# Gender Differences and the Meaning of Life among People Living with HIV/AIDS: A Cross-Sectional Study

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Abstract--- Meaning of life is an important term for people living with Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome (HIV/AIDS). Meaning of life has a correlation with quality of life. However, inconsistent research results on the meaning of life based on gender were found. This study aimed to analyze the gender difference in reference to the meaning of life among people living with HIV/AIDS. A descriptive analytical comparative study conducted with a cross-sectional approach was used. People living with HIV/AIDS older than 17 years old who were mentally healthy were enrolled in the study. Snowball sampling was performed to recruit 133 respondents. There were 69 females and 64 males enrolled in this study. Meaning of life was assessed using 10 questions through a meaning of life questionnaire. The questionnaire validity was in the range 0.60 to 0.79 and the questionnaire reliability was in the range of 0.713 to 0.798. The Mann-Whitney test was used to analyze the gender difference in relation to meaning of life. The range in age was 17 to 55 years old (mean [SD] age: 35.2[8.4]). The majority of the respondents were married and lived together with their spouse (41%), had graduated from senior high school (64%), worked in a private institution/office (57%), had 1-3 years length of time pass since diagnosis (43%), and their monthly income was in the range of 1.800.000 - 3.000.000 Indonesian Rupiah (48%). There was a difference in meaning of life based on gender among the people living with HIV/AIDS in Surabaya (p: 0.03; mean in females: 60.01; mean in males: 74.53). This study, in summary, has discovered that men are more likely to find there to be a meaning of life compared to women. Health care providers should discuss and address the existence the gender difference among people living with HIV/AIDS.

Keywords--- Meaning of Life; Gender; People Living with HIV/AIDS

# I. INTRODUCTION

Meaning in life is an important term for people living with HIV/AIDS. The meaning of life gives special value to someone. Happiness will be achieved when the meaningfulness of life is fulfilled. The meaning of life will be felt to be useful, valuable and meaningful when the desires of life are fulfilled [1]. Meaning of life is an important factor affecting the quality of life of terminal patients [2]. People who have high meaning of life tend to have a better quality of life [3], [4]. The meaningfulness of life is expressed by the desire to pursue one's life goals. This will help people living with HIV/AIDS (PLWHA) to overcome any difficulties and to move on with their life [5]. Conversely, unfulfilled meaning of life will be

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manifest as feeling that life is useless [1]. A previous study explained that some PLWHA consider their lives to be meaningless because of their poor health [5]. Physical and psychological problems can obstruct the meaning of life [6]. It can cause depression [6] and lead to the development of health problems [7] among chronic disease patients. However, the meaning of life is also a protective factor concerning psychological well-being [8]. The meaning of life is a buffer when facing adversities regarding physical and psychological health problems [4]. Both men and women living with HIV/AIDS have to achieve a better meaning of life to reach better health-related quality of life [9].

The Joint United Nations Program on HIV and AIDS (UNAIDS) reported that by the end of 2018, the number of PLWHA in the world had reached 37.9 million. There were 1.7 million new HIV infections and 770,000 PLWHA reported to have died of AIDS [10]. In Indonesia, based on the final report of June 2019, the cumulative number of people living with HIV from 2005 to 2019 was 349,882 people [11]. In April-June 2019, new infected HIV people totaled 11,519 and new AIDS cases totaled 1,463 people [11]. The distribution of people living with HIV based on gender shows that there are twice as many males with HIV as females. In addition, compared to January-March 2019, the number of people living with AIDS decreased from 1,536 people to 1,463 people [11]. This data shows that PLWHA in Indonesia have a better quality of life. Improvements in the quality of life are one of the keys points for PLWHA to maintain their CD4+ T lymphocyte cell count and to suppress the HIV RNA viral load [12]. Research related to the factors that affect the quality of life among PLWHA has been widely carried out. The meaning of life is one of the factors that affect quality of life. Another study indicated that patients who experience high levels of meaning [13]. Research related to the meaning of life was conducted among 74 PLWHA. The mean value of the meaning of life was 100 (in the score range of 20-140) with an SD value of 19.41 [14]. Likewise, another research was conducted among 125 respondents and the results showed that the mean value of the meaning of life was 5.44 (in the range of scores 1 to 7) with an SD value of 1.45 [3].

Meaning of life is considered to be a noteworthy term in relation to achieving better health-related quality of life among chronic disease patients including PLWHA. The meaning of life is directly proportional to the psychological and physiological dimensions in health-related quality of life [4]. One study indicated that the level of meaning of life is inversely proportional to the level of psychological health [13]. Being diagnosed with a life-threatening disease such as HIV/AIDS is a stressor that can change a person's life [1]. In the early diagnosis stage, PLWHA will tend to experience physical and psychological problems such as living under stress, depression, feeling that there is a lack of social support and changes in behavior. According to Schultz (1991), experiencing stress, feeling depressed and feeling useless can cause depression which leads to a sense that there is nothing in life and thus developing a meaningless life [5]. Depression is a common psychological problem faced by PLWHA.

The meaning of life and the factors related to the meaning of life based on gender is a contentious topic. One recent study found that males have better a meaning of life compared to females [15]. Another study found that females have a better meaning of life compared to males [1]. In 2006, a study found that there was no difference in the meaning of life based on gender [14]. Another study emphasized that meaning of life is related to depression [8]. In line with the previous study, the meaning of life is a strong predictor of depressive symptoms among females more so when compared to males [7]. Females tend to experience depression more compared with males [16]. Moreover, the meaning of life is considered to be related to the psychological and physiological dimensions in quality of life related to health [4]. Females tend to have better health-related quality of life compared to males [17]. The inconsistency of the research results leaves questions unanswered

among academics. The study aim was to analyze the gender difference in the meaning of life among people living with HIV/AIDS.

## **II.** METHODS

A descriptive analytical comparative approach with a cross-sectional approach design was performed to analyze the gender differences in the meaning of life among the people living with HIV/AIDS in Surabaya. This study was conducted in one of the public hospitals in Surabaya that provides health care services for PLWHA. Since 2004, this hospital has provided health care services for PLWHA and become a HIV/AIDS health service point of reference from other hospitals in the east region of Indonesia. In terms of the population, 133 people living with HIV/AIDS over 17 years old who were mentally healthy attended this study. Snowball sampling was performed to recruit the respondents. There was one PLWHA who willing become a key person to help the researcher to collect the data. The questionnaire was distributed by the key person to the other PLHWA who came to the hospital for their monthly health visit.

The data collection was finished within 2 months. The meaning of life and gender were the variables that were measured in this study. Meaning of life was assessed using the meaning of life questionnaire developed by Steger, Frazier, Kaler, & Oishi in 2006 [18]. This instrument consists of 10 questions about presence and searching for the meaning of life. Questions 1, 4, 5, 6 and 9 were used to measure the presence of the meaning of life. Questions 2, 3, 7, 8 and 10 were used to measure the search for the meaning of life. This instrument used a 7-item Likert scale including absolutely untrue, mostly untrue, somewhat untrue, can't say true or false, somewhat true, mostly true and absolutely true (0 to 7). The score of this instrument ranged from 0 to 70. The highest score means the presence of the highest meaning of life. The questionnaire validity was analyzed using interrater validity. The score range was from 0.60 to 0.79. The reliability was analyzed using Cronbach's alpha correlation. The score range was from 0.713 to 0.798. Testing the homogeneity of variance based on mean was conducted using Levene's test and the results showed that the null hypothesis was accepted (p= 0.364). The Mann-Whitney test was used to analyze the gender difference in relation to the meaning of life. Ethical approval certificate number 1078/101/II/2019 was issued by the research ethic committee in the hospital.

#### **III. RESULTS**

Several characteristics of the respondents were used including gender, age, education background, marital status, occupation, length of infection and monthly income. One of the characteristics of the respondents was monthly income. The description of monthly income for the students and housewives referred to the money that was received from their parents (for the students) and their husband (for the housewives). In Table 1, the frequency and percentage of the respondents' characteristics based on gender have been presented.

Table 1. Characteristics of the respondents (n=133)

Characteristic of the respondents	Males (n: 65)		Females (n: 68)		Total (n: 133)	
	n	%	n	%	n	%
Ages						
17-22 years old	3	2.2	4	3	7	5.2
23-28 years old	14	10.5	9	6.8	23	17.3
29-34 years old	19	14.3	17	12.8	36	27.1
35-40 years old	18	13	14	10.5	32	24.1
41-46 years old	4	3	14	10.5	18	13.5
47-55 years old	7	5.3	10	7.5	17	12.8
Education background						
Elementary School	0	0	5	3.8	5	3.8
Junior High School	4	3	12	9.1	16	12.1
Senior High School	41	30.7	44	33.1	85	63.8
College	20	15.1	7	5.2	27	20.3

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Marital Status						
Single	30	22.6	10	7.5	40	30.1
Married & living together	24	18	30	22.6	54	40.6
Widower/Widow	11	8.3	28	21.1	39	29.3
Occupation						
Entrepreneur	11	8.3	5	3.8	16	12.1
Employee	50	37.6	26	19.5	76	57.1
Housewife	0	0	31	23.3	31	23.3
Student	4	3	6	4.5	10	7.5
Length of time since diagnosis						
1-3 years	21	15.7	36	27.1	57	42.8
4-6 years	28	21.1	22	16.5	50	37.6
7-10 years	14	10.5	6	4.5	20	15
11-15 years	2	1.6	3	2.2	5	3.8
>15 years	0	0	1	0.8	1	0.8
Monthly income (Indonesian Rupiah)						
< 1.800.000	5	3.8	25	18.8	30	22.6
1.800.000-3.000.000	28	21.1	36	27.1	64	48.2
3.000.000-5.000.000	30	22.6	7	5.2	37	27.8
>5,000,000	2	1.6	0	0	2	1.6

Table 2. Analysis of the gender difference for the meaning of life among people living with HIV/AIDS

Variable	Mean	SD	Min-Max	р
Meaning of life	41.4	9.8	19 - 65	0.03
Males	74.53	9.4	19-64	
Females	60.01	10	23-65	

The respondents were made up of 48% males and 52% females. The distribution of the respondents based on age were that 5% in the range of 17 to 22 years old, 17% in the range of 23 to 28 years old, 27% in the range of 29 to 34 years old, 24% in the range of 35 to 40 years old, 14% in the range of 41 to 46 years old, and 13% in the range 47 to 55 years old. The distribution of the respondents based on their last education was that 4% had graduated from elementary school, 12% had graduated from junior high school, 64% had graduated from senior high school and 20% had graduated from college. Based on marital status, 30% of the respondents were single, 41% of the respondents were married and living with their spouse and 29% of the respondents were widowed. The allocation of the respondents based on occupation showed that 12% worked as an entrepreneur, 57% worked as an employee, 23% worked as a housewife and 8% were students. Based on the length of time since diagnosis, 43% of the respondents had been infected with HIV/AIDS for 1 to 3 years, 37% of respondents for 4 to 6 years, 15% respondents for 7 to 10 years, 3.2% of respondents for 11 to 15 years and 0.8% respondents for more than 15 years. The last, based on monthly income, showed that 23% of respondents earned less than 1,800,000 Indonesian Rupiah, 48% earned in the range of 1,800,001 to 3,000,000 Indonesian Rupiah, 28% earned money in the range of 3,000,001 to 5,000,000 Indonesian Rupiah and 1% of the respondents based on their demographic characteristics.

The analysis deferential was performed to evaluate the difference in the meaning of life based on gender among people living with HIV/AIDS in Surabaya. The first step was to identify the homogeneity of the variances. Testing the homogeneity of the variances based on the mean was conducted using Levene's test. The results showed that the null hypothesis was accepted (p=0.364). Therefore the Mann-Whitney test was chosen by the researchers to analyze the gender difference in the meaning of life among people living with HIV/AIDS in Surabaya. Table 2 describes the meaning of life among people living with HIV/AIDS in Surabaya as having a mean score of 41.1 and a standard

deviation of 8.9. There was a difference in the meaning of life based on gender among people living with HIV/AIDS in Surabaya (p: 0.03; mean in women: 60.01; mean in men: 74.53).

## **IV. DISCUSSION**

The meaning of life has been put forward as an important construct in the health of someone suffering from chronic illness, including HIV/AIDS. However, the difference in the meaning of life among HIV/AIDS patients when it is based on gender is still unclear. This research seeks to better understand meaning of life in PLWHA as seen from the gender perspective. The result of this study found that among PLWHA, males tend to have better a meaning of life compared to females. Consistent with the previous findings, males have a greater meaning of life than females [15]. The difference in meaning of life between males and females may be caused by their education background and monthly income [14]. Males tend to have a better education background which makes them have a better meaning of life [14]. Moreover, males tend to have a higher monthly income which may give them more of a chance to be involved in activities in their professional life, family life, education/training and activities with friends and when achieving targets in their life to augment their meaning of life [14].

In some way, length of time since diagnosis has a correlation with depressive symptoms. PLWHA who have more depressive symptoms will experience a lower meaning of life [12]. Males and females experience differences in matters related to the meaning of life such as depression. Previous research found there to be evidence of a significant meaning of life associated with depression symptoms among both males and females. Females are more likely to show depressive symptoms than males. This is in line with a previous study which found that meaning of life is a strong predictor of depressive symptoms among females compared to males [19]. Females tend to experience more depression compared to males [16]. From another point of view, meaning of life has a positive relationship with physical health [7]. A previous study found that females tend to have better health-related quality of life compared to males [17]. The study indicated that patients who experience high levels of meaning f life have higher levels of well-being compared with the chronically ill patients who experience low levels of meaning [13].

## **V.** CONCLUSION

The meaning of life based on gender among PLWHA is shown to be significantly different. Health workers must pay attention to these differences in the care process as an effort to achieve the expected quality of life status. Future studies are expected to examine the factors that influence the differences in the meaning of life between the genders among PLWHA.

#### **CONFLIC OF INTEREST**

The authors declare there to be no conflict of interest with respect to the research, authorship and/or publication of this article.

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