|  |  |
| --- | --- |
| **RESULTS ON FEEDBACK ABOUT** **AWARENESS OF COMMUNICATION** **DISORDERS AND RELATED ISSUES** **IN THE PUBLIC** | Out of 504 questionnaires that were distributed in 73 villages belonging to Gavadagere Hobli & Kasaba Hobli, Hunsur Taluk, Mysuru District, there were 482 filled questionnaires (including pre and post questionnaires) whereas 22 questionnaires were not returned. Table 41 shows the number of persons and percentage from the 9 target groups who filled the questionnaire and The mean, median and standard deviation of Speech & Language disorders, Hearing Impairment and Lifestyle domains across target groups illustrated in Table 42. The mean, median and standard deviation of the pre and post test scores for the domains of Hearing Impairment, Speech & Language disorders and Lifestyle across target groups (9 professionals) are depicted in Table 44. |
|  |  |
| Table 41*Total Number of persons representing various target groups who responded to the questionnaire in Gavadagere Hobli and Kasaba Hobli of Hunsur Taluk, Mysuru District*

|  |  |  |  |
| --- | --- | --- | --- |
| Target Groups | Gavadagere Hobli | Kasaba Hobli | Total(percentage) |
| Agriculturists | 33 (11.22%) | 22 (11.70%) | 55 (11.41%) |
| Manual Labourers | 32 (10.88%) | 19 (10.10%) | 51 (10.58%) |
| Businessmen | 34 (11.56%) | 21 (11.17%) | 55 (11.41%) |
| Grampanchayat member/Counselor | 33 (11.22%) | 21 (11.17%) | 54 (11.20%) |
| Professionals  | 32 (10.88%) | 19 (10.10%) | 51 (10.58%) |
| Home Makers | 32 (10.88%) | 22 (11.70%) | 54 (11.20%) |
| Government Employees | 33 (11.22%) | 21 (11.17%) | 54 (11.20%) |
| Private Organization | 32 (10.88%) | 21 (11.17%) | 53 (10.99%) |
| Students | 33 (11.22%) | 22 (11.70%) | 55 (11.41%) |
| Total | 294 | 188 | 482  |

 |
|  |
| Table 42 *Pre and post test Mean, Median and Standard Deviation of the three domains among target groups of Hunsur Taluk, Mysuru District*

|  |  |
| --- | --- |
| Target Groups |  Domains |
| Speech and language disorders | Hearing Impairment | Lifestyle | Overall |
| Mean | SD | Median | Mean | SD | Median | Mean | SD | Median | Mean | SD | Median |
| A | Pre | 42.56 | 14.114 | 48.00 | 13.60 | 3.670 | 14.00 | 20.11 | 7.261 | 21.00 | 76.26 | 20.621 | 82.35 |
| Post | 49.11 | 8.753 | 55.00 | 15.84 | 2.949 | 18.00 | 24.42 | 6.754 | 29.00 | 89.36 | 16.797 | 102.00 |
| ML | Pre | 44.29 | 12.290 | 46.00 | 13.37 | 3.429 | 13.00 | 20.14 | 8.270 | 21.00 | 77.41 | 19.729 | 80.00 |
| Post | 49.53 | 7.991 | 55.00 | 15.33 | 3.192 | 18.00 | 24.53 | 6.463 | 29.00 | 89.39 | 16.004 | 102.00 |
| B | Pre | 43.65 | 12.835 | 47.00 | 13.60 | 4.188 | 14.00 | 20.02 | 8.689 | 20.00 | 77.56 | 21.314 | 79.00 |
| Post | 48.58 | 8.257 | 55.00 | 15.31 | 3.271 | 18.00 | 24.09 | 6.550 | 29.00 | 87.98 | 16.798 | 102.00 |
| GM | Pre | 43.00 | 13.850 | 46.00 | 14.06 | 4.114 | 14.00 | 20.56 | 8.825 | 23.50 | 76.83 | 24.401 | 81.00 |
| Post | 47.35 | 12.357 | 55.00 | 14.91 | 4.384 | 18.00 | 23.19 | 7.900 | 29.00 | 85.44 | 23.066 | 100.00 |
| P | Pre | 44.25 | 9.822 | 44.00 | 14.10 | 3.378 | 14.00 | 20.65 | 7.655 | 23.00 | 78.67 | 17.583 | 77.00 |
| Post | 49.35 | 8.775 | 55.00 | 15.43 | 3.300 | 18.00 | 24.06 | 6.973 | 29.00 | 88.82 | 17.525 | 102.00 |
| HM  | Pre | 45.00 | 9.879 | 46.00 | 14.37 | 3.460 | 14.00 | 21.09 | 7.604 | 22.00 | 80.69 | 18.124 | 80.50 |
| Post | 49.22 | 8.252 | 55.00 | 15.63 | 3.275 | 18.00 | 24.15 | 6.418 | 29.00 | 89.00 | 16.378 | 102.00 |
| GE | Pre | 44.65 | 13.723 | 51.00 | 13.30 | 4.022 | 14.00 | 19.57 | 8.669 | 21.00 | 77.70 | 22.300 | 80.50 |
| Post | 50.22 | 7.595 | 55.00 | 15.78 | 2.905 | 18.00 | 23.63 | 6.786 | 29.00 | 89.59 | 15.622 | 102.00 |
| PO | Pre | 40.62 | 13.886 | 42.00 | 13.64 | 4.114 | 14.00 | 19.02 | 8.219 | 19.00 | 73.19 | 22.463 | 73.00 |
| Post | 48.45 | 11.758 | 55.00 | 16.98 | 12.226 | 18.00 | 23.55 | 7.508 | 29.00 | 86.92 | 20.693 | 102.00 |
| St | Pre | 39.38 | 15.063 | 44.00 | 13.65 | 3.273 | 13.00 | 20.76 | 7.628 | 23.00 | 73.25 | 22.558 | 79.00 |
| Post | 49.67 | 7.765 | 55.00 | 16.98 | 11.808 | 18.00 | 23.93 | 6.702 | 29.00 | 89.09 | 15.964 | 102.00 |
| **Total** | Pre | **43.03** | **12.994** | **46.00** | **13.74** | **3.742** | **14.00** | **20.21** | **8.064** | **22.00** | **76.83** | **21.090** | **80.00** |
| Post | **49.05** | **9.161** | **55.00** | **15.80** | **6.394** | **18.00** | **23.95** | **6.865** | **29.00** | **88.40** | **17.709** | **102.00** |

 |
| (Note: A= Agriculturists, ML=Manual Laborer, B=Businessmen, GM= Grampanchayat member, P= Professional, HM= Home Maker, GE=Government Employee, PE=Private Organization (Employee), St=Students) |
| The results revealed that the scores obtained in the post test were higher compared to pre test in all 3 domains among each of the 9 target groups. The results of Wilcoxon Signed Rank test (Table 43), revealed a significant difference (p < 0.05) in some of the target groups in the domain of Hearing Impairment of (Agriculturist,Manual Laborer, Government Employee, Private Employee, Students); in the domain of Speech-Language disorder (Agriculturists, Manual Laborer, Grampanchayat member, Professionals, Private Employee, Students) and in the domain of Lifestyle (Agriculturist, Private Employee). These findings indicate an improvement in the awareness levels of most target groups with respect to the domain of Speech- Language disorder, Hearing impairment and lifestyle post survey.Table 43*Results of Wilcoxon Sign Rank Test comparing pre and post test scores for various domains in the target groups of Hunsur Taluk, Mysuru District*

|  |  |
| --- | --- |
| **Target group** | **/z/** **(Pre Vs Post)** |
| **Hearing Impairment** | **Speech Language Disorders** | **Lifestyle** |
| Agriculturist | 3.226\* | 2.859\* | 3.029\* |
| Manual Laborer | 3.360\* | 3.080\* | 2.740 |
| Businessmen | 2.249 | 1.627 | 2.417 |
| Grampanchayat member  | 1.124 | 3.079\* | 1.457 |
| Professional | 2.310 | 2.898\* | 2.155 |
| Home Maker | 2.338 | 2.733 | 2.227 |
| Government Employee | 3.792\* | 2.306 | 2.669 |
| Private Employee | 3.252\* | 4.166\* | 3.530\* |
| Students | 3.256\* | 3.946\* | 2.137 |

 Note: \* p< 0.05The data was further analyzed to compare the overall scores obtained for the three domains (Speech-language disorders, Hearing Impairment and Lifestyle) across the 9 target groups separately for pre test and post test scores using Kruskal Wallis test. The results of the Kruskal Wallis revealed no significant difference (p>0.05) between the target groups in both pre as well as post test scores. |
| Table 44*Results of Kruskal Wallis test comparing across the target groups for the overall scores for combined domains for Hunsur Taluk, Mysuru District*

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

Note: A=Agriculturist, ML=Manual Laborer, B=Businessmen, GM=Grampanchayat member= Professional, HM= Home Maker, GE=Government Employee, PE=Private Employee, St=Students, S= Significant, NS= Not Significant) |
| Mann-Whitney U test was then carried out to analyze significant differences in the scores obtained in each of the three domains (Speech-language disorders, Hearing Impairment and Lifestyle) across target groups separately for pre test and post test. As in the earlier section for overall scores, the results of Mann-Whitney U test were same for comparison of both pre test as well as post test scores and hence, are mentioned commonly in Table 45. Overall, there were no significant differences across the various target groups for all three domains namely Speech-language disorders, Hearing Impairment and Lifestyle. Table 45*Comparison across the target groups of Hunsur Taluk, Mysuru District for the three domains using Mann-Whitney U test*

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

 |
| (Note: A=Agriculturist, ML=Manual Laborer, B=Businessmen, GM=Grampanchayat member P=Professional, HM=Home Maker, GE=Government Employee, PE=Private Employee, St=Students, S= Significant, NS= Not Significant)The data was also analyzed to compare the scores obtained across the sub domains within each of the three main domains of Speech-Language disorders, Hearing Impairment and Lifestyle in pre test and post test. The mean, median and standard deviation of the scores obtained each sub domain in the pre test and post test for the three main domains in the questionnaire and the corresponding percentages are depicted in Tables 46 and 47, respectively. |
| Table 46*Mean, Median and Standard Deviation for sub domains of the three domains in the questionnaire for Hunsur Taluk, Mysuru District*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Domains*** | ***Sub Domain Code*** | ***Pre Test*** |  | ***Post Test*** |  |
| ***Mean***  | ***SD*** | ***Median*** | ***Mean*** |  ***SD*** | ***Median*** |
| ***Speech Language Disorders*** | **SLD 1** | 5.93 | 1.65 | 7.00 | 6.11 | 1.64 | 7.00 |
| **SLD 2** | 6.87 | 1.84 | 8.00 | 7.40 | 1.14 | 8.00 |
| **SLD 3** | 4.21 | 1.36 | 5.00 | 4.57 | 0.88 | 5.00 |
| **SLD 4** | 2.34 | 0.95 | 3.00 | 2.63 | 0.75 | 3.00 |
| **SLD 5** | 3.28 | 1.72 | 4.00 | 4.59 | 0.91 | 5.00 |
| **SLD 6** | 2.87 | 1.46 | 3.00 | 3.50 | 0.88 | 4.00 |
| **SLD 7** | 3.89 | 1.52 | 4.00 | 4.42 | 0.96 | 5.00 |
| **SLD 8** | 3.09 | 1.26 | 4.00 | 3.45 | 0.96 | 4.00 |
| **SLD 9** | 3.02 | 1.34 | 4.00 | 3.49 | 0.92 | 4.00 |
| **SLD 10** | 7.70 | 3.03 | 9.00 | 8.84 | 2.04 | 10.00 |
| ***Hearing Impairment***  | **HI 1**  | 5.68 | 1.87 | 5.00 | 7.09 | 1.45 | 8.00 |
| **HI 2** | 3.87 | 1.22 | 4.00 | 4.03 | 1.40 | 5.00 |
| **HI 3** | 4.27 | 1.12 | 5.00 | 4.34 | 1.04 | 5.00 |
| ***Life style*** | **LS 1** | 7.59 | 2.70 | 8.00 | 8.23 | 2.53 | 10.00 |
| **LS 2** | 0.62 | 0.48 | 1.00 | 0.86 | 0.34 | 1.00 |
| **LS 3** | 0.69 | 0.46 | 1.00 | 0.76 | 0.42 | 1.00 |
| **LS 4** | 4.20 | 2.04 | 5.00 | 5.13 | 1.39 | 6.00 |
| **LS 5** | 3.73 | 2.06 | 4.00 | 4.91 | 1.55 | 6.00 |
| **LS 6** | 2.13 | 4.62 | 2.00 | 2.42 | 0.81 | 3.00 |
| **LS 7** | 1.57 | 0.75 | 2.00 | 1.65 | 0.61 | 2.00 |

 |
| Table 47*Percentage Mean, Median and Standard Deviation for sub domains of the three domains in the questionnaire for Hunsur Taluk, Mysuru District*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Domains*** | ***Sub Domain Code*** | ***Pre Test*** |  | ***Post Test*** |  |
| ***Mean (%)***  | ***SD******(%)*** | ***Median******(%)*** | ***Mean******(%)*** |  ***SD******(%)*** | ***Median******(%)*** |
| ***Speech Language Disorders*** | **SLD 1** | 84.72 | 23.58 | 100.00 | 87.28 | 23.46 | 100.00 |
| **SLD 2** | 86.03 | 22.88 | 100.00 | 92.57 | 14.03 | 100.00 |
| **SLD 3** | 83.62 | 27.18 | 100.00 | 91.49 | 17.67 | 100.00 |
| **SLD 4** | 77.29 | 31.35 | 100.00 | 87.61 | 25.27 | 100.00 |
| **SLD 5** | 66.50 | 34.64 | 80.00 | 91.74 | 18.30 | 100.00 |
| **SLD 6** | 70.89 | 35.96 | 75.00 | 87.39 | 22.05 | 100.00 |
| **SLD 7** | 78.16 | 30.36 | 100.00 | 88.37 | 19.33 | 100.00 |
| **SLD 8** | 77.21 | 31.75 | 100.00 | 86.32 | 24.24 | 100.00 |
| **SLD 9** | 75.51 | 33.65 | 100.00 | 87.03 | 23.37 | 100.00 |
| **SLD 10** | 76.86 | 30.50 | 90.00 | 88.50 | 20.34 | 100.00 |
| ***Hearing Impairment***  | **HI 1**  | 71.14 | 23.45 | 62.50 | 88.69 | 18.09 | 100.00 |
| **HI 2** | 77.19 | 24.61 | 80.00 | 80.56 | 28.33 | 100.00 |
| **HI 3** | 85.51 | 22.45 | 100.00 | 86.80 | 20.87 | 100.00 |
| ***Life style*** | **LS 1** | 76.29 | 26.84 | 80.00 | 82.26 | 25.32 | 100.00 |
| **LS 2** | 61.74 | 100.00 | 48.60 | 86.09 | 34.63 | 100.00 |
| **LS 3** | 69.08 | 46.26 | 100.00 | 75.93 | 42.79 | 100.00 |
| **LS 4** | 70.02 | 34.00 | 83.33 | 85.57 | 23.20 | 100.00 |
| **LS 5** | 62.09 | 34.37 | 66.66 | 81.81 | 26.02 | 100.00 |
| **LS 6** | 63.44 | 39.24 | 66.66 | 80.77 | 27.09 | 100.00 |
| **LS 7** | 78.63 | 37.73 | 100.00 | 82.46 | 30.90 | 100.00 |

The results also revealed that the post test scores were higher than the pretest scores in each of the sub domains of the three main domains. Further, sub domain HI 1 had the highest scores both in the pre and post test in the domain of Hearing Impairment. Similarly, highest scores were obtained for SLD 2 and LS 1 in the domains of Speech-Language disorders and Lifestyle, respectively for pre and post tests. Analysis using Friedman’s test revealed significant effect of the sub domains of Speech-Language disorders on the scores obtained both in pre (λ2 (2) = 262.72, p < 0.001) and post test (λ2 (2) =135.95, p < 0.001). Pair wise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between all sub domains both for pre test and post test except for SLD 1. These findings suggest that the persons in the target groups were better aware of the sub domain SLD 2 compared to other sub domains Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each sub domain of Speech-Language disorders and the results revealed significant difference (p < 0.05) for the subdomains. Friedman’s test was used to compare the effect of the respective sub domains of Hearing impairment, Speech-Language disorders and Lifestyle separately for pre test and post test. Whenever a significant difference was obtained for any of the domains, further comparison between scores across the sub domains was carried out using Wilcoxon’s Signed Rank test.Analysis using Friedman’s test revealed significant effect of the sub domains of Hearing impairment on the scores obtained both in pre test (λ2 (2) = 154.79, p < 0.001) and post test (λ2 (2) = 44.478, p < 0.001). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) in HI 1 sub domain both for pre test and post test. These findings suggest that the persons in the target groups were better aware of the subdomain HI 1 compared to subdomains HI 2 and HI 3. Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each subdomain of hearing impairment and the results revealed significant difference (p < 0.05) for each of the subdomains. Thus, the awareness levels increased post survey with respect to each subdomain.Analysis using Friedman’s test revealed significant effect of the subdomains of Lifestyle on the scores obtained both in pre (λ2 (2) = 190.04, p < 0.001) and post test (λ2 (2) =149.58, p < 0.001). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between all subdomains both for pre test and post test except for LS 3 and LS 7. These findings suggest that the persons in the target groups were better aware of the subdomain LS 1 compared to other subdomains. Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each subdomain of lifestyle and the results revealed significant difference (p < 0.05) for each of the subdomains. In summary, the results revealed that there was a significant difference between the various subdomains of Speech-Language disorders, Hearing impairment and Lifestyle in both pretest and post test and the awareness levels increased post survey in each of the subdomains.

|  |
| --- |
| In Pandavapura Taluk, Mandya District, out of 711 questionnaires that were distributed in 117 villages belonging to Kasaba 1 and Melkote Hobli (Rural), Pandavapura Taluk, Mandya District, there were 515 filled questionnaires (including pre and post questionnaires) whereas 196 questionnaires were not returned were not returned. Table 48 shows the number of persons and percentage from the 9 target groups who filled the questionnaire. The mean, median and standard deviation of the pre and post test scores for the domains of Hearing Impairment, Speech & Language disorders and Lifestyle across target groups (9 professionals) are depicted in Table 49 |
| Table 48*Total Number of persons representing various target groups who responded to the questionnaire in Kasaba Hobli and Melkote (Rural) Pandavapura Taluk, Mandya District*

|  |  |  |  |
| --- | --- | --- | --- |
| Target Groups |  |  |  |
| Agriculturist | 33(11.30%) | 24(10.76%) | 57(11.1%) |
| Manual Labourer | 34(11.64%) | 25(11.21%) | 59(11.5%) |
| Businessmen | 33(11.30%) | 31(13.90%) | 64(12.4%) |
| Grampanchayat member/Counselor | 31(10.61%) | 25(11.21%) | 56(10.9%) |
| Professionals  | 3110.61%) | 25(11.21%) | (10.9%) |
| Home Makers | 32(10.95%) | 19(08.52%) | 51(9.9%) |
| Government Employee | 33(11.30%) | 25(11.21%) | 57(11.1%) |
| Private Organization | 32(10.95%) | 25(11.21%) | 57(11.1%) |
| Students | 33(11.30%) | 24(10.76%) | 58(11.3%) |
| Total | **292** | **223** | **515**(100%) |

 |
| Table 49*Pre and post test Mean, Median and S*tandard Deviation *of the three domains among target groups of* *Pandavapura Taluk, Mandya District* |
|

|  |  |  |
| --- | --- | --- |
| Target Group | Pre/Post | Domains |
| Speech and language disorders | Hearing Impairment | Lifestyle |
| Mean | SD | Median | Mean | SD | Median | Mean | SD | Median |
| A | Pre | 44.50 | 6.84 | 14.00 | 14 | 1.70 | 43.00 | 21.50 | 5.12 | 22.00 |
| Post | 51.50 | 1.62 | 16.00 | 16.25 | 1.42 | 51.00 | 25.83 | 3.15 | 27.00 |
| ML | Pre | 44.31 | 3.70 | 14.00 | 14.08 | 2.25 | 42.00 | 19.69 | 7.15 | 22.00 |
| Post | 50.38 | 1.66 | 17.00 | 16.69 | 0.94 | 51.00 | 26.07 | 3.09 | 27.00 |
| B | Pre | 44.67 | 7.67 | 14.00 | 14.17 | 2.44 | 43.00 | 24.36 | 3.17 | 22.00 |
| Post | 50.50 | 2.19 | 17.00 | 16.58 | 1.62 | 51.00 | 26 | 3.65 | 26.50 |
| G M | Pre | 38.09 | 10.92 | 14.00 | 13.73 | 2 | 42.00 | 19.45 | 4.69 | 21.00 |
| Post | 50.18 | 4.85 | 17.00 | 16.18 | 1.83 | 51.00 | 25.18 | 5.32 | 26.00 |
| P | Pre | 44.80 | 5.16 | 14.00 | 13.90 | 2.47 | 43.00 | 21.30 | 6.99 | 22.00 |
| Post | 52.10 | 4.64 | 17.00 | 17.30 | 0.82 | 51.00 | 27.40 | 1.77 | 28.00 |
|  HM | Pre | 45.91 | 6.02 | 14.00 | 13.55 | 1.80 | 45.00 | 23.82 | 3.06 | 23.00 |
| Post | 50.45 | 2.91 | 17.00 | 15.90 | 2.42 | 51.00 | 25.36 | 3.69 | 27.00 |
| GE | Pre | 46.91 | 7.60 | 14.00 | 13.64 | 2.24 | 46.00 | 22.00 | 5.71 | 22.50 |
| Post | 50.90 | 4.03 | 16.50 | 16.18 | 1.72 | 51.00 | 25.81 | 1.66 | 26.00 |
| PO | Pre | 39.33 | 13.70 | 14.00 | 14.78 | 2.04 | 43.00 | 20.11 | 5.98 | 21.00 |
| Post | 49.77 | 5.06 | 17.00 | 17.00 | 0.86 | 51.00 | 26.88 | 1.83 | 27.00 |
| St | Pre | 47.82 | 5.17 | 15.00 | 14.36 | 2.50 | 46.00 | 23.45 | 4.48 | 23.00 |
| Post | 49.47 | 3.55 | 17.00 | 16.72 | 0.90 | 51.00 | 25.81 | 3.28 | 27.00 |
| **Mean** | **Pre** | 44.14 | 8.01 | 14.00 | 14.01 | 1.49 | 43.00 | 21.74 | 5.40 | 22.00 |
| **Post** | 50.59 | 3.25 | 17.00 | 16.52 | 8.01 | 51.00 | 26.01 | 3.20 | 27.00 |

 |
| (Note: A= Agriculturist, ML=Manual Laborer, B=Businessmen, GM= Grampanchayat member, P= Professional, HM= Home Maker, GE=Government Employee, PE=Private Organization (Employee), St=Students)The results revealed that the scores obtained in the post test were higher compared to pre test in all 3 domains among each of the 9 target groups. The results of Wilcoxon Signed Rank test (Table 50), revealed a significant difference (p < 0.05) in each of the target groups in all 3 domains. These findings indicate an overall improvement in the awareness levels of most target groups with respect to the domain of Speech- Language disorder, Hearing impairment and lifestyle post survey.Table 50 *Results of Wilcoxon Sign Rank Test comparing pre and post test scores for various domains in the target groups of Pandavapura Taluk, Mandya District*

|  |  |
| --- | --- |
| **Target group** | **/z/** **(Pre Vs Post)** |
| **Hearing Impairment** | **Speech Language Disorders** | **Lifestyle** |
| Agriculturist | 5.45\* | 5.70\* | 5.13\* |
|  Manual Laborer | 6.11\* | 5.54\* | 5.81\* |
| Businessmen | 6.24\* | 5.34\* | 4.87\* |
| Grampanchayat member  | 5.87\* | 4.85\* | 4.41\* |
| Professional | 5.56\* | 4.20\* | 4.67\* |
| Home Maker | 4.98\* | 3.50\* | 4.16\* |
| Government Employee | 5.46\* | 4.55\* | 3.96\* |
| Private Employee | 5.53\* | 5.14\* | 5.16\* |
| Students | 5.60\* | 4.26\* | 4.71\* |

 Note: \* p< 0.05The data was further analyzed to compare the overall scores obtained for the three domains (Speech-language disorders, Hearing Impairment and Lifestyle) across the 9 target groups separately for pre test and post test scores using Kruskal Wallis test. The results of the Kruskal Wallis a significant difference (p<0.05) between some of the target groups as mentioned in table 52. However, there was no significant difference (p>0.05) between the other target groups in both pre as well as post test scores.  |
| Table 51*Results of Kruskal Wallis test comparing across the target groups for the overall scores for combined domains for Pandavapura Taluk, Mandya district*

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

(Note: A=Agriculturist, ML=Manual Laborer, B=Businessmen, GM=Grampanchayat member= Professional, HM= Home Maker, GE=Government Employee, PE=Private Employee, St=Students, S= Significant, NS= Not Significant)Mann-whitney U test was then carried out to analyze significnt differences in the scores obtained in each of the three domains (Speech-language disorders, Hearing Impairment and Lifestyle) across target groups separately for pre test and post test. As in the earlier section for overall scores, the results of Mann-Whitney U test were same for comparison of both pre test as well as post test scores and hence, are mentioned commonly in Table 52. Overall, there were no significant differences across the various target groups for all three domains namely Speech-language disorders, Hearing Impairment and Lifestyle.  |
| Table 52*Comparison across the target groups of Pandavapura Taluk, Mandya district for the three domains using Mann-Whitney U test*

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

 |
| (Note: A=Agriculturist, ML=Manual Laborer, B=Businessmen, GM=Grampanchayat member P=Professional, HM=Home Maker, GE=Government Employee, PE=Private Employee, St=Students, S= Significant, NS= Not Significant)The data was also analyzed to compare the scores obtained across the sub domains within each of the three main domains of Speech-Language disorders, Hearing Impairment and Lifestyle in pre test and post test. The mean, median and standard deviation of the scores obtained each sub domain in the pre test and post test for the three main domains in the questionnaire and the corresponding percentages are depicted in Tables 53 and 54 respectively |
| Table 53*Mean, Median and Standard Deviation for sub domains of the three domains in the questionnaire for Pandavapura Taluk, Mandya District*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Domains*** | ***Sub Domain Code*** | ***Pre Test*** |  |  | ***Post Test*** |
| ***Mean***  | ***SD*** | ***Median*** | ***Mean*** | ***SD*** | ***Median*** |
| ***Speech Language Disorders*** | **SLD 1** | 5.81 | 1.29 | 6.00 | 6.48 | 0.871 | 7.00 |
| **SLD 2** | 6.60 | 1.56 | 7.00 | 7.30 | 0.92 | 8.00 |
| **SLD 3** | 4.67 | 1.08 | 4.00 | 4.62 | 0.65 | 5.00 |
| **SLD 4** | 2.28 | 0.90 | 3.00 | 2.75 | 0.57 | 3.00 |
| **SLD 5** | 3.47 | 1.53 | 4.00 | 4.43 | 0.96 | 5.00 |
| **SLD 6** | 2.85 | 1.26 | 3.00 | 3.54 | 0.76 | 4.00 |
| **SLD 7** | 3.88 | 1.32 | 4.00 | 4.41 | 0.83 | 5.00 |
| **SLD 8** | 3.06 | 1.18 | 3.00 | 3.71 | 1.76 | 4.00 |
| **SLD 9** | 3.00 | 1.18 | 3.00 | 6.21 | 15.26 | 4.00 |
| **SLD 10** | 7.55 | 2.48 | 8.00 | 9.17 | 1.52 | 10.00 |
| ***Hearing Impairment*** | **HI 1**  | 6.22 | 1.45 | 6.00 | 7.34 | 1.04 | 8.00 |
| **HI 2** | 3.88 | 0.96 | 4.00 | 4.41 | 0.79 | 5.00 |
| **HI 3** | 4.08 | 1.00 | 4.00 | 4.57 | 0.69 | 5.00 |
| ***Life style*** | **LS 1** | 7.40 | 2.24 | 8.00 | 8.87 | 1.50 | 9.00 |
| **LS 2** | 0.70 | 0.48 | 1.00 | 0.87 | 0..33 | 1.00 |
| **LS 3** | 0.75 | 0.47 | 1.00 | 0.92 | 0.27 | 1.00 |
| **LS 4** | 4.70 | 1.30 | 5.00 | 5.57 | 0.78 | 6.00 |
| **LS 5** | 4.01 | 4.65 | 4.00 | 5.22 | 1.15 | 6.00 |
| **LS 6** | 2.10 | 0.97 | 2.00 | 2.59 | 0.65 | 3.00 |
| **LS 7** | 1.58 | 0.69 | 2.00 | 1.89 | 0.37 | 2.00 |

 |
| Table 54*Percentage Mean, Median and Standard Deviation for sub domains of the three domains in the questionnaire for Pandavapura Taluk, Mandya District*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Domains*** | ***Sub Domain Code*** | ***Pre Test*** |  | ***Post Test*** |  |
| ***Mean (%)***  | ***SD******(%)*** | ***Median******(%)*** | ***Mean******(%)*** |  ***SD******(%)*** | ***Median******(%)*** |
| ***Speech Language Disorders*** | **SLD 1** | 95.05 | 250.72 | 85.71 | 92.59 | 12.48 | 100 |
| **SLD 2** | 82.94 | 19.15 | 87.50 | 91.30 | 11.50 | 87.54 |
| **SLD 3** | 81.35 | 21.40 | 80.00 | 92.46 | 13.17 | 100 |
| **SLD 4** | 76.22 | 29.60 | 100 | 91.97 | 19.06 | 100 |
| **SLD 5** | 69.41 | 30.88 | 80.0 | 88.43 | 19.69 | 100 |
| **SLD 6** | 71.10 | 31.58 | 75.00 | 88.55 | 19.15 | 100 |
| **SLD 7** | 77.63 | 26.57 | 80.00 | 88.37 | 16.63 | 100 |
| **SLD 8** | 76.41 | 29.53 | 75.00 | 90.97 | 18.27 | 100 |
| **SLD 9** | 74.89 | 29.61 | 75.00 | 86.43 | 24.31 | 100 |
| **SLD 10** | 75.61 | 24.86 | 80.00 | 91.84 | 15.28 | 100 |
| ***Hearing Impairment*** | **HI 1**  | 79.49 | 44.52 | 75.00 | 91.88 | 12.92 | 100 |
| **HI 2** | 77.35 | 19.56 | 80.00 | 88.31 | 15.95 | 100 |
| **HI 3** | 81.67 | 20.01 | 80.00 | 91.45 | 13.94 | 100 |
| ***Life style*** | **LS 1** | 73.98 | 22.40 | 80.00 | 88.93 | 14.95 | 90.00 |
| **LS 2** | 69.12 | 46.24 | 100 | 87.57 | 33.02 | 100 |
| **LS 3** | 73.75 | 44.00 | 100 | 92.21 | 26.81 | 100 |
| **LS 4** | 78.28 | 21.67 | 83.33 | 92.86 | 13.10 | 100 |
| **LS 5** | 66.95 | 27.59 | 66.66 | 88.08 | 29.65 | 100 |
| **LS 6** | 69.49 | 32.23 | 66.66 | 86.12 | 21.87 | 100 |
| **LS 7** | 78.89 | 34.43 | 100 | 94.85 | 19.16 | 100 |

The results also revealed that the post test scores were higher than the pretest scores in each of the subdomains of the three main domains. Further, subdomain HI 3 had the highest scores both in the pre and post test in the domain of Hearing Impairment. Similarly, highest scores were obtained for SLD 2 and LS 3 in the domains of Speech-Language disorders and Lifestyle, respectively for pre and post tests. Analysis using Friedman’s test revealed significant effect of the subdomains of Speech-Language disorders on the scores obtained both in pre (λ2 (9) =3247.38, p < 0.001) and post test (λ2 (9) =3896.95, p < 0.001). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between all subdomains both for pre test and post test. These findings suggest that the persons in the target groups were better aware of the subdomain SLD 10 and SLD 2 compared to other subdomains Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each subdomain of Speech-Language disorders and the results revealed significant difference (p < 0.05) for each of the subdomains. Friedman’s test was used to compare the effect of the respective subdomains of Hearing impairment, Speech-Language disorders and Lifestyle separately for pre test and post test. Whenever a significant difference was obtained for any of the domains, further comparison between scores across the subdomains was carried out using Wilcoxon’s Signed Rank test.Analysis using Friedman’s test revealed significant effect of the subdomains of Hearing impairment on the scores obtained both in pre test (λ2 (2) = 643.601, p < 0.001) and post test (λ2 (2) = 831.145, p < 0.001). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between all subdomains both for pre test and post test. These findings suggest that the persons in the target groups were better aware of the subdomain HI 3 compared to subdomains HI 1 and HI 2. Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each subdomain of hearing impairment and the results revealed significant difference (p < 0.05) for each of the subdomains. Thus, the awareness levels increased post survey with respect to each subdomain.Analysis using Friedman’s test revealed significant effect of the subdomains of Lifestyle on the scores obtained both in pre (λ2 (6) = 2567.20, p < 0.001) and post test (λ2 (6) =2937.82, p < 0.001). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between all subdomains both for pre test and post test. These findings suggest that the persons in the target groups were better aware of the subdomain LS 1 compared to other subdomains. Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each subdomain of lifestyle and the results revealed significant difference (p < 0.05) for each of the subdomains. In summary, the results revealed that there was a significant difference between the various subdomains of Speech-Language disorders, Hearing impairment and Lifestyle in both pretest and post test and the awareness levels increased post survey in each of the subdomains. |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Out of 657 questionnaires that were distributed in 58 Villages of Harave Hobli (Rural) Chamarajanagara Taluk, Chamarajanagara District, there were 545 filled questionnaires (including pre and post questionnaires) whereas 112 were not returned. Table 55 shows the number of persons and percentage from the 9 target groups who filled the questionnaire and the mean, median and standard deviation of Speech & Language disorders, Hearing Impairment and Lifestyle domains across target groups illustrated in Table 56. The mean, median and standard deviation of the pre and post test scores for the domains of Speech & Language disorders, Hearing Impairment and Lifestyle domains across target groups (9 professionals) are depicted in Table 57.Table 55*Total number of persons representing various target groups who responded to the questionnaire in Harave Hobli (Rural) Chamarajanagar Taluk, Chamarajanagara District*

|  |  |
| --- | --- |
| Target Groups | Harave Hobli(Percentage)  |
| Agriculturists | 59 (10.8%) |
| Manual Laborer | 58 (10.6%) |
| Businessmen | 58 (10.6%) |
| Grampanchayat members | 55 (10.1%) |
| Professionals | 55 (10.1%) |
| Home Makers | 61 (11.2%) |
| Students | 69 (12.7%) |
| Private Employee | 51 (9.4%) |
| Government Employee | 79 (14.5%) |
| **Total** | **545 (100%)** |

 |
| Table 56 *Pre and post test Mean, Median and S*tandard Deviation *of the three domains among target groups of Chamarajanagara Taluk, Chamarajanagara District*

|  |  |  |
| --- | --- | --- |
| Target Groups | Pre/Post | Domains |
| Hearing Impairment | Speech and language disorders | Lifestyle |
| Mean | Median | SD | Mean | Median | SD | Mean | Median | SD |
| A | Pre | 12.66 | 13.00 | 3.94 | 37.85 | 41.00 | 15.06 | 19.49 | 21.00 | 7.87 |
| Post | 15.62 | 17.00 | 2.70 | 48.57 | 52.00 | 8.58 | 25.61 | 27.00 | 9.08 |
| ML | Pre | 12.10 | 13.50 | 5.23 | 36.83 | 41.50 | 16.74 | 17.33 | 19.00 | 9.55 |
| Post | 16.13 | 17.00 | 2.28 | 49.43 | 51.00 | 6.07 | 26.18 | 28.00 | 4.18 |
| B | Pre | 12.72 | 13.00 | 3.91 | 38.43 | 39.50 | 13.66 | 19.76 | 21.00 | 7.57 |
| Post | 16.17 | 17.00 | 2.46 | 49.56 | 52.00 | 6.02 | 26.22 | 28.00 | 4.25 |
| G M | Pre | 12.11 | 13.00 | 4.40 | 38.69 | 40.00 | 12.69 | 18.47 | 19.00 | 7.29 |
| Post | 15.29 | 16.00 | 3.18 | 47.94 | 21.00 | 8.55 | 25.00 | 27.00 | 4.74 |
| P | Pre | 12.33 | 13.00 | 3.74 | 37.56 | 39.00 | 12.57 | 19.45 | 20.00 | 6.68 |
| Post | 15.96 | 16.00 | 1.95 | 47.87 | 51.00 | 9.74 | 25.69 | 27.00 | 4.09 |
| HM | Pre | 12.49 | 13.00 | 4.46 | 36.59 | 42.50 | 15.91 | 18.00 | 19.00 | 8.20 |
| Post | 16.11 | 16.00 | 2.33 | 50.32 | 52.00 | 5.72 | 26.09 | 28.00 | 4.29 |
| GE | Pre | 13.06 | 14.00 | 3.76 | 40.75 | 45.00 | 12.92 | 20.22 | 22.00 | 27.77 |
| Post | 15.68 | 17.00 | 3.36 | 48.30 | 52.00 | 8.80 | 26.20 | 28.00 | 3.31 |
| PE | Pre | 12.31 | 12.00 | 4.61 | 39.49 | 41.00 | 13.19 | 20.80 | 24.00 | 7.59 |
| Post | 16.27 | 17.00 | 1.60 | 50.19 | 52.00 | 4.92 | 25.66 | 28.00 | 4.56 |
| St | Pre | 12.59 | 13.00 | 3.65 | 38.93 | 41.00 | 13.36 | 19.12 | 21.00 | 7.37 |
| Post | 16.11 | 17.00 | 2.63 | 49.53 | 52.00 | 5.74 | 25.53 | 28.00 | 4.52 |
| **Mean** | **Pre** | **12.52** | **13.00** | **4.16** | **38.43** | **42.44** | **14.42** | **19.20** | **21.00** | **7.83** |
| **Post** | **15.91** | **17.00** | **2.60** | **49.10** | **52.00** | **7.35** | **25.82** | **28.00** | **4.21** |

 |
| Note: A=Agriculturists, ML=Manual Laborers’, B=Business, GM=Grampanchayat Members, P= Professionals, HM= Home Makers, GE=Government Employees, PE=Private Employees, St=Students, SD= Standard Deviation |
| It was observed that the scores obtained in the post test were higher compared to pre test in all 3 domains among each of the 9 target groups. The results of Wilcoxon Signed Rank test (Table 57), revealed a significant difference (p < 0.05) between pre and post test scores in each of the target groups in all 3 domains. These findings indicates an overall improvement in the awareness levels of all target groups with respect to the domains of Speech- Language disorders, hearing impairment and lifestyle post survey. |
| Table 57*Results of Wilcoxon Sign Rank Test comparing pre and post test scores for various domains in the target groups of Chamarajanagara Taluk, Chamarajanagara District*

|  |  |
| --- | --- |
| Domains | /Z/(Pre v/s Post) |
| Speech Language Disorders | Hearing Impairment | Lifestyle |
| Agriculturist | 4.304\* | 3.989\* | 4.244\* |
|  Manual Laborer | 4.411\* | 4.085\* | 4.960\* |
| Businessmen | 5.030\* | 5.164\* | 4.779\* |
| Grampanchayat member  | 3.711\* | 3.711\* | 4.445\* |
| Professional | 5.308\* | 4.715\* | 4.725\* |
| Home Maker | 4.873\* | 4.722\* | 5.448\* |
| Government Employee | 4.478\* | 3.600\* | 5.100\* |
| Private Employee | 4.689\* | 4.424\* | 3.372\* |
| Students | 5.326\* | 5.274\* | 5.051\* |

 *Note: \* p< 0.05* |
| The data was further analyzed to compare the overall scores obtained for the three domains (Hearing Impairment, Speech-language disorders and Lifestyle) across the 9 target groups separately for pre test and post test scores using Kruskal Wallis test. The results obtained from Kruskal Wallis test were same for comparison of both pre test as well as post test scores , Hence there was no significant difference (p>0.05) between the target groups.  |
| The data was also analyzed to compare the scores obtained across the sub domains within each of the three main domains of Speech-Language disorders, Hearing Impairment, and Lifestyle in pre test and post test. The mean, median and standard deviation of the scores obtained each sub domain in the pre test and post test for the three main domains in the questionnaire and the corresponding percentages are depicted in Tables 58 and 59, respectively. |
| Table 58 *Mean, Median and Standard Deviation for sub domains of the three domains in the questionnaire for Chamarajanagara Taluk, Chamarajanagara District*

|  |  |  |  |
| --- | --- | --- | --- |
| *Domains* | *Sub Domain Code* | *Pre Scores* | *Post Scores* |
| *Mean* | *Median* | *SD* | *Mean* | *Median* | *SD* |
| *Speech-Language Disorders* | SLD 1 | 5.17 | 6.00 | 1.859 | 6.434 | 7.00 | 0.986 |
| SLD 2 | 6.18 | 7.00 | 2.247 | 7.119 | 8.00 | 1.249 |
| SLD 3 | 3.78 | 4.00 | 1.565 | 4.548 | 5.00 | 0.862 |
| SLD 4 | 2.01 | 2.00 | 1.116 | 2.789 | 3.00 | 0.628 |
| SLD 5 | 3.01 | 3.00 | 1.801 | 4.392 | 5.00 | 0.985 |
| SLD 6 | 2.61 | 3.00 | 1.444 | 3.594 | 4.00 | 0.850 |
| SLD 7 | 3.46 | 4.00 | 1.690 | 4.471 | 5.00 | 0.890 |
| SLD 8 | 2.82 | 3.00 | 1.432 | 3.656 | 4.00 | 0.684 |
| SLD 9 | 2.68 | 3.00 | 1.430 | 3.592 | 4.00 | 0.846 |
| SLD 10 | 6.77 | 8.00 | 3.159 | 9.049 | 10.00 | 2.514 |
| *Hearing Impairment*  | HI 1  | 5.28 | 5.00 | 2.044 | 7.128 | 8.00 | 1.407 |
| HI 2 | 3.39 | 4.00 | 1.383 | 4.352 | 5.00 | 0.931 |
| HI 3 | 3.88 | 5.00 | 1.539 | 4.578 | 5.00 | 0.980 |
| *Life style* | LS 1 | 6.95 | 8.00 | 2.916 | 8.926 | 10.00 | 1.616 |
| LS 2 | 0.61 | 1.00 | 0.489 | 0.908 | 1.00 | 0.502 |
| LS 3 | 0.72 | 1.00 | 0.450 | 0.924 | 1.00 | 0.264 |
| LS 4 | 4.23 | 5.00 | 1.984 | 5.455 | 6.00 | 0.993 |
| LS 5 | 3.58 | 4.00 | 1.930 | 5.181 | 6.00 | 1.417 |
| LS 6 | 1.75 | 2.00 | 1.160 | 2.60 | 3.00 | 0.815 |
| LS 7 | 1.42 | 2.00 | 0.841 | 1.825 | 2.00 | 0.489 |

 [Note: HI=Hearing Impairment, SLD=Speech-Language Disorders, LS=Lifestyle] |
| Table 59*Percentage Mean, Median and Standard Deviation for sub domains of the three domains in the questionnaire for Chamarajanagara Taluk, Chamarajanagara District*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***Domains*** | ***Sub*** ***Domain*** ***Code*** | ***Pre Test*** |  | ***Post Test*** |  |
| ***Mean (%)***  | ***SD******(%)*** | ***Median******(%)*** | ***Mean******(%)*** |  ***SD******(%)*** | ***Median******(%)*** |
| ***Speech Language Disorders*** | **SLD 1** | 75.200 | 85.710 | 43.769 | 91.755 | 100.00 | 14.101 |
| **SLD 2** | 77.510 | 87.500 | 27.918 | 89.307 | 100.00 | 15.018 |
| **SLD 3** | 76.579 | 80.00 | 44.258 | 92.183 | 100.00 | 29.966 |
| **SLD 4** | 66.970 | 66.660 | 37.239 | 92.271 | 100.00 | 19.842 |
| **SLD 5** | 62.720 | 60.00 | 67.768 | 87.675 | 100.00 | 20.116 |
| **SLD 6** | 65.064 | 75.00 | 36.146 | 89.578 | 100.00 | 20.885 |
| **SLD 7** | 69.128 | 80.00 | 33.699 | 89.669 | 100.00 | 17.860 |
| **SLD 8** | 71.422 | 75.00 | 40.926 | 91.376 | 100.00 | 17.054 |
| **SLD 9** | 67.559 | 75.00 | 38.510 | 89.394 | 100.00 | 18.622 |
| **SLD 10** | 69.412 | 80.00 | 51.381 | 90.082 | 100.00 | 15.038 |
| ***Hearing Impairment***  | **HI 1**  | 66.970 | 62.50 | 28.771 | 89.241 | 100.00 | 17.403 |
| **HI 2** | 69.016 | 80.00 | 41.944 | 86.433 | 100.00 | 19.765 |
| **HI 3** | 78.684 | 100.00 | 43.760 | 90.495 | 100.00 | 16.746 |
| ***Life style*** | **LS 1** | 72.009 | 80.00 | 55.825 | 89.614 | 100.00 | 15.777 |
| **LS 2** | 60.550 | 100.00 | 48.919 | 88.990 | 100.00 | 31.329 |
| **LS 3** | 71.745 | 100.00 | 45.063 | 92.660 | 100.00 | 26.102 |
| **LS 4** | 71.374 | 83.330 | 40.047 | 90.784 | 100.00 | 16.640 |
| **LS 5** | 60.981 | 66.660 | 46.120 | 86.650 | 100.00 | 23.340 |
| **LS 6** | 58.529 | 66.660 | 38.575 | 86.298 | 100.00 | 26.195 |
| **LS 7** | 70.886 | 100.00 | 42.063 | 91.284 | 100.00 | 24.483 |

It can be observed that the post test scores were higher than the pretest scores in each of the sub domains of the three main domains. Further, sub domain HI 3 had the highest scores both in the pre and post test in the domain of Hearing Impairment. Similarly, highest scores were obtained for SLD 2 & SLD 3 and LS 1 & LS 3 in the domains of Speech-Language disorders and Lifestyle respectively for pre and post tests. Analysis using Friedman’s test revealed significant effect of the sub domains of Speech-Language disorders on the scores obtained both in pre (λ2 (9) =97.927, p < 0.05) and post test (λ2 (9) =170.636, p < 0.05). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between most of sub domains both for pre test and post test, except SLD1- SLD 10. These findings suggest that the persons in the target groups were better aware of the sub domain SLD 4 compared to other sub domains. Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each sub domain of Speech-Language disorders and the results revealed significant difference (p < 0.05) for each of the sub domains. Friedman’s test was used to compare the effect of the respective sub domains of Hearing impairment, Speech-Language disorders and Lifestyle separately for pre test and post test. Whenever a significant difference was obtained for any of the domains, further comparison between scores across the sub domains was carried out using Wilcoxon’s Signed Rank test.Analysis using Friedman’s test revealed significant effect of the sub domains of Hearing impairment on the scores obtained both in pre test (λ2 (2) =459.653, p < 0.05) and post test (λ2 (2) =777.429 , p < 0.05). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between all sub domains both for pre test and post test. These findings suggest that the persons in the target groups were better aware of the sub domain HI 3 compared to sub domains HI 1 and HI 2. Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each sub domain of hearing impairment and the results revealed significant difference (p < 0.05) for each of the sub domains. Thus, the awareness levels increased post survey with respect to each sub domain.Analysis using Friedman’s test revealed significant effect of the sub domains of Lifestyle on the scores obtained both in pre (λ2 (2) =181.655, p < 0.05) and post test (λ2 (2) =228.696, p < 0.05). Pairwise comparisons using Wilcoxon’s Signed Rank test revealed significant difference (p < 0.05) between all sub domains both for pre test and post test except for LS5-LS6 pair in the post test. These findings suggest that the persons in the target groups were better aware of the sub domain LS 3 compared to other sub domains. Wilcoxon’s Signed Rank test was also administered to compare between pre test and post test scores within each sub domain of lifestyle and the results revealed significant difference (p < 0.05) for each of the sub domains. In summary, the results revealed a significant difference between the various sub domains of Speech-Language disorders, Hearing impairment and Lifestyle in both pretest and post test and the awareness levels increased post survey in each of the sub domains.**SUMMARY ON PREVALENCE OF COMMUNICATION DISORDERS**In Level IV, Phase 2 of the survey, the population in Hunsur Taluk of Mysuru District (N=62,543) were identified, screened and evaluated for communication disorders. The survey was carried out in Gavadagere and Kasaba hobli of Hunsur Taluk which included only villages (rural) and this was carried out by trained ASHA Workers. The percentage prevalence in the population surveyed was as follows: (i) speech and language disorders **(0.727%)** (ii) Hearing impairment **(1.165%)** (iii) ENT conditions and diseases **(1.582%)** and (iv) Dual & Multiple disorders (**0.039%)**. The percentage prevalence of different communication disorders in the population surveyed was (i) **0.935%** in children, (ii) **1.691 %** in Adults and (iii) **0.104 %** in geriatric population. It was found that 0.460% males and 0.267% females had speech and language disorders(0.650%) males and (0.601%) females had hearing impairment; (0.753%) males and (0.900%) females had ENT diseases and conditions and (0.028%) males, females (0.011%) had dual and multiple conditions. In Level IV phase II of the survey, the population in Pandavapura Taluk – Rural (Kasab I and Melkote Hobli) of Mandya District (N=81,563) were identified, screened and evaluated for communication disorders. The survey was carried out in 2 Hoblis only from the Pandavapura Taluk. The population in the Pandavapura Rural was carried out by 117 ASHA workers. The percentage prevalence in the population surveyed was as follows: (i) speech and language disorders **(0.458%)** (ii) Hearing impairment **(1.22%)** (iii) ENT diseases and conditions **(0.794%)** and (iv) Dual & Multiple disorders (**0.01%)**. The percentage prevalence of different communication disorders in the population surveyed was (i) **0.546%** in children, (ii) **1.279%** in Adults and (iii) **0.736%** in geriatric population. It was found that 0.304% males and 0.154% females had speech and language disorders; 0.613% males and 0.702% females had hearing impairment; 0.383% males and 0.434% females had ENT diseases and conditions and 0.009% males and 0.006% females had dual and multiple conditions.In Level IV phase II of the survey, the population in Chamarajanagara Taluk –Harave Hobli of Chamarajanagar District (N=80,572) were identified, screened and evaluated for communication disorders. The survey was carried out in Harave Hobli only from the Chamarajanagara Taluk. The population survey in the Harave Hobli was carried out by 73 ASHA workers. The percentage prevalence in the population surveyed was as follows: (i) speech and language disorders **(0.523 %)** (ii) Hearing impairment **(1.718 %)** (iii) ENT diseases and conditions **(0.629 %)** and (iv) Dual & Multiple disorders (**0.004 %)**. The percentage prevalence of different communication disorders in the population surveyed was (i) **0.143 %** in children, (ii) **1.224 %** in Adults and (iii) **0.454 %** in geriatric population. It was found that 0.330% males and 0.193% females had speech and language disorders; 0.894 % males and 0.824% females had hearing impairment; 0.335 % males and 0.317 % females had ENT diseases and conditions; 0.003% males and 0.001% females had dual and multiple conditions.Further details of percentage prevalence of types of communication disorders in each Taluk is as follows:1. **Speech and Language Disorders**

Prevalence of Speech-Language disorders in the population of Hunsur Taluk-Gavadagere Hobli was 0.482 % and in Kasaba Hobli was 0.244%.The speech-language disorders were found to be more prevalent in males compared to females in Gavadagere Hobli (0.305% in males and 0.177% in females) and in Kasaba Hobli (0.155% and 0.089%). Within the speech and language disorders, in Gavadagere Hobli, percentage prevalence of (i) Intellectual Disability and Fluency disorders were found to be higher (ii) Global Developmental Delay, Cerebral Palsy and Voice disorders were found to be very less than the first two conditions and other speech and language disorders have few variations in the prevalence count. In Kasaba Hobli, percentage of (i) Intellectual Disability, Fluency disorders and Speech Sound disorders were found to be higher (ii) Voice disorders, Cerebral Palsy, Dysarthria, and Dual disorders were found to be very less than the first two conditions, and other speech and language disorders have similar prevalence count.Speech and language disorders in Pandavapura Taluk (rural- Kasaba I Hobli and Melkote Hobli) was 0.458% (Kasaba I Hobli 0.324%, Melkote Hobli 0.133%).It was found that speech and hearing disorders were more prevalent in males compared to females (0.304% in males and 0.154% in females in Pandavapura rural). Within the speech and language disorders, it was found that intellectual disability were more prevalent followed by fluency disorders and speech sound disorder in Pandavapura rural. Prevalence of speech and language disorders in Chamarajanagar Taluk (Harave Hobli) was 0.523%. It was found that speech and Language disorders were more prevalent in males compared to females (0.330% in males and 0.193% in females). Within the speech and language disorders, it was found that Intellectual disabilities were more prevalent followed by Fluency disorders and Speech Sound disorders in Chamarajanagar Taluk (Harave Hobli)1. **Hearing disorders**

The percentage prevalence of hearing disorders (Irrespective of the type and degree of hearing loss) was 0.887% in the population of Gavadagere Hobli and Kasaba Hobli was 0.364%. Amongst the types of hearing loss, the percentage of prevalence of Sensorineural hearing loss was the highest (0.706%), followed by the Mixed (0.127%) and Conductive type of hearing loss (0.052%) in Gavadagere Hobli. In Kasaba Hobli, sensorineural hearing loss was the highest (0.314%), followed by the mixed (0.028%) and conductive type of hearing loss (0.020%). With respect to degree of hearing loss (Table 14), the percentage prevalence of Moderate degree of hearing loss was highest, followed by Moderately severe, Mild and Severe; minimal & Profound degree of hearing loss had similar percentage prevalence in Gavadagere Hobli. In Kasaba Hobli, Moderate degree of hearing loss was highest, followed by Moderately severe and mild degree of hearing loss. In Gavadagere Hobli, the percentage prevalence of hearing loss in males were higher when compared to females with respect to the type and degree of hearing loss, but in Kasaba Hobli, females had higher prevalence percentage than males with respect to the type and degree of loss**.**Hearing impairment in Pandavapura Taluk Kasaba I Hobli and Melkote Hobli(Rural) was 0.822% and 0.448%, respectively**.** The percentage prevalence of Sensorineural Hearing Loss (1.113%) was highest followed by Mixed Hearing Loss and Conductive hearing loss in both Hoblis surveyed. Hearing impairment in Chamarajanagar Taluk (Harave Hobli) was more prevalent among the other communication disorders **(1.718%).** The percentage prevalence of Sensorineural Hearing Loss (1.467%) was highest followed by Mixed Hearing Loss 0.110%) and Conductive hearing loss (0.047%)1. **ENT Diseases and Conditions**

The prevalence percentage of ENT diseases and conditions was 1.061% in Gavadagere Hobli and 0.591% in Kasaba Hobli. Prevalence percentage in females was higher compared to males in both Gavadagere Hobli (0.588% in females and 0.473% in males) Kasaba Hobli (0.311% in females and 0.279% in males). Amongst the conditions and diseases, the prevalence % in Gavadagere Hobli and Kasaba Hobli was higher for Middle Ear diseases and Overall Ear related conditions, followed by other conditions (which included complaints such as ear pain, tinnitus, vertigo etc).The prevalence percentage of ENT diseases and conditions was in Pandavapura Taluk was 0.817%. The Percentage prevalence in females was higher compared to males. It was found in females 0.434% and in males 0.383% of Pandavapura Rural (Kasaba I and Melkote Hobli). Amongst the conditions and diseases, the prevalence % in Pandavapura Rural was higher for Middle ear diseases followed by External Ear diseases, and other conditions (which included complaints such as ear pain, tinnitus, vertigo etc). The prevalence percentage of ENT diseases and conditions was **0.629%**. The % prevalence in males was higher compared to females. It was 0.335% in males and 0.317% in females in Chamarajanagara Taluk (Harave Hobli). Amongst the conditions and diseases, the prevalence % in Chamarajanagara Taluk (Harave Hobli) was higher for Middle ear diseases (0.337%) followed by Over all ear related conditions (0.134%) and External Ear diseases (0.134%). 1. **Dual and Multiple disorders**

The overall percentage prevalence of dual and multiple disorders in Gavadagere Hobli and Kasaba Hobli was (0.035%) and (0.004%) respectively indicating slightly greater prevalence in Gavadagere Hobli compared to Kasaba hobli. The prevalence in males was higher compared to females.The percentage prevalence of dual and multiple disorders was very less in both rural and urban population of Pandavapura Taluk (0.015%)The overall percentage prevalence of dual and multiple disorders was very less in Harave Hobli (0.004%).In total, a population of 3,96,424 were surveyed in this Phase and evaluated and the prevalence of communication disorders was 3.63% in Hunsur Taluk , 2.52% in Pandavapura Taluk and 3.09% in Chamarajanagara Taluk and averaging to 3.08% when combining all the three districts. The following percentage prevalence of Speech- Language Disorders , Hearing impairment , ENT Diseases and Conditions and Dual & multiple disorders with respect to different groups (Children, Adult and geriatrics) and gender wise as shown in Table 60 and Table 61. Table 60Percent prevalence of communication disorders in three Taluks

|  |  |
| --- | --- |
| Communication Disorders  | Percent prevalence  |
| Hunsur  | Pandavapura | Chamarajanagara  |
| SLD | 0.727 | 0.458 | 0.523 |
| HI | 1.165 | 1.271 | 1.911 |
| ENT | 1.582 | 0.817 | 0.652 |
| D&M | 0.039 | 0.015 | 0.004 |

Table 61Break up details of percent prevalence of communication disorders in three Taluks

|  |  |  |  |
| --- | --- | --- | --- |
| Taluk  | Disease/disorders  | Groups | Gender |
| Children  | Adult  | Gediatrics | M % | F % |
| Hunsur  | SLD | 0.935 | 1.691 | 1.040 | 0.460 | 0.267 |
| HI | 0.650 | 0.601 |
| ENT | 0.753 | 0.900 |
| D&M | 0.028 | 0.011 |
| Pandavapura  | SLD | 0.546 | 1.279 | 0.736 | 0.304 | 0.154 |
| HI | 0.613 | 0.658  |
| ENT | 0.383 | 0.434 |
| D&M | 0.009 | 0.006 |
| Chamarajanagar  | SLD | 0.413 | 1.224 | 1.454 | 0.330 | 0.193 |
| HI | 1.054 | 0.856 |
| ENT | 0.335 | 0.317 |
| D&M | 0.003 | 0.001 |
| Average | 0.631 | 1.398 | 1.07  | 1.750 | 1.466  |

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