 29.56% | 27.37% | **56.93%** | 50.00% | | 50.00% | |  | **Total for 4 Hoblis** | 40 | 52 | **92** | 82 | 107 | | **189** | 224 | 267 | **491** | **346**  **(0.193%)** | | **426**  **(0.238 %)** | | **772**  **(0.504%)** | | | | % Prevalence in population  (N=1,78,432) | 0.022% | 0.029% | **0.051%** | 0.045% | 0.059% | | **0.105%** | 0.125% | 0.149% | **0.275** |  | |  | | % Prevalence within hearing disorder  (N=772) | 5.181% | 6.735% | 11.917**%** | 10.621% | 13.860% | | 24.481**%** | 29.015% | 34.585% | 63.601**%** | 44.818% | | 55.181% |   [Note: M=Male, F=Female, Be = Belagola Hobli, Ka = Kasaba Hobli, KS=K.Shettahalli Hobli & Ar = Arakere Hobli] | | | | | | | | |
|  | | | | |  | | | |
| Table 19  *Gender distribution, type of hearing disorder and degree of hearing loss in Srirangapattana Town.*   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | **Srirangapattana Town** | | | | | | | | | | | | Degree  of Hearing loss | **HEARING DISORDERS** | | | | | | | | | | | | **Types of Hearing disorders** | | | | | | | | | | | | Conductive | | | Mixed | | | Sensori neural | | | Total & % Prevalence in population  (N=1,78,432) | | | M | F | T | M | F | T | M | F | T | M | F | | Mild | 4 | 6 | 10 | - | - | - | 14 | 17 | 31 | 18 (0.010%) | 23  (0.012%) | | Moderate | 3 | 2 | 5 | 10 | 9 | 19 | 40 | 36 | 76 | 53  (0.029%) | 47  (0.026%) | | Severe | - | - | - | 4 | 2 | 6 | 5 | 6 | 11 | 9 (0.005%) | 8  (0.004%) | | Profound | - | - | - | 1 | - | 1 | 1 | 1 | 2 | 2  (0.001%) | 1  (0.000%) | | Sub Total | 7 | 8 | 15 | 15 | 11 | 26 | 60 | 60 | 120 | **82 (0.045%)** | **79 (0.044%)** | | **161**  **(0.090%)** | | | % Prevalence in population  (N=1,78,432) | 0.003% | 0.004% | **0.008%** | 0.008% | 0.006% | **0.014%** | 0.033% | 0.033% | **0.067%** |  |  | | % Prevalence within hearing disorder  (N=161) | 4.34% | 4.96% | **9.31%** | 9.31% | 6.83% | **16.41%** | 37.26% | 37.26% | **74.53%** | - | - |   [Note: M=Male, F=Female] | | | | | | | | |
|  | | | | | | | |  |
| *Figure 7*: Percentage of types of hearing disorders in four hoblis of Srirangapattana Taluk (Rural)(N= 772) | | | | | | | | |
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| *Figure 8*: Percentage of types of hearing disorders in Srirangapattana Town (Urban)(N= 161) | | | | | | | | |
|  | | |  | | | | | |
| **ENT CONDITIONS &**  **DISEASES** | | | The prevalence percentage of ENT conditions and diseases was **0.378**% in Srirangapattana Taluk (**0.300**% in rural and **0.077**% in urban). The % prevalence in females was higher compared to males. It was 0.177% in females and 0.122% in males in Srirangapattana Rural and 0.047% in females and 0.030% in males in Srirangapattana Town. Amongst the conditions and diseases, the prevalence % in Srirangapattana Rural was higher for External Ear and Middle Ear diseases, 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. But in Srirangapattana Town Middle Ear diseases was higher followed by other conditions  The details are shown in Table 20 (Srirangapattana Rural) and 21 (Srirangapattana Urban). Figures 9 and 10 depict the distribution of ENT conditions and diseases in percentage in the hoblis of Srirangapattana (Rural) and Srirangapattana town (Urban) respectively | | | | | |
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| Table 20  *ENT conditions and diseases in four hoblis of Srirangapattana Taluk (Rural)*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | ENT Conditions &  Diseases | Hoblis | Male | Female | Total | % Prevalence in population  (N=1,78,432) | % Prevalence within ENT conditions & diseases  (N=98 in Be;  93 in Ka;  166 in KS;  179 in Ar) | | External Ear Diseases | Be | 14 | 16 | 30 | 0.016% | 30.61 | | Ka | 10 | 15 | 25 | 0.014% | 26.88 | | KS | 26 | 31 | 57 | 0.031% | 34.33 | | Ar | 16 | 21 | 37 | 0.020% | 20.67 | | Middle Ear Diseases | Be | 8 | 22 | 30 | 0.016% | 30.61 | | Ka | 16 | 24 | 40 | 0.022% | 43.01 | | KS | 23 | 18 | 41 | 0.022% | 24.69 | | Ar | 20 | 43 | 63 | 0.035% | 35.19 | | Inner Ear Diseases | Be | 2 | 3 | 5 | 0.002% | 5.10 | | Ka | 4 | 3 | 7 | 0.003% | 7.52 | | KS | 4 | 19 | 23 | 0.012% | 13.85 | | Ar | 10 | 20 | 30 | 0.016% | 16.75 | | Overall Ear Related Conditions | Be | 12 | 9 | 21 | 0.011% | 21.42 | | Ka | 3 | 5 | 8 | 0.004% | 8.60 | | KS | 10 | 12 | 22 | 0.012% | 13.25 | | Ar | 13 | 8 | 21 | 0.011% | 11.73 | | Throat Related Conditions | Be | 1 | 1 | 2 | 0.001% | 2.04 | | Ka | 1 | 2 | 3 | 0.001% | 3.22 | | KS | - | 6 | 6 | 0.003% | 3.61 | | Ar | - | 1 | 1 | 0.000% | 0.55 | | Nose Related Conditions | Be | 2 | 4 | 6 | 0.003% | 6.12 | | Ka | - | 1 | 1 | 0.000% | 1.07 | | KS | 2 | 2 | 4 | 0.002% | 2.40 | | Ar | 1 | 4 | 5 | 0.002% | 2.79 | | Others | Be | - | - | - | - | - | | Ka | 1 | 2 | 3 | 0.001% | 3.22 | | KS | - | 5 | 5 | 0.002% | 3.01 | | Ar | 7 | 5 | 12 | 0.006% | 6.70 | | Combined/Dual Conditions | Be | 1 | 3 | 4 | 0.002% | 4.08 | | Ka | 4 | 2 | 6 | 0.003% | 6.45 | | KS | 4 | 4 | 8 | 0.004% | 4.81 | | Ar | 4 | 6 | 10 | 0.005% | 5.58 | | Sub Total | Be | 40  (0.022%) | 58  (0.032%) | 98 | 0.054% | - | |  | Ka | 39  (0.021%) | 54  (0.030%) | 93 | 0.052% | - | |  | KS | 69  (0.038%) | 97  (0.054%) | 166 | 0.093% |  | |  | Ar | 71  (0.039%) | 108  (0.060%) | 179 | 0.100% | - | | Total in 4 Hoblis |  | 219 (0.122%) | 317  (0.177%) | 536 | 0.300% | - |   [Note:Be=Belagola, Ka=Kasaba, KS=K.Shettahalli & Ar=Arakere Hoblis] | | | | | | | | |
|  | | | | | | |  | |
| Table 21  *ENT conditions and diseases in Srirangapattana Town (Urban)*   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | ENT Conditions &  Diseases | Male | Female | Total | % Prevalence in population  (N=1,78,432) | % Prevalence within ENT conditions & diseases  (N=139) | | External Ear Diseases | 16 | 13 | 29 | 0.016% | 20.86 | | Middle Ear Diseases | 19 | 41 | 60 | 0.033% | 43.16 | | Inner Ear Diseases | 5 | 4 | 9 | 0.005% | 6.47 | | Overall Ear Related Conditions | 7 | 7 | 14 | 0.007% | 10.07 | | Throat Related Conditions | 2 | 9 | 11 | 0.006% | 7.91 | | Nose Related Conditions | - | 2 | 2 | 0.001% | 1.43 | | Others | 4 | 5 | 9 | 0.005% | 6.47 | | Combined/Dual Conditions | 1 | 4 | 5 | 0.002% | 3.59 | | Total | 54  (0.030%) | 85 (0.047%) | 139  (0.077%) |  | - | | | | | | | | | |
|  | | | | | |  | | |
| *Figure 9*: Percentage of types of ENT Disorders and conditions in four hoblis of Srirangapattana Taluk (Rural)(N= 772) | | | | | | | | |
|  | | | | | |  | | |
| *Figure 10*: Percentage of types of ENT Disorders and conditions in Srirangapattana Town (Urban)(N= 161) | | | | | | | | |
|  | |  | | | | | | |
| **MULTIPLE**  **DISORDERS OF COMMUNICATION** | | The overall % perevalence of multiple disorders in Sriranagapattana Taluk was very less (0.014%). It was 0.008% in males and 0.005% in females. Details are shown in Table 22. | | | | | | |
|  | |  | | | | | | |
| Table 22  *Dual and Multiple disorders in Srirangapattana Taluk*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Dual and Multiple Disorders  In Srirangapattana Taluk | Gender Distribution | | *Total* | % Prevalence  (N=1,78,432) | | Male | Female | | Blagola | 5 | 2 | 7 | 0.003% | | Kasaba | 2 | 1 | 3 | 0.001% | | K.Shettahalli | 4 | 1 | 5 | 0.002% | | Arakere | 2 | 3 | 5 | 0.002% | | Srirangapatna Town | 3 | 2 | 5 | 0.002% | | **Total** | **16**  **(0.008%)** | **9**  **(0.005%)** | **25** | **0.014%** | | | | | | | | | |
|  | |  | | | | | | |
| **DETAILS REGARDING PERSONS RECOMMENDED FOR SPEECH-LANGUAGE THERAPY AS TERTIARY REHABILITATION MEASURE** | | After evaluation, the persons identified with various communication disorders were recommended speech language therapy. A total of 351 (0.19%) were identified with speech and language disorders. Out of these, 249 (0.13%) were recommended speech-language therapy, but only 12 (0.006%) attended speech-language therapy at AIISH and 237 (0.13%) did not attend speech- language therapy. | | | | | | |
|  | |  | | | | | | |
| **DETAILS OF**  **HEARING AIDS**  **DISTRIBUTED BY**  **THE INSTITUTE** | | A total of 585 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 AIISH (309) and through camps (276). 159 Ear moulds were issued to the patients who attended the camps. However, 6 persons with hearing impairment could not get hearing aids due to non-availability of funds under the ADIP Scheme. | | | | | | |
|  | |  | | | | | | |
| **ANALYSES & RESULTS OF FEEDBACK OF ASHA WORKERS EXPERIENCE OF SURVEY** | | The responses to the questionnaire administered to 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 4 hoblis in Srirangapattana rural in the survey programme.  The responses of ASHA Workers among four hoblis were compared. The raw scores obtained by each ASHA Worker were cumulated to obtain the total scores of each hobli. Total scores of Pre and Post were also found separately. The mean, median and standard deviation values are presented in table 23 & 24.  SPSS 21.0 software was used for analyses of the data. 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 test Wilcoxon Signed rank test was used for the analysis. | | | | | | |
|  | |  | | | | | | |
| Table 23  *Mean, Median and SD for types of questions in the questionnaire across four hoblis*   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **Question No.** | **Hobli** | **Mean** | **SD** | **Median** | **Question**  **No.** | **Hobli** | **Mean** | **SD** | **Median** | | AIISH Q1 | Pre | 3.03 | 1.181 | 4.00 | SUP Q10 | Pre | 3.57 | 0.71 | 4.00 | | Post | 3.77 | 0.560 | 4.00 | Post | 3.75 | 0.61 | 4.00 | | Q2 | Pre | 2.88 | 1.15 | 3.00 | Q11 | Pre | 3.22 | 0.96 | 4.00 | | Post | 3.78 | 0.529 | 4.00 | Post | 3.74 | 0.59 | 4.00 | | Q3 | Pre | 2.82 | 1.16 | 3.00 | Q12 | Pre | 2.53 | 1.26 | 3.00 | | Post | 3.71 | 0.65 | 4.00 | Post | 3.75 | 0.63 | 4.00 | | Q4 | Pre | 2.19 | 1.18 | 2.00 | Q13 | Pre | 2.79 | 1.27 | 3.00 | | Post | 3.64 | 0.70 | 4.00 | Post | 3.66 | 0.73 | 4.00 | | Q5 | Pre | 2.00 | 1.20 | 1.00 | Q14 | Pre | 3.48 | 0.98 | 4.00 | | Post | 3.64 | 0.64 | 4.00 | Post | 3.77 | 0.62 | 4.00 | | Q6 | Pre | 1.91 | 1.16 | 1.00 | **Mean SUP** | Pre | 15.60 | 3.77 | 16.00 | | Post | 3.60 | 0.74 | 4.00 | Post | 18.62 | 2.81 | 20.00 | | Q7 | Pre | 2.03 | 1.25 | 1.00 |  |  |  |  |  | | Post | 3.61 | 0.71 | 4.00 |  |  |  |  | | Q8 | Pre | 2.65 | 1.21 | 3.00 |  |  |  |  |  | | Post | 3.64 | 0.68 | 4.00 |  |  |  |  | | Q9 | Pre | 1.90 | 1.22 | 1.00 |  |  |  |  |  | | Post | 3.62 | 0.65 | 4.00 |  |  |  |  | | **Mean AIISH** | Pre | 21.40 | 7.87 | 20.00 |  |  |  |  |  | | Post | 33.05 | 4.69 | 35.00 |  |  |  |  | | | | | | | | | |
| *Note: AIISH= questions related to factors in All India Institute of Speech and Hearing; SUP = questions related to Supervisor related factors)* | | | | | | | | |
| It was observed that the mean scores obtained for post test was higher compared to the pre scores. To check if these scores were significantly different the total obtained for the two domains were subjected to Wilcoxon signed rank test and it was found that there was significant difference for all the questions which is depicted in table 24. | | | | | | | | |
|  | |  | | | | | | |
| Table 24  *The Chi-Square values for questions related to AIISH and Supervisors*   |  |  | | --- | --- | | Question No. | /Z/ | | AIISH Q1 | 4.301\* | | Q2 | 5.078\* | | Q3 | 4.952\* | | Q4 | 6.135\* | | Q5 | 6.620\* | | Q6 | 6.584\* | | Q7 | 6.058\* | | Q8 | 5.008\* | | Q9 | 6.718\* | | Mean AIISH | 6.180\* | | SUP Q10 | 1.858 | | Q11 | 3.594\* | | Q12 | 5.613\* | | Q13 | 4.709\* | | Q14 | 2.128\* | | Total SUP | 6.810\* | |  |  | | Overall |  | | Percentage AIISH | 6.612\* | | Percentage SUP | 5.032\* | | Overall Percentage | 6.727\* | | | | | | | | | |
|  |  | | | | | | | |
| The data was subjected to Wilcoxon signed rank test to verify if there was any statistical difference between category one and two. The results revealed that there was a significant difference between the two categories with /Z/ = 6.232 and /Z/= 2.155 for the pre and post data. This suggests that for the questions related to AIISH and Field supervisors the rating for post questions was better than for the issues related to the pre questions. It means that the ASHA Workers were satisfied with the facilities and activities related to evaluation of persons with communication disorders provided at AIISH, and it was more than 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 one time per ASHA Worker in a 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. | | | | | | | | |
|  |  | | | | | | | |
| **RESULTS ON FEEDBACK ABOUT**  **AWARENESS OF COMMUNICATION**  **DISORDERS AND RELATED ISSUES**  **IN THE PUBLIC** | Out of 800 questionnaires, 300 each for Pre and Post were distributed in 127 villages belonging to 4 hoblis & 100 for pre and post respectively in Srirangapattana town. 58 questionnaires were not returned and hence the filled questionnaires included 742. Table 25 shows the number of persons from the 8 target groups who filled the questionnaire. | | | | | | | |
|  |  | | | | | | | |
| Table 25  *Total Number of persons representing various target groups who responded to the questionnaire*   |  |  |  | | --- | --- | --- | | Target Groups | Number (percentage) in villages | Number (percentage) in town | | Agriculturists | 35 (12.41%) | 10 (11.23%) | | Manual Labourers | 9 (3.1%) | 14 (4.96%) | | Businessmen/Private Organization | 38 (13.47%) | 28 (9.92%) | | Grampanchayat members | 17 (6.02%) | - | | Students | 42 (14.89%) | 7 (2.48%) | | Professionals | 46 (16.31%) | 20 (7.09%) | | Government Employees | 54 (19.14%) | 3 (1.06%) | | Home Makers | 41 (14.53%) | 7 (2.48%) | | Total | 282 | 89 | | | | | | | | | |
|  |  | | | | | | | |
|  |  | | | | | | | |
| Table 26  *Pre and post test group Mean and SD of the seven target groups across three domains.*   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Target Groups | | Domains | | | | | | Overall | | | Hearing Impairment | | Speech and language disorders | | Lifestyle | |  | | | Mean | SD | Mean | SD | Mean | SD | Mean | SD | | Agriculture | pre | 13.03 | 3.08 | 40.09 | 12.69 | 19.60 | 7.05 | 72.77 | 20.02 | | post | 15.06 | 1.71 | 49.00 | 5.04 | 24.63 | 3.35 | 88.77 | 7.91 | | Manual Labourer | pre | 12.22 | 2.63 | 40.89 | 5.84 | 22.44 | 5.07 | 75.56 | 10.53 | | post | 14.00 | 3.50 | 47.67 | 5.76 | 24.22 | 3.59 | 87.00 | 8.63 | | Business/Pvt  Organization | pre | 12.79 | 3.67 | 37.47 | 13.23 | 19.29 | 7.25 | 69.76 | 21.26 | | post | 14.74 | 2.03 | 46.34 | 7.26 | 23.45 | 3.90 | 84.61 | 10.91 | | Grampanchayat member | pre | 12.35 | 3.80 | 37.35 | 14.38 | 19.00 | 7.19 | 68.71 | 23.45 | | post | 14.59 | 2.12 | 47.59 | 5.08 | 24.00 | 3.95 | 86.18 | 8.90 | | Professional | pre | 12.59 | 3.17 | 41.43 | 11.34 | 19.93 | 6.76 | 73.26 | 17.02 | | post | 15.39 | 1.48 | 48.91 | 4.57 | 23.65 | 4.03 | 87.85 | 8.06 | | Home Maker | pre | 12.90 | 3.15 | 41.34 | 11.06 | 19.56 | 7.32 | 73.80 | 17.80 | | post | 15.17 | 2.10 | 47.00 | 8.316 | 25.17 | 11.04 | 86.93 | 8.66 | | Government Employee | pre | 13.37 | 2.88 | 43.94 | 10.11 | 20.78 | 5.16 | 78.04 | 13.94 | | post | 14.14 | 2.26 | 47.28 | 5.041 | 23.39 | 4.08 | 85.39 | 7.99 | | Students | pre | 12.40 | 2.83 | 41.38 | 9.35 | 20.45 | 5.60 | 73.88 | 15.39 | | post | 14.81 | 1.95 | 46.38 | 7.20 | 22.43 | 4.37 | 82.86 | 11.73 | | **Mean** | pre | **12.4** | **3.15** | **40.48** | **11.00** | **20.13** | **6.42** | **73.22** | **17.42** | | post | **14.73** | **2.14** | **47.52** | **6.03** | **23.86** | **4.78** | **86.19** | **9.09** | | | | | | | | | |
|  |  | | | | | | | |
|  |  | | | | | | | |
| There was an increase in the mean scores obtained in the post period when compared to the pre period for questions related to Hearing impairment, Speech and language disorders and Lifestyle in the questionnaire among all the 8 target groups. Wilcoxon signed rank test was run to check if the difference was statistically significant when pair wise comparison (Pre vs Post)was made. Significant statistical difference (\*p < 0.05) in all the domains across all the target groups were observed, except for the target group Manual Labourer (as it had a small sample size) for questions related to Hearing impairment and Lifestyle and in students in lifestyle domain. The results are presented in table 27. | | | | | | | | |
|  |  | | | | | | | |
| Table 27  *Chi-Square (χ2) values of 3 domains across the target groups*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Target Group | Domains | | | Overall | |  | Hearing Impairment | Speech and language disorders | Lifestyle |  | | *χ2* (Pre vs Post) | | | | | Agriculture | 3.087\* | 3.524\* | 3.472\* | 4.438\* | | Manual Labourer | 1.307 | 2.194\* | 0.844 | 2.668\* | | Business/ Pvt  Organization | 3.169\* | 3.526\* | 2.841\* | 3.701\* | | Grampanchayat member | 2.662\* | 2.632\* | 2.229\* | 2.949\* | | Professional | 5.206\* | 4.761\* | 3.039\* | 5.574\* | | Home Maker | 3.518\* | 2.757\* | 3.284\* | 3.939\* | | Government Employee | 2.970\* | 2.343\* | 2.587\* | 3.690\* | | Students | 4.026\* | 3.004\* | 1.804 | 3.008\* | | | | | | | | | |
|  |  | | | | | | | |
| The Kruskal-Wallis test was carried out to compare between the target groups within each domain (Hearing Impairment, Speech and language disorders & Lifestyle). The results showed no significant difference (at 0.05 level of significance) between the target groups, indicating that they performed similarly within each domain i.e., Hearing Impairment, Speech and language disorders & Lifestyle and between the domains.  The mean and standard deviation for sub domains of the three domains (pre and post) are shown in Table 28. There is an increase in the mean scores in post compared to pre conditions in the subdomain questions related to Hearing impairment, Speech and language disorders, Lifestyle. The mean and standard deviation across the target groups is presented in table 29. | | | | | | | | |
|  |  | | | | | | | |
| Table 28  *Means and SDs for sub domains of the three domains in the questionnaire*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | *Domains* | *Sub Domain Code* | *Sub Domain questions related to* | *Pre Test* | | *Post Test* | | | *Mean* | *SD* | *Mean* | *SD* | | *Hearing Impairment* | HI 1 | Risk factors leading to hearing impairment | 5.40 | 1.66 | 6.64 | 1.33 | | HI 2 | Hearing impairment | 3.37 | 1.19 | 4.02 | 0.89 | | HI 3 | General awareness of hearing impairment | 4.08 | 1.05 | 4.32 | 0.69 | | *Speech Language Disorders* | SLD 1 | General awareness of Speech and language disorders | 5.67 | 1.61 | 6.20 | 0.90 | | SLD 2 | General awareness of Mental retardation | 6.78 | 1.71 | 6.96 | 1.21 | | SLD 3 | General awareness of Learning disability | 4.05 | 1.26 | 4.36 | 0.79 | | SLD 4 | General awareness of Cerebral Palsy | 2.02 | 0.99 | 2.59 | 0.67 | | SLD 5 | General awareness of Autism | 3.14 | 1.67 | 4.21 | 0.95 | | SLD 6 | General awareness of Aphasia | 2.71 | 1.34 | 3.44 | 0.78 | | SLD 7 | General awareness of Cleft lip and palate | 3.71 | 1.43 | 4.24 | 0.94 | | SLD 8 | General awareness of Articulation disorders | 3.10 | 1.15 | 3.60 | 0.68 | | SLD 9 | General awareness of Fluency disorders | 2.68 | 1.31 | 3.52 | 0.74 | | SLD 10 | General awareness of Voice disorders | 7.08 | 2.72 | 8.54 | 1.42 | | *Life style* | LS 1 | Social aspects | 7.38 | 2.82 | 8.67 | 4.46 | | LS 2 | Vocational aspects | 0.64 (1) | 0.48 | 0.75 (1) | 0.43 | | LS 3 | Entertainment aspects | 0.82 (1) | 0.46 | 0.85 (1) | 0.35 | | LS 4 | Literacy aspects | 4.34 | 1.67 | 5.01 | 1.16 | | LS 5 | Personality aspects | 3.55 | 1.84 | 4.45 | 1.48 | | LS 6 | Physical aspects | 1.80 (2) | 1.0 | 2.29 | 0.84 | | LS 7 | Economical aspects | 1.50 | 0.75 | 1.73 | 0.53 |   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  *Means and SDs for sub domains of the three domains across the target groups*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | *Domain* | | *Agricul-ture* | | *Manual Labourer* | | *Business/ Pvt*  *Organiza-tion* | | *Grampan-chayat member* | | *Profess-ional* | | *Home Maker* | *Govern-*  *ment*  *Employee* | | | | *Students* | | | M | S | M | S | M | S | M | S | M | S | M | S | M | | S | M | S | | HI 1 | pe | 5.43 | 1.59 | 5.33 | 1.73 | 5.42 | 1.76 | 5.24 | 1.67 | 5.39 | 1.70 | 5.29 | 1.70 | 5.74 | | 1.58 | 5.12 | 1.71 | | po | 6.54 | 1.33 | 6.33 | 2.06 | 6.26 | 1.60 | 6.47 | 1.46 | 7.00 | 1.26 | 6.98 | 1.12 | 6.48 | | 1.25 | 6.69 | 1.13 | | HI 2 | pe | 3.54 | 1.31 | 2.89 | 1.36 | 3.55 | 1.13 | 3.29 | 1.16 | 3.09 | 1.26 | 3.54 | 1.16 | 3.46 | | 1.20 | 3.21 | 1.07 | | po | 4.14 | 0.84 | 4.11 | 1.36 | 4.05 | 0.86 | 3.65 | 0.99 | 3.98 | 0.77 | 4.29 | 0.81 | 3.98 | | 0.96 | 3.86 | 0.89 | | HI 3 | pe | 4.11 | 1.10 | 4.00 | 0.50 | 4.11 | 1.08 | 3.82 | 1.23 | 4.13 | 1.10 | 4.07 | 1.10 | 4.15 | | 0.97 | 4.00 | 1.01 | | po | 4.37 | 0.64 | 3.56 | 0.88 | 4.42 | 0.64 | 4.47 | 0.51 | 4.41 | 0.68 | 4.24 | 0.76 | 4.26 | | 0.65 | 4.33 | 0.72 | | SLD 1 | pe | 5.46 | 1.61 | 5.22 | 0.97 | 5.32 | 1.96 | 5.35 | 1.90 | 5.83 | 1.66 | 5.93 | 1.42 | 6.00 | | 1.27 | 5.52 | 1.71 | | po | 6.40 | 0.73 | 5.89 | 1.45 | 6.13 | 0.90 | 6.12 | 0.92 | 6.20 | 0.98 | 6.22 | 0.96 | 6.15 | | 0.89 | 6.24 | 0.74 | | SLD 2 | pe | 6.96 | 1.60 | 6.78 | 0.66 | 6.24 | 2.23 | 6.59 | 2.12 | 6.59 | 1.86 | 7.05 | 1.37 | 7.02 | | 1.51 | 7.07 | 1.53 | | po | 6.97 | 1.22 | 6.56 | 2.29 | 7.34 | 0.87 | 6.94 | 1.08 | 7.26 | 0.92 | 6.93 | 1.14 | 6.70 | | 1.36 | 6.76 | 1.24 | | SLD 3 | pe | 3.97 | 1.29 | 3.89 | 1.05 | 3.53 | 1.52 | 3.88 | 1.26 | 4.13 | 1.34 | 4.17 | 1.30 | 4.26 | | 1.04 | 4.24 | 1.07 | | po | 4.37 | 0.73 | 4.11 | 1.05 | 4.37 | 0.67 | 4.24 | 0.83 | 4.41 | 0.61 | 4.46 | 0.80 | 4.24 | | 0.95 | 4.45 | 0.83 | | SLD 4 | pe | 2.23 | 1.08 | 1.89 | 0.78 | 1.84 | 1.02 | 1.88 | 1.16 | 1.98 | 0.97 | 2.15 | 0.96 | 2.07 | | 0.96 | 1.95 | 0.93 | | po | 2.74 | 0.44 | 2.78 | 0.44 | 2.47 | 0.79 | 2.59 | 0.50 | 2.63 | 0.67 | 2.63 | 0.58 | 2.54 | | 0.77 | 2.48 | 0.77 | | SLD 5 | pe | 3.29 | 1.77 | 3.33 | 0.86 | 2.79 | 1.80 | 2.47 | 2.00 | 3.07 | 1.67 | 3.10 | 1.67 | 3.43 | | 1.52 | 3.33 | 1.61 | | po | 4.37 | 0.80 | 3.89 | 1.05 | 4.03 | 1.15 | 4.06 | 0.89 | 4.41 | 0.93 | 4.27 | 1.00 | 4.28 | | 0.78 | 4.02 | 1.00 | | SLD 6 | pe | 2.71 | 1.48 | 2.44 | 1.01 | 2.50 | 1.46 | 2.12 | 1.61 | 2.89 | 1.28 | 2.61 | 1.39 | 3.02 | | 1.18 | 2.71 | 1.21 | | po | 3.54 | 0.56 | 3.56 | 0.72 | 3.11 | 1.03 | 3.47 | 0.62 | 3.54 | 0.58 | 3.49 | 0.87 | 3.59 | | 0.74 | 3.29 | 0.83 | | SLD 7 | pe | 3.66 | 1.57 | 3.78 | 0.97 | 3.47 | 1.35 | 3.29 | 1.79 | 3.93 | 1.46 | 3.51 | 1.41 | 3.94 | | 1.32 | 3.76 | 1.42 | | po | 4.49 | 0.74 | 4.00 | 1.00 | 3.92 | 1.14 | 4.35 | 0.78 | 4.46 | 0.62 | 4.17 | 0.94 | 4.26 | | 0.87 | 4.14 | 1.22 | | SLD 8 | pe | 2.86 | 1.33 | 3.22 | 0.66 | 2.82 | 1.18 | 2.47 | 1.46 | 3.30 | 1.15 | 3.12 | 1.18 | 3.35 | | 1.06 | 3.24 | 0.87 | | po | 3.66 | 0.53 | 3.33 | 0.86 | 3.45 | 0.92 | 3.71 | 0.47 | 3.78 | 0.51 | 3.71 | 0.51 | 3.57 | | 0.66 | 3.45 | 0.88 | | SLD 9 | pe | 2.43 | 1.42 | 2.56 | 1.33 | 2.50 | 1.13 | 2.59 | 1.41 | 2.74 | 1.29 | 2.61 | 1.33 | 3.06 | | 1.15 | 2.64 | 1.37 | | po | 3.60 | 0.65 | 3.56 | 0.52 | 3.39 | 1.00 | 3.71 | 0.47 | 3.65 | 0.56 | 3.56 | 0.74 | 3.46 | | 0.66 | 3.38 | 0.90 | | SLD 10 | pe | 6.74 | 2.93 | 7.78 | 1.64 | 6.55 | 2.77 | 6.59 | 3.57 | 7.02 | 2.92 | 7.29 | 2.86 | 7.56 | | 2.47 | 7.12 | 2.27 | | po | 8.91 | 1.06 | 8.89 | 1.26 | 8.13 | 1.87 | 8.59 | 1.12 | 8.65 | 1.07 | 8.59 | 1.53 | 8.69 | | 1.11 | 8.17 | 1.80 | | LS 1 | pe | 7.43 | 2.27 | 8.22 | 1.30 | 6.79 | 2.83 | 6.82 | 2.18 | 7.28 | 2.42 | 7.93 | 4.98 | 7.50 | | 1.82 | 7.40 | 2.19 | | po | 8.60 | 1.10 | 8.89 | 0.78 | 8.58 | 1.05 | 8.53 | 1.73 | 8.41 | 1.20 | 10.15 | 11.27 | 8.31 | | 1.43 | 8.10 | 1.52 | | LS 2 | pe | 0.57) | 0.50 | 0.78 | 0.44 | 05.0 | 0.50 | 0.65 | 0.49 | 0.76 | 0.43 | 0.61 | 0.48 | 0.65 | | 0.48 | 0.67 | 0.47 | | po | 0.77 | 0.42 | 0.89 | 0.33 | 0.71 | 0.46 | 0.76 | 0.43 | 0.76 | 0.43 | 0.76 | 0.43 | 0.81 | | 0.39 | 0.64 | 0.48 | | LS 3 | pe | 0.83 | 0.38 | 1.00 | 0 | 0.76 | 0.43 | 0.94 | 0.24 | 0.80 | 0.40 | 0.83 | 0.38 | 0.74 | | 0.44 | 0.90 | 0.75 | | po | 0.89 | 0.32 | 0.78 | 0.44 | 0.82 | 0.39 | 0.88 | 0.33 | 0.89 | 0.31 | 0.83 | 0.38 | 0.85 | | 0.35 | 0.83 ( | 0.37 | | LS 4 | pe | 4.09 | 2.00 | 4.78 | 1.39 | 4.45 | 1.79 | 4.12 | 2.08 | 4.46 | 1.54 | 4.10 | 1.81 | 4.48 | | 1.48 | 4.40 | 1.41 | | po | 5.31 | 0.90 | 5.22 | 1.09 | 5.05 | 1.13 | 5.06 | 0.82 | 5.00 | 1.35 | 5.07 | 1.12 | 4.76 | 1.24 | | 4.93 | 1.25 | | LS 5 | pe | 3.51 | 2.12 | 4.11 | 1.26 | 3.76 | 2.01 | 3.47 | 2.06 | 3.35 | 1.96 | 3.41 | 1.78 | 3.57 | 1.74 | | 3.60 | 1.59 | | po | 4.89 | 1.27 | 4.22 | 1.71 | 4.45 | 1.63 | 4.41 | 1.27 | 4.50 | 1.36 | 4.56 | 1.46 | 4.43 | 1.48 | | 4.00 | 1.66 | | LS 6 | pe | 1.89 | 1.07 | 2.00 | 1.00 | 1.79 | 1.06 | 1.59 | 1.17 | 1.78 | 1.09 | 1.71 | 1.00 | 1.96 | 0.99 | | 1.79 | 1.02 | | po | 2.37 | 0.77 | 2.33 | 1.00 | 2.18 | 1.01 | 2.47 | 0.88 | 2.33 | 0.87 | 2.34 | 0.72 | 2.33 | 0.72 | | 2.12 | 0.96 | | LS 7 | pe | 1.40 | 0.91 | 1.56 | 0.88 | 1.47 | 0.76 | 1.35 | 0.93 | 1.50 | 0.75 | 1.37 | 0.76 | 1.57 | 0.60 | | 1.71 | 0.63 | | po | 1.80 | 0.47 | 1.89 | 0.33 | 1.53 | 0.64 | 1.88 | 0.33 | 1.70 | 0.68 | 1.78 | 0.52 | 1.80 | 0.49 | | 1.69 | 0.56 |   *Note: Pe= pre, Po= post; M= Mean and S= SD* | | | | | | | | |
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| Friedman’s test was used to compare the mean of subdomain questions within Hearing Impairment, Speech-Language Disorders and Lifestyle sections as given in table 30. | | | | | | | | |
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| Table 30  *Chi-Square (χ2) of 3 domains (pre and post) between the target groups*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Target Group | Sub Domains | | | | | | | Hearing Impairment  df (2) | | Speech and language disorders  df (9) | | Lifestyle  df (6) | | |  | | *χ2* | |  | | | Pre | Post | Pre | Post | Pre | Post | | Agriculture | 5.525 | 2.190 | 22.014\* | 6.529 | 19.586\* | 30.729\* | | Manual Labourer | 4.667 | 1.313 | 13.296 | 4.173 | 14.763\* | 10.155 | | Business/ Pvt  Organization | 9.578\* | 2.881 | 32.290\* | 17.897\* | 22.690\* | 17.631\* | | Grampanchayat member | 5.797 | 3.828 | 16.425\* | 12.432 | 22.477\* | 25.360\* | | Professional | 22.558\* | 7.182\* | 54.916\* | 19.926\* | 49.409\* | 43.138\* | | Home Maker | 11.706\* | 1.177 | 47.388\* | 13.313 | 30.548\* | 29.182\* | | Government Employee | 15.793\* | 1.172 | 41.1598\* | 6.994 | 29.216\* | 57.533\* | | Students | 16.118\* | 2.331 | 50.745\* | 15.944 | 41.672\* | 35.684\* | | Total | 84.572\* | 8.499\* | 227.042\* | 39.739 | 195.008\* | 223.586\* | | | | | | | | | |
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| There was a significant difference in the pre test scores of Hearing impairment domain of target groups Business/Pvt Organization, Professional, Home Maker, Government Employee, Students and also total. In order to verify which sub domain showed significant difference, Wilcoxon signed rank test was carried out and it was found that in the target groups of Business/Pvt Organization, Home Maker, Government Employee & Students, there was significant differences observed in the pairs HI 1 vs HI 3 and HI 3 vs HI 2, implying that sub domain HI 3 was significantly different compared to HI 1 and HI 2 and responses were similar for sub domains HI 1 and HI 2. The responses of professionals were significantly different for all the three sub domains HI 1, HI 2 and HI 3. In the post test, it was found that the groups showed similar responses for the three subdomains of hearing impairment except for the professionals. Wilcoxon Signed rank test revealed a significant difference in the pairs HI 1 vs HI 2 and HI 3 vs HI 2 (table 31). | | | | | | | | |
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| Table 31  *Wilcoxon Signed Rank test to compare sub domains of Hearing impairment across the target groups*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | A | | ML | | B/PVT | | GM | | P | | HM | | GE | | S | | | HI | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | | 1vs 2 | NS | NS | NS | NS | NS | NS | NS | NS | S | S | NS | NS | NS | NS | NS | NS | | 1vs 3 | S | NS | NS | NS | S | S | S | NS | S | NS | S | NS | S | NS | S | NS | | 3vs 2 | S | NS | S | NS | S | NS | S | S | S | S | S | NS | S | NS | S | NS | | | | | | | | | |
| Note: HI 1, HI 2 & HI 3=questions related to Hearing Impairment,; A=Agriculture, ML=Manual Laborer, B=Business/Pvt Organisation, GM=Grampanchayat member, P=Professional, HM=Home Maker, GE=Government Employee and S=Students; NS-Not significant & S-Significant | | | | | | | | |
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| Friedman test revealed significant difference in the pre test scores for the different subdomains of speech and language disorders in the target groups (Agriculturists, Business/Pvt Organization, Grama Panchayat members, Professional, Home makers, Government employee and Students). In the post test, the groups revealed similar scores for the three subdomains of hearing impairment across all the target groups except for the Professionals and Business/Pvt Organization, where in there was a significant difference in some of the pairs. Further, Wilcoxon Signed Rank test was run and there was significant difference observed in several pairs of speech and language disorders as shown in table 32. | | | | | | | | |
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| Table 32  *Wilcoxon Signed Rank test for sub domains of Speech and language disorders across the target groups*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | A | | ML | | B/PVT | | GM | | P | | HM | | GE | | S | | | SLD | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | | 2 vs 1 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | S | NS | | 3 vs 1 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 4 vs 1 | NS | NS | NS | NS | S | NS | NS | NS | S | NS | S | NS | S | NS | S | NS | | 5 vs 1 | NS | NS | NS | NS | S | NS | S | NS | S | NS | S | NS | S | NS | NS | S | | 6 vs 1 | NS | NS | NS | NS | S | S | S | NS | S | NS | S | NS | S | NS | NS | NS | | 7 vs 1 | NS | NS | NS | NS | NS | S | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | | 8 vs 1 | NS | NS | NS | NS | NS | NS | NS | S | NS | S | NS | NS | NS | NS | NS | NS | | 9 vs 1 | S | NS | NS | NS | S | NS | NS | NS | S | NS | S | NS | NS | NS | NS | NS | | 10vs 1 | S | NS | NS | NS | S | S | NS | NS | S | NS | NS | NS | S | NS | NS | S | | 3 vs 2 | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 4 vs 2 | NS | NS | NS | NS | S | NS | NS | NS | S | NS | S | NS | S | NS | S | NS | | 5 vs 2 | S | NS | S | NS | S | S | S | NS | S | NS | S | NS | S | NS | S | NS | | 6 vs 2 | S | NS | S | NS | S | S | S | NS | S | NS | S | NS | S | NS | S | NS | | 7 vs 2 | S | NS | NS | NS | S | S | S | NS | NS | NS | S | NS | S | NS | S | NS | | 8 vs 2 | S | NS | NS | NS | NS | NS | S | S | NS | NS | S | NS | NS | NS | S | NS | | 9 vs 2 | S | NS | NS | NS | S | NS | S | NS | S | NS | S | NS | S | NS | S | NS | | 10 vs2 | S | NS | NS | NS | S | S | S | NS | S | S | S | NS | S | NS | S | NS | | 4 vs 3 | NS | NS | NS | NS | NS | NS | NS | NS | S | NS | S | NS | S | NS | S | S | | 5 vs 3 | S | NS | NS | NS | S | NS | S | NS | S | NS | S | NS | S | NS | S | S | | 6 vs 3 | NS | NS | NS | NS | S | NS | S | NS | NS | NS | S | NS | S | NS | S | NS | | 7 vs 3 | NS | NS | NS | NS | NS | S | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | | 8 vs 3 | NS | NS | NS | NS | NS | NS | NS | S | NS | S | NS | NS | NS | NS | NS | NS | | 9 vs 3 | S | NS | NS | NS | NS | NS | NS | S | S | NS | S | NS | S | NS | S | S | | 10 vs3 | NS | NS | NS | NS | NS | NS | NS | NS | S | NS | NS | NS | S | NS | S | NS | | 5 vs 4 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 6 vs 4 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 7 vs 4 | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | S | NS | S | NS | | 8 vs 4 | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | S | S | S | NS | S | NS | | 9 vs 4 | S | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 10 vs4 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 6 vs 5 | NS | NS | NS | NS | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | | 7 vs 5 | NS | NS | NS | NS | S | NS | NS | NS | S | NS | NS | NS | S | NS | NS | NS | | 8 vs 5 | NS | NS | NS | NS | S | NS | NS | S | S | NS | S | NS | S | NS | S | NS | | 9 vs 5 | NS | NS | NS | NS | S | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | | 10 vs5 | NS | NS | NS | NS | S | S | NS | NS | NS | S | S | S | NS | S | NS | S | | 7 vs 6 | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 8 vs 6 | NS | NS | NS | NS | S | NS | NS | NS | S | S | S | NS | NS | NS | S | NS | | 9 vs 6 | NS | NS | NS | NS | S | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | | 10 vs6 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | | 8 vs 7 | NS | NS | NS | NS | S | S | NS | NS | NS | S | NS | S | NS | NS | NS | NS | | 9 vs 7 | S | NS | NS | NS | S | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | | 10 vs7 | NS | S | NS | NS | NS | S | NS | S | S | S | NS | NS | NS | S | NS | S | | 9 vs 8 | NS | NS | NS | NS | S | NS | NS | NS | S | NS | S | S | S | NS | S | NS | | 10 vs8 | NS | NS | NS | NS | S | S | NS | S | S | S | NS | S | S | NS | S | NS | | 10 vs9 | NS | NS | NS | NS | NS | NS | NS | S | NS | S | NS | NS | NS | NS | NS | NS | | | | | | | | | |
|  |  | | | | | | | |
| Note: SLD 1 to 10=questions related to Speech and language disorder,; A=Agriculture, ML=Manual Laborer, B=Business/Pvt Organisation, GM=Grampanchayat member, P=Professional, HM=Home Maker, GE=Government Employee and S=Students; NS-Not significant & S-Significant | | | | | | | | |
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| Friedman test showed significant difference in the pre and post test scores for the different subdomains of lifestyle in all the target groups, except for the target group Manual Labourers (post test). Further, Wilcoxon Signed Rank test was run and there was no significant difference observed among several pairs of lifestyle which is depicted in table 33. | | | | | | | | |
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| Table 33  *Wilcoxon Signed Rank test results of sub domains of Lifestyle across the target groups*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  | A | | ML | | B/PVT | | GM | | P | | HM | | GE | | S | | | LS | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | Pre | Post | | 2 vs 1 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 3 vs 1 | S | S | S | NS | NS | NS | S | NS | NS | S | S | NS | NS | NS | NS | NS | | 4 vs 1 | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 5 vs 1 | NS | NS | S | NS | NS | S | NS | S | S | S | S | S | S | S | S | S | | 6 vs 1 | S | NS | NS | NS | NS | S | NS | NS | S | NS | S | NS | S | NS | S | NS | | 7 vs 1 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | S | S | NS | | 3 vs 2 | S | NS | NS | NS | S | NS | S | NS | NS | NS | S | NS | NS | NS | NS | NS | | 4 vs 2 | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 5 vs 2 | NS | NS | NS | S | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | | 6 vs 2 | NS | NS | NS | NS | NS | NS | NS | NS | S | NS | NS | NS | S | NS | NS | NS | | 7 vs 2 | NS | NS | NS | NS | S | NS | NS | NS | NS | NS | NS | NS | NS | NS | S | S | | 4 vs 3 | NS | NS | S | NS | NS | NS | S | NS | NS | NS | S | NS | NS | NS | NS | NS | | 5 vs 3 | S | NS | S | NS | NS | NS | S | S | S | S | S | NS | S | S | S | S | | 6 vs 3 | S | NS | S | NS | S | NS | S | NS | S | S | S | NS | NS | NS | S | NS | | 7 vs 3 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 5 vs 4 | S | NS | NS | NS | S | S | S | NS | S | S | S | S | S | NS | S | S | | 6 vs 4 | NS | S | NS | NS | S | S | NS | NS | S | NS | S | NS | S | NS | S | S | | 7 vs 4 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | S | NS | S | S | NS | | 6 vs 5 | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | NS | | 7 vs 5 | NS | NS | NS | S | S | NS | NS | S | S | S | S | S | S | S | S | S | | 7 vs 6 | NS | NS | NS | NS | S | NS | NS | NS | S | NS | S | S | S | S | S | NS |   Note: LS 1 to 7=questions related to Lifestyle; A=Agriculture, ML=Manual Laborer, B=Business/Pvt Organisation, GM=Grampanchayat member, P=Professional, HM=Home Maker, GE=Government Employee and S=Students; NS-Not significant & S-Significant | | | | | | | | |
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| In Srirangapattana Town, the survey was carried out by 3 ANM’s (Auxiliary Nurse Midwife) and 12 project staff. The questionnaire was administered and responses obtained from these target groups before and after the survey were completed in the town. For those who were not literate, the questions were read out by the project staff and responses obtained on the same day. Table 34 provides the mean and standard deviations of pre and post comparisons. | | | | | | | | |
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| Table 34  *Pre test and post test group Mean and SD of the seven target groups and Means and SDs of three domains across the target groups of Srirangapattana Town.*   |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Target Group | | Domains | | | | | | Overall | | | Hearing Impairment | | Speech and language disorders | | Lifestyle | |  | | | Mean | SD | Mean | SD | Mean | SD | Mean | SD | | Agriculture | pre | 11.30 | 2.05 | 29.00 | 9.70 | 14.80 | 4.73 | 55.10 | 13.27 | | post | 14.70 | 2.11 | 44.00 | 6.94 | 23.60 | 3.16 | 82.03 | 11.66 | | Manual Labourer | pre | 9.07 | 4.23 | 29.57 | 9.93 | 14.43 | 6.52 | 53.07 | 19.46 | | post | 15.07 | 1.81 | 49.93 | 6.54 | 23.00 | 2.93 | 84.00 | 10.46 | | Business/Pvt  Organization | pre | 11.50 | 3.13 | 32.32 | 7.79 | 18.14 | 3.70 | 61.96 | 12.80 | | post | 15.29 | 2.30 | 46.00 | 6.84 | 24.14 | 3.30 | 84.64 | 12.95 | | Professional | pre | 9.90 | 4.12 | 31.60 | 5.99 | 14.05 | 5.43 | 55.55 | 12.19 | | post | 15.10 | 2.26 | 47.00 | 6.64 | 24.55 | 3.37 | 86.65 | 11.58 | | Home Maker | pre | 9.86 | 4.59 | 30.71 | 10.04 | 18.14 | 2.19 | 58.71 | 9.58 | | post | 14.14 | 2.34 | 45.57 | 5.25 | 24.00 | 1.63 | 83.71 | 7.71 | | Government Employee | pre | 13.00 | 4.35 | 42.67 | 8.32 | 20.33 | 8.08 | 76.00 | 19.92 | | post | 15.33 | 1.15 | 45.00 | 5.56 | 23.33 | 2.08 | 83.67 | 6.02 | | Students | pre | 10.29 | 2.56 | 30.14 | 8.64 | 13.71 | 7.34 | 54.14 | 16.84 | | post | 15.57 | 2.22 | 50.14 | 3.67 | 26.00 | 2.23 | 91.71 | 3.68 | | **Mean** | pre | **10.56** | **3.62** | **31.40** | **8.37** | **15.99** | **5.38** | **57.96** | **14.64** | | post | **15.08** | **2.13** | **46.25** | **6.36** | **24.10** | **3.04** | **85.18** | **11.03** | | | | | | | | | |
|  |  | | | | | | | |
| Wilcoxon signed rank test (table 35) revealed significant increase in mean score in post when compared to the pre questionnaires in Hearing impairment, Speech and language disorders, Lifestyle and in combined domains in the target groups, except in Government employees (small sample size).  Kruskal-Wallis test was carried out to compare between the target groups within each domain (Hearing Impairment, Speech and language disorders & Lifestyle). The results showed no significant difference between the target groups, indicating that they performed similarly within each domain i.e., Hearing Impairment, Speech and language disorders & Lifestyle and between the domains at 0.05 level of significance.  The mean and standard deviations for sub domains of the three domains pre and post are shown in Table 36. There is an increase in the mean scores obtained in the post questionnaires when compared to the pre questionnaires in the subdomain questions related to Hearing impairment, Speech and language disorders, Lifestyle and across the target groups (Table 37). | | | | | | | | |
|  |  | | | | | | | |
| Table 35  *Chi-Square (χ2) values of 3 domains with the overall scores across the target groups*   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Target Group | Domains | | | Overall | |  | Hearing Impairment | Speech and language disorders | Lifestyle |  | | *χ2* (Pre vs Post) | | | | | Agriculture | 2.677\* | 2.805\* | 2.805\* | 2.805\* | | Manual Labourer | 3.187\* | 3.297\* | 3.181\* | 3.297\* | | Business/ Pvt  Organization | 4.253\* | 4.602\* | 4.526\* | 4.556\* | | Professional | 3.627\* | 3.727\* | 3.884\* | 3.921\* | | Home Maker | 2.207\* | 2.366\* | 2.388\* | 2.366\* | | Government Employee | 1.069 | 0.535 | 0.535 | 0.535 | | Students | 2.388\* | 2.375\* | 2.201\* | 2.366\* | | | | | | | | | |
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| Table 36  *Means and SDs for sub domains of the three domains in the questionnaire*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | *Domains* | *Sub Domain Code* | *Sub Domain questions related to* | *Pre Test* | | *Post Test* | | | *Mean* | *SD* | *Mean* | *SD* | | *Hearing Impairment* | HI 1 | Risk factors leading to hearing impairment | 4.92 | 1.76 | 6.79 | 0.59 | | HI 2 | Hearing impairment | 2.71 | 1.45 | 4.09 | 0.87 | | HI 3 | General awareness of hearing impairment | 2.93 | 1.27 | 4.15 | 0.79 | | *Speech Language Disorders* | SLD 1 | General awareness of Speech and language disorders | 4.49 | 1.63 | 6.06 | 0.98 | | SLD 2 | General awareness of Mental retardation | 4.52 | 2.13 | 6.63 | 1.21 | | SLD 3 | General awareness of Learning disability | 2.74 | 1.42 | 4.21 | 0.97 | | SLD 4 | General awareness of Cerebral Palsy | 2.08 | 0.82 | 2.69 | 0.53 | | SLD 5 | General awareness of Autism | 2.79 | 1.23 | 4.24 | 0.89 | | SLD 6 | General awareness of Aphasia | 2.18 | 1.16 | 3.38 | 0.71 | | SLD 7 | General awareness of Cleft lip and palate | 2.54 | 1.31 | 4.11 | 0.93 | | SLD 8 | General awareness of Articulation disorders | 2.29 | 1.17 | 3.44 | 0.69 | | SLD 9 | General awareness of Fluency disorders | 2.16 | 1.21 | 3.40 | 0.73 | | SLD 10 | General awareness of Voice disorders | 5.71 | 2.49 | 8.18 | 1.57 | | *Life style* | LS 1 | Social aspects | 5.92 | 2.36 | 8.20 | 1.55 | | LS 2 | Vocational aspects | 0.56 | 0.49 | 0.84 | 0.36 | | LS 3 | Entertainment aspects | 0.48 | 0.50 | 0.83 | 0.37 | | LS 4 | Literacy aspects | 3.45 | 1.58 | 5.10 | 0.94 | | LS 5 | Personality aspects | 3.12 | 1.37 | 4.98 | 0.97 | | LS 6 | Physical aspects | 1.40 | 0.98 | 2.44 | 0.65 | | LS 7 | Economical aspects | 0.99 | 0.89 | 1.70 | 0.53 | | | | | | | | | |
|  |  | | | | | | | |
| Table 37  *Means and SDs for sub domains of the three domains across the target groups*   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | *Domain* | | *Agriculture* | | *Manual Labourer* | | *Business/ Pvt*  *Organization* | | *Professional* | | *Home Maker* | | *Government Employee* | | *Students* | | | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | Mean | SD | | HI 1 | pre | 5.50 | 1.43 | 4.00 | 2.00 | 5.57 | 1.47 | 4.50 | 1.93 | 4.29 | 2.13 | 5.67 | 2.08 | 4.86 | 0.69 | | post | 6.60 | 0.699 | 6.64 | 0.92 | 6.89 | 0.87 | 6.75 | 1.11 | 6.86 | 1.06 | 7.67 | 0.57 | 6.57 | 1.27 | | HI 2 | pre | 2.90 | 1.197 | 2.36 | 1.44 | 2.79 | 1.59 | 2.70 | 1.41 | 3.00 | 1.52 | 3.00 | 1.73 | 2.43 | 1.61 | | post | 3.90 | 0.73 | 4.14 | 0.66 | 4.14 | 0.93 | 4.10 | 0.91 | 3.57 | 1.13 | 4.00 | 1.00 | 4.57 | 0.78 | | HI 3 | pre | 2.90 | 0.99 | 2.71 | 1.59 | 3.14 | 1.04 | 2.70 | 1.45 | 2.57 | 1.71 | 4.33 | 1.15 | 3.00 | 0.57 | | post | 4.00 | 0.816 | 4.29 | 0.72 | 4.18 | 0.86 | 4.25 | 0.71 | 3.71 | 0.75 | 3.67 | 1.55 | 4.29 | 0.75 | | SLD 1 | pre | 4.80 | 1.54 | 4.00 | 2.14 | 4.86 | 1.35 | 4.15 | 1.42 | 4.57 | 1.61 | 5.00 | 1.00 | 4.29 | 2.43 | | post | 5.80 | 1.03 | 6.14 | 0.94 | 6.14 | 0.84 | 6.15 | 0.74 | 5.43 | 1.51 | 6.67 | 0.57 | 6.00 | 1.52 | | SLD 2 | pre | 4.60 | 1.07 | 5.00 | 2.68 | 4.64 | 2.07 | 3.65 | 1.84 | 4.14 | 2.41 | 6.67 | 1.52 | 4.86 | 2.61 | | post | 6.30 | 1.26 | 6.93 | 1.26 | 6.43 | 1.23 | 6.55 | 1.27 | 6.57 | 1.13 | 6.67 | 1.15 | 7.57 | 0.78 | | SLD 3 | pre | 2.90 | 1.28 | 2.50 | 1.60 | 2.79 | 1.13 | 2.70 | 1.62 | 2.43 | 1.71 | 4.33 | 1.15 | 2.57 | 1.61 | | post | 3.80 | 1.13 | 4.29 | 0.91 | 4.11 | 0.87 | 4.30 | 1.21 | 4.43 | 0.78 | 4.00 | 1.00 | 4.71 | 0.48 | | SLD 4 | pre | 2.00 | 0.47 | 2.10 | 0.86 | 2.11 | 0.87 | 1.95 | 0.82 | 2.14 | 1.06 | 2.67 | 0.57 | 2.00 | 1.00 | | post | 2.70 | 0.67 | 2.64 | 0.63 | 2.61 | 0.56 | 2.80 | 0.41 | 2.71 | 0.48 | 2.67 | 0.57 | 2.71 | 0.48 | | SLD 5 | pre | 2.40 | 1.26 | 2.64 | 1.49 | 2.64 | 1.25 | 2.90 | 1.07 | 3.14 | 1.46 | 4.00 | 1.00 | 3.00 | 0.81 | | post | 4.00 | 0.94 | 4.14 | 1.16 | 4.25 | 0.84 | 4.35 | 0.74 | 3.86 | 1.21 | 4.33 | 0.57 | 4.71 | 0.48 | | SLD 6 | pre | 1.60 | 0.84 | 2.14 | 1.40 | 2.39 | 1.16 | 2.55 | 0.51 | 1.71 | 1.60 | 2.33 | 2.08 | 1.57 | 1.27 | | post | 3.50 | 0.70 | 3.36 | 0.497 | 3.43 | 0.69 | 3.40 | 0.82 | 3.43 | 0.53 | 2.00 | 1.00 | 3.57 | 0.53 | | SLD 7 | pre | 2.40 | 1.57 | 2.14 | 1.29 | 2.82 | 1.27 | 2.65 | 0.98 | 2.14 | 1.67 | 3.00 | 2.00 | 2.29 | 1.49 | | post | 3.60 | 1.07 | 4.07 | 1.14 | 4.18 | 0.90 | 4.25 | 0.78 | 3.86 | 0.69 | 4.00 | 0 | 4.57 | 1.13 | | SLD 8 | pre | 1.80 | 0.91 | 2.14 | 1.29 | 2.54 | 1.29 | 2.25 | 0.96 | 2.43 | 0.53 | 3.33 | 1.15 | 1.86 | 1.57 | | post | 3.50 | 0.70 | 3.29 | 0.72 | 3.32 | 0.67 | 3.45 | 0.75 | 3.57 | 0.78 | 3.67 | 0.57 | 3.86 | 0.37 | | SLD 9 | pre | 1.60 | 1.26 | 2.21 | 1.31 | 2.04 | 1.17 | 2.55 | 1.05 | 2.29 | 1.11 | 3.67 | 0.57 | 1.43 | 1.27 | | post | 3.20 | 0.91 | 3.29 | 0.72 | 3.43 | 0.74 | 3.30 | 0.73 | 3.71 | 0.48 | 4.00 | 0 | 3.57 | 0.78 | | SLD 10 | pre | 4.90 | 2.55 | 5.29 | 3.29 | 5.57 | 2.48 | 6.10 | 1.91 | 5.71 | 3.03 | 7.67 | 2.08 | 6.29 | 1.89 | | post | 7.40 | 2.06 | 7.79 | 1.47 | 8.21 | 1.54 | 8.80 | 1.47 | 8.00 | 1.15 | 7.00 | 1.73 | 8.86 | 1.06 | | LS 1 | pre | 5.80 | 1.39 | 6.29 | 2.86 | 6.32 | 2.03 | 5.55 | 2.93 | 6.57 | 2.14 | 4.67 | 4.04 | 4.71 | 3.09 | | post | 8.30 | 1.25 | 7.71 | 1.54 | 7.96 | 1.79 | 8.35 | 1.63 | 8.43 | 1.27 | 8.00 | 1.00 | 9.43 | 0.53 | | LS 2 | pre | 0.50 | 0.52 | 0.71 | 0.46 | 0.71 | 0.46 | 0.30 | 0.47 | 0.86 | 0.37 | 0.67 | 0.57 | 0.14 | 0.37 | | post | 0.80 | 0.42 | 0.79 | 0.42 | 0.89 | 0.31 | 0.80 | 0.41 | 1.00 | 0 | 1.00 | 0 | 0.71 | 0.48 | | LS 3 | pre | 0.50 | 0.52 | 0.36 | 0.49 | 0.54 | 0.50 | 0.54 | 0.50 | 0.57 | 0.53 | 0.67 | 0.57 | 0.57 | 1.00 | | post | 1.00 | 0 | 0.79 | 0.42 | 0.82 | 0.39 | 0.80 | 0.41 | 0.57 | 0.53 | 1.00 | 0 | 1.00 | 0 | | LS 4 | pre | 2.50 | 1.84 | 2.93 | 1.81 | 4.04 | 1.31 | 3.15 | 1.38 | 4.00 | 0.81 | 4.00 | 2.00 | 3.57 | 2.07 | | post | 4.80 | 1.13 | 4.93 | 0.99 | 5.11 | 0.95 | 5.00 | 0.91 | 5.43 | 0.78 | 4.67 | 0.57 | 6.00 | 0 | | LS 5 | pre | 2.40 | 1.43 | 2.50 | 1.60 | 3.79 | 0.95 | 2.65 | 1.34 | 3.57 | 0.78 | 5.00 | 1.73 | 2.86 | 0.90 | | post | 4.80 | 0.79 | 5.00 | 1.03 | 4.93 | 1.15 | 5.10 | 0.78 | 4.71 | 1.11 | 5.00 | 1.00 | 5.29 | 0.95 | | LS 6 | pre | 1.90 | 0.99 | 0.79 | 0.97 | 1.61 | 0.87 | 1.30 | 0.80 | 1.43 | 0.97 | 2.67 | 0.57 | 0.86 | 1.21 | | post | 2.50 | 0.52 | 2.21 | 0.69 | 2.43 | 0.74 | 2.70 | 0.47 | 2.14 | 0.69 | 2.33 | 0.57 | 2.43 | 0.78 | | LS 7 | pre | 0.50 | 0.70 | 1.14 | 0.86 | 1.14 | 0.  80 | 0.95 | 0.82 | 0.86 | 0  .69 | 1.67 | 0.57 | 0.71 | 0.95 | | post | 1.40 | 0.69 | 1.57 | 0.64 | 1.79 | 0.41 | 1.80 | 0.52 | 1.71 | 0.48 | 1.33 | 0.57 | 1.86 | 0.37 | | | | | | | | | |
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| Friedman’s test was used to compare the mean of subdomain questions within Hearing Impairment, Speech-Language Disorders and Lifestyle sections as given in table 38. | | | | | | | | |
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| Table 38  *Chi-Square (χ2) values of 3 domains pre and post between the target groups*   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Target Group | Sub Domains | | | | | | | Hearing Impairment  df (2) | | Speech and language disorders  df (9) | | Lifestyle  df (6) | | |  | | *χ2* | |  | | |  | Pre | Post | Pre | Post | Pre | Post | | Agriculture | 1.474 | 1.750 | 23.260\* | 9.276 | 7.347 | 13.874\* | | Manual Labourer | 0.118 | 1.512 | 8.201 | 9.703 | 14.411 | 6.388 | | Business/ Pvt.  Organization | 8.385\* | 0.33 | 25.462\* | 8.911 | 9.312 | 18.525\* | | Professional | 2.171 | 0.737 | 11.630 | 12.421 | 7.378 | 10.072 | | Home Maker | 0.364 | 2.100 | 4.580 | 12.084 | 7.904 | 10.000 | | Government Employee | 3.000 | 2.600 | 6.125 | 15.911 | 2.164 | 8.797 | | Students | 2.769 | 2.952 | 14.602 | 7.410 | 11.276 | 9.014 | | Overall | 13.223\* | 0.618 | 37.378\* | 22.443\* | 12.343 | 45.397\* | | | | | | | | | |
| There was no significant difference in the several sections of pre and post test scores indicating the performance was similar in the sub domains of hearing impairment, speech and language disorders & lifestyle among all the target groups. Further Mann-Whitney U test was administered to compare individual domain for pre and post among the target groups. The results of the test are depicted in table 39. | | | | | | | | |
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| Table 39  *Mann-Whitney U test results of Hearing Impairment, Speech-Language Disorders and Lifestyle among the target groups*   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Target Group | Hearing Impairment | | Speech and language disorders | | Lifestyle | | Overall | | | /z/ | | | | | | | | | Pre | Post | Pre | Post | Pre | Post | Pre | Post | | Agriculture | 2.463\* | 0.681 | 2.952\* | 2.071\* | 2.325\* | 1.043 | 3.012\* | 1.600\* | | Manual Labourer | 1.905 | 0.268 | 2.367\* | 0.568 | 2.687\* | 1.207 | 2.616\* | 0.538 | | Business/ Pvt.  Organization | 2.433\* | 1.204 | 2.909\* | 0.156 | 1.920 | 0.346 | 3.174\* | 0.247 | | Professional | 2.616\* | 0.336 | 4.714\* | 0.952 | 3.819\* | 0.428 | 4.977\* | 0.475 | | Home Maker | 1.943 | 1.219 | 2.648\* | 1.057 | 1.128 | 0.665 | 2.836\* | 1.407 | | Government Employee | 0.685 | 0.655 | 0.788 | 0.807 | 0.215 | 0.377 | 0.715 | 0.322 | | Students | 2.136\* | 1.122 | 2.965\* | 1.796 | 2.266\* | 1.962 | 2.745\* | 2.406\* | | Overall | 6.110\* | 0.512 | 8.845\* | 1.733 | 6.249\* | 0.097 | 8.957\* | 0.705 | | | | | | | | | |
|  |  | | | | | | | |
| There is significant difference observed in several sections of pre test in the domains of Hearing Impairment, Speech-Language Disorders and Lifestyle compared to post test. Further Friedman’s test was used to compare the pre and post of subdomain questions within Hearing Impairment, Speech-Language Disorders and Lifestyle sections across the target groups to check further significant difference (table 40). | | | | | | | | |
|  |  | | | | | | | |
| Table 40  *Friedman’s test results of Hearing Impairment, Speech-Language Disorders and Lifestyle among the target groups*   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | *Subdomain* | | *A* | *ML* | *B* | *P* | *HM* | *G* | *S* | | HI 1 | Pre | 0.112 | 1.473 | 0.331 | 1.541 | 0.896 | 0.369 | 0.600 | |  | Post | 0.084 | 0.325 | 1.446 | 1.092 | 0.433 | 1.776 | 0.195 | | HI 2 | Pre | 1.369 | 0.748 | 1.907 | 0.813 | 1.055 | 0.818 | 1.437 | |  | Post | 0.960 | 0.680 | 0.553 | 0.570 | 1.726 | 0.038 | 2.002\* | | HI 3 | Pre | 1.359 | 2.048\* | 3.766\* | 3.941\* | 2.408\* | 0.424 | 0.205 | |  | Post | 3.116\* | 1.946 | 1.030 | 0.945 | 1.749 | 1.217 | 2.906\* | | SLD 1 | Pre | 1.293 | 1.357 | 1.947 | 4.371\* | 2.283\* | 1.739 | 1.385 | |  | Post | 1.764 | 0.308 | 0.042 | 0.585 | 1.443 | 1.007 | 0.186 | | SLD 2 | Pre | 3.814\* | 1.665 | 3.402\* | 5.308\* | 3.586 | 0.658 | 2.925\* | |  | Post | 1.590 | 0.101 | 3.068\* | 2.192\* | 0.949 | 0.279 | 1.741 | | SLD 3 | Pre | 2.667\* | 2.095\* | 2.851\* | 3.878\* | 2.763 | 0.178 | 2.739\* | |  | Post | 1.479 | 0.376 | 1.139 | 0.865 | 0.219 | 0.622 | 0.636 | | SLD 4 | Pre | 1.656 | 0.735 | 0.952 | 0.322 | 0.031 | 1.048 | 0.909 | |  | Post | 0.201 | 0.411 | 0.374 | 0.805 | 0.235 | 0.285 | 0.729 | | SLD 5 | Pre | 1.807 | 1.232 | 0.916 | 0.991 | 0.045 | 0.498 | 1.129 | |  | Post | 1.238 | 0.741 | 0.613 | 0.659 | 0.900 | 0.058 | 2.070\* | | SLD 6 | Pre | 2.506\* | 0.393 | 0.778 | 2.579\* | 1.574 | 0.590 | 2.267\* | |  | Post | 0.016 | 1.068 | 1.107 | 0.384 | 0.550 | 2.771\* | 0.790 | | SLD 7 | Pre | 2.423\* | 2.779\* | 2.395\* | 4.086 | 2.084\* | 0.969 | 2.494\* | |  | Post | 2.609\* | 0.336 | 0.815 | 0.959 | 1.236 | 0.929 | 1.518 | | SLD 8 | Pre | 2.700\* | 2.189\* | 0.875 | 4.150\* | 2.298\* | 0.020 | 2.391\* | |  | Post | 0.613 | 0.274 | 1.368 | 2.013 | 0.264 | 0.166 | 1.261 | | SLD 9 | Pre | 1.720 | 0.687 | 1.618 | 0.973 | 0.924 | 0.884 | 2.138\* | |  | Post | 1.336 | 0.840 | 0.296 | 2.006\* | 0.635 | 1.531 | 0.542 | | SLD 10 | Pre | 2.415\* | 1.780 | 1.863 | 2.327\* | 1.642 | 0.310 | 0.968 | |  | Post | 2.170\* | 1.777 | 0.093 | 0.974 | 1.509 | 1.811 | 1.058 | | LS 1 | Pre | 2.668\* | 1.752 | 1.703 | 3.040\* | 1.035 | 1.604 | 2.094\* | |  | Post | 0.639 | 1.872 | 1.281 | 0.050 | 0.271 | 0.700 | 2.378\* | | LS 2 | Pre | 0.396 | 0.331 | 1.737 | 3.520\* | 1.252 | 0.065 | 2.584\* | |  | Post | 0.190 | 0.623 | 1.777 | 0.346 | 1.453 | 0.814 | 0.364 | | LS 3 | Pre | 2.108\* | 3.015\* | 1.922 | 3.217\* | 1.536 | 0.281 | 1.415 | |  | Post | 1.107 | 0.044 | 0.058 | 0.986 | 1.536 | 0.713 | 1.155 | | LS 4 | Pre | 2.234\* | 2.323\* | 1.759 | 3.590\* | 0.733 | 0.479 | 1.011 | |  | Post | 1.439 | 0.801 | 0.076 | 0.660 | 0.722 | 0.428 | 2.912\* | | LS 5 | Pre | 1.770 | 2.231\* | 0.697 | 1.671 | 0.238 | 1.294 | 1.415 | |  | Post | 0.865 | 1.122 | 1.274 | 1.549 | 0.015 | 0.589 | 2.115\* | | LS 6 | Pre | 0.086 | 2.487\* | 0.868 | 1.976\* | 0.700 | 1.246 | 1.996 | |  | Post | 0.229 | 0.758 | 0.774 | 1.527 | 0.839 | 0.200 | 0.752 | | LS 7 | Pre | 2.747\* | 1.269 | 1.788 | 2.613\* | 1.730 | 0.190 | 3.066\* | |  | Post | 2.114\* | 1.316 | 1.673 | 0.644 | 0.624 | 2.006 | 0.706 |   Note: A=Agriculture, ML=Manual Laborer, B=Business/Pvt. Organization, P=Professional, HM=Home Maker, GE=Government Employee and S=Students. | | | | | | | | |
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| Friedman test showed no significant difference in the pre and post test scores of several sections of different subdomains within Hearing Impairment, Speech-Language Disorders and Lifestyle across the target groups. This was similar to the observations made for ASHA workers recruited in the villages of Srirangapattana Taluk. | | | | | | | | |
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| **SUMMARY ON PREVALENCE OF COMMUNICATION DISORDERS**  In Level III of the survey, the population in Srirangapattana taluk of Mandya District (N=1,78,432) were identified, screened and evaluated for communication disorders. The survey was carried out in 4 hoblis of Srirangapattana taluk which included only villages (rural) and this was carried out by trained ASHA workers. The population in the Srirangapattana town (urban) was surveyed by three trained ANMs and the project staff of the institute (Speech-Language Pathologists Grade I). The percentage prevalence of types of communication disorders in this taluk is as follows:   1. **Speech and Language Disorders**   Prevalence of Speech-Language disorders in the hoblis of Srirangapattana (Rural) was **0.138%** and in Srirangapattana Town (urban) was **0.025%.**The speech-language disorders were found to be more prevalent in males compared to females in Srirangapattana taluk (**0.093%** in males and **0.045%** in females in Sriranagapattana Rural and **0.015%** in males and **0.010%** in females of Srirangapatna Town respectively). Within the speech and language disorders, in the rural population, percentage prevalence of (i) Mental retardation and Fluency disorders were found to be higher (ii) Traumatic Brain Injury, Slow learner, Language disorders with Seizures and Global Developmental Delay were found to be very less than the first two conditions, and other speech and language disorders showed similar prevalence percentage. In Srirangapatna Town, percentage prevalence of (i) Mental retardation and Articulation/Phonological disorders were found to be higher (ii) Voice disorders, Pervasive Developmental Disorder and Expressive Language Delay were found to be very less than the first two conditions, and other speech and language disorders showed similar prevalence percentage.   1. **Hearing disorders**   The percentage of prevalence of hearing loss (Irrespective of the type and degree of hearing loss was **0.504%** in the population of Srirangapattana Rural (Four hoblis) and **0.090%** in Srirangapatna Town. Amongst the types of hearing loss, the percentage of prevalence of sensorineural hearing loss was the highest (**0.275**%), followed by the mixed **(0.105%)** and conductive type of hearing loss **(0.051%) in** Srirangapattana Rural**.** Similar pattern was observed in Srirangapattana town, wherein sensorineural hearing loss was the highest (**0.067**%), followed by the mixed **(0.014%)** and conductive type of hearing loss **(0.008%).** With respect to degree of hearing loss, the percentage prevalence of Moderate degree of hearing loss was highest, followed by Mild degree, Severe and Profound degree of hearing loss in all the four hoblis and Srirangapatna Town, except for K.Shettahalli Hobli wherein, Moderate degree of hearing loss was highest, followed by Severe degree, 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 compared to males.   1. **ENT Conditions and Diseases**   The prevalence percentage of ENT conditions and diseases was **0.378**% in Srirangapattana Taluk (**0.300**% in rural and **0.077**% in urban). The % prevalence in females was higher compared to males. It was 0.177% in females and 0.122% in males in Srirangapattana Rural and 0.047% in females and 0.030% in males in Srirangapattana Town. Amongst the conditions and diseases, the prevalence % in Srirangapattana Rural was higher for External Ear and Middle Ear diseases, 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. But in Srirangapattana Town Middle Ear diseases was higher followed by other conditions   1. **Dual and Multiple disorders**   The percentage prevalence of dual and multiple disorders was very less in both rural and urban population of Srirangapattana taluk. | | | | | | | | |
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