

## **Health Anxiety in Young Indonesian Adults: A Preliminary Study**

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### **Abstract**

In young adulthood most people begin to realize the meaning of health. The amount of costs to be incurred for the treatment of a person when they are suffering from a disease also affects a person's health concern. According to Taylor and Asmundson (2004), most people feel anxious about their health. Anxiety about health can differ from one person to another. Through this study a general overview of health anxiety for young adults in Indonesia, especially in Jakarta, can be seen,.

Participants in this study consisted of 263 people, aged 20-40 years ( $M = 27.23$  ,  $SD = 5.50$ ). Sociodemographic variables include ages, gender, and marital status, level of education, employment status, and ethnicity. Researcher used Short Health Anxiety Inventory (SHAI; Salkovskis, Rimes, & Warwick, 2002), Patient Health Questionnaire Somatic Symptom Severity Scale (PHQ-15; Kroenke, Spitzer, & William, 2002). For data analysis, researcher used The Pearson Product Moment Correlation. The results showed significant correlation between health anxiety and somatic symptoms.

**Keywords:** young adulthood, health anxiety, somatic symptom

## Introduction

There are various methods for people to keep good health. For example, by taking vitamins. There are a variety of multi-vitamins sold in the Indonesian market. The advertisements on television show the importance of vitamins in human life. Through these ads, one is given information that the body's resistance to disease can be prevented by consuming vitamins offered. Daily life activity, like work and spend more time on Jakarta congestion, and others seem to cause some people to feel the need for the presence of daily intake other than food in consumption of vitamins. By taking vitamins most people expect that a healthy body is well preserved. This is certainly to avoid diseases that can lead to disruption of daily activities such as those mentioned above. Another way to improve health was by avoiding smoking and alcohol use, healthy diet, and exercise. In Indonesia, many gyms can be found malls that are close to office complexes. Many young adults join the gym and exercise before or after work hours as well as eating a healthy diet. Eating a healthy diet and exercising are health behaviors aimed to preventing disease (Kasl & Cobb, see Ogden, 2007).

In young adulthood (aged 20 to 40), a person begins to realize the meaning of their health when they get health problems. Health issues especially pertinent to young adults are addressed, with emphasis on factors that influence the health and fitness of people in this age category. Behavior patterns such as diet, exercise, smoking, and drinking alcohol can affect health. Other health factors include socioeconomic status, level of education, gender and ethnic status (Papalia, Olds, & Feldman, 2001). After completing formal education level of high school, college or university, mostly young adults entering the work live. It explained that young adulthood is a time to reach peak performance. With so many activities undertaken during this period, it is possible for people in young adulthood health impaired. According to Santrock (2008) accidents, suicide, and homicide are the leading causes of death among adults aged 20 to 34. Between 35 and 44 accidents, cancer, and heart disease are the top 3 causes of death. AIDS is the seventh leading cause of death between ages 20 and 24, sixth for adults between 25 and 34, and fifth for adults between 35 and 44. The amount of costs to be incurred for the treatment of a person when he is suffering from a disease also affects a person's health anxiety.

Anxiety, as an emotional factor can predicted health behavior. Many people feel anxious about their health (Taylor & Asmundson, 2004). Worrying health condition is a form of anxiety for the health or better known as health anxiety (Furer, Walker & Stein, 2007). It explained that this anxiety varies, there are appropriate and some are excessive or maladaptive. With a sense of anxiety for his health, a person can be motivated to seek proper medical treatment. For example, someone who is experiencing shortness of breath with a history of asthma, of course, will prepare him for the use of drugs associated with the illness he suffered. Maladaptive anxiety occurs when anxiety is not in proportion to the perceived medical risks faced. Low anxiety when facing a high risk and high anxiety when faced with a low risk can be called maladaptive anxiety (Taylor & Asmundson, 2004). For example, excessive anxiety about something that seems minor, like spots or itching.

Health anxiety is fear and belief, based on interpretation, or perhaps more often misinterpretation of bodily sign and symptoms as being indicative of a seious illness (Luckcock & Morley, 1996; Warwick, 1989 see Asmundson, Taylor, & Cox, 2001). The sign or symptoms may extend from the vague and generalized to specific. Most often include pain, gastrointestinal, and cardiorespiratory (Barsky & Klerman, 1983). Somatic symptoms are a frequent presentation of distress in general practice, and up to 30% of common somatic symptoms go undiagnosed (Kroenke, Spitzer, & Williams, 2002; Clarke, Piterman, & Austin, 2008).

Anxiety about health consists of three major aspects. There are health worries, sensitivity to something or unusual changes in the body, and fear of the consequences of a disease (Salkovskis, Rimes, & Warwick, 2002). Health anxiety can be influenced by several factors, including genetics, family background, life events that cause stress, socio-cultural aspects, the belief about the illness, cultural differences, as well as the media information about some illnesses (Taylor & Asmundson, 2002). Hypochondriasis is often associated with high level of anxiety about health or symptoms. However, hypochondriasis occurs in someone who has a fear that he was suffering from a serious disease based only mild symptoms in the body. In *Diagnosis and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013), this disorder can be diagnosed as somatic symptom disorder or illness anxiety disorder. These disorders can be classified in maladaptive anxiety on health. Anxiety about health can differ from one person to another. Through this study it can be seen the description of health anxiety in young Indonesian adults, especially in Jakarta and the correlation of health anxiety with their subjective somatic symptoms.

### **Method**

The participants were young Indonesian adults, with aged between 20-40 years located in Jakarta, Indonesia (N = 263; M = 27.23, SD = 5.50). The participants filled out the questionnaires anonymously. The whole procedures took approximately 15-20 minutes. The technique sampling was convenience sampling.

The researcher used two questionnaires. First, Short Health Anxiety Inventory (SHAI; Salkovskis, Rimes, & Warwick, 2002). The inventory contains 18 items that assess health anxiety on 4 point scale. A higher score means higher levels of health related anxiety. Only the total scores was used in the present study. Cronbach alpha coefficients was 0.84.

Second, Patient Health Questionnaire Somatic Symptom Severity Scale (PHQ-15; Kroenke, Spitzer, & William, 2002). There are 15 item to measure the prevalence of the most common body symptoms that participants experienced in the last 4 weeks on a 3 point scale. Score 1 for not bothered at all to 3 for bothered a lot. Cronbach alpha coefficients was 0.90.

Additionally, the participants filled the demographic includes ages, gender, marital status, level of education, employment status, and ethnicity. The participants completed the questionnaire individually. Participants were given the questionnaire and asked to read the instruction of questionnaire. Then they were told that the answers were only used for this research and were confidential. So, they were assured that he/she can freely give responses as they felt in the questionnaire. Approximately they took 15-20 minutes to complete.

### **Data Analysis**

The data were analyzed using SPSS 17.0. Questionnaire total scores were calculated as sums of item scores. Participants gender and other group were coded into binary variables (1 = male, 2 = female; 1 = age 20-30, 2 = age 30-40; 1 = healthy. Not having illness, 2 = having illness, 1 = having family without serious illness, 2 = having family with serious illness). The data was collected and analyzed by Pearson Product Moment Correlation and Mann-Whitney U.

### **Results**

The 263 participants aged between 20 – 40 years old ( $M=27, 23, SD= 5, 5$ ). There are 123 men and 140 women. The participants last education were varies from junior high school to master degree. SHAI obtained 12.63 for the mean 7.327 for the SD. The lowest score was 0 and the highest score was 35. The PHQ-15 obtained 10.18 for the mean and  $SD=6.783$ . The lowest score was 0 and the highest score was 30. The frequencies and percentages from each somatic symptoms found that headaches was the common symptoms in young Indonesian adults, especially in Jakarta.

**Table 1. The frequencies and percentages of the somatic symptoms**

Somatic Symptoms	Frequencies	Percentages
Stomach pain	161	61%
Back pain	176	67%
Pain in your arms, legs, or joints (knees, hips, etc.)	152	58%
Menstrual cramps or other problems with your periods*	103	74%
Headaches	185	70%
Chest pain	122	46%
Dizziness	168	64%
Fainting spells	87	33%
Feeling your heart pound or race	111	42%
Shortness of breath	99	38%
Pain or problems during sexual intercourse	56	21%
Constipation, loose bowels, or diarrhea	131	50%
Nausea, gas, or indigestion	161	61%
Feeling tired or having low energy	187	71%
Trouble sleeping	149	57%

\*women only

## Correlations

**Table 2. Correlation between health anxiety and somatic symptoms**

	SHAI	PHQ-15
SHAI	1	.286**

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The result showed significant correlation between health anxiety and somatic symptoms.

## Additional Data Analysis

**Table 3. One-Sample Kolmogorov-Smirnov Test**

		SHAI	PHQ
N		263	263
Normal Parameters <sup>a,b</sup>	Mean	12.6274	10.1787
	Std. Deviation	7.32701	6.78306
Most Extreme Differences	Absolute	.114	.154
	Positive	.114	.154
	Negative	-.066	-.077
Kolmogorov-Smirnov Z		1.847	2.505
Asymp. Sig. (2-tailed)		.002	.000

a. Test distribution is Normal.

b. Calculated from data.

Mann-Whitney test is a nonparametric test that allows two groups or conditions or treatments to be compared without making the assumption that values are normally distributed. In the table 4 showed that assymp. Sig. (2-tailed) SHAI  $0.002 < 0.05$  and PHQ  $0.000 < 0.05$ .

**Table 4. Mean Rank and Sum of Ranks**

Measure	Variable	Mean Rank	Sum of Ranks
Gender			
SHAI	Male	133.68	16443.00
	Female	130.52	18273.00
PHQ	Male	128.41	15794.50
	Female	135.15	18921.50
Age			
SHAI	20-29 years	52.40	2987.00
	30-40 years	62.60	3568.00
PHQ	20-29 years	54.24	3091.50
	30-40 years	60.76	3463.50
Illness status			
SHAI	Healthy	23.30	536.00
	Having illness	23.70	545.00
PHQ	Healthy	19.78	455.00
	Having illness	27.22	626.00
Family Serious Illness Status			
SHAI	Family without serious illness	62.65	4260.50
	Family with serious illness	74.35	5055.50
PHQ	Family without serious illness	68.68	4670.50
	Family with serious illness	68.32	4645.50

**Table 5. Mann-Whitney U Grouping Variable: Gender, Age, Illness, and Family with Serious Illness**

Variable	SHAI	PHQ
Gender		
Mann-Whitney U	8403.000	8168.500
Wilcoxon W	18273.000	15794.500
Z	-.337	-.719
Asymp. Sig. (2-tailed)	.736	.472
Age		
Mann-Whitney U	1334.000	1438.500
Wilcoxon W	2987.000	3091.500
Z	-1.649	-1.056
Asymp. Sig. (2-tailed)	.099	.291
Illness Status		
Mann-Whitney U	260.000	179.000
Wilcoxon W	536.000	455.000
Z	-.099	-1.884
Asymp. Sig. (2-tailed)	.921	.060
Family Serious Illness Status		
Mann-Whitney U	1914,500	2299,500
Wilcoxon W	4260,500	4645,500
Z	-1,732	-,055
Asymp. Sig. (2-tailed)	.083	.957

In additional analysis there is no significant differences between men and women in health anxiety ( $0.736 > 0.05$ ) and somatic symptoms ( $0.472 > 0.05$ ). Also there is no significant differences between age 20-29 years and age 30-40 years in health anxiety ( $0.099 > 0.05$ ) and somatic symptoms ( $0.291 > 0.05$ ). There is no significant differences between healthy status (not having illness) and having illness in health anxiety ( $0.921 > 0.05$ ) and somatic symptoms ( $0.060 > 0.05$ ). Similar with family illness status, between having family without serious illness and having family with serious illness, there is no significant differences in health anxiety ( $0.083 > 0.05$ ) and somatic symptoms ( $0.957 > 0.05$ ).

### Conclusion and Discussion

This research showed that the higher level of health anxiety, the higher level of subjective somatic symptoms. Symptoms of minor ailments can lead to disproportionate health anxiety if the person overestimates the seriousness of the sensations. It is quite common for health-anxious people to misinterpret these sensations or symptoms as indicators of a disease (Taylor & Asmundson, 2004).

Some studies showed women more feel anxious about their health than men (Faravelli, et al., 1997; Gumbiner & Flowers, 1997; Hernandez & Kellner, 1992; see Asmundson, et al., 2001). This research find different result. There is no significant differences between men and women in health anxiety and also somatic symptoms. The fact that women are more responsive to most potential health threats than men may provide a basis for the stereotype (Shumaker & Smith, 1994; Wingard, Cohn, Cirillo, Cohen, & Kaplan, 1992 in Asmundson, et al., 2001).

Additional analysis from this research found that headaches (70%), feeling tired/having low energy (71%), back pain (67%), and dizziness (64%) were common subjective somatic symptoms in young adulthood. In addition, menstrual problem (74%) was the common somatic symptoms in women. However, young adulthood is the healthiest time of life with fewer colds and respiratory problems than in childhood and few chronic health problems. According to

Santrock (2008) it is a good time to promote good health like eating habits, regular exercise, and diet.

The differences in health anxiety between age 20-30 and age 30-40 did not showed that when getting older, young adults can worry and anxious more about their health. Also the somatic symptoms did not showed any differences.

Another result showed that when young adulthood having an illness during completed the questionnaire (like headaches, inflammation of nasal sinus, tumor, diabetes, stomach pain, and diarrhea), more somatic complaints appeared. During illness people would showed many somatic complaints because of the illness, but the differences were not significant. The health anxiety also did not showed any differences.

The study about health anxiety and somatic symptoms were found to be connected to modern health worries (Freyler, Kohegyi, Koteles, Kokonyei, & Bardos, 2013). Typical representatives of modern health worries are concerns about negative effects of chemical and biological agents, of various kinds of environmental pollution, of tainted food, or of electromagnetic radiation. These worries exaggerated and maintained by stories published in mass media (Petrie et al., 2001). The modern health worries should be considered in the further research.

The participants in this research were not from medical or clinical setting. To draw the conclusion about hypochondriasis tendencies should be considered carefully. Further research should considered by doing deep interview toward the person who had high level of health anxiety and somatic symptoms.

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