



## RESEARCH ARTICLE

## Differences in the Effectiveness of SRQ (Self Reporting Questionnaire) and HRQLQ (Health-Related Quality of Life Questionnaire) with Malamoi Dialect for Early Detection of Mental Disorders Symptoms in Aimas District Residents of Sorong District in 2019

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### Abstract

Early detection tools for mental disorders can be one of the tools to overcome mental health problems in Indonesia, where there are still many patients with mental disorders who gets an incorrect diagnosis. This study aims to obtain the results of the analysis of differences in the effectiveness of the SRQ and HRQLQ questionnaires in the Aimas District residents of Sorong regency, with the characteristics of the respondents for each questionnaire respectively most are lazy (57.5% and 70%), with elementary school education (50% and 40%) and have jobs as laborers/farmers/fishermen (62.5%). Based on the result of data analysis correlation of Detection of Mental Disorders Symptoms with Question Type, it was concluded that there was a significant difference between the detection of mental disorders using the SRQ and HRQLQ questionnaires, with SRQ effectiveness levels higher than HRQLQ (SRQ's mean rank is 47.50 and HRQLQ at 33.50).

**Keywords:** *Self-reporting Questionnaire, Health-related Quality of Life Questionnaire, Mental Health, Malamoi Dialect.*

### Introduction

The high incidence of psychiatric disorders throughout the world is of particular concern to stakeholders associated with mental health policies. Prevalence of mental disorders according to WHO in 2007 in Yosep [1], around 450 million people in the world experience mental disorders, about 10% of adults experience mental disorders and 25% of the population will experience mental disorders when entering a certain age during his life, that age is there at the age of 18-21 years [2].

In Indonesia, the number of sufferers of mental health problems is quite high and tends to increase from year to year. In almost all parts of Indonesia and for decades, the population has experienced difficult times due to conflict, poverty, or natural disasters. A large number of Indonesian people experience mental suffering that varies from mild psychological distress to acute mental disorders.

Although mental disorders do not cause death directly but will cause sufferers to be unproductive and cause a burden to the patient's family and the surrounding community. According to the results of the Riskesdas survey in 2013, the national prevalence of Emotional Mental Disorders in Population  $\geq 15$  Years Old was 11.6% (based on *Self-Reported Questionnaire*). West Papua Province has a fairly large number and ranks the eighth province with 13.2% [3].

Oktarina & Praseyawati [4] said that 28% of Puskesmas visitors showed symptoms of mental health disorders, 90% could not be detected and obtained appropriate treatment. Therefore, there needs to be an evaluation of the efforts made by the government. The results of an analysis of research conducted by Djauhar [5] on the Study of Aimas District Function Area, Sorong Regency, West Papua Province shows that the Aimas district which

covers the physical aspects of the area's topography, demographic demography, socio-economy, and culture is very suitable to be developed into an urban area, previously known as a transmigration area. These changes can cause factors supporting mental disorders, both mental-emotional disorders, and severe mental disorders.

### Early Detection of Mental Disorders

Stuart's stress adaptation model illustrates the process of mental health problems by analyzing predisposing factors, precipitation, assessment of stressors, coping sources, and coping mechanisms used by individuals to produce constructive and destructive responses in the adaptive to the maladaptive range.

In mental health nursing to identify behavioral deviations using Stuart's stress adaptation model. Some screening instruments that are often used to detect general mental disorders in primary health care are:

- General Health Questionnaire-12 or GHQ-12 [6].

Several studies have shown that GHQ-12 can be used among teenagers, adults, and the elderly [7]. The response from the statement in GHQ-12 was chosen by comparing the current condition of the individual with normal circumstances. The response consists of 4 choices, which contain the sentence "less than usual" to "very more than usual". In scoring, GHQ-12 has 3 scoring methods, namely the bimodal method or the GHQ method, the Likert method, and the Chronic GHQ or CGHQ method. Goldberg as the compiler of GHQ suggested the GHQ or bimodal method as the GHQ-12 scoring standard.

This method has a score of 0 for the response column 1, 2, and a score of 1 for the response column 3, 4. Another method that can be used according to Goldberg is the Likert method with a score of 0, 1, 2, and 3. The last method, Chronic GHQ or CGHQ, created by Goodchild and Jones to anticipate the loss of data from patients with chronic disorders because they answer "the same as usual" on symptoms that have long suffered. The CGHQ method scores 0, 0, 1, 1 for positive items and 0, 1, 1, 1 for negative items. A positive item is an item that refers to a

healthy state and a negative item is an item that refers to a state of impairment [8].

- Strengths and Difficulties Questionnaire (SDQ) for the age of children
- Strengths and Difficulties Questionnaire (SDQ) for teens
- Self Reporting Questionnaire (SRQ) for adults.

SRQ is often used as a screening tool for mental disorders because the instrument is simple and the question is easily understood by someone who has an adult age level. In addition to these instruments, there are still other instruments that can be used to detect mental disorders.

- HRQLQ (Health-Related Quality of Life Questionnaire)

Health is often associated with a person's quality of life. For that, we need a tool to measure the quality of life so that individuals can assess how much quality of life in terms of health [9]. This instrument is often used also to measure physical and mental health. The questionnaire used in this study consisted of 14 questions with varied answer choices.

### A Brief History of the Malamoi Tribe and Language

According to Frits [10], Maladum is the original name of the city of Sorong according to the Moi Tribe since ancient times. Maladum consists of two vocabulary words Mala (place, mountain, or broad plateau) and Dum is a type of plant that resembles the galangal forest, in the language of Moi commonly called Dumlas. The city of Sorong to this day among the people of the Moi Tribe itself is still called the Maldives.

The Moi people who were in the villages when they wanted to go to the city, they still called the Malumas with the term Moi dialect "*Tusioo mladum*" (I went to Maladum). The Moi tribe is friendly; they welcome the Biak Numfor tribe who come to the Malamoi Region. Malamoi is a land that is rich in natural resources and is very strategic because it is a gateway for trade in the Papua region. The Malamoi tribe uses the Malamoi language and dialect in their daily lives.

This language was finally used not only by the Malamoi tribe but also by the people who came and lived in the Malamoi region. Researchers using the Malamoi dialect in this study aimed to facilitate the delivery of questions to residents in Aimas District in detecting the existence of symptoms of mental disorders.

**Methods**

The method of analysis used in this study is correlation analysis by conducting early detection using SRQ and HRQLQ. This design is used to study phenomena by providing treatment or manipulation on research subjects, to then study the effects of these treatments. The design used in this study was *cross sectional* in which the variables studied were observed at the same time. The populations in this study were residents of Mariat Pantai Village and Malasaum Village, Aimas District, Sorong

Regency in 2019, amounting to 990 inhabitants. While the sample that is considered to represent the population is determined by random cluster sampling (random sample) of 80 people divided into two groups of 40 people each. Criteria for inclusion of samples in this study are:

- Father, mother, or child of family members domiciled in Aimas District, Sorong Regency
- Malamoi family members
- The family can read and write
- Willing to be a respondent.

The results of data collection were then analyzed using the descriptive analysis in the form of frequency [11] and bivariate analysis to prove the research hypothesis using the Mann Whitney-U test [12].

**Results**

**Table 1: Distribution of respondents by gender, age, education and public citizen Aimas District in Sorong which detected early by SRQ and HRQLQ 2019 (n<sub>1</sub> = 40 and n<sub>2</sub> = 40)**

Characteristics	SRQ (n1 = 40)		HRQLQ(n2 = 40)	
	Frequency	Percentage	Frequency	Percentage
1. Gender				
a. Male	23	57.5	28	70
b. Female	17	42.5	12	30
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>
2. Age (Years)				
a. 20 - 30	6	15	3	7.5
b. 31 - 40	4	10	12	30.0
c. 41 - 50	8	20	7	17.5
d. 51 - 60	16	40	10	25
e. 61-70	6	15	8	20
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>
3. Education				
a. Higher Education	2	5.0	1	2.5
b. High school	13	32.5	12	30.5
c. Junior High School	2	5.0	6	15.0
d. Elementary School	20	50.0	16	40.0
e. No school	3	7.5	5	12.5
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>
4. Work				
a. Civil Servants / Private	1	2.5	0	0
b. Labor / Farmer / Fisherman	25	62.5	25	62.5
c. Does not work	14	35.0	15	37.0
<b>Total</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>100</b>

**Table 2: Distribution of respondents by Category Early Detection Results Using the SRQ and HRQLQ Questionnaire in Aimas District Residents in Sorong Regency 2019**

Early Detection	Frequency		Percentage	
	SRQ	HRQLQ	SRQ	HRQLQ
Detected	22	8	55	20
Not Detected	18	32	45	80
<b>Total</b>	<b>40</b>	<b>40</b>	<b>100</b>	<b>100</b>

**Table 3: The result of Kolmogorov-Smirnov test**

		Unstandardized Residual
N		40
Normal Parameters	Mean	0.0000000
	Std. Deviation	0.50319492
Most Extreme Differences	Absolute	0.358
	Positive	0.290
	Negative	-0.358
Kolmogorov-Smirnov Z		2.262
Asymp. Sig. (2-tailed)		0.000

Interpretation: not normal

**Table 4: Mann Whitney test results**

	Results
Mann-Whitney U	520.000
Wilcoxon W	1340.000
Z	-3.213
Asymp. Sig. (2-tailed)	0.001

## Discussion

### Characteristics of Respondents

There are similar characteristics in a group of citizens who do detection using SRQ and HRQLQ questionnaires, which are mostly male, have an elementary school educational background and have laborers / farmers / fishermen jobs. This is consistent with the theory according to WHO (2014) which states that individual characteristics are one of the factors that contribute to mental health and well-being [13]. Individual characteristics and behavior are related to emotional intelligence and social intelligence they have and are influenced by genetic factors.

Emotional intelligence is related to a person's nature and learning ability to deal with feelings and thoughts and manage himself in daily life. While social intelligence is the capacity to face the surrounding social world such as taking part in social activities, being responsible, or respecting the opinions of others.

Based on the results of Suyoko's research [14] about the Risk Factors associated with mental-emotional disorders in the elderly in DKI Jakarta, it shows that the proportion of mental-emotional disorders is greater in respondents with less education. In addition to characteristics, individual work also influences the risk of mental health

problems, where the social environment requires them to be positively involved in making a living for themselves and their families.

### Correlation between Questionnaire Types and Detection of Mental Disorders Symptoms

The results of the correlation analysis of the data for the detection of mental disorders with Questionnaire Types were Sig (2-tailed) values of  $0.001 < 0.05$ . Then the conclusion  $H_a$  accepted, meaning that there are significant differences between the detection of mental disorder symptoms using a questionnaire SRQ and HRQLQ. This is in line with the research results of Idaiani et al [15].

On Analysis of 20 Item *Self Reporting Questionnaire* in Indonesian Society which shows that the SRQ questionnaire developed by the WHO [13] is effectively used for screening for psychiatric disorders and for research purposes Basic Health Research 2007 [16] to assess the mental health of the Indonesian population. Several other factors influence the effectiveness of the SRQ questionnaire, for example, the environment when Aimas District residents answer the questionnaire given, the enumerator readiness factor in fostering a trusting relationship before data collection. The SRQ questionnaire consisted of 29 questions with

the results of the detection of psychiatric disorders consisting of indications of neurotic mental disorders, indications of the use of psycho-addictive substances, indications of psychotic symptoms, and the need for further treatment and indications of PTSD (Post Traumatic Stress Disorder) symptoms. In the implementation of this study, researchers divided the results of early detection into 2 categories, namely symptoms of mental disorders and mental symptoms were detected, both on the SRQ and HRQLQ questionnaires.

### **The Effectiveness of SRQ and HRQLQ for the Detection of Mental Symptoms**

Based on the results of the analysis of the effectiveness of SRQ and HRQLQ, the Sig (2-tailed) value of 0.001 <0.05; meaning that there are significant differences in early detection of symptoms of mental disorders using SRQ and HRQLQ. SRQ and HRQLQ can be used as screening instruments to detect common mental disorders in primary health care. Self-Reporting Questionnaire (SRQ) is a questionnaire developed by the World Health Organization (WHO) for screening for psychiatric disorders and research purposes.

The Basic Health Research 2007 uses SRQ to assess the mental health of the Indonesian population [15]. Even though this questionnaire was valid and reliable it was used as a measurement of mental-emotional disorders or distress, the researcher continued to analyze the questions that formed the form of this questionnaire because it had been modified in the form of SRQ in the Malamo dialect. The results of the validity and reliability test showed that the 29 questions in the SRQ questionnaire were declared valid and reliable.

Whereas for questions in HRQLQ out of 14 questions tested only 11 were declared valid. The results of the validity and reliability test are in line with research conducted by Idaiani et al. [15] on the Analysis of 20 Item Self Reporting Questionnaire in Indonesian Society which states that the most symptoms experienced by the community are headache, fatigue, difficulty sleeping, insomnia in the stomach and no appetite. Groups that tend to experience more emotional mental disorders include old age, women, low education, not working, living in rural areas and have low per capita household income levels. Idaiani

also believes that symptoms that are closely related or make a major contribution to mental-emotional disorders include not being able to do things that are useful in life have thoughts to end life, feel worthless, daily work is disrupted and find it difficult to enjoy activities daily. For questions in this study still need to be tested for validity and reliability with a larger sample.

The HRQLQ Questionnaire is a questionnaire used to evaluate the symptoms of physical and mental health disorders that are used by the Psychosocial Support Team of the Faculty of Nursing, the University of Indonesia in collaboration with the Indonesian Mental Health Nurses Association.

It is hoped that early detection in the form of SRQ and HRQLQ tools in the Malamo dialect can improve government programs, especially the Ministry of Health in the field of mental health, to prevent mental disorders and curate clients early on for clients who have experienced mental disorders.

Clients who have been detected early can receive treatment from various places, including acute mental hospitals, long-term mental hospitals, and community-based programs. The level of care depends on the severity of symptoms and the availability of support from family and society.

If the client needs treatment, a Short-Term Psychiatric Hospitalization is performed to manage acute symptoms and provide a safe and structured environment and various treatments, including:

- Pharmacological treatment with antipsychotic medication
- Environmental management
- Supporting therapy, which is generally oriented towards reality, with a cognitive-behavioral approach
- Educational psychology for clients and their families
- Discharge plans from the hospital to ensure continuity of care

In addition to short-term hospitalization, clients can be treated with long-term Psychiatric Hospitalization. Long-term hospitalization is given to clients with persistent symptoms that can endanger themselves or others. The aim is to stabilize

and move the client as quickly as possible to a less restrictive environment.

Another treatment for clients with mental disorders is Community-based Medicine providing comprehensive services. These services are in the form of:

- Relief housing includes transitional housing; cooperative life arrangements; crisis community residence; adoptive childcare; and board and care home.
- The program *day treatment* provides group therapy, social skills training, treatment management, and socialization, and recreation.
- Supporting therapy involves a case manager and several therapists for the client and his family.
- Psychoeducation program for clients, their families, and community groups.

## Conclusion

There are significant differences in SRQ (Self-Reporting Questionnaire) and HRQLQ (Health-Related Quality of Life Questionnaire) with a level of effectiveness of SRQ higher than HRQLQ

## References

1. Yosep I (2013) *Psychiatric Nursing (Keperawatan Jiwa)*. Bandung: PT Refika Aditama.
2. Kurniawan Y, Sulistyarini I (2016) *Sehati Community [Mental and Heart Health] As a Community Based Mental Health Intervention (Komunitas Sehati [Sehat Jiwa dan Hati] Sebagai Intervensi Kesehatan Mental Berbasis Masyarakat)*. *INSAN Jurnal Psikologi dan Kesehatan Mental*, 1(2):112-124.
3. MoH-RI (2013) *Basic Health Research (Riset Kesehatan Dasar / Riskesdas)*. Jakarta: MoH-RI.
4. Oktarina, Praseyawati II (2016) *Efforts to Improve the Utilization of Psychiatric Health Services at Manukan Kulon Health Center, Surabaya (Upaya Meningkatkan Pemanfaatan Pelayanan Kesehatan Jiwa di Puskesmas Manukan Kulon Surabaya)*. *Buletin Penelitian Sistem Kesehatan*, 11(2):172-183.
5. Djauhar NA (2006) *Study on the Regional Function of Aimas District, Sorong Regency, West Papua Province (Kajian Fungsi Kawasan Distrik Aimas Kabupaten Sorong Propinsi Papua Barat)*. Bandung: Unisba Repository.
6. Schmitz N, Kruse J, Heckrath C, Alberti L, Tress W (1999) *Diagnosing mental disorders in primary care: The General Health Questionnaire (GHQ) and the Symptom Check List (SCL-90) as screening instruments*. *Social Psychiatry and Psychiatric Epidemiology*, 34: 360-366.
7. Kawada T, Otsuka T, Inagaki H, Wakayama Y, Katsumata M, Li Q, Li YJ (2011) *Relationship among lifestyles, aging and psychological wellbeing using the General Health Questionnaire 12-items in Japanese working men*. *Aging Male*.
8. Goldberg DP, Williams P (1988) *A User's Guide to the General Health Questionnaire*. Windsor, UK: NFER-Nelson .
9. Litwin MS, Lubeck DP, Stoddard ML, Pasta DJ, Flanders SC, Henning JM (2001) *Quality of life before death in men with prostate cancer: results from the CaPSURE database*. *J Urol.*, 165: 871-875.
10. Frits S (2018) *History of the original name of the city of Sorong according to the Moi tribe (Sejarah Nama Asli Kota Sorong Menurut Suku Moi)*. Sorong.
11. Suparji S, Nugroho HSW, Martiningsih W *Tips for Distinguishing Nominal and Ordinal Scale Data*. *AloHA International Journal of Multidisciplinary Advancement*, 1(6).
12. Nugroho (2019) *Difference Test for Two Sample Groups (Uji Perbedaan untuk Dua Kelompok Sampel)*. Ponorogo: FORIKES.
13. WHO (2014) *The World Health Organization Quality of Life (WHOQOL)*. Geneva: World Health Organization
14. Suyoko (2012) *Risk Factors Associated with Elderly Mental Emotional Disorders in DKI Jakarta (Faktor-faktor Resiko yang Berhubungan dengan Gangguan Mental Emosional pada Lansia di DKI Jakarta)*. Depok: FKM-UI.
15. Idaiani S, Suhardi, Kristanto AY (2009) *Analysis of Symptoms of Indonesian Population Mental Emotional Disorders (Analisis Gejala Gangguan Mental Emosional Penduduk Indonesia)*. *Majalah Kedokteran Indonesia*, 59(10):473-479
16. MoH-RI (2007) *Basic Health Research (Riset Kesehatan Dasar / Riskesdas)*. Jakarta: MoH-RI.