



PAKISTAN MENTAL
HEALTH COALITION

MENTAL HEALTH

SCREENING TOOLS IN PAKISTAN

ANALYSIS REPORT



PAKISTAN MENTAL
HEALTH COALITION



Authors:

Dr. Taha Sabri, Taskeen Health Initiative

Dr. Mekaiel Zia, Taskeen Health Initiative

Dr. Rubeena Kidwai, Savaira

Sanaa Ahmad, British Asian Trust

Dr. Iffat Zafar, Sehat Kahani

Alina Lakhani, Sehat Kahani

Acknowledgements:

Aneeta Pasha, Interactive Research and Development

Fatima Karim, Agha Khan University

Dr. Murad Moosa Khan, Brain and Mind Institute AKU

Dr. Usman Hamdani, Wellcome Trust

Designed by:

Muhammad Hadi Bin Amir, Taskeen Health Initiative

Khush bakht Memon, Taskeen Health Initiative

Table of Content

Glossary of terms

Chapter 1	Executive Summary	1
Chapter 2	Introduction	3
Chapter 3	Methodology	5
Chapter 4	Findings	7
Chapter 5	Analysis	11
Chapter 6	Limitations of the tools	13
Chapter 7	Conclusion	15
Chapter 8	Annexes	17

Glossary of terms

Sensitivity: Sensitivity measures how often a test correctly gives a positive result for people who have the condition that's being tested for (also known as the “true positive” rate). For example, if a screening test identifies an individual as being positive for signs of depression and upon more thorough assessment/ examination that individual is found to be actually suffering from clinical depression, that means the screening tool gave a “true positive” result. A higher rate of sensitivity, such as 90% means that the screening tool will yield correct and true positives majority of the time.

Specificity: The specificity refers to the ability of a screening test to accurately identify people who do not have a condition. If a screening test has a specificity of 90% that means that the test will yield true negatives (when it says a person has tested negative, then upon thorough assessment that individual is in fact found to be free of that condition or disease).

Positive predictive value (PPV): A positive predictive value is a proportion of the number of cases identified out of all positive test results. If 37 people truly have disease out of 41 with a positive test result, the positive predictive value is 90%

Negative predictive value (NPV): It is the ratio of subjects truly diagnosed as negative to all those who had negative test results (including patients who were incorrectly diagnosed as healthy).

Validity: Refers to the quality of any test to measure what it claims to measure. This is the most crucial quality of a test. It is established through research in the following ways:

Criterion validity: If a test is valid, i.e. measures what it is supposed to measure, it should reliably differentiate between those who are known to have the condition to be tested (cases) and those who don't (non-cases). For example, we can take a group of people who are known to be positive for Typhoid or Generalized Anxiety Disorder, and another group of people who are known to not have that condition.

The test or tool is then administered to both groups. Those who are known to have the condition should score positive on the test and those who are known to not have the condition should score negative. This establishes criterion validity – those who already meet the criteria are picked up by the test.

Construct validity: This is established by determining the construct, i.e. the conceptual meaning of the phenomenon to be tested. For example if a test is to measure clinical depression – that condition is a subjective experience. We need to derive an objective and concrete way to define it. This is achieved through different ways such as how it has been defined in prior research or how a group of experts in the field define it. This is also called content or conceptual validity. Construct validity may also be determined by using factor analysis, a statistical procedure that shows the underlying meaning that runs through a set of statements or items of a test. This is also called factorial validity.

Quality metrics: These refer to a compilation of quality standards or a collection of benchmarks against which measured or observed metrics can be compared. These metrics may consist of different areas of measurement that allow for measurement of outcomes.



PAKISTAN MENTAL
HEALTH COALITION

Executive Summary



Executive Summary

Mental health screening tools are a useful tool to assess the mental health status of individuals. They are a means of detection of symptoms of mental illness, even by non-specialists, and may further be used by mental health professionals to evaluate effectiveness of mental health interventions. Currently, very few screening tools which have been adapted for the Pakistani population exist, which makes conducting mental health screening challenging. Additionally, without training users on these tools, standardization in practice is also nullified.

This report identifies commonly used mental health screening tools in the Pakistani context and analyzes their effectiveness. A literature review was conducted on available tools, and effectiveness of the various tools within the Pakistani context was assessed. The review evaluated sensitivity, specificity and validity of the tests in the Pakistani setting. The tools evaluated include AKUADS, SRQ-20, PHQ-9, GAD-7 & GHQ-12 and WHO QOL.

Based on existing research, PHQ-9 and GAD-7 have the best sensitivity and specificity for screening for symptoms of anxiety and depression in the Pakistani population. Using a likert scale they assess both intensity and duration of symptoms, and can also be used to assess treatment outcomes if administered at baseline and after 3-4 sessions or at the end of treatment. GHQ-12 and AKU-ADS also assess intensity and duration of symptoms, but are more difficult to administer and there is less evidence showing them to be effective. In contrast, the SRQ-20 is simpler to administer, since it uses a dichotomous scale, but cannot be utilized to measure changes in mental health outcomes.

These screening tools are limited by external factors and do require clinical assessment after screening to establish a diagnosis. These tools cannot be used in isolation and are screening tools only. In addition to this, several factors have an impact on the effectiveness of these tools. Language and cultural barriers can influence responses, as can education level, gender etc. Another limitation is that these tools are

only available in Urdu and not other dialects/local languages. Similarly, measurement invariance has not been assessed for the Pakistani communities. This introduces the chances of error and requires individuals administering them to be specifically trained in using these tools. Since the South Asian population often has somatic or vague symptoms and often do not recognize them as a mental health issue, it is often difficult to administer screening tools. Tests such as GAD-7 do not look at somatic symptoms and may not provide an accurate picture for the Pakistani population. Additionally, the stigma attached to mental health is another deterrent and any questions should be asked in a sensitive manner. Similarly, westernized language used in the tools is another barrier and measurement invariance needs to be established.

These screening tools are vital to ensure screening of populations especially at primary care level and ensure early detection, intervention and tracking of case progress. However, more research needs to be conducted to measure the validity of screening tools across different cultural contexts within Pakistan.



PAKISTAN MENTAL
HEALTH COALITION

Introduction



Mental health screening tools and other metrics are part of a quality paradigm that is embodied by the mantra, “ You cannot improve what you cannot measure”. Quality metrics are important to ensure measurability and standardization of healthcare services across different practitioners and healthcare institutions.

As such, healthcare quality standards must be measurable to ensure that they can be tracked in real time. These quality indicators must be SMART; they must be Specific, Measurable, Attributable, Reliable and Time bound and provide relevant information on the indices they are tracking. This is to ensure that what is being measured can be done so accurately and reliably.

Consequently there is a need to ensure that standardized tools exist to assess the mental health status of individuals through mental health screening. These tools can be a means of early detection of mental illnesses even by non-specialists, after specific training, and may even be used to evaluate the effectiveness of mental health interventions. The incidence of mental illness within a catchment area can also be estimated using these standardized tools.

In the Pakistani context, there are few standardized tools currently available for mental health screening in non-specialist contexts. This problem is twofold; one, is that there are few metrics with established efficacies that are in use and the ones in use have not been extensively studied for overall efficacy in Pakistan. Secondly, for the metrics with established efficacies, there is a general lack of awareness and understanding of use by practitioners.

Overall, this results in a situation where information regarding standardized mental health screening in the Pakistani contexts is not available, preventing those interested in conducting mental health screening from utilizing them. In addition, without training on how to use these tools, there is no standardization in practice for them. This results in the adoption and usage of screening tools which have not been adapted and validated in the Pakistani context.

In light of this problem, the Pakistan Mental Health Coalition has decided to produce a detailed report on commonly used mental health screening tools in the Pakistani context, an analysis on their effectiveness as explored through published research and recommendations for the usage of such tools. This would serve as a means of identifying and disseminating standardized practices for mental health screening in non-specialist settings.



PAKISTAN MENTAL
HEALTH COALITION

Methodology



Methodology

A literature review was conducted on available mental health screening tools by the Quality Standards Subcommittee of the Pakistan Mental Health Coalition where the effectiveness of various mental health screening tools were investigated. The literature review assessed the existing studies on the efficacies of commonly used mental health screening tools in Pakistani populations and consolidated them into a comparative table (see next section). This included the sensitivity, specificity and validity of the tests in the Pakistani setting. The team conducting the analysis included clinical psychologists, psychiatrists, public mental health professionals and allied mental health workers.



PAKISTAN MENTAL
HEALTH COALITION

Findings



Findings

Name of Tool	Purpose / population	Brief description of study	Sensitivity	Specificity
AKUADS (Aga Khan University Anxiety & Depression Scale)	Screen for distress (signs of sadness and / or anxiety)	The items of this tool were derived from actual presenting complaints by patients seen at a community health center at AKU, Karachi, who were identified as depressed or anxious. To determine validity of AKUADS, Fifty-three individuals between the ages of 16-60 who visited the Psychiatry Department of AKU, Karachi, were interviewed by senior psychiatrists. Twenty-nine were diagnosed with significant anxiety or depression and were considered cases and the rest were non-cases. AKUADS scores of both groups were then compared to determine the validity of the tool. (5)	66% Cut off at score of 20 PPV of 83%	79% Cut off at score of 20 NPV of 60%
SRQ-20	Screen distress (anxiety and depression for adults)	<p>A study comparing SRQ-20 and Bradford Somatic Inventory (BSI) in a rural setting near Islamabad was carried out in 2001 on a population of 664 adults. The study found the SRQ-20 to be a more consistent screening tool for the Pakistani population in comparison to the BSI. (9)</p> <p>A study was conducted in a village near Islamabad on a population of 300 men and women in 1996. It compared SRQ-20 with PHQ-16 and found that SRQ-20 was a better tool for the Pakistani population. (10)</p>	<p>For women 78% at cut off score of 7/8. For men 78% at cut off score of 3/4</p> <p>87% for men and women, cut off score of 6/7</p>	<p>For women 81% at cut off score of 7/8. For men 70% at cut off score of 3/4</p> <p>84% for men and women, cut off score of 6/7</p>

PHQ 9 English & Urdu	Screen for distress (sadness and depression) For adults	PHQ 9 is a multipurpose tool for screening, diagnosing and monitoring the severity of depression. The questions in this tool incorporate the DSM-IV depression diagnostic criteria which measure the intensity, duration and frequency of the symptoms. For comparing the validity of the PHQ-9 with a structured clinical interview, a study was conducted on pregnant women in a rural area of Pakistan (1)	95% Cut off of 10 or >	89% Cut off of 10 or >
GAD 7 English & Urdu	Screen for distress (anxiety) For adults Validated for Pakistani population but no information available on sensitivity/ specificity for our population	One of the most common anxiety disorders seen in general medical practice and in the general population is Generalized Anxiety Disorder (GAD). A score of 10 or greater on the GAD-7 represents a reasonable cut point for identifying cases of GAD. A systematic review of validated screening tools for anxiety in low income countries found that GAD-7 was one of the most commonly used tools (4). Original study on development of GAD 7 on adult patients at primary care settings in the US (3) The tool has been translated in Urdu and validated for Pakistanis. The Urdu version of GAD-7 was compared with ICP-Subjective Well Being Scale and showed moderate validity coefficients (2)	89% with cut off of 10 Ranged from 70% to 94% over different countries Cannot find info for Pakistan	82% with cut off of 10 Ranged from 64% to 91% over different countries Cannot find info for Pakistan
GHQ-12 in English and Urdu	For adults To screen for distress	Patients seen at a primary care center in Peshawar were administered the Urdu translation of GHQ-12. Those who scored above 2 were considered cases and those scoring below 2 were non-cases. Psychiatric Assessment Schedule (PAS) was also administered. GHQ successfully distinguished between cases and non-cases (11) Exploratory and Confirmatory Factor analysis were conducted on scores of GHQ-12 self-administered by 400 Pakistani university teachers from 6 different universities. Factor loadings ranged from (0.70) to (0.90) showing good validity of GHQ -12 (12)	93% at cut off of 2 N/A	88% at cut off of 2 N/A

<p>WHO QOL (Quality of Life)</p>	<p>A quality of life assessment developed by the WHO including physical health, psychological health, social relationships and environment.</p>	<p>Originally developed and tested by WHO (6). English language tool with information on scoring available at the link shown in the far right column. Study on 2000 Pakistani adults found good content and criterion validity for Urdu version for WHOQOL -BREF (7)</p>	<p>N/A</p>	<p>N/A</p>
--------------------------------------	---	--	------------	------------



PAKISTAN MENTAL
HEALTH COALITION

Analysis



Analysis

Based on the findings in the last section, while all the tools have demonstrated effectiveness in mental health screening in the Pakistani context, some tools seem to perform better than others in some respects.

The PHQ-9 and GAD-7 have the best sensitivity and specificity when it comes to screen for symptoms of depression and anxiety specifically. The Likert scale that is used in them not just establishes the presence of symptoms, but also their intensity and duration. As a result these tools can also be used for measuring changes in mental health outcomes due to mental health interventions.

The SRQ-20, GHQ-12 and AKU-ADS measure general distress including symptoms of both anxiety and depression. While the GHQ-12 seems to have the best sensitivity and specificity, it is based on one study and other evidence supporting these findings is not available. Both the GHQ-12 and AKU-ADS use a Likert scale which is helpful in ascertaining changes in mental health outcomes however they are more tedious to administer. The SRQ-20 requires a dichotomous response and while it is simpler to administer, it cannot be used to measure changes in mental health outcomes.

It is important to recognize that results using such tools can vary and fluctuate depending on many factors. In addition, confirmation of mental illness can only occur after a detailed clinical assessment occurs for patients who have been screened positive. Therefore these screening tools cannot be used in isolation and need to be used alongside a detailed clinical assessment by trained mental health professionals.

Some of these tools, such as the PHQ-9 and GAD-7, can also be used to assess treatment outcomes while providing a mental health intervention. This can be done if these tools are administered at baseline and after 3-4 sessions and/or at the end of the treatment and the change in symptom severity score is compared through statistical analysis.



PAKISTAN MENTAL
HEALTH COALITION

Limitations of the tools



Limitations of the tools

1. The tests need some basic training given to individuals administering it- method of questioning plays a big role in answers given.
2. These tools are NOT a diagnostic tool, so individuals cannot use these to diagnose any mental health conditions/illnesses.
3. Language barriers and different cultural backgrounds can influence and skew responses, leading to inaccurate results.
4. Although these screening tools have been translated to Urdu, they have not yet been translated to other dialects relevant to communities within Pakistan for eg. Pashto, Sindhi, Punjabi etc.
5. Other factors such as education level, gender can affect results.
6. Measurement invariance has not been assessed using these tools especially in South Asian communities.



PAKISTAN MENTAL
HEALTH COALITION

Conclusion



It is important to have standardized tools, which have been translated and validated in a language which is easy to understand by both the assessor as well as the individual being assessed. Screening tools are an important preliminary step in assessing an individual's needs and the level of care required. They provide a baseline from which practitioners, counselors can work towards their objectives, i.e. to improve mental health symptoms over time.

These mental health screening tools, whilst not diagnostic, can be used for screening, especially at a primary care level to ensure early detection, intervention and tracking of progress. However it is important that individuals carrying out screening are trained and well-versed in how to use these tools and how to administer the questions, as well as the language they should use with beneficiaries. The tools mentioned above are the few which have been translated and validated for use in Pakistan and are available in Urdu. Unfortunately, limited choices exist for screening tools and the majority of tools analyzed have been adapted cross-culturally; this means that changes have been made to both the content and administration procedures to ensure cultural-relevance, not just the verbal language.

Across South Asia especially, people do tend to complain about physical and somatic symptoms, sometimes not even recognizing it stems from a mental health issue. They may present themselves with having a headache, stomach ache etc. Due to the

stigma attached to mental health, questions should be asked in a sensitive manner and there may need to be some psycho-education and explanations which need to complement the tests. Tests such as the GAD-7 do not look at somatic symptoms and thus, may not provide an accurate picture. The language used and questions asked in most of these screening tools are very 'westernized' and sometimes not as relatable to our population.

It is evident that a lot more research needs to be done to measure the validity of screening tools across cultures and also different communities within Pakistan, who perceive and interpret mental health issues very differently to the Western world, and even to one another. Not enough studies have been conducted to measure the validity of these screening tools across South Asia, especially in low income communities. In South Asia, assessment of these scales' essential psychometric properties is lacking. However, the above mentioned tools are both translated and validated to use in Pakistan and it is important to work towards strengthening our data collection to track outcomes and improve our services when needed. To measure and compare incidences of depression, anxiety and other mental health issues amongst different communities as well as on a global level, the usage of screening tools is crucial.



PAKISTAN MENTAL
HEALTH COALITION

Annexes



1. AKUADS

Guiding/training manual:

<https://jpma.org.pk/article-details/3839>

The Tool:

Table 1. The Aga Khan University Anxiety and Depression Scale (translation from Urdu)

S.No.	Don't Know 9	Never 0	Sometimes 1	Mostly 2	Always 3
During the past 2 weeks:					
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					

نمبر شمار	سوالات	ہر وقت = 3	اکثر = 2	کبھی کبھی = 1	کبھی نہیں = 0	بہت نہیں = 9
19	کیا آپ کو سانس لینے میں مشکل محسوس ہوتی ہے؟					
20	کیا آپ کا پھر پائوں یا ہم کا پتہ آیا ہے؟					
21	کیا آپ کے پھر پائوں میں درد محسوس ہوتا ہے؟					
22	کیا آپ کے کندھے یا گردن میں ٹھنڈا محسوس ہوتا ہے؟					
23	کیا آپ کے سر میں درد محسوس ہوتا ہے؟					
24	کیا آپ کے پاؤں میں درد محسوس ہوتا ہے؟					
25	کیا آپ کو ہارٹ بٹیاں دینے کی ضرورت محسوس ہوتی ہے؟					
کل علامات						

اگر سوال نمبر 19 کا جواب ہر وقت یا اکثر ہے تو یہ سوال پھینکیں۔ اگر ہاں تو 1۔ ہاں 2۔ نہیں

2۔ کبھی کبھی ہے 1۔ ہاں 2۔ نہیں

عمومی اسکور =

Limitations

1. It has a higher negative predictive value of 88% rather than positive predictive value which is 63%.⁷

2. As AKUADS is a screening tool, it's considered better to confirm the diagnosis via psychologist interviews.⁸

گورنمنٹ ہسپتال

نمبر شمار	سوالات	ہر وقت = 3	اکثر = 2	کبھی کبھی = 1	کبھی نہیں = 0	بہت نہیں = 9
1	کیا آپ کی نیند کم ہوئی ہے؟					
2	کیا آپ کی ذمہ داریاں میں کمی ہوئی ہے؟					
3	کیا آپ کے دل کی دھڑکن میں کمی ہوئی ہے؟					
4	کیا آپ کو حرکت کرنے میں کمی ہوئی ہے؟					
5	کیا آپ کو کھانے میں کمی ہوئی ہے؟					
6	کیا آپ کو سانس لینے میں کمی ہوئی ہے؟					
7	کیا آپ کے دل کی دھڑکن میں کمی ہوئی ہے؟					
8	کیا آپ کو نیند میں کمی ہوئی ہے؟					
9	کیا آپ کو کام میں کمی ہوئی ہے؟					
10	کیا آپ کو کھانے میں کمی ہوئی ہے؟					
11	کیا آپ کو دل کی دھڑکن میں کمی ہوئی ہے؟					
12	کیا آپ کو نیند میں کمی ہوئی ہے؟					
13	کیا آپ کو کام میں کمی ہوئی ہے؟					
14	کیا آپ کو دل کی دھڑکن میں کمی ہوئی ہے؟					
15	کیا آپ کو نیند میں کمی ہوئی ہے؟					
16	کیا آپ کو کام میں کمی ہوئی ہے؟					
17	کیا آپ کو دل کی دھڑکن میں کمی ہوئی ہے؟					
18	کیا آپ کو نیند میں کمی ہوئی ہے؟					

Usage Indication:

1. When any tool is needed on the basis of lingual variety, AKUADS is recommended showing the 100% of linguistic validity and being used in various studies in Pakistan.²

2. Also this tool is recommended if the task or procedure only needs the screening of patients for anxiety and depression.³

3. AKUADS has the ability to discriminate between anxiety-depression syndromes, making it a reliable tool for screening in a community.⁴

4. AKUADS is not only grounded in local ethnographic context⁵. It also has similarities with many well established western tools overall enhancing its reliability.⁶

1 file:///C:/Users/HP/Downloads/AKUADS%20-%20Dr.%20Badar's%20study.pdf
 2 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-10-57>
 3 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-10-57>
 4 https://www.researchgate.net/publication/13260381_Development_of_an_indigenous_screening_instrument_in_Pakistan_The_Aga_Khan_University_Anxiety_and_Depression_Scale

5 Kleinman A. Anthropology and psychiatry: the role of culture in cross-cultural research and illness. Br. J. Psychiatry., 1987;1 51:447-54
 6 https://www.researchgate.net/publication/13260381_Development_of_an_indigenous_screening_instrument_in_Pakistan_The_Aga_Khan_University_Anxiety_and_Depression_Scale

2. SRQ-20

Guiding/training manual:

https://apps.who.int/iris/bitstream/handle/10665/61113/WHO_MNH_PSF_94.8.pdf?sequence=1&isAllowed=y

The Tool:

Items of SRQ-20	Primary cares (n = 60)	Communities (n = 959)
1. Do you often have headaches?	0.54	0.61
2. Is your appetite poor?	0.61	0.58
3. Do you sleep badly?	0.63	0.55
4. Are you easily frightened?	0.55	0.51
5. Do your hands shake?	0.40	0.62
6. Do you feel nervous, tense or worried?	0.47	0.51
7. Is your digestion poor?	0.55	0.58
8. Do you have trouble thinking clearly?	0.65	0.66
9. Do you feel unhappy?	0.47	0.67
10. Do you cry more than usual?	0.49	0.58
11. Do you find it difficult to enjoy your daily activities?	0.73	0.64
12. Do you find it difficult to make decisions?	0.67	0.63
13. Is your daily work suffering?	0.72	0.63
14. Are you unable to play a useful part in life?	0.53	0.59
15. Have you lost interest in things?	0.69	0.61
16. Do you feel that you are a worthless person?	0.61	0.59
17. Has the thought of ending your life been on your mind?	0.51	0.56
18. Do you feel tired all the time?	0.59	0.69
19. Do you have uncomfortable feelings in your stomach?	0.47	0.61
20. Are you easily tired?	0.67	0.65

QUESTIONNAIRE PARTII: SRQ SCALE FOR ANXIETY AND DEPRESSION

English	Urdu
1. Do you often have headaches?	کیچھلے بھاری بھاری سر میں درد ہوتا ہے۔
2. Is your appetite poor?	آپ کا کھانے کا دلچسپی کم ہے۔
3. Do you sleep badly?	آپ کو سونے میں مشکل ہے۔
4. Are you easily frightened?	آپ کو آسانی سے ڈرنا شروع ہوتا ہے۔
5. Do your hands shake?	آپ کے ہاتھ کانپتے ہیں۔
6. Do you feel nervous, tense or worried?	آپ کو دلچسپی، تنگی یا پریشانی محسوس ہوتی ہے۔
7. Is your digestion poor?	آپ کی ہاضمہ کمزور ہے۔
8. Do you have trouble thinking clearly?	آپ کو سوچنے میں مشکل ہے۔
9. Do you feel unhappy?	آپ کو دلچسپی محسوس ہوتی ہے۔
10. Do you cry more than usual?	آپ زیادہ رونا کرتے ہیں۔
11. Do you find it difficult to enjoy your daily activities?	آپ کو اپنے روزمرہ کاموں میں دلچسپی محسوس ہوتی ہے۔
12. Do you find it difficult to make decisions?	آپ کو فیصلے کرنے میں مشکل محسوس ہوتی ہے۔
13. Is your daily work suffering?	آپ کی روزمرہ کاموں میں مشکل محسوس ہوتی ہے۔
14. Are you unable to play a useful part in life?	آپ کو زندگی میں مفید حصہ لینے کے قابل محسوس ہوتے ہیں۔
15. Have you lost interest in things?	آپ کو چیزوں میں دلچسپی محسوس ہوتی ہے۔
16. Do you feel that you are a worthless person?	آپ کو محسوس ہوتا ہے کہ آپ کو کوئی قدر نہیں ہے۔
17. Has the thought of ending your life been on your mind?	آپ کو اپنے زندگی ختم کرنے کی فکر آتی ہے۔
18. Do you feel tired all the time?	آپ کو سب کچھ کرنے میں تھکاوٹ محسوس ہوتی ہے۔
19. Do you have uncomfortable feelings in your stomach?	آپ کو کھانے پینے کے بعد دلچسپی محسوس ہوتی ہے۔
20. Are you easily tired?	آپ کو آسانی سے تھک جاتی ہیں۔

Usage Indication:

1. Having simple Yes/No questions have indicated the tool itself for basic self-screening.¹¹
2. This is recommended as a tool which is cost-effective and to be used on community level with the ease to be regulated by lay wellbeing workers.¹²
3. If only recommended for the screening of probable mental health disorders diagnosis.¹³

Limitations:

1. SRQ- is culture-specific mostly fit for the west and factors are not compared to established measures of psychopathological assessment of depression and anxiety disorders. This tool gives a probable screening for the mental health illness in primary health care settings.⁹
2. When this tool is to be translated in languages it has few of the words needed to get altered as per the cultural settings.¹⁰

7 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-10-57>
 8 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-10-57>
 10 <https://ijmhs.biomedcentral.com/articles/10.1186/s13033-018-0242-y>

3. PHQ-9

Guiding/training manual:

https://aims.uw.edu/sites/default/files/Talking%20with%20Patients%20about%20the%20PHQ-9_MA%20%26%20Office%20Staff.pdf

Link out:

<http://www.phqscreeners.com/select-screener>

The Tool:

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

ID #: _____ DATE: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems? (use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3

7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

add columns: _____ + _____ + _____

(Healthcare professional: For interpretation of TOTAL, please refer to accompanying scoring card).

TOTAL: _____

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	_____
	Somewhat difficult	_____
	Very difficult	_____
	Extremely difficult	_____

Copyright © 1999 Pfizer Inc. All rights reserved. Reproduced with permission. PRIME-MD® is a trademark of Pfizer Inc. A2663B 10-04-2005

PHQ-9				
(آخری بار) (تقریباً)	(بے وقت سے زیادہ)	(کئی بار)	(بہت سے بار)	(بہت سے بار)
				گزشتہ دو ہفتوں کے دوران اندر درج ذیل مسائل سے آپ کتنا پریشان ہوئے؟
				1. روزمرہ کے کاموں میں دلچسپی اور لطف کی کمی۔
				2. اداسی، افسردگی، یا افسوس کا احساس۔
				3. (ب) نیند نہ آنا، (ب) نیند نہ آنا، (ب) نیند نہ آنا۔
				4. بے سبب تھکاوٹ یا کمزوری کا احساس۔
				5. زیادہ کھانا کھانا یا کم کھانا کھانا۔
				6. (ب) نیند نہ آنا، (ب) نیند نہ آنا، (ب) نیند نہ آنا۔
				7. (ب) نیند نہ آنا، (ب) نیند نہ آنا، (ب) نیند نہ آنا۔
				8. (ب) نیند نہ آنا، (ب) نیند نہ آنا، (ب) نیند نہ آنا۔
				9. (ب) نیند نہ آنا، (ب) نیند نہ آنا، (ب) نیند نہ آنا۔

3. For a wide patient's subgroup this tool is not able to evaluate the difference.¹⁸

4. Previous meta-analysis reported that it also limits its usage where it does not exclude those who are already being diagnosed with MH disorders.¹⁹

Usage indications:

1. PHQ-9 is utilized essentially for screening for the nearness of major depressive episodes but not major depressive disorder.²⁰

2. If self-regulation is priority along with screening, PHQ-9 is recommended.²¹

Limitations:

1. PHQ-9 is useful only for screening purposes.¹⁶

2. It has its usage limitations as it cannot give diagnosis for "current major depressive episode" in a psychiatric specialty clinic.¹⁷

11 <https://ijmhs.biomedcentral.com/articles/10.1186/s13033-018-0242-y>

12 <https://ijmhs.biomedcentral.com/articles/10.1186/s13033-018-0242-y>

13 <https://ijmhs.biomedcentral.com/articles/10.1186/s13033-018-0242-y>

14 [file:///C:/Users/HP/Downloads/PHQ9%20id%20date%2008.03%20\(1\).pdf](file:///C:/Users/HP/Downloads/PHQ9%20id%20date%2008.03%20(1).pdf)

15 <https://jgma.org.pk/article-details/8805>

16 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-12-73>

17 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-12-73>

18 <https://www.practiceupdate.com/content/accuracy-of-the-phq-9-in-detecting-major-depression/82414#:~:text=Although%2C%20the%20Patient%20Health%20Questionnaire,and%20the%20inability%20to%20assess>

19 <https://www.practiceupdate.com/content/accuracy-of-the-phq-9-in-detecting-major-depression/82414#:~:text=Although%2C%20the%20Patient%20Health%20Questionnaire,and%20the%20inability%20to%20assess>

20 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-12-73>

4. GAD-7

Guiding/training manual:

https://www.mirecc.va.gov/cih-visn2/Documents/Clinial/GAD_with_Info_Sheet.pdf OR <https://www.corc.uk.net/outcome-experience-measures/generalised-anxiety-disorder-assessment-gad-7/#:~:text=The%20GAD%2D7%20score%20is,ranges%20from%200%20to%2021.>

The Tool:

GAD-7 Anxiety

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid, as if something awful might happen	0	1	2	3

Column totals _____ + _____ + _____ + _____ =
Total score _____

If you checked any problems, how difficult have they made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GAD-7				
(کمزور)	(ایک بار ہفتے میں)	(کئی بار ہفتے میں)	(بسیار)	گزشتہ دو ہفتوں کے دوران مزید اعلیٰ مسائل سے آپ کو کتنا پریشان کیا؟
				۱۔ گھبراہٹ، پریشانی یا شہیہ نہایت کم کا۔
				۲۔ پریشانی یا گھر پر کام پانے میں دشواری۔
				۳۔ مختلف چیزوں کے بارے میں مدد سے زیادہ دوسری ہوئی تھوڑی۔
				۴۔ پر سکون رہنے میں دشواری۔
				۵۔ اس قدر پریشانی یا اضطراب کہ ایک کچھ بیٹنا مشکل ہو جائے۔
				۶۔ معمولی باتوں کا برا لگنا یا چڑچاڑ۔
				۷۔ ایک ماہانے خوف کا احساس جیسے حکومت براہ راست دانا ہے۔

22

Usage Indication:

The tool is recommended:²⁵

1. When screening for primary health care patients
2. To screen for General anxiety disorders.
3. Also for distinguishing between mild and moderate anxiety.

Limitations:

1. Only generalized anxiety is being catered, though there are others like social phobia.²³
2. Does not provide an accurate diagnosis rather on probable basis which needs further evaluation.²⁴
3. GAD7 does not take into account somatic symptoms, which tends to be a key indicator of mental health issues, especially as seen here in South Asia. Further questions related to somatic symptoms and an overall assessment by the assessor is key.

21 <https://bmcpyschiatry.biomedcentral.com/articles/10.1186/1471-244X-12-73>
22 <https://jpma.org.pk/article-details/8391>

5. GHQ-12

Guiding/training manual:

<https://ijmhs.biomedcentral.com/articles/10.1186/s13033-020-00397-0>

Link out:

Copyrighted – ask for permission at

<https://eprovide.mapi-trust.org/instruments/general-health-questionnaire>

The Tool:

Short General Health Questionnaire (GHQ 12)

Have you recently?

1. Been able to concentrate on what you're doing?	Better than usual	Same as usual	Less than usual	Much less than usual
2. Lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
3. Felt you were playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
4. Felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
5. Felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
6. Felt you couldn't overcome your difficulties?	Not at all	No more than usual	Rather more than usual	Much more than usual
7. Been able to enjoy your normal day-to-day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
8. Been able to face up to your problems?	More so than usual	Same as usual	Less so than usual	Much less able
9. Been feeling unhappy and depressed?	Not at all	No more than usual	Rather more than usual	Much more than usual
10. Been losing confidence in yourself?	Not at all	No more than usual	Rather more than usual	Much more than usual
11. Been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
12. Been feeling reasonably happy, all things considered	More so than usual	About same as usual ²	Less so than usual	Much less than usual;

26

Limitations:²⁷

1. Has negatively phrased items, which adds the element of response biases.
2. Has limitations, when utilized for psychiatric sufferings.

Usage indications:²⁸

1. Recommended for surveys rather for clinical settings.
2. Indicates its utilization for screening the overall psychological concerns.
3. If the problem for which screening is made, not psychiatric, then the tool can be used.

²³ <https://gpnotebook.com/simplepage.cfm?ID=x2016062893017544321#:~:text=Limitations%3A,be%20confirmed%20by%20further%20evaluation>

²⁴ <https://gpnotebook.com/simplepage.cfm?ID=x2016062893017544321#:~:text=Limitations%3A,be%20confirmed%20by%20further%20evaluation>

²⁵ <https://www.corc.uk.net/outcome-experience-measures/generalised-anxiety-disorder-assessment-gad-7#:~:text=Suitability,and%20moderate%20GAD%20in%20adolescents.>

7. WHOQOL

Guiding/training manual:

Link out:

<https://www.infond.org/toolkits/n-md-toolkit/whoqol-bref>

The Tool:

Please read the question, assess your feelings, for the last two weeks, and circle the number on the scale for each question that gives the best answer for you.

	Very poor	Poor	Neither poor nor good	Good	Very good
1 How would you rate your quality of life?	1	2	3	4	5

	Very dissatisfied	Fairly Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2 How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the **last two weeks**.

	Not at all	A Small amount	A Moderate amount	A great deal	An Extreme amount
3 To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4 How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5 How much do you enjoy life?	1	2	3	4	5
6 To what extent do you feel your life to be meaningful?	1	2	3	4	5

	Not at all	Slightly	Moderately	Very	Extremely
7 How well are you able to concentrate?	1	2	3	4	5
8 How safe do you feel in your daily life?	1	2	3	4	5
9 How healthy is your physical environment?	1	2	3	4	5

	Not at all	Slightly	Moderately	Very	Extremely
15 How well are you able to get around physically?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the **last two weeks**.

	Very Dissatisfied	Fairly Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very satisfied
16 How satisfied are you with your sleep?	1	2	3	4	5
17 How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18 How satisfied are you with your capacity for work?	1	2	3	4	5
19 How satisfied are you with yourself?	1	2	3	4	5
20 How satisfied are you with your personal relationships?	1	2	3	4	5

21 How satisfied are you with your sex life?	1	2	3	4	5
22 How satisfied are you with the support you get from your friends?	1	2	3	4	5
23 How satisfied are you with the conditions of your living place?	1	2	3	4	5
24 How satisfied are you with your access to health services?	1	2	3	4	5
25 How satisfied are you with your transport?	1	2	3	4	5

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

	Never	Infrequently	Sometimes	Frequently	Always
26 How often do you have negative feelings such as blue mood, despair, anxiety or depression?	1	2	3	4	5

WHOQOL-BREF

ہدایات:

اس سوالنامہ میں آپ کی زندگی کے معیار ، صحت اور زندگی کے دیگر پہلوؤں کے بارے میں پوچھا جائے گا۔ براہ مہربانی اپ تمام سوالات کے جواب دیں۔ اگر آپ کسی سوال کے جواب کے بارے میں یقینی طور پر کچھ نہیں کہہ سکتے تو سب سے مناسب جواب کا چناؤ کریں۔ عموماً یہ وہ جواب ہو سکتا ہے جو کہ آپ کے ذہن میں سب سے پہلے آئے۔ آپ سے گزارش ہے کہ اپنے ذاتی معیار ، اُمیدیں ، خوشیاں اور خدشات ذہن میں رکھیں۔ سوالات دیتے وقت پچھلے دو ہفتوں کی زندگی کو ذہن میں رکھیں۔

کیا آپ کو دوسروں کی ایسی مدد حاصل ہے جو آپ چاہتے ہیں؟

بالکل نہیں	تھوڑی بہت	درمیانی حد تک	بہت زیادہ	بہت ہی زیادہ
1	2	3	4	5

اگر پچھلے دو ہفتوں سے آپ کو دوسروں کی بہت زیادہ مدد حاصل رہی ہو تو اب نمبر 4 پر دائرہ لگا سکتے ہیں۔ کیا آپ کو دوسروں کی ایسی مدد حاصل ہے جو آپ چاہتے ہیں؟

بالکل نہیں	تھوڑی بہت	درمیانی حد تک	بہت زیادہ	بہت ہی زیادہ
1	2	3	4	5

لیکن اگر پچھلے دو ہفتوں سے آپ کو دوسروں کی مدد بالکل بھی نہیں ملی ہو تو اب نمبر 1 پر دائرہ لگا سکتے ہیں۔ آپ کے تعاون کا شکریہ۔

آپ سے گزارش ہے کہ ہر سوال کو غور سے پڑھیں اور اپنے احساسات کا جائزہ لیں اور پھر اُس نمبر پر دائرہ لگائیں جو آپ کے احساسات کو بہتر طور پر ظاہر کرتا ہو۔

1	اپنے معیار کی زندگی کو کس درجہ کا محسوس کرتے ہیں۔	بہت برا	برا	نہ اچھا نہ برا	اچھا	بہت اچھا
2	آپ اپنی صحت سے کس حد تک مطمئن ہیں۔	بہت غیر مطمئن	غیر مطمئن	نہ مطمئن نہ غیر مطمئن	مطمئن	بہت مطمئن

33 <https://www.frontiersin.org/articles/10.3389/fpsyg.2015.00811/full>

34 <https://www.mentalhealthschools.org.uk/resources/the-strengths-and-difficulties-questionnaire-sda/>

35 <https://www.who.int/tools/whoqol/whoqol-bref/docs/default-source/publishing-policies/whoqol-bref/english-australian-whoqol-bref>

مندرجہ ذیل سوالات میں آپ کچھ مخصوص چیزوں کے بارے میں پوچھا جائے گا کہ ان سے آپ کا پچھلے دو ہفتوں میں کس حد تک تجربہ ہوا ہے۔

3	آپ کس حد تک محسوس کرتے ہیں کہ جسمانی درد آپ کے لئے وہ کام کرنے میں رکاوٹ بنتی ہے جس کا کرنا آپ کے لئے ضروری ہوتا ہے۔	بناک نہیں	بہت زیادہ	بہت کم
4	روزمرہ کاموں کی ادائیگی کے لئے آپ کس حد تک طبی علاج کی ضرورت پڑتی ہے۔	بناک نہیں	بہت زیادہ	بہت کم

125. Translated by Touseef Khalid & Rubhana Kausar, Ph.D in 2006.
Developed by Dr. J. Orley, Dr. W. Kayken, Prof S. Shazo, WHOQOL Group,
Institute of Applied Psychology,
University of the Punjab, Lahore-Pakistan.

2. WHOQOL limits its usages, when screening the audience above 60, as it needs additional questions for more comprehensive outcomes.³⁸

3. WHOQOL BREF things are centered less on personal behaviors and more on how people encounter their regular social settings. This centers on the self-inside social settings instead of behavior.³⁹

Usage indications:⁴⁰

1. When one wants to self-screen and to describe their own quality of life.
2. When the screening is related to the aspects directly related to your quality of life, like sleep, pain, emotions and ETC one shall use this tool.
3. Due to its clarity, it is indicated to be used on a large scale easily.

5	آپ کس حد تک اپنی زندگی سے لطف اٹھاتے ہوئے ہیں۔	بہت زیادہ	بہت کم	3	4	5
6	آپ کس حد تک اپنی زندگی کو بامعنی محسوس کرتے ہیں۔	بہت زیادہ	بہت کم	3	4	5
7	آپ کس حد تک اپنے آپ کو توجہ مرکوز کرنے کے قابل سمجھتے ہیں۔	بہت زیادہ	بہت کم	3	4	5
8	آپ روزمرہ زندگی میں اپنے آپ کو کس حد تک محفوظ محسوس کرتے ہیں۔	بہت زیادہ	بہت کم	3	4	5
9	آپ کے ارد گرد کا طبعی ماحول کس حد تک صحت مند ہے۔	بہت زیادہ	بہت کم	3	4	5
10	آپ روزمرہ زندگی کے لئے مناسب توانائی محسوس کرتے ہیں۔	بہت زیادہ	بہت کم	3	4	5
11	آپ کے لئے اپنی ظاہری جسمانی شکل و صورت قابل قبول ہے۔	بہت زیادہ	بہت کم	3	4	5
12	آپ کے پاس اپنی ضروریات پوری کرنے کے لئے مناسب پیشہ موجود ہے۔	بہت زیادہ	بہت کم	3	4	5
13	آپ کو روزمرہ زندگی گزارنے سے متعلق کتنی ضروری معلومات دستیاب ہیں۔	بہت زیادہ	بہت کم	3	4	5
14	آپ کو سیر و تفریح کے مواقع کس حد تک میسر ہیں۔	بہت زیادہ	بہت کم	3	4	5
15	آپ اپنے ارد گرد جسمانی طور پر کس حد تک چلتے پھرتے کے قابل ہیں۔	بہت زیادہ	بہت کم	3	4	5

مندرجہ ذیل سوالات میں آپ سے پوچھا گیا ہے کہ پچھلے دو ہفتوں سے آپ نے اپنے زندگی کے مختلف پہلوؤں کے حوالے سے کس قدر اچھا یا مطمئن محسوس کیا۔

16	آپ اپنی نیند سے کس حد تک مطمئن ہیں	بہت زیادہ	بہت کم	3	4	5
17	آپ اپنی روزمرہ کام سرانجام دینے کی صلاحیت سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
18	آپ اپنی کام کرنے کی صلاحیت سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
19	آپ اپنی ذات سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
20	آپ اپنے تعلقات سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
21	آپ اپنی جنسی زندگی سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
22	آپ اپنے دوستوں سے ملنے والی مدد سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
23	آپ اپنی رہائش کی جگہ کے حالات سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
24	آپ طبعی سہولتوں تک اپنی رسائی سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5

125. Translated by Touseef Khalid & Rubhana Kausar, Ph.D in 2006.
Developed by Dr. J. Orley, Dr. W. Kayken, Prof S. Shazo, WHOQOL Group,
Institute of Applied Psychology,
University of the Punjab, Lahore-Pakistan.

25	آپ اپنے ذرائع آمدورفت سے کس حد تک مطمئن ہیں۔	بہت زیادہ	بہت کم	3	4	5
26	آپ کس حد تک منفی احساسات کا شکار رہتے ہیں مثلاً اداسی، مایوسی، پریشانی اور افسردگی وغیرہ۔	بہت زیادہ	بہت کم	3	4	5

36

Limitations:

1. WHOQOL-100 has many elements to be screened upon. Which creates burden in huge settings. (Instead the BREF is suggested to be used).³⁷

36 <https://www.who.int/tools/whoqol/whoqol-bref/docs/default-source/publishing-policies/whoqol-bref/urdu-whoqol-bref>
37 <https://cpcr.aot.ac.nz/new-zealand-whoqol/terms-and-conditions-of-use-of-the-whoqol-tools#:-:text=If%20you%20want%20to%20know,and%20environmental%20quality%20of%20life>
38 <https://cpcr.aot.ac.nz/new-zealand-whoqol/terms-and-conditions-of-use-of-the-whoqol-tools#:-:text=If%20you%20want%20to%20know,and%20environmental%20quality%20of%20life>
39 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4838402/>
40 <https://cpcr.aot.ac.nz/new-zealand-whoqol/terms-and-conditions-of-use-of-the-whoqol-tools#:-:text=If%20you%20want%20to%20know,and%20environmental%20quality%20of%20life>

References

1. Gallis, J. A., Maselko, J., O'Donnell, K., Song, K., Saqib, K., Turner, E. L., & Sikander, S. (2018). Criterion-related validity and reliability of the Urdu version of the Patient Health Questionnaire (PHQ-9) in a sample of community-based pregnant women in Pakistan. *PeerJ*, 6, e5185. <https://doi.org/10.7717/peerj.5185>
2. Ahmed, S, Hussain, S., Shah, F.S., Akhtar, F. (2017). Urdu translation and validation of GAD-7: A screening and rating tool for anxiety symptoms in primary health care. *Journal of Pakistan Medical Association*, Volume 67, issues 10, pg. 1536-1540. <https://jpmma.org.pk/PdfDownload/8391>
3. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. *Arch Intern Med*. 2006 May 22;166(10):1092-7. doi: 10.1001/archinte.166.10.1092. PMID: 16717171.
4. Mughal, A.Y., Devadas, J., Ardman, E. et al. A systematic review of validated screening tools for anxiety disorders and PTSD in low to middle income countries. *BMC Psychiatry* 20, 338 (2020). <https://doi.org/10.1186/s12888-020-02753-3>
5. Ali, B.S., Reza, H., Khan, M.M., & Jehan, I. (1998) Development of an indigenous screening instrument in Pakistan: The Aga Khan University Anxiety and Depression Scale. *Journal of Pakistan Medical Association*. 48(9):261-https://www.researchgate.net/publication/13260381_Development_of_an_indigenous_screening_instrument_in_Pakistan_The_Aga_Khan_University_Anxiety_and_Depression_Scale
6. WHOQOL: Measuring Quality of Life. <https://www.who.int/tools/whoqol>
7. Saqib Lodhi, F., Raza, O., Montazeri, A., Nedjat, S., Yaseri, M., & Holakouie-Naieni, K. (2017). Psychometric properties of the Urdu version of the World Health Organization's quality of life questionnaire (WHOQOL-BREF). *Medical journal of the Islamic Republic of Iran*, 31, 129. <https://doi.org/10.14196/mjiri.31.129>
8. Essau, CA., Qadir, F., Maqsood, A., Sahar, N.U., Bukhtawar, N., Ozer, B.U., Pauli, R., & Gilvarry, C. (2017). Factor Structure of the Urdu Version of the Strengths and Difficulties Questionnaire in Pakistani Adolescents. *Acta Psychopathologica*, Voil 3, Issue1:4, pg 1-7. DOI:10.4172/2469-6676.100076
9. Khalid, S., Sultan, S., Dogar, I., (2001) Comparison of self-reporting questionnaire (SRQ) and Bradford Somatic Inventory as screening instruments for psychiatric morbidity in community settings in Pakistan. *Journal of the College of Physicians and Surgeons Pakistan*. 11 (4): 229-31
<https://pesquisa.bvsalud.org/portal/resource/pt/emr-57024>
10. Husain, N., Gater, R., Tomenson, B., & Creed, F. (2006) Comparison of the Personal Health Questionnaire and the Self Reporting Questionnaire in rural Pakistan. *Journal of Pakistan Medical Association*. 56:366 <https://www.jpmma.org.pk/PdfDownload/800>
11. Minhas FA, Mubbashar MH (1996) Validation of General Health Questionnaire in a primary care setting of Pakistan. *J Coll Physicians Surg Pak* 6:133-136
12. Khan, A., Shah, I. M., Khan, F., & Suhail, S., (2013). Reliability and Validity Assessment of 12 Items General Health Questionnaire (GHQ 12) among Pakistani University Teachers. *World Applied Sciences Journal* 24 (5): 603-608, ISSN 1818-4952 https://www.researchgate.net/publication/257253358_Reliability_and_Validity_Assessment_of_12_Items_General_Health_Questionnaire_GHQ_12_among_Pakistani_University_Teachers