Characteristic of Anxiety Levels and Risk Factors Among Fishermen with Hypertension in Coastal Lampung

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ABSTRACT: Anxiety disorders are mental health problems that frequently affect vulnerable groups. In Indonesia, the prevalence of anxiety disorders is 6.9% among individuals aged 55–64 years, 9.7% among those aged 65–74 years, and 13.4% among those over 75 years (Ministry of Health, 2020). This study aims to provide an overview of anxiety levels among hypertensive fishermen. A quantitative observational study was conducted using a cross-sectional design. The study was carried out from February to May 2025 in the coastal area of Lampung, specifically in the working area of the Sukaraja Health Center, Bandar Lampung City. The study population consisted of 100 hypertensive fishermen. Anxiety levels were measured using the Zung Self-Rating Anxiety Scale (ZSAS), and blood pressure was also measured. The results showed that 60 fishermen (60%) did not experience anxiety (32%) had mild anxiety, (6%) had moderate anxiety, and (2%) experienced severe anxiety. Risk factors associated with mild anxiety included adult age (37.6%), low education (35.9%), low income (27.8%), family support (32.1%), working morning shifts (34,6%), poor sleep quality (35.8%), exposure to bad weather (41.2%), social conflict (41.8%), and uncontrolled hypertension treatment (30.1%).

KEYWORDS: Anxiety, Fishermen, Hypertension

INTRODUCTION

Anxiety disorders are one of the common mental disorders in the global population. In the Global Burden of Disease, 2019 some regions have a higher prevalence of anxiety disorders. Latin America and Caribbean region. Agency for Research and Development Health Research and Development Agency (Balitbangkes) of the Ministry of Health stated that the rate of anxiety disorders in Indonesia increased by 6.8% at the end of 2021 compared to the previous year. Based on data from the Ministry of Health throughout the year 2020 people Indonesia as many as 18,373 people experienced disorder more than 23,000 experienced depression and as many as 1,193 people attempted suicide. The fishermen group is also classified as a group that has a vulnerability to non-communicable diseases suffered by fishermen, including hypertension, joint pain, emotional disorders, diabetes mellitus (DM), stroke and coronary heart disease (CHD).

For the fishermen group, many of them do not realize that some of them suffer from hypertension because they are closely related to several risk factors, including high coffee consumption, smoking, sodium consumption from salted sea products, irregular diet, and so on. According to Sholikhah *et al*, 2021, anxiety is one of the risk factors for increasing hypertension and has a four-time risk of suffering from hypertension.

Anxiety is influenced by intrinsic and extrinsic factors. Intrinsic factors include: age, gender and experience. While extrinsic factors include education, occupation and environmental conditions (Donsu, 2017). Anxiety that may be experienced by individuals can be detected by physical changes such as increased blood pressure, pulse and respiration, uncontrolled hand movements, moist palms, restlessness, asking the same questions repeatedly and difficulty sleeping (Carpenito, 2019).

The behavior of people who predominantly consume high sodium foods, sleep poorly, smoking behavior, drinking alcohol and drinking coffee, especially in fishermen, as well as due to economic demands that are always increasing but are not always supported by the condition of the sea which is where fishermen make a living so that it has an impact on unmet needs which are stressors in coastal communities. The purpose of this study was to see a description of the level and risk factors for anxiety in hypertensive fishermen in the Lampung Coastal region.

METHODS

This study employed a quantitative observational design with a cross-sectional approach. The population consisted of 100 hypertensive fishermen. A probability sampling technique was used. The study was conducted from February to May 2025 in the coastal area of Lampung, within the working area of the Sukaraja Health Center, Bandar Lampung City. Data collection involved both primary and secondary data, obtained directly through interviews and questionnaire administration. Anxiety levels were assessed using the Zung Self-Rating Anxiety Scale (ZSAS), and blood pressure measurements were also conducted.

RESULTS

This research has been conducted in the coastal area of Lampung, can be seen in tables 1 and II below.

Table I Distribution of Anxiety Level

Anxiety level	frekuency	Percentage (%)
Not anxious	60	60,0%
Mild anxiety	32	32,0%
Mild anxiety	6	6,0%
Severe anxiety	2	2,0%

Table II. Frequency Distribution of Anxiety Level of Fishermen with Hypertension in Lampung Coastal Area

Category		Not anxious		Mild anxiety		Mild anxiety		Severe anxiety		Total
		n	%	n	%	n	%	n	%	n
Age	Old age (>60Th)	14	93,3%	1	6,7%	0	0,0%	0	0,0%	15
	adulhood (30-59 th)	45	52,9%	32	37,6%	6	7,1%	2	2,4%	85
Education	Low (< junior Hs)	44	56,4%	28	35,9%	4	5,1%	2	2,6%	78
	High (> junior Hs)	15	68,2%	5	22,7%	2	9,1%	0	0,0%	22
Income	Low income <Rp.3.305.367	47	65,3%	20	27,8%	3	4,2%	2	2,8%	72
	High income Rp.>3.305.367	12	42,9%	13	46,4%	3	10,7%	0	0,0%	28
Family support	Not suppported	9	47.4%	7	36,8%	2	10,55	1	5,3%	19
	Supported	50	61,7%	26	32,1%	4	4,9%	1	1,2%	81
Work shift	Night	29	60,4%	15	31,3%	4	8,3%	0	0,0%	48
	morning	30	57,7%	18	34,6%	2	3,8%	2	3,8%	52
Sleep quality	bad	45	55,6	29	35,8%	5	6,2%	2	2,5%	81
	good	14	73,7%	4	21,1%	1	5,3%	0	0,0%	19
Bad weather	ever	24	47,1%	21	41,2%	4	7,8%	2	3,9%	51
	never	59	59,0%	33	33,0%	6	6,0%	2	2,0%	49
Sosial conflict	ever	20	46,5%	21	48,8%	1	2,3%	1	2,3%	43
	Never	39	68,4%	12	21,1%	5	8,8%	1	1,8%	57
History of hypertension treatment	Uncontrolled	57	61,3%	28	30,1%	6	6,5%	2	2,2%	93
	Controlled	2	28,6	5	71,4	0	0,0%	0	0,0%	7

DISCUSSION

The results showed that out of 100 fishermen respondents, as many as 40% experienced anxiety with details of 32% mild anxiety 6% moderate anxiety, and 2% severe anxiety based on the Zung Self-Rating Anxiety Scale (ZSAS) . Meanwhile, 60% of respondents did not experienced anxiety. This finding shows that although the majority of hypertensive fishermen did not experience anxiety, there was still a significant proportion (40%) who experienced anxiety in various levels. This finding is in line with previous studies showing that people with with hypertension have a higher risk of experiencing anxiety disorders, which can worsen can worsen blood pressure control and reduce quality of life (Shinn et al., 2020).

Based on the risk factors, the most age category is adulthood (30-59 years) totaling 85 people (85%) the majority experienced a mild level of anxiety as many as 32 people (37.6%). This shows that adulthood is the most vulnerable group to psychological stress. This group is a phase of life with economic, social, and family responsibilities. Uncertainty income from fishing, weather risks, family burdens, and awareness of hypertensive disease are the main triggers of stress and anxiety. This supports previous findings that anxiety is experienced more by the productive productive age group due to economic pressure, family responsibilities, and job uncertainty (Nugroho and Sriatun, 2020).

In the education level, the most in education (not graduated from elementary school, elementary school and junior high school). The majority of respondents experienced anxiety level of 28 people (35.9%). Low education levels are often associated with low health literacy which has an impact on the difficulty of understanding disease conditions and managing stress (Ministry of Health, 2018). Individuals with higher education tend to have better cognitive adaptability in facing health and psychosocial stress (Setiawan, 2020).

Income level shows the most respondents low income level as many as 72 respondents, the majority of whom experienced mild anxiety as many as 20 people (27.8%). Higher income income is not always in line with low anxiety. This can be explained by a greater economic burden, a more demanding lifestyle, or fear of losing a source of income (Putri and Iskandar, 2021).

Risk factors for family support showed that the most respondents family support as many as 81 respondents (81%) who experienced a mild level of anxiety as many as 26 people (32.1%). anxiety level as many as 26 people (32.1%). Respondents who received Respondents who received support showed a lower proportion of anxiety. Family The family serves as a source of emotional, informational, and practical assistance that strengthens the individual's ability to deal with stress (fitriana and yuliana 2020).

The data obtained from the quality of sleep showed that the most respondents were bad sleep quality as many as 81 people (81%) the majority experienced mild anxiety of 29 people (35.8%). Based on field conditions fishermen often fishermen often stay up late and have irregular sleeping hours. Irregular sleep causes the body to be unable to recover from physical and mental stressors, thus increasing the tendency of anxiety. the study by Widiasih and Novayelinda (2020) showed that poor sleep quality had a significant has a significant relationship with increased anxiety levels.

The work shift risk factor shows the most respondents, namely the morning work shift, as many as 52 people (52%) who experienced mild anxiety levels as many as 18 people (34.6%). Morning workers may be more exposed to the direct pressure from daily catches, social interactions, and family routines. While night shifts tend to be quieter but are prone to disrupting circadian rhythms. Ningsih and Widyawati, 2020 mentioned that although night shifts are often associated with fatigue and sleep disturbances, they do not always have an impact on anxiety if accompanied by adaptation.

Majority of bad weather respondents showed that the most 51 people (51%) had bad weather and experienced mild anxiety as many as 21 people (41,2%). Extreme weather at sea is a source of severe stress because it is directly related to safety risks and loss of livelihood. evere weather not only has a physical impact but is also a source of economic anxiety due to reduced opportunities to go to sea (Arifin et al., 2019). Wahyuni et al., 2021 noted that fishers are particularly sensitive to changes in the weather as work risks increase dramatically in adverse natural conditions, which has an impact on psychological conditions.

In social conflict, 43 respondents had experienced social conflict and the majority experienced mild anxiety as many as 21 people (41.8%). In fishermen's lives, an inharmonious social environment can be a major trigger of emotional distress and psychological disorders. the main trigger of emotional distress and psychological disorders. In contrast, those social conflict in the neighborhood also decreases the sense of security and increases psychological distress (Saputra and Adi, 2021).

The data obtained from the history of hypertension treatment showed that the respondents most were uncontrolled hypertension treatment history as many as 93% people (93%) and experienced mild anxiety as many as 28 people (30.1%). Most of them may not yet have full awareness or not yet understand the risk of complications of hypertension, so they do not raise excessive anxiety.

However, there was also a small proportion who experienced moderate and severe anxiety (8.7% in total), which may be related to their impaired physical condition or fear of hypertension complications. Research by Andriyani et al., 2020 mentioned that patients who are not compliant or irregular in treatment tend to have lower anxiety because due to lack of risk awareness, but are at high risk of real physical complications.

CONCLUSION

This study shows that the level of anxiety in hypertensive fishermen in the coastal area of Lampung, Sukaraja Health Center working area From a total of 100 respondents. Respondents total of (60%) did not experience anxiety, (32%) experienced anxiety. mild anxiety, (6%) experienced temporary anxiety, and (2%) experienced severe anxiety. As for the risk factors for anxiety, the majority respondents experienced mild anxiety in the factors of mature age, low education, low income, family support, morning work shifts, poor sleep quality, bad weather, ever experienced conflict, and a history of uncontrolled hypertension.

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