Screening for Depression in Middle-Aged and Older Puerto Rican Primary Care Patients

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Background. Brief depression screens have recently been developed, but their use in older or minority populations has not been studied. To date, optimal depression screens and optimal cutpoints have not been identified for middle-aged and older Hispanic primary care patients.

Methods. This study compares multiple versions of four depression screening tools—Center for Epidemiologic Studies–Depression Scale (CES-D), Geriatric Depression Scale, Yale 1-question screen, and PRIME-MD 2-question screen—to the Composite International Diagnostic Interview (CIDI), the World Health Organization’s diagnostic interview, which has been validated in adult Latino populations, to assess convergent validity. Three hundred and three Puerto Rican primary care patients age 50 and older completed all screens and the CIDI in a face-to-face interview. Sensitivity and specificity for each screen were calculated, and receiver operator characteristic curves were generated.

Results. Between 34% and 61% of patients screened positive for depression, depending on the measure, with 12% meeting DSM-IV criteria for major depression (CIDI). The 10-item CES-D worked best to identify major depression in this population, with a sensitivity of 84% and specificity of 64% using a cutpoint of 3.

Conclusions. The 10-item CES-D, which takes about 2 minutes to administer, is a useful tool for identifying Puerto Rican patients in need of an in-depth mental health evaluation in a primary care setting. A lower cutpoint of 3 (instead of the conventional cutpoint of 4) is recommended for optimal sensitivity and specificity.

Depression is a major public health problem in all minority populations, with highest rates among Hispanics, and in particular Puerto Ricans (1–3). Hispanics represent one of the fastest growing segments of America’s older population (4). This group faces multiple risk factors for depression, including immigrant status, low education, low socioeconomic status, social isolation, ill health, and language and cultural barriers to social and medical services. Latinos older than 50 years have high rates of chronic diseases and disability, which contribute to depression (5). These conditions commonly occur at earlier ages in Latinos than in other ethnic groups (6,7).

Hispanic adults face an elevated risk not only for experiencing depression but also for underdiagnosis and undertreatment of their depression (8,9). The Surgeon General’s report on mental health in ethnic minorities documents that Hispanics as well as other minority groups are significantly less likely to receive treatment for mental illnesses and often receive poorer quality treatment and misdiagnoses (10). Depression, when untreated, leads to overutilization of medical visits, unnecessary tests, increased morbidity associated with unnecessary pharmacology, greater disability, and lengthened hospital stays, and it contributes to mortality and suicide (11,12).

Although major depression is one of the most common and treatable disorders in primary care practices, some studies show that fewer than 50% of cases are recognized by primary care practitioners (13–15). A number of rating scales reliably detect depression in certain populations, but their use is limited in practice because some are too lengthy to administer or are perceived as cumbersome (16). One- and two-question depression screens have recently been developed (17,18), but their use in older or minority populations has not been studied. Some of the existing depression screening instruments may have validity in this population (for example, the CES-D) (19). Others, like the Geriatric Depression Scale, may lack adequate sensitivity and specificity due to cultural factors which could affect sensitivity, for example, a tendency among Latinos toward somatization (20).

Research with Hispanic populations has made clear the need to distinguish among different Hispanic groups for any research question (21). Subgroups of Hispanic origin, such as Mexicans, Puerto Ricans, Cubans, and Central or South Americans, differ in terms of generational history, migration history, immigrant status, poverty level, and educational attainment. Based on national data, Puerto Ricans of all ages consistently report the highest rates of unemployment and poverty (22). As U.S. citizens, older Puerto Ricans travel freely between Puerto Rico and the mainland United States, creating a pattern of circular migration that negatively affects continuity of health care.

The majority of Hispanic residents in the northeastern United States are Puerto Rican, with smaller concentrations of Dominicans, Cubans, Mexicans, and other Latin American groups. Puerto Rican residents comprise a large proportion of the total population of several northeastern cities, including the site of the current study. Thus, this study

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focuses on a Puerto Rican population, which comprises 80% of the Hispanic population and 33% of the total population in the project’s geographical area (23).

This study evaluated the utility of existing depression screens as tools for the Puerto Rican primary care population aged 50 and older. Because the conventional cutpoints of these depression screens may not work as well for both middle-aged and older Puerto Rican primary care patients, we further identify optimal cutpoints for each screen for this particular population.

METHODS

Participants

Puerto Rican patients aged 50 and older from six primary care clinics, affiliated with two inner-city hospitals in the northeastern United States, participated in the study. A bilingual, bicultural Puerto Rican interviewer recruited eligible clinic patients on selected days for 13 months. Participants signed an informed consent, approved by the hospitals’ Institutional Review Boards. Of the 535 people approached, 52 were ineligible because they had a Folstein Mini-Mental State Examination (MMSE) (24) score of 21 or less. Previous research indicates utilizing this less restrictive cutoff score with Puerto Ricans because of the MMSE’s documented educational bias (25).

Approximately three-quarters (76%) agreed to participate. Of these, 64 were unable to complete the interview due to lack of transportation or child care, illness, or bad weather. In all, 303 (83%) of those who agreed completed interviews. This rate of research interview completion is very high in this group of patients who show up for only 30% of their scheduled medical appointments. Refusers and participants did not differ significantly in age, but women (80%) were significantly more likely than men (60%) to participate. The interviewer offered both Spanish and English versions of the interview; all participants elected to participate. Of these, 64 were unable to complete the interview due to lack of transportation or child care, illness, or bad weather. In all, 303 (83%) of those who agreed completed interviews. This rate of research interview completion is very high in this group of patients who show up for only 30% of their scheduled medical appointments. Refusers and participants did not differ significantly in age, but women (80%) were significantly more likely than men (60%) to participate. The interviewer offered both Spanish and English versions of the interview; all participants elected to use the Spanish version. Participants who scored 21 or higher on the full Center for Epidemiologic Studies—Depression (CES-D) scale were referred to their primary care providers for follow-up and further mental health evaluation.

Measures

Each participant completed two ultra-brief screens, the Yale 1-question (18) and PRIME-MD 2-question (18), the Geriatric Depression Scale (GDS) (16), the CES-D scale (26), and the suicide probe from the Hamilton Depression interview (27). Short versions of the GDS (15-item) and CES-D (10-item) (28) were extracted and scored during data analysis. A cutoff of 21 was used for the full CES-D (26). We used the GDS cutpoints, which commonly distinguish between no/mild depression versus moderate/severe depression. The full CES-D response categories were collapsed at both ends of the scale to create the dichotomous categories used in the 10-item CES-D (28). The order of administration of screening instruments was rotated, and the interviewer administered all measures due to low literacy levels.

Responses to the Composite International Diagnostic Interview (CIDI) established the criterion standard for the diagnosis of major depressive disorder and also identified other psychiatric conditions. The specific sections used included depression, mania, and psychosis, which were administered after screening, functioning, and demographic measures. The CIDI is a comprehensive, fully standardized interview that can be used to assess mental disorders according to the definitions and criteria of ICD-10 and DSM-IV (29). The interview was designed by the World Health Organization (WHO) and the National Institutes of Health (NIH) for use by trained interviewers who are not clinicians. The CIDI has proven to have excellent validity and reliability in 20 countries (29–32). Good diagnostic agreement (kappa = .84) between the CIDI depression section and psychiatrists’ ratings are documented (33). A Spanish version of the CIDI has been developed (34) with Latinos (mostly Puerto Ricans) participating in the field trials in which the instrument’s psychometric properties were tested. All validity testing of the CIDI has been conducted in adult populations.

Respondents also indicated whether they had ever experienced an ataque de nervios, a cultural syndrome common in Caribbean populations usually triggered by personal loss or conflict. Ataques de nervios are episodes characterized by uncontrollable trembling, shouting, and sometimes aggression, collapsing, or amnesia, which have associations with diagnosable DSM disorders (35).

In most cases, the instruments had been previously validated and used in Hispanic populations. A professional translation service translated and back translated those instruments available only in English. All data were analyzed using SPSS 10.0 (SPSS, Inc., Chicago, IL).

Analyses

After generating descriptive statistics to characterize the study participants’ sociodemographic, mental health, and health statuses, sensitivity and specificity for bivariate forms of each of the six depression screens were calculated. Sensitivity is the ability to correctly identify those who have depression (true positives); specificity is the ability to correctly identify those who do not have depression (true negatives). A diagnosis of major depressive disorder as indicated by the CIDI was the gold standard (depressed vs not depressed). In addition, positive and negative likelihood ratios were generated. Receiver operator characteristic (ROC) curves were generated to visualize the sensitivity and specificity (plotting sensitivity vs 1-specificity) of depression scores for the continuous measures of depression. The area under the curve was measured to compare the diagnostic value of the depression screens for each measure of depression. Finally, optimal diagnostic cutoff values determined by the ROC analysis for prediction of depression in this population were identified by examining the cumulative percentages of the scores of the depressed and not depressed groups.

RESULTS

Participant Overview

The study participants represent a largely female (71%) urban population characterized by low education and low income (only 7% report annual income exceeding $15,000) with a mean age of 61 (Table 1). Many respondents de-
described a long history of circular migration between mainland United States and Puerto Rico, coming to the mainland for seasonal agricultural work. Participants also frequently reported coming to the mainland because of health problems, describing a pattern of poor and inconsistent health care available in Puerto Rico. While on the mainland, the majority of the sample (76%) lived with others, almost always with other family members and frequently in households containing three or more generations.

The interview included multiple indicators of mental health status. Table 2 shows percentages of positive scores for each of the examined depression screens, as well as the distributions of particular mental illness diagnoses as indicated by the CIDI. The depression screens varied widely in the percentage of the patients identified with clinically significant depressive symptoms, from 34% on the full CES-D to 61% on the Yale 1-question. Not surprisingly, fewer patients (12%) met the stricter diagnostic criteria for major depressive disorder required for a DSM-IV diagnosis (CIDI), which incorporates severity and duration of symptoms.

Other mental health problems were common as well in this sample, in particular anxiety disorders. The CIDI-SF (36) (short form) indicated that 24% of the sample likely met DSM-IV criteria for an anxiety disorder. Just over one fourth of participants reported a history of ataques de nervios.

Table 2. Mental Health Status (N = 303)

<table>
<thead>
<tr>
<th>Depression Measures</th>
<th>% Positive</th>
<th>Other Psychiatric Measures</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yale 1-question</td>
<td>61%</td>
<td>Ataques de nervios</td>
<td>26%</td>
</tr>
<tr>
<td>PRIME-MD 2-question</td>
<td>60%</td>
<td>Any anxiety diagnosis</td>
<td>24%</td>
</tr>
<tr>
<td>30-item Geriatric</td>
<td>51%</td>
<td>Generalized anxiety</td>
<td>11%</td>
</tr>
<tr>
<td>Depression Scale</td>
<td>51%</td>
<td>Specific phobia</td>
<td>12%</td>
</tr>
<tr>
<td>15-item Geriatric</td>
<td>41%</td>
<td>Panic attack</td>
<td>11%</td>
</tr>
<tr>
<td>Depression Scale</td>
<td>41%</td>
<td>Agoraphobia</td>
<td>7%</td>
</tr>
<tr>
<td>20-item CES-D</td>
<td>34%</td>
<td>Social phobia</td>
<td>4%</td>
</tr>
<tr>
<td>10-item CES-D</td>
<td>36%</td>
<td>Obsessive compulsive disorder</td>
<td>2%</td>
</tr>
<tr>
<td>Suicidal thoughts</td>
<td>26%</td>
<td>Schizophrenia</td>
<td>2%</td>
</tr>
<tr>
<td>CIDI MDD</td>
<td>12%</td>
<td>Alcohol dependence</td>
<td>1%</td>
</tr>
<tr>
<td>CIDI MDD/dysthymia</td>
<td>22%</td>
<td>4+ drinks (1 day/past week)</td>
<td>6%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Abuse prescription medication</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use illegal drugs (past year)</td>
<td>6%</td>
</tr>
</tbody>
</table>

Note: CES-D = Center for Epidemiologic Studies–Depression scale; CIDI = Composite International Diagnostic Interview; MDD = major depressive disorder.

Depression Screening Tools

The primary goal of this project was to identify the best depression screen for use in the primary care setting for middle-aged and older Puerto Rican patients. Table 3 displays the sensitivity and specificity for each of the tested depression screens, using conventional cutpoints, against the CIDI major depression diagnosis gold standard.

The one- and two-question screens achieved quite high levels of sensitivity but low specificity. The 30-item GDS had a sensitivity of 84% and a specificity of 53%. Sensitivity for the 15-item GDS was 76%, and specificity was 64%. Both the 20- and 10-item CES-D screens had significantly higher specificity rates (70–72%) than the other screens, with sensitivity rates of 73% and 76%, respectively.

Figure 1 displays ROC curves, comparing the PRIME-MD and long and short versions of the GDS and CES-D scales. No single screen stands out in the figure as a significantly superior measure of depression in this population; they all perform similarly with a range of .68 to .77. The instrument with the smallest area under the ROC curve was the 2-question PRIME-MD.

Using data generated by the ROC curve, sensitivity and specificity rates were combined for every possible cutpoint for each screen to identify optimal cutpoints for each screen (data available from the authors) (Table 3). The best cutpoint for the PRIME-MD 2-question remains at a score of 1, as recommended in the literature. However, optimal cutpoints for this population for the long and short versions of both the GDS and the CES-D change. Raising the cutpoints

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>29%</td>
<td>Mean time in Mainland</td>
<td>23 years</td>
</tr>
<tr>
<td>Women</td>
<td>71%</td>
<td>Range</td>
<td>0–60 years</td>
</tr>
<tr>
<td>Mean age</td>
<td>61 years</td>
<td>Live alone</td>
<td>24%</td>
</tr>
<tr>
<td>Age range</td>
<td>50–86 years</td>
<td>Live with others</td>
<td>76%</td>
</tr>
<tr>
<td>Married</td>
<td>30%</td>
<td>Independent in ADLs</td>
<td>95%</td>
</tr>
<tr>
<td>Widowed</td>
<td>41%</td>
<td>Independent in IADLs</td>
<td>67%</td>
</tr>
<tr>
<td>Widowed</td>
<td>41%</td>
<td>Mean global functioning</td>
<td>82</td>
</tr>
<tr>
<td>Never married</td>
<td>11%</td>
<td>Range</td>
<td>50–100</td>
</tr>
<tr>
<td>6th grade or less</td>
<td>47%</td>
<td>Poor/fair subjective health</td>
<td>63%</td>
</tr>
<tr>
<td>7th–11th grade</td>
<td>37%</td>
<td>Good/very good subjective health</td>
<td>37%</td>
</tr>
<tr>
<td>12th grade or more</td>
<td>16%</td>
<td>Mean illness severity</td>
<td>1.97</td>
</tr>
<tr>
<td>Annual income &lt;$10,000</td>
<td>74%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$10,000–$14,999</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥$15,000</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: ADLs = activities of daily living; IADLs = instrumental activities of daily living.
on the 30-item and 15-item GDS results in a slight decrease in sensitivity paired with a fairly substantial increase in specificity. In contrast, lowering the standard cutoffs on the 20- and 10-item CES-D by one point each raises the sensitivity eight percentage points and lowers the specificity slightly.

Notably, the 10-item CES-D screen, probably the best of the depression screens examined in these analyses, appears to identify anxiety as well in this population. Using any type of CIDI-diagnosed anxiety disorder as a gold standard, the 10-item CES-D (with a cutpoint of 3) has a sensitivity of 82% and a specificity of 70% (data in preparation).

**DISCUSSION**

We make a qualified recommendation to use the 10-item CES-D screen and to lower the cutpoint to 3 for Puerto Rican primary care patients aged 50 and older. This screen displays the best combination of sensitivity and specificity among the screens tested. In addition, the 10-item CES-D is short and uses “yes/no” response categories (vs the number of days response categories of the 20-item CES-D), taking only about 2 minutes to administer. Further, our data indicate that patients scoring positive on the CES-D should also be evaluated for symptoms of anxiety. With cutoffs adjusted based on the ROC analyses, the 30-item GDS displays similar sensitivity and specificity rates to the 10-item CES-D, but is much lengthier to administer.

Although it is critical to differentiate among Hispanic groups, these groups also share many commonalities, such as somatization tendencies, strong religious beliefs, and close family ties. We can only draw definitive conclusions about Puerto Rican patients from these data; further research on depression screening for other Hispanic groups is needed. Until such research has been conducted, however, the 10-item CES-D should be considered the screening instrument of choice for depression in other Hispanics.

It is not immediately clear why the CES-D is a more sensitive detector of depression for this group. As others have speculated (19), Puerto Ricans who are depressed may more readily endorse somatic items, which are purposely excluded from the GDS, rather than affective items. Kirmayer (38) describes somatic symptoms as cultural idioms of distress that can lead to inappropriate medical tests and procedures if misinterpreted. At this point, no comparable rates of positive scores on the screens examined here are available for middle-aged and older mainstream or other minority primary care patients, which represents an important topic for future research.

Our findings raise questions about why the sensitivity of all the screens is not higher in this population, contrary to findings from general population studies (18). Analysis of participant’s comments made during the course of the interviews revealed that participants did not distinguish among specific mental illnesses and used descriptive language for symptoms that differed somewhat from those of standardized screens. Depression screens for this population may benefit from the addition of questions that incorporate cultural conceptions or symptoms, such as ataques de nervios, or other more commonly understood terminology referring to mental health problems (e.g., enfermo de los nervios, literally translated as “sick from nerves”). More research is needed to continue building on or modifying the existing screens to improve their cultural sensitivity.

It is not known whether this population underreports depressive symptoms as is the case with Anglo populations,
particularly men (39). If so, are the responses of these underreporting patients adding to the sensitivity problems of the findings? More than two thirds of participants were women (representative of the gender imbalance in primary care clinic attendees), thus male Puerto Rican primary care patients are underrepresented in this sample.

The use of the bilingual, bicultural interviewer, although an asset for this research, also represents a further limitation of the study. Patients may have felt more comfortable discussing their feelings with this researcher than they would talking to a care provider through an interpreter. Whenever possible, depression screens should be administered by a clinic staff member who is at least bilingual. Because we only had one interviewer, no tests of interrater reliability were possible. The interviewer underwent training for administration of each screen as well as the CIDI. All of these measures are highly standardized, with little room for interviewer interpretation. Although interviewer bias is always a possibility, we do not think that the results of this research were significantly compromised.

The interviewing process revealed several important issues for clinicians working with inner-city Latino patients to consider when screening for depression. Almost half of the participants left school before 7th grade, and a majority of the patients interviewed could not read Spanish (almost none of the participants could speak or read English). Any primary care practice intending to implement depression screening in this patient population will have to provide a staff member to administer the screens verbally and in Spanish. Further, in Spanish, the word for depression is “depresión.” Coincidentally, this word is difficult to distinguish orally from “de presión,” which refers to high blood pressure. Our interviewer took special care to distinguish between these conditions, and clinicians must do the same.

Screening is only one small but essential step in the larger challenge of delivering treatment to Puerto Rican patients with depression and other mental health problems. Assuming these screening recommendations are accepted and utilized by primary care practices and clinicians, more depressed patients will be identified, but then what? Increases in depression detection will make more obvious other obstacles to care for urban, middle-aged, and older Latinos. These include deficiencies in coverage and availability of services, barriers compounded by language, poverty, lack of transportation, and low literacy, and the shortages of Hispanic professionals in the mental health workforce, particularly psychiatrists.

The lack of sufficient numbers of Spanish-speaking professionals argues for greater importance in using screens; the results on these Spanish language screens could serve as a signal for the primary care provider that additional evaluation conducted by a Spanish-speaking associate is indicated. Because of the language barrier of monolingual Spanish-speaking patients in primarily English-speaking offices, the information that a depressive illness might be present would otherwise be lost.

The results of this study provide a needed step in the development of depression detection instruments useful in middle-aged and older urban Puerto Rican primary care patients. Clearly, work remains to be done in developing a truly culturally sensitive screen for depression in this population.

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References

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Appendix

Depression Screens Evaluated in the Analyses

Yale 1-question
Do you often feel sad or depressed?

PRIME-MD
1. During the past month, have you often been bothered by feeling down, depressed, or hopeless?
2. During the past month, have you often been bothered by little interest or pleasure in doing things?

CES-D (**10-item version)**
Below is a list of ways you may have felt or behaved in the past week. Please choose a category from this card that best matches how often during the past week you have felt or behaved in each of these ways.

<table>
<thead>
<tr>
<th>During the past week</th>
<th>Rarely or none of the time (less than 1 day)</th>
<th>Some or a little of the time (1–2 days)</th>
<th>Occasionally or a moderate amount of the time (3–4 days)</th>
<th>Most or all of the time (5–7 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I was bothered by things that usually don’t bother me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. I did not feel like eating; my appetite was poor.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. I felt that I could not shake off the blues even with help from my family or friends.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. I felt that I was just as good as other people.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>5. I had trouble keeping my mind on what I was doing.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. I felt depressed.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. I felt that everything I did was an effort.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. I felt hopeful about the future.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>9. I thought my life had been a failure.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>10. I felt fearful.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>11. My sleep was restless.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>12. I was happy.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>13. I talked less than usual.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>14. I felt lonely.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>15. People were unfriendly.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>16. I enjoyed life.</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>17. I had crying spells.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>18. I felt sad.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>19. I felt that people disliked me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>20. I could not get “going.”</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

GDS (**15-item version)**
Choose the best answer for how you felt over the past week

*1. Are you basically satisfied with your life?* yes/no
*2. Have you dropped many of your activities and interests?* yes/no
*3. Do you feel that your life is empty?* yes/no
*4. Do you often get bored?* yes/no
*5. Are you hopeful about the future?* yes/no
*6. Are you bothered by thoughts you can’t get out of your head?* yes/no
*7. Are you in good spirits most of the time?* yes/no
*8. Are you afraid that something bad is going to happen to you?* yes/no
*9. Do you feel happy most of the time?* yes/no
*10. Do you often feel helpless?* yes/no
*11. Do you often get restless and fidgety?* yes/no
*12. Do you prefer to stay at home, rather than going out and doing new things?* yes/no
*13. Do you frequently worry about the future?* yes/no
*14. Do you feel you have more problems with memory than most?* yes/no
*15. Do you think it is wonderful to be alive now?* yes/no
*16. Do you often feel downhearted and blue?* yes/no
*17. Do you feel pretty worthless the way you are now?* yes/no
*18. Do you worry a lot about the past?* yes/no
*19. Do you find life very exciting?* yes/no
*20. Is it hard for you to get started on new projects?* yes/no
*21. Do you feel full of energy?* yes/no
*22. Do you feel that your situation is hopeless?* yes/no
*23. Do you think that most people are better off than you are?* yes/no
*24. Do you frequently get upset over little things?* yes/no
*25. Do you frequently feel like crying?* yes/no
*26. Do you have trouble concentrating?* yes/no
*27. Do you enjoy getting up in the morning?* yes/no
*28. Do you prefer to avoid social gatherings?* yes/no
*29. Is it easy for you to make decisions?* yes/no
*30. Is your mind as clear as it used to be?* yes/no