**Online Supplementary Materials**

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eTable 4. Sociodemographic Characteristics Associated with Psychological Distress Among Adults ≥18 Years with General Vision Impairment or ≥1 Visual Function Impairment in the United States in 2016–2017. (Regression Analysis without Multiple Imputation; Based on Complete Case Analysis or Listwise Deletion).

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| **eTable 1. Selected Characteristics of Adults ≥18 Years in the United States in 2016–2017** | | | |
| **Characteristic** | **Totala** | **General vision impairment statusb** | |
| **GVI** | **No GVI** |
|  | *Weighted % (95% CI)c* | | |
| Age, years (n=57,644) |  |  |  |
| 18–39 | 38.4 (37.6, 39.1) | 6.8 (6.3, 7.3) | 93.2 (92.7, 93.7) |
| 40–64 | 41.9 (41.3, 42.5) | 12.0 (11.4, 12.6) | 88.0 (87.4, 88.6) |
| ≥65 | 19.7 (19.2, 20.2) | 15.1 (14.4, 15.9) | 84.9 (84.1, 85.6) |
| Sex (n=57,644) |  |  |  |
| Male | 48.3 (47.8, 48.8) | 8.7 (8.3, 9.2) | 91.3 (90.8, 91.7) |
| Female | 51.7 (51.2, 52.2) | 12.4 (11.9, 12.9) | 87.6 (87.1, 88.1) |
| Race/ethnicity (n=57,644) |  |  |  |
| White, non-Hispanic | 64.2 (62.6, 65.8) | 10.7 (10.3, 11.1) | 89.3 (88.9, 89.7) |
| Black, non-Hispanic | 11.6 (10.8, 12.5) | 12.3 (11.3, 13.4) | 87.7 (86.6, 88.7) |
| Hispanic | 15.9 (14.6, 17.3) | 10.1 (9.2, 11.1) | 89.9 (88.9, 90.8) |
| Other | 8.2 (7.6, 8.9) | 8.6 (7.6, 9.8) | 91.4 (90.2, 92.4) |
| Education level (n=57,474) |  |  |  |
| <High school | 11.9 (11.3, 12.5) | 15.3 (14.2, 16.5) | 84.7 (83.5, 85.8) |
| High school/GED | 24.5 (23.9, 25.2) | 11.7 (11.0, 12.4) | 88.3 (87.6, 89.0) |
| >High school | 63.6 (62.7, 64.5) | 9.3 (8.9, 9.7) | 90.7 (90.3, 91.1) |
| Marital status (n=57,545) |  |  |  |
| Married/domestic partnership | 60.8 (60.1, 61.5) | 9.6 (9.1, 10.0) | 90.4 (90.0, 90.9) |
| Not marriedd | 39.2 (38.5, 39.9) | 12.2 (11.7, 12.8) | 87.8 (87.2, 88.3) |
| Employment status (n=57,624) |  |  |  |
| Working at a job/business for pay | 61.3 (60.6, 62.0) | 7.7 (7.3, 8.1) | 92.3 (91.9, 92.7) |
| Not working at a job/business for pay | 38.7 (38.0, 39.4) | 15.2 (14.5, 15.8) | 84.8 (84.2, 85.5) |
| Income/poverty ratioe (n=54,970) |  |  |  |
| <1 | 11.9 (11.3, 12.5) | 15.8 (14.6, 17.0) | 84.2 (83.0, 85.4) |
| 1 to <2 | 17.1 (16.5, 17.7) | 14.3 (13.4, 15.2) | 85.7 (84.8, 86.6) |
| ≥2 | 71.0 (70.1, 71.9) | 8.9 (8.5, 9.3) | 91.1 (90.7, 91.5) |
| Insurance status (n=57,426) |  |  |  |
| Public | 24.9 (24.1, 25.7) | 15.8 (15.0, 16.7) | 84.2 (83.3, 85.0) |
| Private | 55.4 (54.5, 56.3) | 7.6 (7.2, 8.0) | 92.4 (92.0, 92.8) |
| Both | 10.1 (9.7, 10.5) | 14.8 (13.8, 15.8) | 85.2 (84.2, 86.2) |
| None | 9.6 (9.1, 10.1) | 10.2 (9.1, 11.3) | 89.8 (88.7, 90.9) |
| Smoking statusf (n=57,581) |  |  |  |
| Not current smoker | 85.3 (84.8, 85.8) | 10.0 (9.6, 10.3) | 90.0 (89.7, 90.4) |
| Current smoker | 14.7 (14.2, 15.2) | 14.5 (13.6, 15.5) | 85.5 (84.5, 86.4) |
| Physical activityg (n=56,259) |  |  |  |
| Some physical activity | 73.0 (71.8, 74.1) | 9.3 (8.9, 9.7) | 90.7 (90.3, 91.1) |
| Physically inactive | 27.0 (25.9, 28.2) | 14.2 (13.5, 15.1) | 85.8 (84.9, 86.5) |
| Body mass index (kg/m2)h (n=56,091) |  |  |  |
| Underweight | 1.8 (1.7, 2.0) | 13.0 (10.2, 16.4) | 87.0 (83.6, 89.8) |
| Normal weight | 33.0 (32.4, 33.7) | 9.1 (8.5, 9.7) | 90.9 (90.3, 91.5) |
| Overweight | 34.7 (34.1, 35.2) | 9.6 (9.1, 10.2) | 90.4 (89.8, 90.9) |
| Obesity | 30.5 (29.9, 31.2) | 13.3 (12.7, 14.0) | 86.7 (86.0, 87.3) |

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| **eTable 1 Continued. Selected Characteristics of Adults ≥18 Years in the United States in 2016–2017** | | | |
| **Characteristic** | **Totala** | **General vision impairment statusb** | |
| **GVI** | **No GVI** |
|  | *Weighted % (95% CI)c* | | |
| Health conditionsi |  |  |  |
| Diabetes (n=57,601) | 9.4 (9.0, 9.7) | 20.4 (19.2, 21.6) | 79.6 (78.4, 80.8) |
| Hypertension (n=57,574) | 30.8 (30.2, 31.4) | 15.8 (15.1, 16.5) | 84.2 (83.5, 84.9) |
| Arthritis (n=57,587) | 23.7 (23.1, 24.3) | 18.5 (17.7, 19.4) | 81.5 (80.6, 82.3) |
| Coronary heart disease (n=57,537) | 4.4 (4.2, 4.6) | 20.8 (19.1, 22.7) | 79.2 (77.3, 80.9) |
| COPD (n=57,570) | 3.6 (3.4, 3.9) | 26.3 (24.1, 28.7) | 73.7 (71.3, 75.9) |
| Myocardial infarction (n=57,600) | 3.0 (2.9, 3.2) | 22.1 (20.1, 24.3) | 77.9 (75.7, 79.9) |
| Stroke (n=57,602) | 3.1 (2.9, 3.3) | 27.9 (25.6, 30.3) | 72.1 (69.7, 74.4) |
| General vision impairmentb (n=57,644) | 10.6 (10.2, 11.0) | - | - |
| Visual function impairmentj |  |  |  |
| Difficulty reading ordinary newsprint  (n=57,057) | 7.0 (6.7, 7.4) | 40.7 (38.9, 42.6) | 59.3 (57.4, 61.1) |
| Difficulty seeing up close when doing  work or hobbies (n=56,889) | 4.9 (4.6, 5.2) | 46.1 (43.7, 48.5) | 53.9 (51.5, 56.3) |
| Difficulty going down steps, stairs, or  curbs in dim light (n=56,419) | 4.3 (4.1, 4.6) | 49.2 (46.8, 51.6) | 50.8 (48.4, 53.2) |
| Difficulty driving in daytime in a  familiar place (n=53,864) | 1.5 (1.4, 1.6) | 49.4 (45.2, 53.6) | 50.6 (46.4, 54.8) |
| Difficulty noticing objects off to the  side (n=56,981) | 2.2 (2.1, 2.4) | 55.0 (51.4, 58.6) | 45.0 (41.4, 48.6) |
| Difficulty finding object on a  crowded shelf (n=57,119) | 2.2 (2.1, 2.4) | 57.0 (53.1, 60.8) | 43.0 (39.2, 46.9) |
| ≥1 visual function impairmentk (n=54,535) | 11.6 (11.1, 12.0) | 38.1 (36.7, 39.5) | 61.9 (60.5, 63.3) |
| Psychological Distress (n=57,644)l |  |  |  |
| No/low | 89.2 (88.8, 89.6) | 8.8 (8.5, 9.1) | 91.2 (90.9, 91.5) |
| Mild/moderate | 7.3 (7.0, 7.6) | 21.5 (20.0, 23.2) | 78.5 (76.8, 80.0) |
| Serious | 3.5 (3.3, 3.7) | 34.4 (31.8, 37.0) | 65.6 (63.0, 68.2) |
| Abbreviations: CI (confidence interval), COPD (chronic obstructive pulmonary disease), GED (General Educational Development), GVI (general vision impairment).  a Percentages add to 100% vertically in the column.  b Defined as an affirmative response to the question: “Do you have trouble seeing, even when wearing glasses or contact lenses?”. These percentages add to 100% horizontally across the rows.  c Because of rounding, weighted percentages may not add up to 100%.  d Widowed, divorced, separated, or never married.  e Ratio of the family income to the poverty threshold, based on the U.S. Census Bureau federal poverty thresholds given the family’s size and number of children (<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>).  f Current smoker was defined as those who had smoked more than 100 cigarettes in their lifetime and now smoke every day or some days.  g Physically inactive was defined as performing 0 minutes per week of light, moderate, or vigorous leisure-time physical activities.  h Body mass index was calculated, using self-reported data, as weight (kilograms) divided by height (meters) squared. Body mass index was classified as: underweight (BMI<18.5 kg/m2), normal weight (BMI 18.5–24.9 kg/m2), overweight (BMI 25.0–29.9 kg/m2), and obesity (BMI≥30 kg/m2).  i Self-reported health conditions ascertained by asking whether respondent has ever been told by a doctor or other health professional that they had this condition.  j Visual function impairment was measured using six questions that asked: “Even when wearing glasses or contact lenses, because of your eyesight, how difficult is it for you to [perform each of these six listed tasks].” Difficulty is defined as reporting that the task is somewhat difficult, very difficult, or the person is unable to do the task at all because of his/her eyesight.  k Defined as having difficulty with any of these six functional tasks: 1) reading ordinary newsprint, 2) seeing up close when doing work or hobbies, 3) going down steps, stairs, or curbs in dim light, 4) driving in daytime in a familiar place, 5) noticing objects off to the side, or 6) finding object on a crowded shelf.  l Psychological distress was defined using the 6-item Kessler Psychological Distress Scale (K6 scores): no/low (0–7 points), mild/moderate (8–12 points), and serious (13–24 points) psychological distress. | | | |

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| **eTable 2. Adjusted Odds Ratios for Psychological Distress by Vision Status and Age Group Among Adults ≥18 Years in the United States in 2016–2017** | | | | | | |
| **Status** | **Model IIIa**  **Adjusted Odds Ratio (95% Confidence Interval) for Psychological Distressb** | | | | | |
| **18–39 years** | | **40–64 years** | | **≥65 years** | |
| **Mild/moderate**  **(K6 score: 8–12)** | **Serious**  **(K6 score: 13–24)** | **Mild/moderate**  **(K6 score: 8–12)** | **Serious**  **(K6 score: 13–24)** | **Mild/moderate**  **(K6 score: 8–12)** | **Serious**  **(K6 score: 13–24)** |
| General vision impairment status |  |  |  |  |  |  |
| No vision impairment | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Vision impairmentc | 1.96 (1.54, 2.49) | 3.63 (2.75, 4.79) | 2.63 (2.26, 3.07) | 3.50 (2.92, 4.19) | 1.89 (1.55, 2.31) | 2.86 (2.06, 3.99) |
|  |  |  |  |  |  |  |
| Visual Function Impairmentd |  |  |  |  |  |  |
| No difficulty | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Difficulty reading ordinary newsprint | 2.70 (1.92, 3.82) | 4.28 (2.73, 6.69) | 1.80 (1.50, 2.17) | 2.83 (2.30, 3.49) | 2.13 (1.69, 2.68) | 3.20 (2.38, 4.30) |
| Difficulty seeing up close when doing work or hobbies | 1.91 (1.16, 3.13) | 3.87 (2.02, 7.41) | 2.20 (1.80, 2.70) | 2.92 (2.35, 3.63) | 2.26 (1.75, 2.91) | 3.19 (2.26, 4.52) |
| Difficulty going down steps, stairs,  or curbs in dim light | 2.60 (1.82, 3.72) | 3.99 (2.42, 6.58) | 2.43 (1.93, 3.06) | 3.92 (3.11, 4.94) | 2.32 (1.79, 3.02) | 3.92 (2.82, 5.43) |
| Difficulty driving in daytime in a  familiar place | 2.36 (1.27, 4.39) | 3.47 (1.48, 8.11) | 2.11 (1.44, 3.10) | 3.13 (2.21, 4.45) | 1.69 (1.13, 2.54) | 1.67 (0.92, 3.06) |
| Difficulty noticing objects off to  the side | 3.58 (2.16, 5.92) | 4.33 (2.30, 8.13) | 2.26 (1.71, 2.98) | 4.38 (3.15, 6.10) | 1.92 (1.40, 2.65) | 2.27 (1.48, 3.48) |
| Difficulty finding object on a  crowded shelf | 2.71 (1.73, 4.26) | 5.89 (3.32, 10.47) | 2.32 (1.72, 3.13) | 4.12 (2.98, 5.71) | 2.69 (2.01, 3.61) | 3.37 (2.32, 4.92) |
| ≥1 visual function impairmente | 2.63 (2.03, 3.39) | 3.55 (2.51, 5.00) | 2.22 (1.91, 2.57) | 2.95 (2.43, 3.58) | 2.45 (1.96, 3.05) | 3.35 (2.52, 4.46) |
| Abbreviations: K6 (Kessler 6-item Psychological Distress Scale).  a Controlling for sex, race/ethnicity, education level, marital status, employment status, income-to-poverty ratio, health insurance status, smoking status, physical activity, body mass index, diabetes, hypertension, arthritis, coronary heart disease, chronic obstructive pulmonary disease, myocardial infarction, and stroke. Multiple imputation was used to impute missing data for income-to-poverty ratio, physical activity, and body mass index.  b Multinomial logistic regression was used to calculate adjusted odds ratios for mild/moderate and serious psychological distress (reference: no/low psychological distress which is a K6 score of 0–7), stratified by age group. Each type of vision impairment was modeled separately and separate models were run for each age group. Sample sizes for each model were: 1) general vision impairment: 18–39 years (n=18,359), 40–64 years (n=22,976), ≥65 years (n=15,166); 2) difficulty reading ordinary newsprint: 18–39 years (n=18,250), 40–64 years (n=22,768), ≥65 years (n=14,924); 3) difficulty seeing up close when doing work or hobbies: 18–39 years (n=18,283), 40–64 years (n=22,748), ≥65 years (n=14,758); 4) difficulty going down steps, stairs, or curbs in dim light: 18–39 years (n=18,280), 40–64 years (n=22,671), ≥65 years (n=14,386); 5) difficulty driving in daytime in a familiar place: 18–39 years (n=17,802), 40–64 years (n=21,935), ≥65 years (n=13,164); 6) difficulty noticing objects off to the side: 18–39 years (n=18,296), 40–64 years (n=22,784), ≥65 years (n=14,785); 7) difficulty finding object on a crowded shelf: 18–39 years (n=18,299), 40–64 years (n=22,822), ≥65 years (n=14,880); 8) ≥1 visual function impairment: 18–39 years (n=17,815), 40–64 years (n=22,132), ≥65 years (n=13,585).  c Defined as an affirmative response to the question: “Do you have trouble seeing, even when wearing glasses or contact lenses?”.  d Visual function impairment was measured using six questions that asked: “Even when wearing glasses or contact lenses, because of your eyesight, how difficult is it for you to [perform each of these six listed tasks].” Difficulty is defined as reporting that the task is somewhat difficult, very difficult, or the person is unable to do the task at all because of his/her eyesight.  e Defined as having difficulty with any of these six functional tasks: 1) reading ordinary newsprint, 2) seeing up close when doing work or hobbies, 3) going down steps, stairs, or curbs in dim light, 4) driving in daytime in a familiar place, 5) noticing objects off to the side, or 6) finding object on a crowded shelf. | | | | | | |

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| **eTable 3. Adjusted Odds Ratios for Psychological Distress by Vision Status Among Adults ≥18 Years in the United States in 2016–2017 (Regression Analysis without Multiple Imputation; Based on Complete Case Analysis or Listwise Deletion)** | | | | | | |
| **Status** | **Adjusted Odds Ratio (95% Confidence Interval) for Psychological Distressa** | | | | | |
| **Model Ib** | | **Model IIc** | | **Model IIId** | |
| **Mild/moderate**  **(K6 score: 8–12)** | **Serious**  **(K6 score: 13–24)** | **Mild/moderate**  **(K6 score: 8–12)** | **Serious**  **(K6 score: 13–24)** | **Mild/moderate**  **(K6 score: 8–12)** | **Serious**  **(K6 score: 13–24)** |
| General vision impairment status |  |  |  |  |  |  |
| No vision impairment | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Vision impairmente | 2.99 (2.70, 3.31) | 5.47 (4.84, 6.19) | 2.57 (2.30, 2.88) | 4.02 (3.51, 4.59) | 2.22 (1.97, 2.51) | 3.33 (2.88, 3.85) |
|  |  |  |  |  |  |  |
| Visual Function Impairmentf |  |  |  |  |  |  |
| No difficulty | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Difficulty reading ordinary newsprint | 2.73 (2.42, 3.08) | 5.29 (4.58, 6.12) | 2.38 (2.10, 2.71) | 3.93 (3.34, 4.62) | 2.02 (1.75, 2.32) | 3.10 (2.61, 3.67) |
| Difficulty seeing up close when doing work or hobbies | 3.01 (2.62, 3.45) | 5.55 (4.71, 6.53) | 2.65 (2.29, 3.06) | 4.04 (3.38, 4.82) | 2.24 (1.91, 2.61) | 3.19 (2.62, 3.89) |
| Difficulty going down steps, stairs,  or curbs in dim light | 3.86 (3.36, 4.44) | 8.50 (7.27, 9.95) | 3.18 (2.74, 3.69) | 5.41 (4.53, 6.47) | 2.54 (2.17, 2.97) | 3.97 (3.28, 4.81) |
| Difficulty driving in daytime in a  familiar place | 3.05 (2.42, 3.83) | 5.95 (4.60, 7.70) | 2.55 (1.98, 3.28) | 3.61 (2.70, 4.84) | 2.22 (1.70, 2.90) | 2.93 (2.12, 4.05) |
| Difficulty noticing objects off to  the side | 3.64 (3.05, 4.33) | 7.93 (6.44, 9.76) | 2.99 (2.47, 3.62) | 4.84 (3.81, 6.13) | 2.55 (2.07, 3.14) | 3.83 (2.96, 4.97) |
| Difficulty finding object on a  crowded shelf | 3.82 (3.18, 4.59) | 9.13 (7.51, 11.10) | 3.21 (2.65, 3.89) | 5.86 (4.64, 7.41) | 2.63 (2.15, 3.21) | 4.42 (3.43, 5.69) |
| ≥1 visual function impairmentg | 3.36 (3.04, 3.72) | 5.94 (5.16, 6.84) | 2.87 (2.58, 3.20) | 4.10 (3.52, 4.76) | 2.42 (2.15, 2.73) | 3.15 (2.69, 3.69) |
| Abbreviations: K6 (Kessler 6-item Psychological Distress Scale).  a Multinomial logistic regression was used to calculate adjusted odds ratios for mild/moderate and serious psychological distress (reference: no/low psychological distress which is a K6 score of 0–7). Each type of vision impairment was modeled separately. Sample sizes for each model were: 1) general vision impairment: Model I (n=57,644), Model II (n=54,616), Model III (n=51,897); 2) difficulty reading ordinary newsprint: Model I (n=57,057), Model II (n=54,080), Model III (n=51,394); 3) difficulty seeing up close when doing work or hobbies: Model I (n=56,889), Model II (n=53,944), Model III (n=51,278); 4) difficulty going down steps, stairs, or curbs in dim light: Model I (n=56,419), Model II (n=53,491), Model III (n=50,848); 5) difficulty driving in daytime in a familiar place: Model I (n=53,864), Model II (n=51,171), Model III (n=48,674); 6) difficulty noticing objects off to the side: Model I (n=56,981), Model II (n=54,004), Model III (n=51,316); 7) difficulty finding object on a crowded shelf: Model I (n=57,119), Model II (n=54,126), Model III (n=51,435); 8) ≥1 visual function impairment: Model I (n=54,535), Model II (n=51,783), Model III (n=49,235).  b Controlling for age, sex, and race/ethnicity.  c Model I plus education level, marital status, employment status, income-to-poverty ratio, and health insurance status.  d Model II plus smoking status, physical activity, body mass index, diabetes, hypertension, arthritis, coronary heart disease, chronic obstructive pulmonary disease, myocardial infarction, and stroke.  e Defined as an affirmative response to the question: “Do you have trouble seeing, even when wearing glasses or contact lenses?”.  f Visual function impairment was measured using six questions that asked: “Even when wearing glasses or contact lenses, because of your eyesight, how difficult is it for you to [perform each of these six listed tasks].” Difficulty is defined as reporting that the task is somewhat difficult, very difficult, or the person is unable to do the task at all because of his/her eyesight.  g Defined as having difficulty with any of these six functional tasks: 1) reading ordinary newsprint, 2) seeing up close when doing work or hobbies, 3) going down steps, stairs, or curbs in dim light, 4) driving in daytime in a familiar place, 5) noticing objects off to the side, or 6) finding object on a crowded shelf. | | | | | | |

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| **eTable 4. Sociodemographic Characteristics Associated with Psychological Distress Among Adults ≥18 Years with General Vision Impairment or ≥1 Visual Function Impairment in the United States in 2016–2017 (Regression Analysis without Multiple Imputation; Based on Complete Case Analysis or Listwise Deletion)** | | | | |
| Sociodemographic characteristics | Psychological Distress  Adjusted Odds Ratio (95% Confidence Interval)a | | | |
| General Vision Impairmentb | | ≥1 Visual Function Impairmentc | |
| Mild/moderate  (K6 score: 8–12) | Serious  (K6 score: 13–24) | Mild/moderate  (K6 score: 8–12) | Serious  (K6 score: 13–24) |
| Age, years |  |  |  |  |
| 18–39 | **2.43 (1.78, 3.33)** | **4.16 (2.65, 6.52)** | **3.43 (2.39, 4.92)** | **4.82 (3.11, 7.49)** |
| 40–64 | **2.71 (2.06, 3.55)** | **5.69 (4.01, 8.09)** | **2.53 (1.93, 3.32)** | **5.70 (4.23, 7.69)** |
| ≥65 | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Sex |  |  |  |  |
| Male | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Female | **1.32 (1.09, 1.59)** | **1.55 (1.21, 1.98)** | **1.53 (1.26, 1.86)** | **1.64 (1.31, 2.04)** |
| Race/ethnicity |  |  |  |  |
| White, non-Hispanic | 1.30 (0.96, 1.76) | **2.10 (1.50, 2.93)** | **1.54 (1.14, 2.08)** | **1.41 (1.03, 1.94)** |
| Black, non-Hispanic | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Hispanic | 1.19 (0.82, 1.72) | 1.32 (0.81, 2.13) | **1.54 (1.05, 2.25)** | 1.25 (0.81, 1.92) |
| Other | 0.89 (0.56, 1.42) | **2.02 (1.21, 3.37)** | 1.46 (0.93, 2.31) | 1.43 (0.80, 2.55) |
| Education level |  |  |  |  |
| <High school | **1.34 (1.03, 1.74)** | **1.41 (1.01, 1.97)** | **1.34 (1.03, 1.73)** | **1.42 (1.06, 1.90)** |
| High school/GED | 1.00 (0.79, 1.26) | 1.17 (0.90, 1.52) | 1.16 (0.94, 1.44) | **1.37 (1.06, 1.76)** |
| >High school | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Marital status |  |  |  |  |
| Married/domestic partnership | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Not marriedd | 1.16 (0.93, 1.44) | **1.54 (1.18, 2.00)** | 1.13 (0.93, 1.39) | **1.44 (1.11, 1.88)** |
| Employment status |  |  |  |  |
| Working at a job/business for pay | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Not working at a job/business for pay | **1.37 (1.08, 1.73)** | **2.31 (1.71, 3.11)** | **1.33 (1.03, 1.72)** | **2.80 (2.13, 3.66)** |
| Income/poverty ratioe |  |  |  |  |
| <1 | **1.61 (1.22, 2.13)** | **2.02 (1.44, 2.83)** | **1.46 (1.10, 1.95)** | **2.34 (1.70, 3.21)** |
| 1 to <2 | **1.32 (1.03, 1.69)** | **1.54 (1.13, 2.09)** | **1.59 (1.24, 2.05)** | **2.14 (1.60, 2.87)** |
| ≥2 | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |

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| **eTable 4 Continued. Sociodemographic Characteristics Associated with Psychological Distress Among Adults ≥18 Years with General Vision Impairment or ≥1 Visual Function Impairment in the United States in 2016–2017 (Regression Analysis without Multiple Imputation; Based on Complete Case Analysis or Listwise Deletion)** | | | | |
| Sociodemographic characteristics | Psychological Distress  Adjusted Odds Ratio (95% Confidence Interval)a | | | |
| General Vision Impairmentb | | ≥1 Visual Function Impairmentc | |
| Mild/moderate  (K6 score: 8–12) | Serious  (K6 score: 13–24) | Mild/moderate  (K6 score: 8–12) | Serious  (K6 score: 13–24) |
| Insurance status |  |  |  |  |
| Public | 1.13 (0.86, 1.49) | **2.12 (1.42, 3.16)** | **1.68 (1.23, 2.29)** | **2.48 (1.70, 3.62)** |
| Private | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Both | 1.30 (0.88, 1.91) | **2.12 (1.34, 3.35)** | **1.71 (1.17, 2.49)** | **2.40 (1.54, 3.76)** |
| None | 0.81 (0.56, 1.17) | **1.60 (1.04, 2.46)** | 1.05 (0.72, 1.54) | **1.77 (1.11, 2.81**) |
| Abbreviations: GED (General Educational Development), K6 (Kessler 6-item Psychological Distress Scale).  a Multinomial logistic regression was used to calculate adjusted odds ratios for mild/moderate and serious psychological distress (reference: no/low psychological distress which is a K6 score of 0–7). Each type of vision impairment was modeled separately, and the models included all of the sociodemographic characteristics. Sample sizes for each model were: general vision impairment (n=6,418) and ≥1 visual function impairment (n=6,835). Bold indicates statistical significance (95% confidence interval does not contain 1.0).  b Defined as an affirmative response to the question: “Do you have trouble seeing, even when wearing glasses or contact lenses?”.  c Defined as having difficulty (the task is somewhat difficult, very difficult, or the person is unable to do the task at all because of his/her eyesight) with any of these six functional tasks: 1) reading ordinary newsprint, 2) seeing up close when doing work or hobbies, 3) going down steps, stairs, or curbs in dim light, 4) driving in daytime in a familiar place, 5) noticing objects off to the side, or 6) finding object on a crowded shelf.  d Widowed, divorced, separated, or never married.  e Ratio of the family income to the poverty threshold, based on the U.S. Census Bureau federal poverty thresholds given the family’s size and number of children (<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>). | | | | |

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| **eTable 5. Chronic Disease Risk Factors and Comorbidities Associated with Psychological Distress Among Adults ≥18 Years with General Vision Impairment or ≥1 Visual Function Impairment in the United States in 2016–2017**  **(Regression Analysis without Multiple Imputation; Based on Complete Case Analysis or Listwise Deletion)** | | | | |
| Risk factors and comorbidities | Psychological Distress  Adjusted Odds Ratio (95% Confidence Interval)a | | | |
| General Vision Impairmentb | | ≥1 Visual Function Impairmentc | |
| Mild/moderate  (K6 score: 8–12) | Serious  (K6 score: 13–24) | Mild/moderate  (K6 score: 8–12) | Serious  (K6 score: 13–24) |
| Smoking statusd |  |  |  |  |
| Not current smoker | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Current smoker | **1.54 (1.24, 1.91)** | **2.33 (1.78, 3.06)** | 1.20 (0.96, 1.51) | **1.87 (1.46, 2.41)** |
| Physical activitye |  |  |  |  |
| Some physical activity | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Physically inactive | 1.22 (1.00, 1.50) | **1.58 (1.19, 2.09)** | **1.23 (1.01, 1.51)** | **1.43 (1.12, 1.82)** |
| Body mass index (kg/m2)f |  |  |  |  |
| Underweight | 0.97 (0.43, 2.21) | 1.83 (0.80, 4.21) | 0.99 (0.42, 2.34) | **3.26 (1.51, 7.06)** |
| Normal weight | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] | 1.00 [Reference] |
| Overweight | 0.97 (0.73, 1.28) | 0.96 (0.69, 1.35) | 1.01 (0.80, 1.27) | 0.95 (0.69, 1.31) |
| Obesity | 1.12 (0.87, 1.45) | 1.17 (0.85, 1.60) | 1.14 (0.88, 1.49) | 1.19 (0.87, 1.63) |
| Health conditionsg |  |  |  |  |
| Diabetes | 0.95 (0.74, 1.21) | 0.87 (0.66, 1.14) | 0.93 (0.73, 1.19) | 1.04 (0.78, 1.39) |
| Hypertension | **1.37 (1.08, 1.73)** | 1.29 (1.00, 1.67) | 1.21 (0.96, 1.51) | **1.39 (1.09, 1.77)** |
| Arthritis | **1.45 (1.18, 1.79)** | **2.13 (1.62, 2.80)** | **1.60 (1.32, 1.95)** | **1.88 (1.46, 2.41)** |
| Coronary heart disease | 1.06 (0.72, 1.57) | 1.28 (0.80, 2.03) | 1.18 (0.83, 1.66) | 1.26 (0.86, 1.85) |
| COPD | **1.58 (1.15, 2.17)** | **1.63 (1.12, 2.36)** | **1.65 (1.22, 2.23)** | **1.74 (1.28, 2.38)** |
| Myocardial infarction | 1.01 (0.68, 1.51) | 1.11 (0.70, 1.77) | 1.08 (0.74, 1.57) | 1.25 (0.81, 1.91) |
| Stroke | **1.69 (1.23, 2.33)** | **1.51 (1.03, 2.20)** | **1.57 (1.14, 2.15)** | **1.47 (1.01, 2.12)** |
| Abbreviations: COPD (chronic obstructive pulmonary disease), K6 (Kessler 6-item Psychological Distress Scale).  a Multinomial logistic regression was used to calculate adjusted odds ratios for mild/moderate and serious psychological distress (reference: no/low psychological distress which is a K6 score of 0–7). Each type of vision impairment was modeled separately, and the models included all of the chronic disease risk factors and comorbidities and all of the sociodemographic characteristics (age, sex, race/ethnicity, education level, marital status, employment status, income-to-poverty ratio, and health insurance status). Sample sizes for each model were: general vision impairment (n=6,053) and ≥1 visual function impairment (n=6,447). Bold indicates statistical significance (95% confidence interval does not contain 1.0).  b Defined as an affirmative response to the question: “Do you have trouble seeing, even when wearing glasses or contact lenses?”.  c Defined as having difficulty (the task is somewhat difficult, very difficult, or the person is unable to do the task at all because of his/her eyesight) with any of these six functional tasks: 1) reading ordinary newsprint, 2) seeing up close when doing work or hobbies, 3) going down steps, stairs, or curbs in dim light, 4) driving in daytime in a familiar place, 5) noticing objects off to the side, or 6) finding object on a crowded shelf.  d Current smoker was defined as those who had smoked more than 100 cigarettes in their lifetime and now smoke every day or some days.  e Physically inactive was defined as performing 0 minutes per week of light, moderate, or vigorous leisure-time physical activities.  f Body mass index was calculated, using self-reported data, as weight (kilograms) divided by height (meters) squared. Body mass index was classified as: underweight (BMI<18.5 kg/m2), normal weight (BMI 18.5–24.9 kg/m2), overweight (BMI 25.0–29.9 kg/m2), and obesity (BMI≥30 kg/m2).  g Self-reported health conditions ascertained by asking whether respondent has ever been told by a doctor or other health professional that they had this condition. | | | | |