## A. Supplementary file of regression results

**Table 1. Gender wise Regression results of visual impairment and short sleep duration with other background characteristics among older Indian- WHO SAGE Wave-1**

| Background Characteristics | Vision Impairment & Short Sleep Hour (<6 hour) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| **Sleep duration** | | | | | | | | |
| Others ® | | | | | | | | |
| <6 hour | 1.67*[1.32 : 2.13] | 1.6*[1.25 : 2.05] | 1.52*[1.18 : 1.96] | 1.37*[1.06 : 1.78] | 1.76*[1.41 : 2.21] | 1.61*[1.28 : 2.04] | 1.53*[1.2 : 1.93] | 1.42*[1.11 : 1.81] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 6--69 | | 1.16[0.92 : 1.47] | 1.13[0.89 : 1.43] | 1.08[0.85 : 1.38] | | 1.55*[1.28 : 1.88] | 1.5*[1.23 : 1.82] | 1.42*[1.16 : 1.74] |
| 70+ | | 2.02*[1.56 : 2.6] | 1.93*[1.49 : 2.5] | 1.66*[1.27 : 2.17] | | 2.35*[1.86 : 2.97] | 2.21*[1.75 : 2.8] | 1.86*[1.46 : 2.37] |
| **Education** | | | | | | | | |
| No schooling ® | | | | | | | | |
| 1-5 year | | 1.04[0.83 : 1.32] | 1.05[0.83 : 1.33] | 1.08[0.85 : 1.38] | | 1.31*[1.04 : 1.66] | 1.37*[1.08 : 1.74] | 1.42*[1.12 : 1.81] |
| 6-9 year | | 0.86[0.65 : 1.13] | 0.88[0.66 : 1.17] | 0.96[0.72 : 1.29] | | 1.14[0.81 : 1.61] | 1.21[0.85 : 1.71] | 1.3[0.91 : 1.85] |
| 10+ | | 0.72*[0.54 : 0.98] | 0.76[0.56 : 1.03] | 0.83[0.61 : 1.14] | | 0.92[0.59 : 1.45] | 1.02[0.65 : 1.61] | 1.19[0.75 : 1.9] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.3*[1 : 1.67] | 1.28[0.99 : 1.66] | 1.28[0.98 : 1.67] | | 1.43*[1.19 : 1.71] | 1.43*[1.2 : 1.72] | 1.35*[1.12 : 1.62] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| Ever | | 0.82[0.54 : 1.22] | 0.81[0.54 : 1.23] | 0.91[0.6 : 1.39] | | 0.96[0.79 : 1.17] | 0.94[0.77 : 1.15] | 1.01[0.83 : 1.24] |
| currently working | | 0.5*[0.33 : 0.75] | 0.51*[0.34 : 0.78] | 0.7[0.45 : 1.07] | | 0.68*[0.54 : 0.86] | 0.67*[0.53 : 0.84] | 0.75*[0.59 : 0.95] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.78[0.59 : 1.02] | 0.78[0.59 : 1.03] | 0.83[0.63 : 1.1] | | 0.75*[0.58 : 0.95] | 0.74*[0.57 : 0.94] | 0.77*[0.59 : 0.99] |
| Middle | | 0.86[0.65 : 1.13] | 0.89[0.67 : 1.19] | 0.93[0.7 : 1.25] | | 0.71*[0.55 : 0.91] | 0.73*[0.57 : 0.94] | 0.74*[0.57 : 0.95] |
| Richer | | 0.7*[0.52 : 0.94] | 0.74*[0.54 : 1] | 0.84[0.62 : 1.15] | | 0.66*[0.5 : 0.86] | 0.68*[0.52 : 0.89] | 0.68*[0.51 : 0.89] |
| Richest | | 0.65*[0.46 : 0.9] | 0.72[0.51 : 1.01] | 0.84[0.59 : 1.18] | | 0.54*[0.41 : 0.72] | 0.59*[0.44 : 0.79] | 0.6*[0.44 : 0.8] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 1.39*[1.08 : 1.79] | 1.34*[1.04 : 1.74] | 1.31*[1.01 : 1.7] | | 1.74*[1.4 : 2.16] | 1.71*[1.38 : 2.13] | 1.59*[1.27 : 1.99] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.69*[0.48 : 0.99] | 0.7[0.48 : 1.02] | | | 0.66*[0.51 : 0.84] | 0.64*[0.49 : 0.82] |
| Diabetes | | | 0.99[0.69 : 1.43] | 0.99[0.68 : 1.44] | | | 0.94[0.66 : 1.34] | 0.93[0.65 : 1.33] |
| Hypertension | | | 1.18[0.97 : 1.44] | 1.14[0.93 : 1.39] | | | 1.14[0.96 : 1.35] | 1.09[0.91 : 1.3] |
| Stroke | | | 0.38*[0.18 : 0.78] | 0.34*[0.16 : 0.7] | | | 1.25[0.7 : 2.25] | 1.07[0.59 : 1.94] |
| Angina | | | 1.16[0.79 : 1.71] | 1.06[0.71 : 1.56] | | | 1.27[0.86 : 1.89] | 1.21[0.81 : 1.82] |
| Depression | | | 1.9*[1.51 : 2.38] | 1.58*[1.25 : 1.99] | | | 1.6*[1.31 : 1.95] | 1.32*[1.08 : 1.62] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 2.83*[2.28 : 3.51] | | | | 2.74*[2.3 : 3.27] |

*Note: * p<0.05*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*

**Table 2. Gender wise Regression results of visual impairment and long sleep duration with other background characteristics among older Indian- WHO SAGE Wave-1**

| Background Characteristics | Vision Impairment and Long sleep duration (≥9 hour) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| Sleep duration | | | | | | | | |
| Others® | | | | | | | | |
| ≥9 hour | 1.33*[1.01 : 1.76] | 1.12[0.84 : 1.5] | 1.17[0.88 : 1.57] | 1.22[0.9 : 1.64] | 1.23*[1.01: 1.53] | 1.08[0.87 : 1.35] | 1.09[0.88 : 1.36] | 1.07[0.85 : 1.34] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 6—69 | | 1.18[0.93 : 1.49] | 1.14[0.9 : 1.44] | 1.09[0.86 : 1.39] | | 1.56*[1.29 : 1.9] | 1.51*[1.24 : 1.83] | 1.43*[1.17 : 1.74] |
| 70+ | | 1.99*[1.55 : 2.57] | 1.9*[1.47 : 2.46] | 1.63*[1.25 : 2.13] | | 2.36*[1.87 : 2.98] | 2.21*[1.75 : 2.8] | 1.86*[1.46 : 2.37] |
| **Education** | | | | | | | | |
| No schooling® | | | | | | | | |
| 1-5 year | | 1.05[0.83 : 1.33] | 1.06[0.84 : 1.35] | 1.09[0.86 : 1.39] | | 1.3*[1.03 : 1.65] | 1.36*[1.08 : 1.73] | 1.42*[1.11 : 1.8] |
| 6-9 year | | 0.86[0.65 : 1.14] | 0.89[0.67 : 1.19] | 0.97[0.73 : 1.3] | | 1.12[0.8 : 1.59] | 1.19[0.84 : 1.69] | 1.29[0.9 : 1.83] |
| 10+ | | 0.73*[0.54 : 0.98] | 0.77[0.56 : 1.04] | 0.84[0.62 : 1.15] | | 0.89[0.56 : 1.39] | 0.99[0.63 : 1.56] | 1.16[0.73 : 1.85] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.3*[1.01 : 1.68] | 1.29[0.99 : 1.66] | 1.29[0.99 : 1.68] | | 1.44*[1.2 : 1.72] | 1.44*[1.21 : 1.73] | 1.35*[1.13 : 1.63] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| Ever | | 0.79[0.53 : 1.18] | 0.79[0.53 : 1.19] | 0.89[0.59 : 1.36] | | 0.95[0.78 : 1.15] | 0.93[0.77 : 1.13] | 1.01[0.82 : 1.23] |
| currently working | | 0.48*[0.32 : 0.72] | 0.49*[0.33 : 0.75] | 0.68[0.44 : 1.04] | | 0.66*[0.52 : 0.84] | 0.65*[0.51 : 0.82] | 0.73*[0.58 : 0.93] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.77[0.59 : 1.02] | 0.77[0.59 : 1.02] | 0.83[0.62 : 1.1] | | 0.74*[0.58 : 0.94] | 0.73*[0.57 : 0.93] | 0.76*[0.59 : 0.98] |
| Middle | | 0.84[0.63 : 1.11] | 0.87[0.66 : 1.16] | 0.92[0.69 : 1.23] | | 0.7*[0.55 : 0.9] | 0.73*[0.56 : 0.94] | 0.73*[0.57 : 0.95] |
| Richer | | 0.69*[0.51 : 0.94] | 0.74*[0.54 : 1] | 0.84[0.62 : 1.15] | | 0.65*[0.5 : 0.85] | 0.67*[0.51 : 0.88] | 0.67*[0.51 : 0.89] |
| Richest | | 0.64*[0.46 : 0.89] | 0.71*[0.51 : 1] | 0.84[0.59 : 1.18] | | 0.55*[0.41 : 0.72] | 0.6*[0.45 : 0.8] | 0.6*[0.45 : 0.81] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 1.38*[1.07 : 1.78] | 1.33*[1.03 : 1.73] | 1.3*[1 : 1.69] | | 1.73*[1.39 : 2.15] | 1.7*[1.37 : 2.12] | 1.58*[1.27 : 1.98] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.68*[0.47 : 0.98] | 0.7[0.48 : 1.01] | | | 0.65*[0.51 : 0.84] | 0.63*[0.49 : 0.82] |
| Diabetes | | | 0.99[0.68 : 1.43] | 0.98[0.67 : 1.43] | | | 0.94[0.66 : 1.34] | 0.93[0.65 : 1.33] |
| Hypertension | | | 1.19[0.98 : 1.46] | 1.15[0.94 : 1.41] | | | 1.15[0.97 : 1.37] | 1.1[0.92 : 1.31] |
| Stroke | | | 0.39*[0.19 : 0.79] | 0.34*[0.17 : 0.71] | | | 1.26[0.7 : 2.26] | 1.07[0.59 : 1.95] |
| Angina | | | 1.17[0.8 : 1.72] | 1.05[0.71 : 1.56] | | | 1.26[0.85 : 1.86] | 1.19[0.8 : 1.79] |
| Depression | | | 1.96*[1.56 : 2.45] | 1.61*[1.27 : 2.03] | | | 1.65*[1.35 : 2] | 1.35*[1.1 : 1.65] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 2.9*[2.34 : 3.59] | | | | 2.78*[2.33 : 3.31] |

*Note: * p<0.05*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*

**Table 3. Gender wise Regression results of visual impairment and poor sleep quality (sleep problem) with other background characteristics among older Indian- WHO-SAGE Wave-1**

| Background Characteristics | Vision Impairment and Poor sleep Quality (sleep Problem) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| **Sleep problem** | | | | | | | | |
| No® | | | | | | | | |
| Yes | 4.08*[3.21 : 5.18] | 3.19*[2.48 : 4.1] | 2.99*[2.31 : 3.87] | 2.28*[1.74 : 2.99] | 3.59*[2.96 : 4.35] | 3*[2.46 : 3.67] | 2.81*[2.29 : 3.45] | 2.2*[1.78 : 2.73] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 6—69 | | 1.16[0.91 : 1.47] | 1.13[0.89 : 1.44] | 1.09[0.86 : 1.39] | | 1.49*[1.23 : 1.82] | 1.45*[1.19 : 1.77] | 1.4*[1.14 : 1.71] |
| 70+ | | 1.96*[1.51 : 2.54] | 1.9*[1.46 : 2.47] | 1.68*[1.29 : 2.2] | | 2.21*[1.74 : 2.8] | 2.11*[1.66 : 2.68] | 1.84*[1.44 : 2.34] |
| **Education** | | | | | | | | |
| No schooling® | | | | | | | | |
| 1-5 year | | 1.06[0.84 : 1.35] | 1.07[0.84 : 1.36] | 1.09[0.85 : 1.4] | | 1.29*[1.02 : 1.63] | 1.35*[1.06 : 1.71] | 1.39*[1.09 : 1.78] |
| 6-9 year | | 0.88[0.66 : 1.17] | 0.9[0.68 : 1.21] | 0.96[0.72 : 1.29] | | 1.16[0.82 : 1.65] | 1.23[0.86 : 1.74] | 1.3[0.91 : 1.85] |
| 10+ | | 0.76[0.56 : 1.04] | 0.79[0.58 : 1.08] | 0.86[0.63 : 1.17] | | 0.95[0.6 : 1.5] | 1.05[0.67 : 1.66] | 1.2[0.75 : 1.91] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.33*[1.02 : 1.72] | 1.31*[1.01 : 1.71] | 1.3[1 : 1.7] | | 1.4*[1.17 : 1.68] | 1.4*[1.17 : 1.69] | 1.34*[1.11 : 1.61] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| Ever | | 0.88[0.58 : 1.34] | 0.89[0.58 : 1.35] | 0.96[0.63 : 1.46] | | 0.95[0.78 : 1.16] | 0.94[0.77 : 1.15] | 1[0.82 : 1.23] |
| currently working | | 0.6*[0.39 : 0.91] | 0.61*[0.4 : 0.94] | 0.76[0.49 : 1.18] | | 0.7*[0.55 : 0.89] | 0.68*[0.54 : 0.87] | 0.75*[0.59 : 0.96] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.83[0.63 : 1.09] | 0.83[0.62 : 1.09] | 0.86[0.65 : 1.15] | | 0.75*[0.58 : 0.97] | 0.75*[0.58 : 0.96] | 0.77*[0.6 : 1] |
| Middle | | 0.9[0.67 : 1.2] | 0.93[0.7 : 1.24] | 0.95[0.71 : 1.28] | | 0.75*[0.58 : 0.97] | 0.77[0.6 : 1] | 0.77[0.59 : 1] |
| Richer | | 0.77[0.57 : 1.05] | 0.81[0.59 : 1.1] | 0.88[0.64 : 1.21] | | 0.7*[0.53 : 0.91] | 0.72*[0.55 : 0.95] | 0.71*[0.54 : 0.94] |
| Richest | | 0.74[0.52 : 1.03] | 0.8[0.57 : 1.13] | 0.89[0.63 : 1.26] | | 0.59*[0.44 : 0.79] | 0.65*[0.48 : 0.87] | 0.64*[0.48 : 0.86] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 1.41*[1.09 : 1.82] | 1.35*[1.04 : 1.75] | 1.32*[1.02 : 1.72] | | 1.66*[1.33 : 2.07] | 1.63*[1.31 : 2.03] | 1.55*[1.24 : 1.94] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.68*[0.47 : 0.99] | 0.69[0.48 : 1.01] | | | 0.65*[0.5 : 0.84] | 0.63*[0.49 : 0.82] |
| Diabetes | | | 0.96[0.66 : 1.39] | 0.97[0.66 : 1.41] | | | 0.87[0.61 : 1.24] | 0.88[0.61 : 1.26] |
| Hypertension | | | 1.17[0.96 : 1.43] | 1.14[0.93 : 1.4] | | | 1.13[0.95 : 1.35] | 1.1[0.92 : 1.31] |
| Stroke | | | 0.33*[0.16 : 0.69] | 0.31*[0.15 : 0.65] | | | 1.13[0.62 : 2.07] | 1.02[0.56 : 1.87] |
| Angina | | | 1.11[0.75 : 1.64] | 1.03[0.69 : 1.53] | | | 1.12[0.74 : 1.68] | 1.1[0.73 : 1.67] |
| Depression | | | 1.69*[1.34 : 2.13] | 1.48*[1.16 : 1.87] | | | 1.39*[1.13 : 1.7] | 1.21[0.99 : 1.5] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 2.48*[1.98 : 3.1] | | | | 2.37*[1.98 : 2.85] |

*Note: * p<0.05*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*

**Table 4. Gender wise Regression results of visual impairment with combined short sleep duration and poor sleep quality with other background characteristics among older Indian-WHO-SAGE Wave-1**

| Background Characteristics | Vision Impairment with short sleep duration and poor sleep quality combined | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| **Short Sleep & problem** | | | | | | | | |
| No® | | | | | | | | |
| Yes | 3.03*[2.04 : 4.51] | 2.44*[1.61 : 3.71] | 2.23*[1.46 : 3.41] | 1.58*[1.02 : 2.45] | 3.53*[2.50:4.98] | 2.91*[2.03 : 4.18] | 2.58*[1.79 : 3.73] | 2.07*[1.43 : 3.02] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 6—69 | | 1.18[0.94 : 1.5] | 1.15[0.9 : 1.45] | 1.1[0.86 : 1.4] | | 1.56*[1.28 : 1.89] | 1.51*[1.24 : 1.83] | 1.43*[1.17 : 1.75] |
| 70+ | | 2.06*[1.59 : 2.66] | 1.97*[1.52 : 2.55] | 1.68*[1.29 : 2.19] | | 2.32*[1.84 : 2.93] | 2.19*[1.73 : 2.78] | 1.85*[1.45 : 2.36] |
| **Education** | | | | | | | | |
| No schooling® | | | | | | | | |
| 1-5 year | | 1.04[0.83 : 1.32] | 1.05[0.83 : 1.33] | 1.08[0.85 : 1.38] | | 1.31*[1.03 : 1.65] | 1.37*[1.08 : 1.73] | 1.41*[1.11 : 1.8] |
| 6-9 year | | 0.87[0.66 : 1.15] | 0.9[0.67 : 1.19] | 0.97[0.72 : 1.3] | | 1.15[0.82 : 1.63] | 1.22[0.86 : 1.72] | 1.3[0.91 : 1.85] |
| 10+ | | 0.74*[0.54 : 1] | 0.77[0.57 : 1.05] | 0.84[0.62 : 1.15] | | 0.93[0.59 : 1.45] | 1.02[0.65 : 1.62] | 1.19[0.75 : 1.89] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.32*[1.02 : 1.7] | 1.3*[1.01 : 1.69] | 1.29[0.99 : 1.69] | | 1.42*[1.19 : 1.7] | 1.43*[1.19 : 1.71] | 1.34*[1.12 : 1.62] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| Ever | | 0.82[0.55 : 1.23] | 0.82[0.54 : 1.24] | 0.91[0.6 : 1.39] | | 0.95[0.79 : 1.16] | 0.94[0.77 : 1.14] | 1.01[0.83 : 1.23] |
| currently working | | 0.52*[0.34 : 0.78] | 0.53*[0.35 : 0.8] | 0.7[0.46 : 1.08] | | 0.69*[0.55 : 0.87] | 0.67*[0.53 : 0.85] | 0.75*[0.59 : 0.96] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.79[0.6 : 1.04] | 0.79[0.6 : 1.04] | 0.84[0.63 : 1.11] | | 0.74*[0.57 : 0.94] | 0.73*[0.57 : 0.93] | 0.76*[0.59 : 0.98] |
| Middle | | 0.85[0.64 : 1.12] | 0.88[0.66 : 1.17] | 0.92[0.69 : 1.24] | | 0.7*[0.54 : 0.9] | 0.73*[0.56 : 0.94] | 0.73*[0.56 : 0.95] |
| Richer | | 0.72*[0.53 : 0.97] | 0.75[0.56 : 1.02] | 0.85[0.62 : 1.16] | | 0.65*[0.5 : 0.85] | 0.67*[0.51 : 0.88] | 0.67*[0.51 : 0.88] |
| Richest | | 0.66*[0.47 : 0.92] | 0.73[0.52 : 1.02] | 0.84[0.59 : 1.19] | | 0.55*[0.41 : 0.73] | 0.6*[0.45 : 0.8] | 0.6*[0.45 : 0.81] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 1.38*[1.07 : 1.78] | 1.34*[1.03 : 1.73] | 1.31*[1.01 : 1.7] | | 1.73*[1.39 : 2.14] | 1.7*[1.37 : 2.12] | 1.58*[1.27 : 1.98] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.68*[0.47 : 0.99] | 0.7[0.48 : 1.01] | | | 0.66*[0.51 : 0.84] | 0.64*[0.49 : 0.82] |
| Diabetes | | | 0.98[0.68 : 1.42] | 0.98[0.67 : 1.43] | | | 0.92[0.64 : 1.3] | 0.91[0.63 : 1.31] |
| Hypertension | | | 1.18[0.96 : 1.44] | 1.14[0.93 : 1.39] | | | 1.14[0.96 : 1.35] | 1.09[0.92 : 1.3] |
| Stroke | | | 0.37*[0.18 : 0.76] | 0.34*[0.16 : 0.69] | | | 1.22[0.67 : 2.19] | 1.05[0.58 : 1.92] |
| Angina | | | 1.19[0.81 : 1.74] | 1.07[0.72 : 1.58] | | | 1.24[0.83 : 1.85] | 1.19[0.79 : 1.79] |
| Depression | | | 1.88*[1.5 : 2.35] | 1.58*[1.25 : 2] | | | 1.55*[1.27 : 1.89] | 1.29*[1.05 : 1.59] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 2.79*[2.24 : 3.47] | | | | 2.68*[2.25 : 3.2] |

*Note: * $p<0.05$*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*

**Table 5. Gender wise Regression results of low vision acuity and short sleep duration with other background characteristics among older Indian- WHO SAGE Wave-1**

| Background Characteristics | Low-Vision acuity and short sleep duration (<6 hours) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| **Sleep Duration** | | | | | | | | |
| Others® | | | | | | | | |
| <6 hours | 1.52***[1.24:1.87] | 1.47*[1.19 : 1.81] | 1.44*[1.17 : 1.78] | 1.42*[1.15 : 1.75] | 1.12[0.90:1.39] | 1.07[0.86 : 1.32] | 1.04[0.84 : 1.3] | 1.02[0.82 : 1.27] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 6--69 | | 1.17[0.99 : 1.38] | 1.16[0.98 : 1.38] | 1.16[0.98 : 1.37] | | 1.21*[1.02 : 1.42] | 1.21*[1.03 : 1.42] | 1.19*[1.01 : 1.41] |
| 70+ | | 1.62*[1.32 : 1.99] | 1.6*[1.3 : 1.96] | 1.56*[1.27 : 1.92] | | 1.16[0.94 : 1.43] | 1.17[0.95 : 1.45] | 1.12[0.9 : 1.38] |
| **Education** | | | | | | | | |
| No schooling® | | | | | | | | |
| 1-5 year | | 1.02[0.84 : 1.23] | 1.03[0.85 : 1.25] | 1.03[0.85 : 1.25] | | 0.99[0.81 : 1.21] | 0.99[0.8 : 1.21] | 0.99[0.81 : 1.21] |
| 6-9 year | | 0.9[0.72 : 1.11] | 0.91[0.73 : 1.12] | 0.92[0.74 : 1.14] | | 0.83[0.63 : 1.1] | 0.84[0.64 : 1.12] | 0.85[0.64 : 1.13] |
| 10+ | | 0.85[0.68 : 1.05] | 0.85[0.68 : 1.06] | 0.87[0.69 : 1.08] | | 0.77[0.56 : 1.07] | 0.76[0.55 : 1.06] | 0.79[0.57 : 1.09] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.1[0.89 : 1.37] | 1.09[0.88 : 1.35] | 1.09[0.87 : 1.35] | | 1.02[0.87 : 1.19] | 1.03[0.88 : 1.2] | 1.01[0.87 : 1.19] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| ever | | 0.48*[0.33 : 0.69] | 0.47*[0.32 : 0.68] | 0.48*[0.33 : 0.7] | | 0.75*[0.63 : 0.89] | 0.74*[0.62 : 0.88] | 0.75*[0.63 : 0.89] |
| currently working | | 0.46*[0.32 : 0.67] | 0.46*[0.32 : 0.66] | 0.48*[0.33 : 0.7] | | 0.61*[0.51 : 0.74] | 0.61*[0.5 : 0.73] | 0.62*[0.52 : 0.75] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.92[0.74 : 1.15] | 0.92[0.73 : 1.14] | 0.93[0.74 : 1.16] | | 0.87[0.69 : 1.08] | 0.86[0.69 : 1.08] | 0.87[0.7 : 1.09] |
| Middle | | 0.95[0.75 : 1.19] | 0.95[0.76 : 1.2] | 0.96[0.76 : 1.21] | | 0.89[0.71 : 1.11] | 0.89[0.71 : 1.11] | 0.89[0.71 : 1.12] |
| Richer | | 1.07[0.85 : 1.35] | 1.08[0.85 : 1.36] | 1.1[0.87 : 1.39] | | 0.98[0.77 : 1.23] | 0.98[0.78 : 1.24] | 0.99[0.78 : 1.25] |
| Richest | | 0.79[0.61 : 1.02] | 0.81[0.62 : 1.04] | 0.82[0.64 : 1.07] | | 0.75*[0.59 : 0.96] | 0.75*[0.59 : 0.96] | 0.75*[0.59 : 0.97] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 0.99[0.83 : 1.19] | 1[0.83 : 1.2] | 0.99[0.83 : 1.19] | | 1.19*[1 : 1.42] | 1.2*[1.01 : 1.42] | 1.18[0.99 : 1.4] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.96[0.76 : 1.22] | 0.97[0.76 : 1.23] | | | 1.17[0.96 : 1.42] | 1.17[0.96 : 1.42] |
| Diabetes | | | 1.1[0.84 : 1.44] | 1.1[0.84 : 1.44] | | | 1.05[0.78 : 1.4] | 1.05[0.78 : 1.4] |
| Hypertension | | | 1.04[0.89 : 1.21] | 1.04[0.89 : 1.21] | | | 0.89[0.76 : 1.03] | 0.88[0.76 : 1.02] |
| Stroke | | | 0.79[0.51 : 1.23] | 0.78[0.5 : 1.21] | | | 1.06[0.62 : 1.81] | 1.02[0.59 : 1.74] |
| Angina | | | 0.92[0.67 : 1.26] | 0.9[0.66 : 1.24] | | | 0.83[0.58 : 1.18] | 0.82[0.57 : 1.17] |
| Depression | | | 1.23*[1.01 : 1.5] | 1.19[0.97 : 1.45] | | | 1.3*[1.08 : 1.56] | 1.24*[1.03 : 1.49] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 1.22*[1.01 : 1.47] | | | | 1.26*[1.08 : 1.48] |

*Note: * p<0.05*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*

**Table 6. Gender wise Regression results of low vision acuity and long sleep duration with other background characteristics among older Indian- WHO SAGE Wave-1**

| Background Characteristics | Low Vision Acuity and Long sleep duration (>9 hours) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| **Sleep duration** | | | | | | | | |
| Others® | | | | | | | | |
| >9 hours | 1.27*[1.01:1.60] | 1.17[0.93 : 1.48] | 1.18[0.93 : 1.49] | 1.18[0.94 : 1.5] | 1.27*[1.05:1.54] | 1.24*[1.02 : 1.5] | 1.24*[1.02 : 1.5] | 1.23*[1.02 : 1.5] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 6—69 | | 1.17[0.99 : 1.39] | 1.17[0.99 : 1.39] | 1.16[0.98 : 1.38] | | 1.21*[1.03 : 1.42] | 1.21*[1.03 : 1.43] | 1.2*[1.01 : 1.41] |
| 70+ | | 1.61*[1.31 : 1.97] | 1.58*[1.29 : 1.94] | 1.54*[1.25 : 1.89] | | 1.16[0.94 : 1.43] | 1.17[0.94 : 1.44] | 1.11[0.9 : 1.38] |
| **Education** | | | | | | | | |
| No schooling® | | | | | | | | |
| 1-5 year | | 1.03[0.85 : 1.24] | 1.04[0.86 : 1.26] | 1.04[0.86 : 1.26] | | 0.99[0.81 : 1.22] | 0.99[0.81 : 1.22] | 1[0.82 : 1.23] |
| 6-9 year | | 0.91[0.73 : 1.12] | 0.92[0.74 : 1.14] | 0.93[0.75 : 1.15] | | 0.84[0.63 : 1.1] | 0.84[0.64 : 1.12] | 0.86[0.65 : 1.13] |
| 10+ | | 0.86[0.69 : 1.07] | 0.86[0.69 : 1.08] | 0.88[0.71 : 1.1] | | 0.78[0.56 : 1.07] | 0.77[0.55 : 1.06] | 0.79[0.57 : 1.1] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.11[0.89 : 1.37] | 1.09[0.88 : 1.36] | 1.09[0.88 : 1.35] | | 1.01[0.87 : 1.18] | 1.02[0.87 : 1.2] | 1.01[0.86 : 1.18] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| Ever | | 0.47*[0.32 : 0.67] | 0.46*[0.32 : 0.67] | 0.47*[0.32 : 0.68] | | 0.74*[0.63 : 0.88] | 0.74*[0.62 : 0.87] | 0.75*[0.63 : 0.89] |
| currently working | | 0.45*[0.31 : 0.65] | 0.45*[0.31 : 0.65] | 0.47*[0.33 : 0.69] | | 0.61*[0.5 : 0.73] | 0.61*[0.5 : 0.73] | 0.62*[0.51 : 0.75] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.92[0.73 : 1.14] | 0.91[0.73 : 1.14] | 0.92[0.74 : 1.15] | | 0.87[0.7 : 1.08] | 0.86[0.69 : 1.08] | 0.87[0.7 : 1.09] |
| Middle | | 0.93[0.74 : 1.17] | 0.94[0.75 : 1.18] | 0.95[0.75 : 1.19] | | 0.9[0.72 : 1.12] | 0.89[0.71 : 1.12] | 0.9[0.72 : 1.12] |
| Richer | | 1.07[0.85 : 1.35] | 1.08[0.85 : 1.36] | 1.1[0.87 : 1.39] | | 0.99[0.78 : 1.24] | 0.99[0.79 : 1.26] | 1[0.79 : 1.26] |
| Richest | | 0.78[0.61 : 1.01] | 0.8[0.62 : 1.03] | 0.82[0.63 : 1.06] | | 0.77*[0.6 : 0.98] | 0.76*[0.6 : 0.98] | 0.77*[0.6 : 0.99] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 0.99[0.83 : 1.19] | 1[0.83 : 1.19] | 0.99[0.83 : 1.19] | | 1.19[1 : 1.41] | 1.19*[1 : 1.42] | 1.17[0.98 : 1.39] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.96[0.75 : 1.22] | 0.96[0.76 : 1.23] | | | 1.17[0.96 : 1.42] | 1.16[0.96 : 1.41] |
| Diabetes | | | 1.1[0.84 : 1.43] | 1.09[0.84 : 1.43] | | | 1.03[0.77 : 1.38] | 1.03[0.77 : 1.38] |
| Hypertension | | | 1.05[0.9 : 1.23] | 1.04[0.9 : 1.22] | | | 0.89[0.77 : 1.03] | 0.88[0.76 : 1.02] |
| Stroke | | | 0.8[0.52 : 1.25] | 0.79[0.51 : 1.23] | | | 1.05[0.62 : 1.8] | 1.01[0.59 : 1.73] |
| Angina | | | 0.93[0.68 : 1.27] | 0.91[0.67 : 1.25] | | | 0.83[0.58 : 1.18] | 0.82[0.57 : 1.17] |
| Depression | | | 1.27*[1.04 : 1.54] | 1.22[1 : 1.48] | | | 1.3*[1.09 : 1.56] | 1.24*[1.03 : 1.5] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 1.25*[1.04 : 1.5] | | | | 1.26*[1.08 : 1.48] |

*Note: * p<0.05*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*

**Table 7. Gender wise Regression results of low vision acuity and poor sleep quality (sleep problem) with other background characteristics among older Indian- WHO-SAGE Wave-1**

| Background Characteristics | Low Vision Acuity and poor sleep quality (sleep problem) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| **Sleep Problem** | | | | | | | | |
| No® | | | | | | | | |
| Yes | 1.64***[1.31:2.06] | 1.41*[1.12 : 1.79] | 1.36*[1.07 : 1.73] | 1.29*[1 : 1.65] | 1.23*[1.02:1.48] | 1.13[0.93 : 1.36] | 1.09[0.89 : 1.32] | 1.01[0.82 : 1.24] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 60-69 | | 1.17[0.99 : 1.39] | 1.17[0.99 : 1.39] | 1.16[0.98 : 1.38] | | 1.2*[1.02 : 1.41] | 1.21*[1.02 : 1.42] | 1.19*[1.01 : 1.41] |
| 70+ | | 1.6*[1.31 : 1.96] | 1.59*[1.29 : 1.95] | 1.55*[1.26 : 1.91] | | 1.15[0.93 : 1.42] | 1.16[0.94 : 1.44] | 1.12[0.9 : 1.38] |
| **Education** | | | | | | | | |
| No schooling® | | | | | | | | |
| 1-5 year | | 1.04[0.86 : 1.25] | 1.04[0.86 : 1.26] | 1.05[0.86 : 1.27] | | 0.98[0.8 : 1.2] | 0.98[0.8 : 1.2] | 0.99[0.81 : 1.21] |
| 6-9 year | | 0.91[0.73 : 1.13] | 0.92[0.74 : 1.14] | 0.93[0.75 : 1.15] | | 0.84[0.64 : 1.11] | 0.85[0.64 : 1.13] | 0.86[0.65 : 1.14] |
| 10+ | | 0.86[0.69 : 1.07] | 0.87[0.7 : 1.08] | 0.88[0.7 : 1.1] | | 0.78[0.56 : 1.07] | 0.76[0.55 : 1.06] | 0.79[0.57 : 1.09] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.11[0.89 : 1.37] | 1.09[0.88 : 1.36] | 1.09[0.88 : 1.36] | | 1.01[0.87 : 1.19] | 1.03[0.88 : 1.2] | 1.01[0.87 : 1.19] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| Ever | | 0.47*[0.32 : 0.69] | 0.47*[0.32 : 0.69] | 0.48*[0.33 : 0.7] | | 0.75*[0.63 : 0.88] | 0.74*[0.62 : 0.88] | 0.75*[0.63 : 0.89] |
| currently working | | 0.47*[0.32 : 0.68] | 0.47*[0.32 : 0.68] | 0.49*[0.33 : 0.71] | | 0.61*[0.51 : 0.74] | 0.61*[0.5 : 0.74] | 0.62*[0.51 : 0.75] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.93[0.74 : 1.16] | 0.92[0.74 : 1.15] | 0.93[0.74 : 1.16] | | 0.87[0.7 : 1.08] | 0.86[0.69 : 1.08] | 0.87[0.7 : 1.09] |
| Middle | | 0.95[0.75 : 1.19] | 0.95[0.75 : 1.19] | 0.95[0.76 : 1.2] | | 0.9[0.72 : 1.13] | 0.89[0.71 : 1.12] | 0.89[0.71 : 1.12] |
| Richer | | 1.1[0.87 : 1.38] | 1.1[0.87 : 1.39] | 1.11[0.88 : 1.41] | | 0.98[0.78 : 1.24] | 0.99[0.78 : 1.25] | 0.99[0.78 : 1.25] |
| Richest | | 0.8[0.62 : 1.04] | 0.81[0.63 : 1.05] | 0.83[0.64 : 1.07] | | 0.76*[0.59 : 0.97] | 0.75*[0.59 : 0.96] | 0.75*[0.59 : 0.96] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 1[0.83 : 1.19] | 1[0.83 : 1.19] | 0.99[0.83 : 1.19] | | 1.18[1 : 1.41] | 1.19[1 : 1.42] | 1.17[0.99 : 1.4] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.96[0.75 : 1.22] | 0.96[0.76 : 1.23] | | | 1.17[0.97 : 1.43] | 1.17[0.96 : 1.42] |
| Diabetes | | | 1.09[0.83 : 1.42] | 1.09[0.83 : 1.42] | | | 1.04[0.78 : 1.39] | 1.04[0.78 : 1.4] |
| Hypertension | | | 1.05[0.9 : 1.22] | 1.04[0.89 : 1.22] | | | 0.88[0.76 : 1.03] | 0.88[0.76 : 1.02] |
| Stroke | | | 0.78[0.5 : 1.22] | 0.77[0.5 : 1.21] | | | 1.05[0.61 : 1.8] | 1.02[0.59 : 1.74] |
| Angina | | | 0.92[0.67 : 1.25] | 0.9[0.66 : 1.24] | | | 0.82[0.58 : 1.17] | 0.82[0.57 : 1.17] |
| Depression | | | 1.21[1 : 1.48] | 1.18[0.97 : 1.44] | | | 1.29*[1.07 : 1.55] | 1.24*[1.03 : 1.49] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 1.19[0.98 : 1.44] | | | | 1.26*[1.07 : 1.48] |

*Note: * p<0.05*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*

**Table 8. Gender wise Regression results of Low vision Acuity with combined short sleep duration and poor sleep quality with other background characteristics among older Indian- WHO-SAGE Wave-1**

| Background Characteristics | Low vision Acuity with Short sleep duration and Poor Sleep Quality | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Male | | | | Female | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 1 | Model 2 | Model 3 | Model 4 |
| **Short Sleep & problem** | | | | | | | | |
| No® | | | | | | | | |
| Yes | 2.07***[1.41:3.05] | 1.88*[1.26 : 2.79] | 1.8*[1.21 : 2.69] | 1.69*[1.13 : 2.54] | 1.13[0.80:1.59] | 1.01[0.71 : 1.44] | 0.96[0.67 : 1.37] | 0.9[0.63 : 1.29] |
| **Age** | | | | | | | | |
| 50-59® | | | | | | | | |
| 60-69 | | 1.18[1 : 1.4] | 1.18[0.99 : 1.39] | 1.17[0.99 : 1.39] | | 1.21*[1.03 : 1.42] | 1.21*[1.03 : 1.42] | 1.19*[1.01 : 1.41] |
| 70+ | | 1.64*[1.34 : 2.01] | 1.62*[1.32 : 1.98] | 1.57*[1.28 : 1.94] | | 1.16[0.94 : 1.43] | 1.17[0.95 : 1.45] | 1.12[0.91 : 1.39] |
| **Education** | | | | | | | | |
| No schooling® | | | | | | | | |
| 1-5 year | | 1.02[0.85 : 1.24] | 1.03[0.85 : 1.25] | 1.04[0.86 : 1.26] | | 0.99[0.81 : 1.21] | 0.98[0.8 : 1.21] | 0.99[0.81 : 1.21] |
| 6-9 year | | 0.91[0.73 : 1.12] | 0.92[0.74 : 1.14] | 0.93[0.75 : 1.15] | | 0.83[0.63 : 1.1] | 0.84[0.63 : 1.11] | 0.85[0.64 : 1.13] |
| 10+ | | 0.86[0.69 : 1.07] | 0.86[0.69 : 1.08] | 0.88[0.7 : 1.09] | | 0.77[0.56 : 1.06] | 0.76[0.55 : 1.05] | 0.78[0.57 : 1.09] |
| **Marital Status** | | | | | | | | |
| Currently married® | | | | | | | | |
| Not married | | 1.11[0.9 : 1.38] | 1.1[0.88 : 1.37] | 1.1[0.88 : 1.36] | | 1.02[0.87 : 1.19] | 1.03[0.88 : 1.21] | 1.02[0.87 : 1.19] |
| **Employment status** | | | | | | | | |
| Never® | | | | | | | | |
| Ever | | 0.48*[0.33 : 0.69] | 0.47*[0.32 : 0.68] | 0.48*[0.33 : 0.69] | | 0.75*[0.63 : 0.89] | 0.74*[0.62 : 0.88] | 0.75*[0.63 : 0.89] |
| currently working | | 0.47*[0.33 : 0.68] | 0.46*[0.32 : 0.67] | 0.48*[0.33 : 0.71] | | 0.61*[0.5 : 0.73] | 0.61*[0.5 : 0.73] | 0.62*[0.51 : 0.75] |
| **Wealth quintile** | | | | | | | | |
| Poorest® | | | | | | | | |
| Poorer | | 0.93[0.74 : 1.16] | 0.92[0.74 : 1.15] | 0.93[0.74 : 1.16] | | 0.86[0.69 : 1.08] | 0.86[0.69 : 1.07] | 0.87[0.7 : 1.09] |
| Middle | | 0.94[0.75 : 1.18] | 0.94[0.75 : 1.19] | 0.95[0.76 : 1.19] | | 0.89[0.71 : 1.11] | 0.89[0.71 : 1.11] | 0.89[0.71 : 1.11] |
| Richer | | 1.08[0.86 : 1.37] | 1.09[0.86 : 1.38] | 1.11[0.88 : 1.4] | | 0.98[0.77 : 1.23] | 0.98[0.78 : 1.24] | 0.99[0.78 : 1.25] |
| Richest | | 0.79[0.62 : 1.02] | 0.81[0.62 : 1.04] | 0.82[0.64 : 1.07] | | 0.75*[0.59 : 0.96] | 0.75*[0.59 : 0.96] | 0.75*[0.59 : 0.97] |
| **Place of residence** | | | | | | | | |
| Urban® | | | | | | | | |
| Rural | | 0.99[0.83 : 1.18] | 0.99[0.83 : 1.19] | 0.99[0.83 : 1.18] | | 1.19*[1 : 1.42] | 1.2*[1.01 : 1.42] | 1.18[0.99 : 1.4] |
| **Medical Condition** | | | | | | | | |
| Obesity | | | 0.96[0.75 : 1.22] | 0.96[0.76 : 1.22] | | | 1.17[0.96 : 1.42] | 1.16[0.96 : 1.41] |
| Diabetes | | | 1.09[0.83 : 1.43] | 1.09[0.83 : 1.43] | | | 1.05[0.78 : 1.4] | 1.05[0.78 : 1.41] |
| Hypertension | | | 1.04[0.89 : 1.21] | 1.04[0.89 : 1.21] | | | 0.89[0.77 : 1.03] | 0.88[0.76 : 1.02] |
| Stroke | | | 0.79[0.5 : 1.23] | 0.78[0.5 : 1.21] | | | 1.06[0.62 : 1.82] | 1.02[0.6 : 1.75] |
| Angina | | | 0.93[0.68 : 1.27] | 0.92[0.67 : 1.25] | | | 0.83[0.58 : 1.18] | 0.82[0.57 : 1.17] |
| Depression | | | 1.23*[1.01 : 1.5] | 1.19[0.98 : 1.45] | | | 1.31*[1.09 : 1.57] | 1.25*[1.04 : 1.5] |
| **Active daily leaving** | | | | | | | | |
| No Limitation® | | | | | | | | |
| atleast 1 limitation | | | | 1.2[0.99 : 1.44] | | | | 1.27*[1.08 : 1.49] |

*Note: * p<0.05*

*Model 1( Unadjusted); Model 2( adjusted for age, education, marital status, employment status, wealth status, and residence); Model 3( adjusted for Model-2, obesity, diabetes, hypertension, stroke, angina, depression); Model 4(adjusted for Model-3, and IADL)*