Supplementary material 3. Do-file of STATA used in our study.

```
use "E:\Database_v1.dta", clear

*Table 1 - Socio-demographic analysis

global catvars_table1 sex agecat civilstatus educationcat work Livingalone
Historypsychiatricdx depression anxiety

tabout $catvars_table1 depression using Table1.xlsx, ///
  replace c(freq col) clab(No. %) f(0c 1p) style(xlsx) font(bold) ///
  ptotal(none) stats(chi2) stpos(col) ppos(only) plab(P value) ///
  title(Table 1. Sociodemographic characteristics) ///
  fn(Note: n=number, %=Percentage.) twidth(14) sheet(Table1)

* Table 2. Sensitivity, specificity, +LR, -LR, PPV, NPV, and Youden's index for different
PHQ and GAD cut-off points compared to the gold standard.
tab cutoffPHQ9_7
diagt depression cutoffPHQ9_7
tab cutoffPHQ9_10
tab PHQ9algorithm
diagt depression PHQ9algorithm
tab PHQ9ajus_algorithm
diagt depression PHQ9ajus_algorithm
diagt depression cutoffPHQ9_10
tab cutoffPHQ8_7
diagt depression cutoffPHQ8_7
tab cutoffPHQ2_2
diagt depression cutoffPHQ2_2
tab cutoffGAD7_8
diagt anxiety cutoffGAD7_8
tab cutoffGAD7_10
diagt anxiety cutoffGAD7_10
tab cutoffGAD2_2
diagt anxiety cutoffGAD2_2




* Supplementary material 3. Sensitivity, specificity, +LR, -LR, PPV, NPV, and Youden's
index for different PHQ cut-off points compared to the gold standard.
* PHQ-9 - Sensitivity, specificity, +LR, -LR, PPV, NPV, and Youden's index

tab cutoffPHQ9_1
diagt depression cutoffPHQ9_1
tab cutoffPHQ9_2
diagt depression cutoffPHQ9_2
tab cutoffPHQ9_3
diagt depression cutoffPHQ9_3
tab cutoffPHQ9_4
diagt depression cutoffPHQ9_4
tab cutoffPHQ9_5
diagt depression cutoffPHQ9_5
tab cutoffPHQ9_6
diagt depression cutoffPHQ9_6
tab cutoffPHQ9_7
diagt depression cutoffPHQ9_7
tab cutoffPHQ9_8
diagt depression cutoffPHQ9_8
tab cutoffPHQ9_9
diagt depression cutoffPHQ9_9
tab cutoffPHQ9_10
diagt depression cutoffPHQ9_10
tab cutoffPHQ9_11
diagt depression cutoffPHQ9_11
tab cutoffPHQ9_12
diagt depression cutoffPHQ9_12
```

```
tab cutoffPHQ9_13
diagt depression cutoffPHQ9_13
tab cutoffPHQ9_14
diagt depression cutoffPHQ9_14
tab cutoffPHQ9_15
diagt depression cutoffPHQ9_15
tab cutoffPHQ9_16
diagt depression cutoffPHQ9_16
tab cutoffPHQ9_17
diagt depression cutoffPHQ9_17
tab cutoffPHQ9_18
diagt depression cutoffPHQ9_18
tab cutoffPHQ9_19
diagt depression cutoffPHQ9_19
tab cutoffPHQ9_20
diagt depression cutoffPHQ9_20
tab cutoffPHQ9_21
diagt depression cutoffPHQ9_21
tab cutoffPHQ9_22
diagt depression cutoffPHQ9_22
tab cutoffPHQ9_23
diagt depression cutoffPHQ9_23
tab cutoffPHQ9_24
diagt depression cutoffPHQ9_24
tab cutoffPHQ9_25
diagt depression cutoffPHQ9_25
tab cutoffPHQ9_26
diagt depression cutoffPHQ9_26
tab cutoffPHQ9_27
diagt depression cutoffPHQ9_27


*PHQ-8 - Sensitivity, specificity, +LR, -LR, PPV, NPV, and Youden's index

tab cutoffPHQ8_1
diagt depression cutoffPHQ8_1
tab cutoffPHQ8_2
diagt depression cutoffPHQ8_2
tab cutoffPHQ8_3
diagt depression cutoffPHQ8_3
tab cutoffPHQ8_4
diagt depression cutoffPHQ8_4
tab cutoffPHQ8_5
diagt depression cutoffPHQ8_5
tab cutoffPHQ8_6
diagt depression cutoffPHQ8_6
tab cutoffPHQ8_7
diagt depression cutoffPHQ8_7
tab cutoffPHQ8_8
diagt depression cutoffPHQ8_8
tab cutoffPHQ8_9
diagt depression cutoffPHQ8_9
tab cutoffPHQ8_10
diagt depression cutoffPHQ8_10
tab cutoffPHQ8_11
diagt depression cutoffPHQ8_11
tab cutoffPHQ8_12
diagt depression cutoffPHQ8_12
tab cutoffPHQ8_13
diagt depression cutoffPHQ8_13
tab cutoffPHQ8_14
diagt depression cutoffPHQ8_14
tab cutoffPHQ8_15
diagt depression cutoffPHQ8_15
tab cutoffPHQ8_16
diagt depression cutoffPHQ8_16
tab cutoffPHQ8_17
diagt depression cutoffPHQ8_17
```

```
tab cutoffPHQ8_18
diagt depression cutoffPHQ8_18
tab cutoffPHQ8_19
diagt depression cutoffPHQ8_19
tab cutoffPHQ8_20
diagt depression cutoffPHQ8_20
tab cutoffPHQ8_21
diagt depression cutoffPHQ8_21
tab cutoffPHQ8_22
diagt depression cutoffPHQ8_22
tab cutoffPHQ8_23
diagt depression cutoffPHQ8_23
tab cutoffPHQ8_24
diagt depression cutoffPHQ8_24
```

* PHQ-9 algorithm - Sensitivity, specificity, +LR, −LR, PPV, NPV, and Youden's index

```
tab PHQ9algorithm
diagt depression PHQ9algorithm
```

* PHQ-9 adjusted algorithm - Sensitivity, specificity, +LR, −LR, PPV, NPV, and Youden's index

```
tab PHQ9ajus_algorithm
diagt depression PHQ9ajus_algorithm
```

* PHQ-2 - Sensitivity, specificity, +LR, −LR, PPV, NPV, and Youden's index

```
tab cutoffPHQ2_1
diagt depression cutoffPHQ2_1
tab cutoffPHQ2_2
diagt depression cutoffPHQ2_2
tab cutoffPHQ2_3
diagt depression cutoffPHQ2_3
tab cutoffPHQ2_4
diagt depression cutoffPHQ2_4
tab cutoffPHQ2_5
diagt depression cutoffPHQ2_5
tab cutoffPHQ2_6
diagt depression cutoffPHQ2_6
```

*Supplementary material 4. Sensitivity, specificity, +LR, −LR, PPV, NPV, and Youden's index for different GAD cut-off points compared to the gold standard.
*GAD-7 - Sensitivity, specificity, +LR, −LR, PPV, NPV, and Youden's index

```
tab cutoffGAD7_1
diagt anxiety cutoffGAD7_1
tab cutoffGAD7_2
diagt anxiety cutoffGAD7_2
tab cutoffGAD7_3
diagt anxiety cutoffGAD7_3
tab cutoffGAD7_4
diagt anxiety cutoffGAD7_4
tab cutoffGAD7_5
diagt anxiety cutoffGAD7_5
tab cutoffGAD7_6
diagt anxiety cutoffGAD7_6
tab cutoffGAD7_7
diagt anxiety cutoffGAD7_7
tab cutoffGAD7_8
diagt anxiety cutoffGAD7_8
tab cutoffGAD7_9
diagt anxiety cutoffGAD7_9
tab cutoffGAD7_10
diagt anxiety cutoffGAD7_10
tab cutoffGAD7_11
diagt anxiety cutoffGAD7_11
```

Supplemental material

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BMJ Open

```
tab cutoffGAD7_12
diagt anxiety cutoffGAD7_12
tab cutoffGAD7_13
diagt anxiety cutoffGAD7_13
tab cutoffGAD7_14
diagt anxiety cutoffGAD7_14
tab cutoffGAD7_15
diagt anxiety cutoffGAD7_15
tab cutoffGAD7_16
diagt anxiety cutoffGAD7_16
tab cutoffGAD7_17
diagt anxiety cutoffGAD7_17
tab cutoffGAD7_18
diagt anxiety cutoffGAD7_18
tab cutoffGAD7_19
diagt anxiety cutoffGAD7_19
tab cutoffGAD7_20
diagt anxiety cutoffGAD7_20
tab cutoffGAD7_21
diagt anxiety cutoffGAD7_21
```

* GAD-2 - Sensitivity, specificity, +LR, −LR, PPV, NPV, and Youden's index

```
tab cutoffGAD2_0
diagt anxiety cutoffGAD2_0
tab cutoffGAD2_1
diagt anxiety cutoffGAD2_1
tab cutoffGAD2_2
diagt anxiety cutoffGAD2_2
tab cutoffGAD2_3
diagt anxiety cutoffGAD2_3
tab cutoffGAD2_4
diagt anxiety cutoffGAD2_4
tab cutoffGAD2_5
diagt anxiety cutoffGAD2_5
tab cutoffGAD2_6
diagt anxiety cutoffGAD2_6
```

*Figures 2 - ROC curve

```
roccomp depression PHQ9TOTAL PHQ8TOTAL PHQ9algorithm PHQ9ajus_algorithm PHQ2TOTAL, graph
summary plot1opts(mcolor(red) lcolor(red)) plot2opts(mcolor(blue) lcolor(blue))
plot3opts(mcolor(orange) lcolor(orange)) plot4opts(mcolor(green) lcolor(green))
plot5opts(mcolor(purble) lcolor(purple)) legend(order(1 "PHQ-9 (AUC=0.805 [0.779-
0.831])" 2 "PHQ-8 (AUC=0.802 [0.776-0.828])" 3 "PHQ-9 algorithm (AUC=0.641 [0.614-
0.667])" 4 "PHQ-9 adjusted algorithm (AUC=0.723 [0.696-0.749])" 5 "PHQ-2 (AUC=0.771
[0.743-0.799])" 6 "Reference") size(2.5) position(7) cols(2) rows(3))

graph export "E:\Figure2.tif", as(tif) replace
```

*Figures 3 - ROC curve

```
roccomp anxiety GAD7TOTAL GAD2TOTAL, graph summary plot1opts(mcolor(red) lcolor(red))
plot2opts(mcolor(blue) lcolor(blue)) legend(order(1 "GAD-7 (AUC=0.718 [0.622-0.814])" 2
"GAD-2 (AUC=0.685 [0.587-0.783])" 3 "Reference") size(2.5) position(7) cols(2) rows(3))

graph export "E:\Figure3.tif", as(tif) replace
```