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HIV/AIDS Stigma among Women in Sukoharjo District

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Abstract. Reducing the stigma towards people living with HIV/AIDS (PLWHA) among women in Sukoharjo Regency is very important. High stigma causes PLWHA to face discrimination, social isolation, and limited access to health services due to lack of education and prevention. This research aims to describe the stigma towards PLWHA among women in Sukoharjo Regency. This research is an analytical survey research approach *cross-sectional*. The research population was women aged over 15 years. The sample taken was 285 women with a questionnaire distributed via *google form*. Data analysis using tests *chi square*. The results show that the characteristics of respondents were mostly aged 40-49 years (37.5%), highly educated (78.6%), and private employees (33%). Stigma towards PLWHA is still in the low category, namely 42.8%. Age and education are not related to HIV/AIDS stigma while employment is related to HIV/AIDS stigma. There needs to be an intervention program for women according to age, education and employment to reduce stigma towards PLWHA.

Keywords: stigma, People with HIV/AIDS, women

1. INTRODUCTION

HIV/AIDS stigma is an important thing to address because it has a broad and deep impact on individuals and society [1]. HIV/AIDS stigma is caused by many factors such as education, knowledge, age, economic level, length of residence, and religion [2],[3],[4],[5],[6]. The negative impacts of stigma include physical, psychological, and social aspects such as discrimination, social isolation, and limited access to health services due to lack of education and prevention [7],[8]. Individuals who experience stigma may face decreased mental health, such as depression and anxiety, as well as a decrease in overall quality of life. Additionally, stigma can hinder access to health services, which are important for the treatment and prevention of HIV/AIDS. The social impact of stigma is also significant, including social isolation and discrimination in the workplace and community [9],[10],[1].

Research on HIV/AIDS stigma is very important because this stigma can hinder efforts to prevent and control HIV/AIDS. Stigma often leads to discrimination and social isolation of people living with HIV/AIDS (PLHIV), which in turn can reduce their access to necessary health services. Additionally, stigma can prevent individuals from testing for HIV and disclosing their status, which is important for preventing further transmission. Therefore, in-depth research on HIV/AIDS stigma is needed to develop effective strategies in reducing stigma and improving the quality of life of PLHIV [10].

The stigma placed on PLHIV by women can have a significant impact. This stigma often appears in the form of discrimination, social rejection and exclusion, which can worsen the psychological and emotional conditions of PLHIV. Women who have negative views of PLHIV may feel afraid or reluctant to interact with them, which can lead to social isolation for PLHIV. The impact of this stigma not only affects the mental health of PLHIV, but can also hinder their access to important health services for treatment and support. Additionally, stigma can reinforce negative stereotypes and exacerbate gender inequalities, especially in already vulnerable communities [11].

Global data shows that HIV/AIDS stigma is still a big problem in many countries [12]. In Indonesia, the prevalence of HIV/AIDS continues to increase, with stigma still high in various regions [13]. In Central Java Province, including Sukoharjo Regency, the latest data shows an increase in HIV/AIDS cases and high levels of stigma towards PLWHA [14]. In 2024, Sukoharjo Regency will record an increase in the number of HIV/AIDS cases, especially among women of productive age [15]. The aim of this research is to provide an overview of women's stigma regarding HIV/AIDS in Sukoharjo Regency. It is hoped that the results of this research will provide a basis for developing policies and programs that are more effective in reducing stigma and supporting PLWHA.

2. METHOD

This research is a survey that uses a cross-sectional research design. The population studied included all women in Sukoharjo Regency. The sample criteria are women who live in Sukoharjo Regency and are aged 15 years and over. The survey was conducted in December 2023 using a Google form distributed via WhatsApp group. The sample obtained was 285 women spread across 12 sub-districts in Sukoharjo Regency.

This research uses a questionnaire as a measuring tool to assess the characteristics of respondents and women's stigma towards HIV/AIDS. The characteristics measured include age, education and employment, while stigma towards HIV/AIDS is measured through 10 questions. Age categories were divided into <20 years, 20-29 years, 30-39 years, 40-49 years, and >50 years. Employment is classified into government sector, private sector, and non-employment. Education is categorized into basic education (SD), secondary education (SMP and SMA) and higher education (D3, D4, S1, S2 and S3). Stigma consists of 10 questions with a correct score of 1 and an incorrect score of 0. Stigma is categorized into 2, namely good if the stigma score is > 5 which means the respondent does not give stigma to PLWHA and poor if the score is ≤ 5 which means the respondent still has a negative stigma towards PLWHA. . Data were analyzed descriptively and analytically with tests *chi square*.

3. RESULTS AND DISCUSSION

3.1 Respondent Characteristics

The majority of respondents had tertiary education (78.6%), indicating that the study population was dominated by individuals who had access to advanced education. Only a small proportion of respondents had primary education (7%), while respondents with secondary education amounted to 20.7%. Age can influence a person's perspective on HIV/AIDS. Older generations may have more conservative views and stronger stigma towards PLWHA, as they grew up in a context where HIV/AIDS was often associated with risky behavior and morality. In contrast, younger generations, who are more exposed to information and education about HIV/AIDS, may be more open and accepting [16],[17],[1].

Most of the respondents were aged 40-49 years (82.1%), which means that the middle age group dominates the population of this study. Respondents aged 30-39 years and 50 years and above accounted for 44.6% and 23.5% of the total respondents, respectively. The age group under 20 years (4.2%) is the smallest. A higher level of education often correlates with a better understanding of HIV/AIDS. Individuals with higher education tend to have better access to health information and are better able to understand scientific facts about HIV/AIDS, which can reduce stigma and shame. In contrast, individuals with lower education may be more influenced by negative myths and stereotypes, so are more likely to feel embarrassed if a family member is affected by HIV/AIDS [16],[17],[3]. Individuals with higher education tend to have a better understanding of HIV/AIDS, including modes of transmission and prevention. They may be better able to reject the myths and misconceptions that contribute to stigma. Conversely, lack of education can lead to lack of understanding and acceptance of stigma, which can exacerbate discrimination against infected individuals [1].

Based on occupation, respondents were divided into three large groups: 23.9% were civil servants or worked in government institutions, 41.8% worked in the private sector, and 34.4% were unemployed. Individuals working in more open and inclusive sectors may experience less stigma than those working in more conservative environments or where there is a risk of job loss due to HIV status. Additionally, individuals working in the health sector may better understand HIV/AIDS-related issues and be better able to provide support, while those in other sectors may be affected by greater stigma [1],[17],[11].

Women's stigma about HIV/AIDS shows that the majority have good stigma at 57.2%, but there are still 42.8% of women who have less stigma about HIV/AIDS. Stigma is defined as a negative label given to certain individuals or groups, resulting in discrimination and unfair treatment towards them. This stigma is often related to health conditions, such as HIV/AIDS, and can cause PLWHA (People with HIV/AIDS) to experience various forms of rejection and

exclusion from society. Stigma can be social, where individuals are perceived as “spreading disease” or “behaving immorally,” and can include internal stigma, where individuals internalize these negative views, leading to feelings of shame, low self-esteem, and an inability to reveal their health status. These forms of stigma can have a significant impact on the quality of life of PLWHA, affecting their mental health, access to care, and their ability to participate in society [18]. HIV/AIDS-related stigma is a complex problem that requires a multifaceted approach to address, including education, advocacy, and policy changes to create a more inclusive and supportive environment for individuals living with HIV/AIDS [1].

Table 1. Characteristics of Respondents According to HIV/AIDS Stigma

Stigma HIV/AIDS	**Number of Respondents**	**Stigma HIV/AIDS Baik**	***p value***
	f	**f**	
Age			
<20 th	4,25	41,7%	0,279
20 - 29 th	24,2%	54,4%	
30 - 39 th	44,6%	69%	
40 – 49 th	82,1%	56,1%	
>50 th	23.5T	52,9%	
Education			
basic education	7%	50%	0,228
Secondary Education	20,7%	47,5%	
higher education	78,6%	59,8%	
Work			
Government employees	23,9%	28,8%	0,046
Private Officer	41,8%	50,4%	
No Defender	34,4%	57,1%	
Stigma HIV/AIDS			
Good	57,2%	-	-
Not enough	42,85	-	

Based on statistical tests it is known that age (*p value* 0.279) and education (0.228) were not related to HIV/AIDS stigma, while employment was significantly related to HIV/AIDS stigma (*p value* 0.046). This is in line with research which shows that stigma towards HIV/AIDS can occur in various age groups without significant differences. HIV-related stigma can affect individuals of various age groups equally. Therefore, interventions to reduce stigma must cover all age groups without discrimination [19]. Education also does not show a significant relationship with HIV/AIDS stigma, so this shows that the level of education is not always a determining factor in attitudes towards people with HIV/AIDS. Although education can increase knowledge about HIV/AIDS, this does not always reduce the existing stigma [20]. In contrast, employment showed a significant relationship with HIV/AIDS stigma (*p value* 0.046). This suggests that a person's type of work or employment status can influence their attitudes towards people with HIV/AIDS. Recent research shows that workplace stigma remains a major problem. A study found that HIV-

related stigma in the workplace can influence engagement and adherence to HIV care. Therefore, it is important to develop workplace policies and programs that support and do not discriminate against employees with HIV/AIDS[21].

3.2 Gambaran Stigma HIV/AIDS

Stigma towards HIV/AIDS varies by age group. Research shows that the age group <20 years old has a lower level of stigma, with a percentage of under 50% of respondents feeling embarrassed if a member of their family is affected by HIV/AIDS. The 20–29-year age group also shows a level of stigma below 50%, although slightly higher than the <20-year age group. Interestingly, levels of stigma decreased in the 30–39-year age group, which may reflect increased understanding and awareness of HIV/AIDS with age. However, levels of stigma again increased in the age groups 40-49 years and >50 years, which may be due to traditional views and a lack of accurate information about HIV/AIDS among older adults. Older people tend to be more embarrassed or worried if others know their or their family members' HIV status. This is caused by several factors, including the more conservative views of society in the older generation and their limited knowledge about HIV. Most older people also tend to worry more about social rejection, which can make them feel isolated and embarrassed if their HIV status is revealed. They may feel more vulnerable to societal stereotypes and prejudices that assume the disease is only associated with certain risk behaviors [22].

The level of education does not appear to have a significant influence on the level of stigma towards HIV/AIDS. Respondents with secondary education showed lower shame (39%) compared to respondents with higher education (46.9%). This shows that although formal education can increase knowledge about HIV/AIDS, it does not always reduce the shame if a family member has HIV. Other factors such as cultural and social values may play a greater role in shaping attitudes towards HIV/AIDS. These findings suggest that higher levels of education do not necessarily correlate with shame in the presence of lower HIV family members. These results are in line with a recent study by Tsai et al. (2019) who found that the relationship between education and shame is complex and not always linear. They observed that in some contexts, individuals with higher education actually demonstrated higher levels of stigma, which may be due to broader social and cultural factors. Therefore, more comprehensive and inclusive educational interventions are needed to reduce stigma at all levels of education [23].

Occupation seems to have a relatively similar influence on feelings of shame if there is a family member with HIV/AIDS. Respondents working in the formal sector showed the highest level of stigma (47.1%), followed by informal workers (45.4%) and those who were unemployed (42.9%). High levels of stigma among formal workers may be due to fear of workplace discrimination and a lack of policies that support PLWHA. This finding is in line with research by Rao et al. (2019) who found that HIV/AIDS stigma varied based on job characteristics and socio-economic status. They highlight that individuals with formal employment and higher social status tend to show higher levels of stigma, which may be due to concerns about social and professional image. The high percentage of stigma among government employees may reflect social pressure and higher expectations in formal work environments [24]. This is supported by the study of Mukolo et al. (2013) who observed that HIV/AIDS stigma in the workplace can be influenced by organizational norms and concerns about discrimination [25]. Meanwhile, the slightly lower percentage of stigma among private and non-working employees may reflect differences in exposure to information and policies related to HIV/AIDS. These findings are consistent with research by Stangl et al. (2019) which emphasizes the importance of social and environmental context in shaping attitudes towards HIV/AIDS [25].

In the context of this study, these attitudes were measured through questions designed to evaluate feelings of shame and the desire to keep HIV status secret in the family. Research shows that many respondents, especially those who have little knowledge about HIV, tend to feel embarrassed if a family member is infected. This is because many women still have misconceptions about how HIV is transmitted, which can cause fear and stigma. In many cultures, there is a strong stigma against people infected with HIV, which is often seen as the result of immoral behavior. It can make individuals feel embarrassed or distressed if their family members become infected. The media often highlights the negative aspects of HIV/AIDS, which can reinforce stigma and make people feel that they have to hide their HIV status in the family. In addition, this shame can also stem from concerns about how others will view them and their family, as well as potential discrimination that infected family members may face [16],[26],[23].

There are interesting variations in willingness to work with HIV-positive coworkers among different age groups. The 30–39-year age group showed the highest percentage (77.6%) who were willing to work with HIV-positive coworkers, followed by the 40-49 year age group (67.3%), ≥50 years (52.9%), 20-29 years (59.6%), and <20 years (33.3%). These data suggest that willingness to work with HIV-positive coworkers does not necessarily increase or decrease linearly with age. These findings are in line with recent research by Vu et al. (2015) who found that attitudes towards people with HIV/AIDS (PLHIV) in the workplace varied by age group. They observed that the middle age group tended to show more positive attitudes, which may be due to a combination of life experience and exposure to better information [27]. The highest percentage in the 30–39-year age group may reflect a balance between maturity, work experience and openness to new information. This is supported by the study of Dahlui et al. (2015) who

highlighted the importance of experience and education in forming attitudes towards PLWHA [28]. Interestingly, the <20 years age group showed the lowest percentage of willingness to work with HIV-positive coworkers. This phenomenon may be related to the lack of work experience and understanding of HIV/AIDS in this age group. The non-linear pattern in this data suggests that factors other than age, such as education, work experience, and exposure to information, also play an important role in shaping attitudes towards PLWHA in the workplace. This is supported by the study of Ekstrand et al. (2019) which emphasizes the importance of multi-level interventions in reducing HIV stigma in various age groups [29].

There is an interesting pattern in the relationship between level of education and willingness to work with HIV-positive coworkers. Respondents with higher education showed the highest percentage (66.1%) willing to work with HIV-positive coworkers, followed by those with secondary education (57.6%). These findings indicate that higher levels of education tend to be positively correlated with willingness to work with HIV-positive coworkers. These results are in line with recent research by Adeomi et al. (2014) who found that a higher level of education correlated with more positive attitudes towards people with HIV/AIDS (PLWHA) in the workplace. They suggest that education can increase understanding of HIV/AIDS, which in turn reduces stigma and discrimination. Individuals with higher education tend to have better knowledge about HIV/AIDS and are more likely to show more inclusive attitudes towards PLWHA. They emphasize the importance of education in shaping perceptions and attitudes towards HIV/AIDS [30]. The percentage difference between the tertiary and secondary education groups, although not very large, suggests that further education can have a positive impact on attitudes towards PLWHA in the workplace. This is consistent with research by Geter et al. (2018) who found that educational interventions can effectively reduce HIV stigma in various settings, including the workplace [31].

There is significant variation in willingness to work with HIV-positive coworkers among different occupational groups. The government employees group showed the highest percentage (75%) willing to work with HIV-positive coworkers, followed by private employees (59.7%), and not working (61.2%). This difference shows that type of work is related to attitudes towards HIV-positive coworkers. These findings are in line with recent research by Rao et al. (2019) who found that attitudes towards people with HIV/AIDS (PLHIV) in the workplace varied based on employment sector and level of job formality. They observed that individuals in formal and structured jobs tended to show more positive attitudes towards PLHIV [24]. The highest percentage in the Government Employees group may reflect the existence of more structured policies and training regarding HIV/AIDS in the public sector. Interestingly, the private sector employee group shows a lower percentage than the public sector. This phenomenon may be related to variations in HIV/AIDS-related policies and programs in the private sector. This finding is consistent with research by Grossman and Stangl (2013) who found that the implementation of HIV anti-discrimination policies in the workplace can vary between the public and private sectors [32].

Women who have a better understanding of HIV tend to be more willing to work with HIV-positive colleagues, compared with those who have less knowledge. This attitude can be influenced by several factors, including level of education, sources of information accessed, and personal experience. Research shows that those who get their information from credible sources, such as health professionals or educational programs, are more likely to have less stigmatizing attitudes. In contrast, those who are less exposed to accurate information about HIV tend to have negative attitudes and feel uncomfortable working with infected people[23],[26],[17].

Based on the data in Table 2, there are interesting variations in the view that AIDS is a punishment for bad behavior among different age groups. The age group <20 years showed the highest percentage (58.3%) who agreed with the statement, followed by the age group 20-29 years (43.9%), ≥50 years (45.1%), 40-49 years (37.4%), and 30-39 years (29.3%). These data show that moralistic views towards AIDS do not always decrease linearly with increasing age. These findings are in line with recent research by Lyons et al. (2020) who found that moralistic attitudes towards HIV/AIDS still exist in various age groups, with complex patterns. They observed that factors such as education, exposure to information, and social norms interact with age in shaping attitudes towards HIV/AIDS[33]. The highest percentage in the <20 years age group may reflect the lack of comprehensive understanding of HIV/AIDS in this age group. This is supported by the study of Pantelic et al. (2019) who highlighted the importance of comprehensive sexual health education to reduce stigma and misconceptions about HIV/AIDS among adolescents and young adults [34].

There is an interesting pattern in the relationship between level of education and the view that AIDS is a punishment for bad behavior. Respondents with primary education showed the highest percentage (50%) agreeing with the statement, followed by those with secondary education (39%), and higher education (39.3%). Although the difference is not very large between secondary and higher education, these data indicate that the level of education is related to moralistic views on AIDS. Higher education tends to increase understanding of the causes and transmission of HIV, thereby reducing moralistic views. The highest percentage in the primary education group may reflect a lack of access to accurate and comprehensive information about HIV/AIDS. Interestingly, the small differences between secondary and tertiary education groups suggest that factors other than formal education level may also play a role in

shaping views about HIV/AIDS. This finding is consistent with research by Ekstrand et al. (2018) who found that social and cultural norms also influence perceptions about HIV/AIDS, even among highly educated individuals [29].

There is significant variation in the view that AIDS is a punishment for bad behavior among different occupational groups. The Not Working group showed the highest percentage (41.8%) who agreed with this statement, followed by private employees (42%), and government employees (30.9%). This difference shows that type of work is related to moralistic views on AIDS. These findings are in line with recent research by Hargreaves et al. (2020) who found that stigma and misconceptions about HIV/AIDS varied based on employment status and sector. They observed that individuals who have not yet fully integrated into the formal world of work (such as students and housewives) tend to have a more stigmatizing view of HIV/AIDS[35]. The highest percentage in the Not working group may reflect a lack of exposure to HIV/AIDS policies and education programs that are usually more common in formal work environments. This is supported by a study by Grossman and Stangl (2013) which highlights the importance of HIV education programs in the workplace in reducing stigma and misconceptions [32].

The statement "AIDS is a punishment for bad behavior" reflects the stigmatized view that often exists in society regarding HIV/AIDS infection. This view links HIV infection to individual morality, where people become infected as a result of unethical or immoral behavior. Many people still believe that HIV/AIDS is the result of risky sexual behavior, such as sex outside of marriage, injection drug use, or sexual behavior that is considered deviant. This view leads to the notion that infected people "deserve" the disease as a consequence of their actions[16],[23],[26].

There are interesting variations in the view that promiscuous people are to blame for AIDS among different age groups. The age group ≥50 years showed the highest percentage (58.8%) who agreed with this statement. Followed by age <20 years (58.3%), 40-49 years (59.8%), and 30-39 years (55.2%), and 20-29 years (52.6%). These data indicate that blame views toward AIDS-related discretionary behavior are quite high across all age groups, with relatively little variation. These findings are in line with recent research by Ekstrand et al. (2019) who found that stigma related to HIV risk behavior is still prevalent in various age groups. They observed that although knowledge about HIV/AIDS increased, attitudes of blame towards individuals who were perceived to behave promiscuously persisted [29]. The high percentage in the older age group (≥50 years) may reflect a lack of comprehensive understanding of the complexity of HIV/AIDS risk factors. Interestingly, the 20–29-year age group shows the lowest percentage, although the difference is not very significant. This phenomenon may be related to the level of education and better exposure to information in this age group. This is supported by the study of Pantelic et al. (2019) who highlighted the importance of comprehensive and stigma-free sexual health education to reduce blame attitudes among adolescents and young adults [34]. These findings are consistent with research by Stangl et al. (2019) who found that increasing knowledge and understanding about HIV/AIDS can reduce stigma and attitudes of blame.[36] The relatively consistent pattern across all age groups indicates that attitudes of blame for AIDS-related free behavior are still deeply rooted in society. This is supported by the study of Rao et al. (2019) which emphasizes the importance of multi-level interventions in overcoming stigma and blame attitudes related to HIV/AIDS that have been internalized in social norms [24].

There is an interesting pattern in the relationship between level of education and the view that people who behave freely are to blame for AIDS. Respondents with secondary education showed the highest percentage (61%) who agreed with the statement, followed by those with primary education (50%), and higher education (56.3%). These data indicate that education level has an inverse relationship with the tendency to blame promiscuous behavior as the cause of AIDS. These findings are in line with research by Tsai et al. (2018) who found that a higher level of education was correlated with reduced stigma and blaming attitudes towards people with HIV/AIDS. They suggest that education can increase understanding of the complexity of HIV risk factors, thereby reducing overly simplistic views of the causes of AIDS [37]. The highest percentage in the secondary education group (61%) may reflect a lack of access to accurate and comprehensive information about HIV/AIDS. Although there is a decrease in the percentage as the level of education increases, the percentage is still quite high in the higher education group (56.3%) indicating that formal education alone may not be enough to completely eliminate blaming attitudes. These findings are consistent with research by Stangl et al. (2019) who found that HIV/AIDS stigma is rooted in complex social and cultural factors, which cannot always be overcome by formal education alone [36].

The government employees' group (60.3%) showed the highest percentage agreeing with the statement that people who behave freely are to blame for AIDS, followed by private employees (56.3%), and those who do not work (56.1%). This difference shows that type of work is related to attitudes of blame for free behavior related to AIDS. These findings are in line with recent research by Hargreaves et al. (2020) who found that stigma and blame attitudes related to HIV/AIDS varied by employment status and sector. They observed that factors such as work environment, workplace policies, and exposure to information can influence attitudes towards HIV/AIDS [35]. The highest percentage in the Government employees' group may reflect variations in HIV/AIDS policies and education programs in the government sector. This is supported by the study of Sprague et al. (2020) which highlights differences in the

implementation of anti-discrimination policies and HIV education programs in various work sectors [38]. This phenomenon may be related to social and cultural norms that are still strong in the formal work environment. This finding is consistent with research by Grossman and Stangl (2019) who found that blaming attitudes can persist even in environments with formal policies that support non-discrimination [39]. This is supported by the study of Rao et al. (2019) who emphasize the importance of a multi-level approach in overcoming stigma and blame related to HIV/AIDS in various work contexts [24].

There are interesting variations in the view that people who contract HIV/AIDS through sex or drug use get what they deserve between different age groups. The 30–39-year age group showed the highest percentage (79.3%) who agreed with the statement, followed by the 40-49 year age group (76.6%), ≥50 years (78.4%), 20-29 years (89.5%), and <20 years (83.3%). This data shows that judgmental views towards people who contract HIV/AIDS through risky behavior are still very high in all age groups. These findings are in line with recent research by Lyons et al. (2020) who found that stigma related to HIV transmission mode is still prevalent in various age groups. They observed that despite increasing knowledge about HIV/AIDS, judgmental attitudes towards individuals who become infected through risky behavior persist [33]. The high percentage in all age groups, especially in the productive age, namely <20 years and 20-49 years, shows that this stigma is deeply rooted in society. This is supported by the study of Pantelic et al. (2019) which highlights how HIV stigma related to mode of transmission can affect the quality of life and access to health services for people with HIV/AIDS. Interestingly, the age group < 20 years showed the highest percentage, which is contrary to expectations that the younger generation may be more tolerant [34]. This phenomenon may be related to the lack of comprehensive education about HIV/AIDS and human rights in this age group. These findings are consistent with research by Stangl et al. (2019) which emphasizes the importance of rights-based education in reducing HIV stigma [36]. The relatively consistent pattern across all age groups shows that judgmental attitudes towards modes of HIV/AIDS transmission are still deeply rooted in society. This is supported by the study of Rao et al. (2019) which emphasizes the importance of multi-level interventions in overcoming HIV/AIDS stigma that has been internalized in social norms [24].

Women with secondary education showed the highest percentage (81.4%) who agreed with the statement that people who contract HIV/AIDS through sex or drug use get what they deserve, followed by those with tertiary education (80.4%) and primary education. (50%). These data indicate that although there is a slight decline with increasing levels of education, judgmental views towards people who contract HIV/AIDS through risky behavior are still very high at all levels of education. These findings are in line with recent research by Ekstrand et al. (2019) who found that stigma related to HIV transmission mode is still prevalent even among individuals with high levels of education. They suggest that formal education alone may not be enough to overcome stigma rooted in social and cultural norms [29]. The very high percentage in the secondary education group (81.4%) may reflect a lack of access to accurate and comprehensive information about HIV/AIDS. This is supported by the study of Tsai et al. (2017) who highlighted the importance of inclusive and evidence-based health education in reducing stigma and misconceptions about HIV/AIDS [37].

There is significant variation in perceptions about people contracting HIV/AIDS through sex or drug use among different occupational groups of women. Results showed that Out of work showed the highest percentage agreeing that the person "got what they deserved" (88.8%). This pattern indicates the existence of complex differences in perception between occupational groups. This may reflect a lack of exposure to comprehensive information about HIV/AIDS or the influence of more conservative social norms in their environment. This finding is in line with research by Dahlui et al. (2015) who found that the level of knowledge and exposure to information about HIV/AIDS can influence attitudes and stigma towards PLWHA [28]. The government employees group showed the lowest percentage (15.4%) who agreed with this statement. This may be due to wider exposure to information about HIV/AIDS in the workplace or more diverse urban environments. These findings are consistent with the study of Stangl et al. (2019) which shows that exposure to accurate information and educational programs in the workplace can reduce HIV-related stigma. This variation in perceptions based on job type indicates the need for educational and intervention strategies tailored to each group [28].

Table 2, Description of HIV/AIDS Stigma

CHARACTERISTICS	STIGMA HIV/AIDS									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Age										
<20 th	41,7%	33,3%	58,3%	58,3%	83,3%	50%	16,7%	58,3%	75%	75%

20 - 29 th	42,1%	59,6%	43,9%	52,6%	89,5%	17,5%	12,3%	45,6%	50,9%	70,2%
30 - 39 th	34,5%	77,6%	29,3%	55,2%	79,3%	5,2%	3,4%	24,1%	31%	65,5%
40 – 49 th	43,9%	67,3%	37,4%	59,8%	76,6%	22,4%	7,5%	36,4%	37,4%	66,4%
>50 th	62,7%	52,9%	45,1%	58,8%	78,4%	29,4%	11,8%	41,2%	41,2%	60,8%
Education										
basic education	0%	0%	50%	50%	50%	50%	0%	100%	100%	100%
Secondary Education	39%	57,6%	39%	61%	81,4%	27,1%	11,9%	47,5%	49,2%	78%
higher education	46,9%	66,1%	39,3%	56,3%	80,4%	18,3%	8%	34,4%	38,4%	62,9%
Work										
Government employees	47,1%	75%	30,9%	60,3%	73,5%	14,7%	4,4%	27,9%	26,5%	55,9%
Private Officer	45,4%	59,7%	42%	56,3%	77,3%	16%	9,2%	37%	44,5%	72,3%
Doesn't work	42,9%	61,2%	41,8%	56,1%	88,8%	29,6%	11,2%	44,9%	46,9%	66,3%

Information:
1 = You would feel embarrassed if someone in your family was infected with HIV/AIDS
2 = You are willing to work with HIV-positive coworkers
3 = AIDS is a punishment for bad behavior
4 = People who behave freely are to blame for AIDS
5 = People who contracted HIV/AIDS through sex or drug use got what they deserved.
6 = People who have HIV are dirty
7 = People who have HIV must lose their jobs
8 = You are afraid of people living with HIV/AIDS
9 = You would not buy anything from a food seller who has HIV/AIDS
10= You don't want to share eating utensils with PLWHA because you are afraid of getting infected

There are interesting variations in perceptions of people living with HIV/AIDS (PLWHA) among different age groups of women. The results showed that 50% of respondents were <20 years old, 17.5% were 20-29 years old, 5.2% were 30-39 years old, 22.4% were 40-49 years old, and 29.4% were >50 years old assume that PLWHA are "dirty" people. This pattern indicates that there are significant differences in perception between age groups. The under 20 age group shows the highest percentage who consider PLWHA to be "dirty". This may reflect a lack of in-depth understanding of HIV/AIDS and the factors that contribute to its transmission among adolescents. This finding is in line with research by Dzah et al. (2019) who found that although teenagers have basic knowledge about HIV/AIDS, they often have misconceptions that can cause stigma [40]. The 30-39 year age group shows the lowest level of stigma (5.2%) compared to other age groups. These patterns may reflect differences in life experiences, education levels, and exposure to HIV/AIDS-related public health campaigns. This is in line with research by Adeomi et al. (2014) who found that attitudes towards PLWHA can vary significantly between age groups and are influenced by various social and educational factors [30]. This finding is also consistent with the study of Nyblade et al. (2019) which shows that exposure to accurate information and social interaction can significantly reduce stigma against PLWHA [41].

Based on the data presented in the table, there are significant variations in perceptions about people living with HIV/AIDS (PLWHA) between various levels of female education. The results showed that 50% of respondents with primary education, 27.1% with secondary education, and 18.3% with higher education thought that PLWHA were "dirty" people. This pattern indicates a complex relationship between education level and stigma towards PLWHA. The group with primary education showed the highest percentage who considered PLWHA as "dirty" people. This may reflect gaps in HIV/AIDS education curricula at primary school level, which may not comprehensively address issues of stigma and discrimination. This finding is in line with research by Dzah et al. (2019) who found that although elementary school students have basic knowledge about HIV/AIDS, they often have misconceptions that can cause stigma [40]. The group with higher education showed the lowest percentage who viewed PLWHA as "dirty" people. This may be due to wider exposure to scientific information and a better understanding of HIV/AIDS. These findings

are consistent with the study of Vorasane et al. (2017) who show that higher levels of education generally correlate with more positive attitudes towards PLWHA, although there is still room for improvement[42].

Based on the data, there are significant variations in perceptions about people living with HIV/AIDS (PLWHA) among various female occupational groups. The results show that respondents who work in the government employee sector are the lowest (14.7%) who think that PLWHA are "dirty" people. This pattern indicates a complex relationship between type of work and stigma against PLWHA. This may reflect the effectiveness of HIV/AIDS education programs and anti-discrimination policies in the public sector. This finding is in line with research by Vorasane et al. (2017) who found that training and strong workplace policies can significantly reduce stigma against PLWHA among public sector workers. The private sector employees and non-employed groups showed a relatively higher percentage who considered PLWHA as "dirty" people. This may indicate a lack of access to comprehensive HIV/AIDS education programs in the private sector and among the general public [42].

Based on the data there are interesting variations in attitudes towards the employment rights of people living with HIV/AIDS (PLWHA) among different age groups of women. The results show that women aged <20 years show the highest percentage of people who have HIV should lose their jobs (58.3%) and women aged 30-39 years show the lowest percentage who think that PLWHA should lose their jobs. This pattern indicates that there are significant differences in attitudes between age groups. This may reflect a lack of in-depth understanding of HIV/AIDS and the rights of PLWHA among youth. This finding is in line with research by Dzah et al. (2019) who found that although teenagers have basic knowledge about HIV/AIDS, they often lack understanding of the social and human rights implications related to this condition [40]. Interestingly, the 30–39-year age group showed the lowest percentage supporting employment discrimination against PLWHA. This may be due to a combination of life experience, exposure to better information, and possible interactions with PLWHA. This age group may also be more aware of the importance of protecting workers' rights. These findings are consistent with the study of Sprague et al. (2011) which shows that exposure to information and social interaction can significantly reduce discriminatory attitudes towards PLWHA in the workplace [43].

Based on the data there are interesting variations in attitudes towards the employment rights of people living with HIV/AIDS (PLWHA) between different levels of female education. The results show that 11.9% with secondary education, and 8% with higher education think that PLWHA should lose their jobs. Interestingly, groups with secondary and tertiary education show the most supportive attitudes towards the employment rights of PLWHA, meaning that women with secondary and tertiary education do not support employment discrimination. This finding is in line with research by Feyissa et al. (2019) who found that community-based interventions can be effective in reducing HIV stigma and discrimination, including among individuals with lower levels of formal education [44]. The highly educated group showed a relatively more supportive attitude towards the employment rights of PLWHA than the middle-educated group, with only 34.4% supporting employment discrimination. However, this figure still shows there is room for improvement. This may reflect the complexity of the relationship between formal education and attitudes towards PLWHA, where greater knowledge does not always directly lead to more positive attitudes. This finding is in line with research by Vorasane et al. (2017) who found that misconceptions and discriminatory attitudes can still be found even among highly educated professionals [42].

Based on the data presented, there are significant variations in attitudes towards the employment rights of people living with HIV/AIDS (PLWHA) among various female occupational groups. The results show that 27.9% of respondents who work in the government employee sector, 37% of private employees, and 44.9% of those who do not work think that PLWHA should lose their jobs. This pattern indicates interesting differences in attitudes between occupational groups. The government employee group showed the most supportive attitude towards the employment rights of PLWHA. This may reflect the effectiveness of anti-discrimination policies and training in the public sector, as well as a better understanding of workers' rights. This finding is in line with research by Sprague et al. (2011) who found that strong workplace policies and employee training can significantly reduce stigma and discrimination against PLWHA in the work environment [43]. The Not Working group showed a relatively more supportive attitude towards the employment rights of PLWHA compared to the private sector employee group, with 44.9% supporting employment discrimination. Variations within these groups may reflect differences in access to information and education about HIV/AIDS. College and university students may have better access to up-to-date information about HIV/AIDS through their educational curriculum, while housewives may have more limited access. This is in line with research by Dzah et al. (2019) which emphasizes the importance of integrated HIV/AIDS education in the school curriculum to reduce stigma and discrimination [40].

Based on the data presented, there are interesting variations in the level of fear of people living with HIV/AIDS (PLWHA) among various age groups of women. The results showed that 58.3% of respondents were <20 years old, 45.6% were 20-29 years old, 24.1% were 30-39 years old, 36.4% were 40-49 years old, and 41.2% were > 50-year-old admits he is afraid of PLWHA. The age group < 20 years old showed the highest level of fear. This may reflect

high awareness of HIV/AIDS in this age group, but accompanied by an incomplete understanding of transmission mechanisms and actual risks. This finding is in line with research by Dahlui et al. (2015) who found that young age groups often have high levels of anxiety regarding HIV/AIDS despite having basic knowledge about this disease [28]. Interestingly, the 30–39-year age group showed the lowest level of fear (24.1%). This may be due to a combination of better knowledge and more life experience. This age group may have been exposed to more accurate information about HIV/AIDS and had the opportunity to interact with PLWHA, which may reduce their fears. These findings are consistent with the study of Letshwenyo-Maruatona et al. (2019) which shows that exposure to information and social interactions can influence attitudes towards PLWHA [45].

Based on the data, there are interesting variations in the level of fear of people living with HIV/AIDS (PLWHA) between various levels of female education. The results showed that 100% of respondents with primary education, 47.5% with secondary education, and 34.4% with higher education admitted that they were afraid of PLWHA. This pattern indicates a complex relationship between education level and fear of PLWHA. Interestingly, the group with primary education showed the highest levels of fear. The high level of fear in the primary education group may reflect gaps in the HIV/AIDS education curriculum at the primary school level. This group may have enough knowledge to be aware of the existence of HIV/AIDS, but lack a deep understanding of the mechanisms of transmission and the actual risks. This finding is consistent with the study of Dzah et al. (2019) who emphasize the importance of comprehensive HIV/AIDS education at the secondary school level to reduce stigma and fear[40]. The low level of fear in the primary education group (8.3%) may be due to other factors such as exposure to public health campaigns or personal experiences. However, it should be noted that the sample size for this group may be smaller, which may affect the accuracy of the results. These findings indicate the need for a more holistic approach to HIV/AIDS education that does not only focus on formal education, but also considers social and cultural factors. Stangl et al. (2019) emphasize the importance of evidence-based interventions that consider various determinants of stigma and fear, including education level [36]. In addition, research by Rao et al. (2019) shows that interventions that combine education with direct contact with PLWHA can be effective in reducing stigma and fear at various levels of education [24].

Based on the data presented in the table, there are significant variations in the level of fear of people living with HIV/AIDS (PLWHA) among various female occupational groups. The results showed that 27.9% of respondents who worked in the government employee sector, 37% of private employees, and 44.9% of those who did not work admitted that they were afraid of PLWHA. This pattern indicates interesting differences in levels of fear between occupational groups. Private employees showed the highest level of fear (38.5%). The Government Employees group showed the lowest level of fear. This may be due to the existence of more structured education programs and policies related to HIV/AIDS in government institutions and state-owned companies. These relatively low levels of fear may also reflect the generally higher level of education among civil servants. However, the persistence of fear suggests that there is still room for improvement. These findings are consistent with the study of Vorasane et al. (2017) which shows that even among health professionals, fear and stigma towards PLWHA still exists [42]. The Not working group showed the highest level of fear. This may reflect variations in access to HIV/AIDS information and education among this group. College and university students may have better access to up-to-date information about HIV/AIDS through their educational curriculum, while housewives may have more limited access. This finding is in line with research by Dzah et al. (2019) which emphasizes the importance of integrated HIV/AIDS education in the school curriculum to reduce stigma and fear [40].

Based on the data presented in the table, there are interesting variations in stigmatizing attitudes towards purchasing food from sellers who have HIV/AIDS among different age groups of women. The results showed that 75% of respondents aged <20 years, 50.9% aged 20-29 years, 31% aged 30-39 years, 37.4% aged 40-49 years, and 41.2% aged >50 years would not buy anything from a food seller who has HIV/AIDS. This pattern shows that there are significant differences in stigma attitudes between age groups. The under 20 age group showed the highest levels of stigma (75%), which may reflect a lack of comprehensive understanding of HIV/AIDS in this age group. This finding is in line with research by Dzah et al. (2019) who found that adolescents and young adults often have misconceptions about HIV transmission, which can contribute to high levels of stigma [40]. Interestingly, the level of stigma tends to decrease in the 20–29-year age group (50.9%) and reaches its lowest point in the 30-39 year age group (31%). This decrease may be due to increased exposure to information and life experiences with age. This is consistent with the study of Dahlui et al. (2015) which shows that age and level of education can influence attitudes towards PLWHA [40]. However, there was a slight increase in stigma in the age groups 40-49 years (37.4%) and >50 years (41.2%). This phenomenon may reflect generational differences in understanding and attitudes towards HIV/AIDS. Older age groups may have more limited understanding or may be influenced by stronger stigma stemming from the early era of the HIV/AIDS epidemic. This finding is in line with research by Letshwenyo-Maruatona et al. (2019) who found that older adults may have more stigmatizing attitudes towards PLWHA compared to younger age groups [45].

Based on the data presented in the table, there is an interesting relationship between women's education level and stigmatizing attitudes towards purchasing food from sellers who suffer from HIV/AIDS. The results show that 100% of respondents with primary education, 49.2% with secondary education, and 38.9% with tertiary education would not buy anything from a food seller who has HIV/AIDS. Interestingly, the stigmatizing attitude towards purchasing food from sellers who suffer from HIV/AIDS decreases at higher education levels. These findings are in line with the general assumption that higher levels of education always correlate with less stigma. This is in line with research by Vorasane et al. (2017) who found that the relationship between education level and HIV stigma is not always linear and can be influenced by other contextual factors [42].

Based on the data presented in the table, there are significant variations in stigmatizing attitudes towards purchasing food from sellers who suffer from HIV/AIDS among various female occupational groups. The results show that 26.5% of respondents who work in the government employee sector, 44.5% of private employees, and 46.9% who do not work will not buy anything from a food seller who has HIV/AIDS. These differences in levels of stigma between occupational groups indicate the need for tailored intervention strategies for each sector. For the private sector, it is necessary to increase HIV/AIDS education programs in the workplace. For the public sector, strengthening existing policies and programs can help further reduce stigma. Meanwhile, for the Not Working group, focusing on maintaining and improving existing education programs can be effective. A comprehensive and evidence-based approach, such as that proposed by Stangl et al. (2019), is needed to overcome HIV stigma in various work sectors [36]. Additionally, interventions that consider sociocultural and economic factors, as recommended by Tsai et al. (2017), can help in reducing HIV stigma more effectively in all occupational groups [37].

Based on the table presented, we can analyze the relationship between women's age and the stigma associated with sharing eating utensils with PLWHA for fear of infection. The data shows significant variation in these attitudes among different age groups. Women aged < 20 years showed the highest stigma (75%) and those aged > 50 years had the lowest stigma. This finding is in line with research conducted by Dahlui et al. (2015), who found that demographic factors, including age, had a significant influence on stigmatizing attitudes towards PLWHA [28].

Based on the data presented in the table, there is an interesting relationship between women's education level and the stigma associated with sharing eating utensils with PLWHA for fear of infection. The results show that the percentage of stigma tends to decrease with 100% of respondents with primary education, 78% with secondary education, and 62.9% with higher education who do not want to share eating utensils with PLWHA. This finding is in line with research by Vorasane et al. (2017) who found that the level of education can influence attitudes towards PLWHA, although the direction of the relationship is not always linear [42].

Based on the data presented in the table, there is significant variation in stigmatizing attitudes towards sharing eating utensils with PLWHA among various occupational groups of women. The results show that 55.9% of respondents who work in the government employee sector, 72.3% of private sector employees, and 66.3% of those who do not work do not want to share eating utensils with PLWHA for fear of infection. These findings indicate that HIV/AIDS stigma is still quite high in all employment sectors, but at varying levels. The government employee group showed a relatively lower level of stigma (55.9%). This may be due to the existence of more structured education programs and policies related to HIV/AIDS in government institutions and state-owned companies. These findings are consistent with the study of Vorasane et al. (2017) which shows that workers in the public sector tend to have more positive attitudes towards PLWHA compared to other sectors [42].

Stigma patterns based on age, education and employment vary, indicating the need for education and intervention strategies that are tailored based on age, education and employment. For younger age groups, a focus on comprehensive HIV/AIDS education in schools and through social media can be effective. For the middle age group, strengthening educational programs in the workplace and community can help maintain and improve their positive attitudes. Meanwhile, for older age groups, an approach that is sensitive to their cultural values and life experiences may be necessary. A holistic, evidence-based approach, such as that proposed by Stangl et al. (2019), is needed to overcome HIV stigma in various age, education and employment groups [36].

4. CONCLUSION

Individuals with higher education tend have a better understanding of HIV/AIDS, which reduces discriminatory attitudes towards PLHIV because of access Which better access to scientific information and a deeper understanding of the mechanisms of HIV transmission and how to treat it. Education also plays a role in building a higher level of empathy and social awareness. In the context of communities with low education, stigma is more common due to a lack of information and awareness about HIV/AIDS. In the work environment, stigma often occurs due to differences in educational background. Individuals who work in the formal sector and have better access to education tend to have more positive perceptions of PLHIV, while individuals in the informal sector with lower education still often show negative attitudes. Even though there has been progress in treating HIV/AIDS, stigma is still a major obstacle that affects the physical, mental and social health of PLWHA. Age and education are not related to HIV/AIDS stigma while employment is related to HIV/AIDS stigma. This research shows that the stigma against HIV/AIDS is still strong in various aspects of life, including the family, workplace and general society. Future research could focus on developing and evaluating community-based interventions aimed at reducing this stigma.

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