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## Profiles of Housewives with HIV-AIDS in Surabaya

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### ABSTRACT

Most HIV transmission to housewives is from husbands infected with HIV. The number of housewives infected by HIV has been increasing especially in Surabaya. This research aimed to find out the profile of housewives infected with HIV so that strategies can be proposed to prevent transmission to this vulnerable group. This was a descriptive study with a cross-sectional design. The research subjects were housewives with HIV in Surabaya selected with purposive sampling method. Inclusion criteria were: not commercial sex workers (CSWs) or former CSWs, had main role as housewives, one-time marriage history, can read, write, and willing to be respondents. The number of respondents were 58 people. Data were collected by questionnaire containing general characteristics, marital history, husband's history, signs and symptoms of HIV for the first time, history of the first examination, history of disclosure of first time status, and the first source of information about HIV. Data analysis used frequency distribution and percentage. The results showed that the age of the majority of respondents were 36-45 years old, high school education, married age 17-25 years, husband's age at marriage 17-25 years, husband's work was an employee, with high school education, history of husband's behavior was having a relationship with other women, the history of the first HIV test was in hospital, with no symptoms, the first source of information about HIV was a doctor, and the majority revealed it to her husband. Proposed strategies in accordance with these profiles are interventions in high school, pre-marriage, marriage, and the husband's workplace setting.

**Keywords:** HIV, housewife, profile, people living with HIV/AIDS

### BACKGROUND

HIV/AIDS is still a serious problem both globally and nationally, because many cases occur in the productive period. Most of the causes are from sexual factors<sup>1</sup>. Based on the report by the Indonesian Ministry of Health in 2019, the cumulative number of AIDS patients reported by occupation /status in October-December 2019 was the highest among non-professionals and housewives as the third highest rank<sup>2</sup>. Most people living with HIV/AIDS (PLWHA) are found in Surabaya City, Malang Regency, Pasuruan Regency, Gresik Regency, and Jember Regency<sup>5</sup>.

East Java Health Office in 2018 reported the ratio of females who are infected was increasing from year to year. There were 212 women in the city of Surabaya with HIV and 103 cases with AIDS<sup>5</sup>. According to Dewi *et al.* in 2018, factors that influence women's susceptible for HIV infection in Bali are gender inequality, lack of knowledge, stigma against condom and HIV, sexual behavior at risk of women and partners, economic pressures that encourage women to engage in prostitution, and economic dependence which restricts access to services<sup>3</sup>. In addition, through qualitative research in the city of Denpasar, Dewi found that women still maintain subordinate positions in marital relations, so that they can become an oppressed group which can lead to

sexual difficulties. This study also found that women could not negotiate the use of condoms which allowed vulnerable women to get sexually transmitted infections.

Transmission to housewives generally comes from husbands who have high-risk sexual behavior<sup>1</sup>. Therefore, a search also needs to be done of the characteristics of the husbands both in terms of age, work, negative habits of the husbands related to the risk of HIV transmission. History in marriage can also give an idea about whether marriage is performed at a young age and if it was their own decision or a marriage based on the intervention of others outside the couple. Marriage that happened because of another party could have the possibility of violence in household, including sexual violence. Sexual violence could be related to risk of HIV infection among women<sup>2</sup>. Living separately after marriage also could become opportunity for husbands to have another partner, beside the wife. Having multiple sexual partners is also one of the risk behaviors of getting HIV<sup>1</sup>. To address this issue could become one of the opportunities in preventing HIV among the housewives.

Some studies have also revealed that housewives are reluctant to have HIV screenings related to HIV stigma, lack of knowledge and also the perception that it is

impossible to contract HIV<sup>3,4</sup>. This makes the housewives to not pay attention to the symptoms of HIV. Accordingly, a survey of HIV symptoms and signs, a history of HIV screening, a history of status disclosure and the first source of information these housewives know about HIV are important to do. This information is useful to provide an overview for the health services to intervene related to the vulnerable group of housewives.

These data showed that efforts are needed to prevent HIV transmission to women especially housewives, such as health promotion, health education, early examinations, as well as other preventive efforts for HIV/AIDS. Meanwhile, research on the profile of housewives with HIV-AIDS, especially in Surabaya, is still not widely found. This research article identifies the profiles of housewives with HIV/AIDS in Surabaya from their general characteristics, husbands' characteristics, signs and symptoms of HIV, history of first time examination and disclosure, and source of information of HIV. It is expected that the results from this research can determine the effective and efficient approach toward this vulnerable group.

**RESEARCH METHODS**

This research was a descriptive research with a cross-sectional design. Subjects of this research were housewives with HIV/AIDS who were discovered from peer groups and hospitals in Surabaya. Respondents were chosen by purposive sampling. The inclusion criteria were: not nor never became commercial sex workers, had main role as housewives, had one history of marriage, could write and read well, and willing to become respondent.

This research was conducted from January to May 2019. Data collection was done by filling out the questionnaires. Questionnaires had already gone through validation and readability tests. The questionnaire instrument consisted of

survey questions in the form of housewives' characteristics, characteristics of husbands, marriage history, and history of HIV infection. The attributes of housewives are age and level of education. The history of marriage contains the age of marriage, the husband's age when married, and the decision to marry and live together or not after marriage. The husband's characteristics contain information about work, education, age at wedding, and negative habits of the husband. The history of HIV infection includes symptoms and signs of HIV, history of status disclosure, HIV test history, and source of HIV information. The instrument consists of 14 questions. Validation was done by face validity by providing questionnaires to experts to get input whether it is appropriate or not, validating criteria by looking at the suitability of standards, and validating content by looking at the appropriateness between the question and the purpose of research. The questionnaire was then tested by giving 10 HIV-infected housewives a readability test and seeing if there was a difference in the questions' perceptions. Results of questionnaire were calculated and grouped. Data analysis was done by making frequency distribution and percentage.

**RESULTS**

From January to May 2019, there were 58 people who met the inclusion criteria as respondents. Based on the questionnaire, the following results were obtained.

1. Characteristics

Table 1 shows the characteristics of respondents. From these data it was found that the majority of respondents were in the age group 36-45 years as many as 26 people (45%). In terms of education, the majority of respondents were high school graduates as many as 26 people (45%) then followed by respondents who had graduated from junior high school who were as many as 12 people (21%).

	Category	N (58)	Percentage
<b>Age (years)</b>	12-16	0	0
	17-25	3	5
	26-35	21	36
	36-45	26	45
	46-55	7	12
	56-65	1	2
<b>Education</b>	No formal education	6	10
	SD (primary school)	9	15
	SMP (junior high school)	12	21
	SMA (senior high school)	26	45
	Diploma	0	0
	Sarjana (bachelor)	5	9
	Total	58	100

**Table 1. Characteristics of Respondents**

2. History of marriage

Marriage history can be seen in Table 2. Both women and men were married mostly at the age of 17-25 years old. From the results, it was also found that 55% of respondents married not because of their own decision but the decision to marry came from parents, extended family, and prospective husband. From the results, it was also found

that most respondents said they lived together with their husband after the marriage.

3. Characteristics of husband

History of occupation, education and husband's existence can be seen in Table 3. In terms of employment, the majority of husbands work as private employees (48%)

**Table 2. History of Marriage**

<b>Characteristics</b>	<b>Category</b>	<b>N (58)</b>	<b>Percentage</b>
Marriage age (years)	12-16	8	14
	17-25	40	69
	26-35	7	12
	36-45	2	3
	46-55	0	0
	56-65	0	0
Husband's marriage age (years)	12-16	1	2
	17-25	29	50
	26-35	18	31
	36-45	10	17
	46-55	0	0
	56-65	0	0
People contribute to decision of marriage	Parents	17	29
	Extended family	9	16
	Joint decision of couples	26	45
	Prospective husband	1	2
	Self-decision	5	9
Living with husband after marriage	Yes	50	86
	No	8	14
	Total	58	100

**Table 3. Husband's Characteristics**

<b>Characteristics</b>	<b>Category</b>	<b>N(58)</b>	<b>Percentage</b>
Occupation	Not working	2	4
	Private employee	28	48
	Public employee	2	3
	Entrepreneur	10	17
	Others (NGO, driver, etc.)	16	28
Education	No formal education	0	0
	SD (primary school)	5	9
	SMP (junior high school)	8	13
	SMA (senior high school)	32	55
	Diploma	1	2
Existence	Sarjana (bachelor)	12	21
	Alive	31	53
	Decease	27	47
	Total	58	100

while a small proportion claim that their husbands are public servants (3%).

In terms of husband's education, most respondents answered that their husbands received education at the high school level (55%) and the second most were undergraduate (21%). When the research was conducted, it was asked about the existence of the husband whether he was still alive or had died. Most of the respondents, namely 53% still have a husband, while 47% have lost their husbands, mostly due to AIDS.

Respondents were also asked about the history of husband's negative behaviors or habits, and as many as 21 people answered yes to the question that their husbands had relations with other women and 14 people responded yes to question about drinking alcohol until drunk. Another finding that was obtained was that as many as 14 respondents admitted not finding any negative habits of their husbands from answer choices offered. The results of this study can be seen in Figure 1.

#### 4. History of HIV infection in respondent

History of HIV infection in respondents can be seen in Table 4. In terms of history of HIV infection, there were 33% of respondents who did not experience any symptoms, history of knowing HIV infection was obtained through the HIV status of their husbands, children and also at the time of antenatal care. As many as 67% of respondents experienced symptoms and checked themselves into health services and it was the start of their HIV status being revealed. The symptoms most often experienced were coughing and weight loss without any cause.

The respondents who examined themselves for the first time at the health center were 45%, then at the doctor's clinic (24%), hospital (22%) and midwives (2%). Regarding the disclosure of their positive status, 43% of respondents revealed it to their husbands, 19% revealed to parents, and as many as 7% did not disclose their status to anyone.

PLWHA, People Living With HIV/AIDS

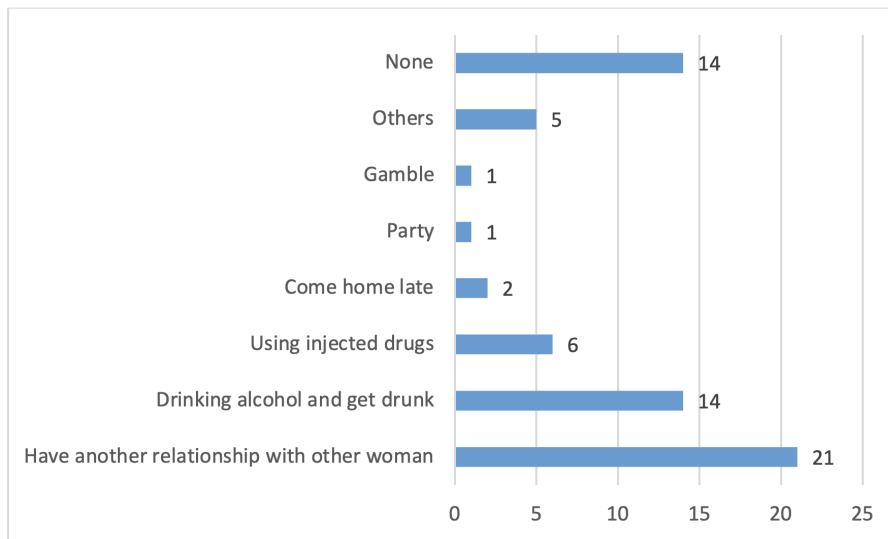


Figure 1. History of husband's behavior

Table 4. History of HIV Infection

Characteristic	Category	N(58)	Percentage
Sign or symptom	Cough	10	17
	Fever	2	3
	Diarrhea	7	12
	Weight loss	10	17
	Mouth sores	6	10
	Pain in genital organs	3	5
	Vaginal discharge	1	2
	No sign or symptom	19	33
History of first time examination	Hospital	13	22
	Primary health center	26	45
	Doctor's clinic	14	24
	Midwives	1	2
History of first time disclosure	Husband	25	43
	Parent	11	19
	Sibling	9	16
	Friend	3	5
	Volunteer of PLWHA	6	10
	No one	4	7
Total		58	100

Respondents were also asked about the first informant of HIV/AIDS. Respondents claimed that they first learned about HIV through doctors (30 people), followed by television (10 people) and websites (6 people). Most respondents firstly discovered about HIV from the doctor during pre and post HIV counseling. Data for this question can be seen in Figure 2.

**DISCUSSION**

The profiles obtained from this study in the form of respondent characteristics, husband characteristics, marriage history and history of HIV-AIDS infection can be input or ideas for related stakeholders in the formulation of HIV prevention programs for housewives in Surabaya.

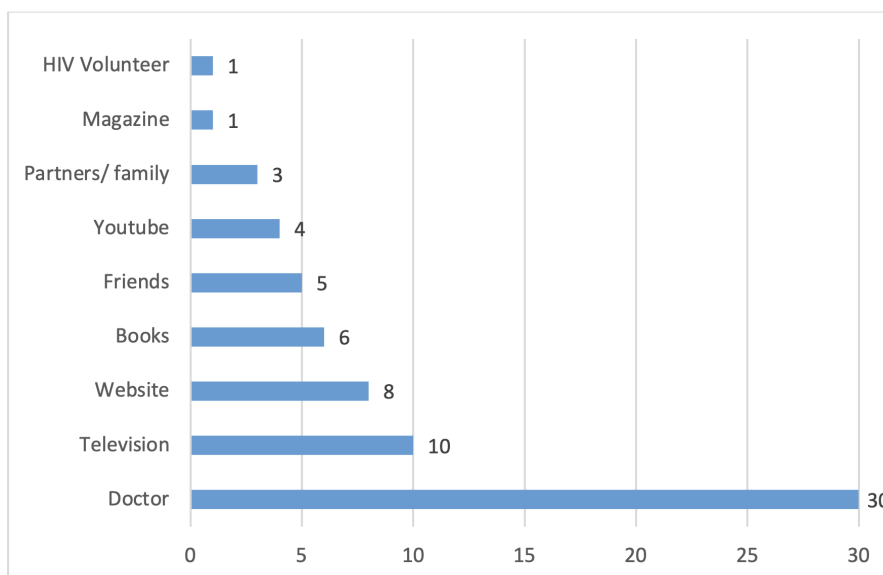
1. General Characteristics

In terms of age, the majority of respondents are in late adulthood (36-45 years) with the last level of education were graduated from high school. At the time of data collection, the respondents were members of the peer

support community or patients who were taking drugs at the hospital. They have known the condition of their HIV status for several years. Putra *et al.* conducted research at the Hasan Sadikin Hospital and also found that 60.78% of pregnant women who were infected with HIV were in the 30-39 years age group and the majority graduated from senior high school education<sup>8</sup>. This pattern, according to Putra, showed counseling and other preventive efforts are very possible and can be done in the family scope to increase the level of success of HIV prevention among the family members, especially the children. On the other hand, findings of the majority of mothers affected by HIV have received a high school education, indicated that efforts to educate adolescents in high school or earlier, become one of the ways to control the HIV virus among housewives. This must be done intensively and in sustainable programs in order for knowledge and behavior changes to be achieved.

2. History of marriage

The majority of respondents married in their late teens (17-



**Figure 2. First source of information of HIV/AIDS**

25 years) and the majority of husbands' age when married were in the age range of 17-25 years. According to Sari and Sunarti in 2013, respondents in their study stated that the ideal age for marriage for women is to marry at 23-25 years and for men it is 26 years<sup>9</sup>. This relates to marriage readiness, namely emotional, social, sexual, role and financial. Another interesting aspect about marriage history is that there were as many as eight respondents (14%) who were married under the age of 17 years. From a survey conducted by the Central Statistics Agency in 2014, it turns out that adolescents who live in rural areas tend to get married at younger age than those who live in urban areas<sup>10</sup>. Marriage and early pregnancy can cause a variety of possible risks or complications that result in maternal and infant death.

Researchers also aimed to find out whether there is an element of coercion in marriage by asking who decided to get married and the majority said that it was a joint decision. This finding is good, considering there were other regions or countries that place women as a lower class group who cannot decide for themselves<sup>11</sup>. This matter will trigger domestic violence such as sexual violence so that they are more susceptible to having sexually transmitted infections including HIV<sup>3</sup>.

In the questionnaire, respondents were also asked about living together, and the majority of respondents answered that they were living together with their husband. This finding is good, because separation and distance between husband and wife physically could be a trigger for a break in the relationship both psychologically and physically, making it vulnerable for affairs. According to Putra *et al.*, the majority of pregnant women diagnosed with HIV get heterosexual transmission from their husbands<sup>8</sup>.

### 3. Characteristics of Husbands

The results of this study indicate that the majority of husband's occupation were private employees, with the highest level of last education were graduated from senior high school. In accordance with the report of the Ministry

of Health of the Republic of Indonesia in 2019 that since 1987-2019, the second highest cumulative number of AIDS cases according to employment status was from employees<sup>6</sup>. An employee had a long time working in the office or workplace, therefore it could be considered for HIV socialization and HIV test in the workplace as a preventive step for preventing transmission from men with HIV to his partner. The method of education provided can be deeper and more complex due to the husbands' last level of education were in senior high school.

In this study questions were also asked about the history of husband's behavior. The majority of respondents admitted that they know their husbands had relationships with other women. Having more than one partner and not using safe protection such as condoms, are risk factors for the spread of HIV infection. Wives who knew that their partners had more than one partner should practice preventive behavior so they would not get infected, such as using safe protection (condoms) and/or doing voluntary counseling and testing (VCT) for early detection. Research by Tasa *et al.* in 2016 showed a significant relationship between housewives' perceptions of HIV and the use of VCT services<sup>4</sup>. This finding means that the more positive a housewife's perception of HIV/AIDS, the more likely she will use VCT services. In this study, a history of maternal knowledge in the past could not be investigated because *bias* can occur, but it was found that the majority of respondents heard about HIV for the first time from doctors. This finding might indicate they only found out when there were having symptoms or signs of HIV and went to see a doctor.

The results of this study also showed that almost half of respondents (47%) had lost their husbands (died). Housewives who have lost their husbands, most likely would have another partner. The results of Silitonga's research in 2018 on HIV prevention behavior of housewives showed a case of mothers with positive knowledge and attitude towards HIV would have HIV prevention behavior by asking her future husband to have VCT before they decide to marry<sup>12</sup>. Therefore, the handling of housewives who



have been infected with HIV is also important. This could be done by positive empowerment of housewives, both through economic, psychological and social empowerment.

#### 4. History of HIV infection in respondent

Regarding symptoms experienced by respondents, two of the most common complaints were cough and weight loss, while there were 33% who did not experience any symptoms and knew their HIV positive status during antenatal care and were examined when the husband or children were sick. According to Minister of Health regulation 21/2013, all pregnant women must have an HIV test during the pregnancy check-up process whether they had symptoms or not<sup>13</sup>. HIV testing is done after going through pre-test counseling and post-test counseling afterward. This could be done in *Puskemas* (primary health center), hospitals or independent doctor's clinics. From this study it was also found that the majority of respondents examined themselves at the hospital for the first time and revealed the results of tests to spouses and parents to get social support. Butt *et al.* in 2010 examined the culture and concept of gender on HIV stigma in the Papua Mountains region and found that cultural values can influence HIV to a certain level for example, withdrawal and isolation<sup>14</sup>. In addition, there were differences in response to HIV by gender where women tend to be more worried and tend to do self-stigmatization. This is also related to the disclosure of their status. Broad disclosure tends to have serious consequences such as discrimination. In this study it was found that more housewives revealed their status first to their spouse or husband than to parents, relatives or close friends.

In addition to the tests, housewives who were positively infected would be monitored routinely for taking drugs and conducting prevention programs for mother to child transmission (PPIA). According to the Green Model Precede-Proceed theory, changes in a person's behavior can be influenced by reinforcing factors, one of which is the support of health workers and social support<sup>15</sup>. This means that the role of strengthening the role of health workers in serving especially housewives is absolutely necessary.

#### 5. HIV/AIDS prevention strategies in housewives

The results also showed that the majority of respondents got their first information about HIV through doctors. Unfortunately, this could be interpreted that they had never received information about HIV when attending school. According to Pratiwi in 2011 there was a significant relationship between knowledge about HIV/AIDS prevention and first sexual behavior in adolescents aged 15-24 years<sup>16</sup>. According to education level, the majority of respondents also have senior and junior high school education. The same was also stated by Pratiwi in 2011 who found that adolescents with low education levels tend to have unsafe sexual behavior compared to adolescents with high education levels. Likewise, the level of education of couples, were at the level of high school education. This also made many health promotion strategies focused on senior and junior high school levels. According to Maulidiyah's research in 2015, there were significant differences in vocational students' knowledge about HIV

using the role playing method compared to lecture<sup>17</sup>. In addition, there were also peer group learning methods as one of the learning media about HIV/AIDS. As stated by Haerana *et al.* in 2015, there was a significant influence on increasing student knowledge by the peer group method<sup>18</sup>. This was likely due to peer educators being better able to influence their peers in forming health knowledge and attitudes. On the other hand, the role of parents was also a factor in reproductive health behavior of their children. Therefore, efforts can be made involving parents which is to increase the knowledge and attitudes of parents regarding reproductive health. Mediastuti and Revika's research results in 2019 showed that parenting class is effective in achieving this goal<sup>19</sup>.

In addition to providing exposure during adolescence, women and men who were ready to get married should also be equipped with knowledge of HIV so as to avoid HIV risk behaviors such as unprotected sex with multiple partners. Hidayah *et al.*'s research in 2019 used an e-book based approach that provided interventions regarding the knowledge and attitude of pregnancy care for married couples<sup>20</sup>. This research had very effective results that showed there is a possibility for HIV-related interventions for married couples. This model might also succeed in remembering HIV is related to stigma and taboo culture in discussing a person's sexual behavior.

HIV socialization can also be done on married couples both separately and together, although research shows that socialization together with partners was more effective than if it was done only on wives alone. Research by Sistiarani *et al.* in 2018 in South Purwokerto Subdistrict found that HIV prevention has not been done optimally by both husband and wife because the wife does not have power over her husband about his sexual behavior<sup>21</sup>. In addition, a low level of knowledge about HIV and sexual transmitted disease could also affect the attitude of housewives towards HIV<sup>22</sup>. It led housewives to not taking precautionary step against this risky behaviors such as using a condom when having intercourse and also asking the husband to check himself further. In addition, for husbands who work, socialization can also be done in the workplace, given the results of this study also found the majority of husbands work as private employees.

Some studies also try to examine promotion media that were suitable with the character of housewives. Al Rahmad *et al.* in 2017 used flipchart promotion media to improve household knowledge about consumption of vegetables and fruit when compared to the lecture method<sup>23</sup>. In addition, there was also research Suhertusi *et al.* in 2015 which stated that there were significant differences in knowledge about exclusive breastfeeding in housewives by using film media more than media leaflets<sup>24</sup>. Research conducted by Wibowo and Suryani in 2013 on increasing the knowledge of housewives about monosodium glutamate (MSG) showed that the use of audiovisual media and pocket books produces a significant positive effect<sup>25</sup>. Damayanti *et al.* in 2017 suggested that there was an increase in knowledge about clean and healthy living behavior among housewives in Sambas District by using local language leaflets when

compared to Indonesian language media<sup>26</sup>.

In accordance with the research findings, HIV prevention strategies for housewives can also be done by providing education to partners. HIV and VCT education for husbands can be done at work. Minister of Manpower and Transmigration of the Republic of Indonesia in Ministerial Decree No. Kep. 68/MEN/IV/2004 has issued rules regarding HIV/AIDS prevention and control in the workplace<sup>27</sup>. The government, employers and companies can provide guidance and efforts to prevent and control HIV/AIDS in the workplace, and also guarantee non-discriminatory policies if someone is found HIV positive among employees.

This research aimed to discover the profile of housewives with HIV so that the results could become input for stakeholders to plan the prevention strategies in preventing HIV transmission to housewives. From the results as described above, the stakeholders, i.e., *Puskesmas*, can target the audience of senior high school students by collaborating with the school's health unit to provide HIV education. *Puskesmas* can also target pre-marriage women and their future spouses by giving education and also screening test offer. This can also be integrated with pre-marital counseling. *Puskesmas* can also cooperate with religious departments or religious organizations for this action. In targeting married women, stakeholders can prepare media for education that is user-friendly to housewives and/or their husband. For example, groups can conduct a once-a-week talk program or counselling that discusses relationship and sex by inviting popular couples, or a video that could be sent via WhatsApp, Facebook or other social media that have been usually used by them. For targets in the husband's workplace, *Puskesmas* can advocate at the workplace and conduct education and screening test to the workers based on willingness. This must be done by maintaining a code of ethics and ensuring safety and confidentiality for the workers if they are found positive.

In summary, HIV prevention strategies for housewives based on the profile found in the study can be seen in Figure 3.

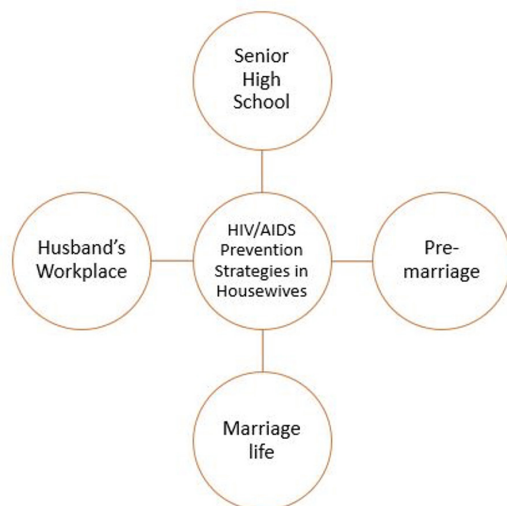


Figure 3. HIV/AIDS prevention strategies for nousewives

## CONCLUSIONS

Profiles of housewives infected with HIV in the city of Surabaya are the majority aged 36-45 years, high school education, married age 17-25 years, husband's age when married 17-25 years, married by mutual decision and living together with a partner, work the husband is an employee, with the last high school education level, the existence of the majority husband is still alive, the history of the husband's behavior is to have relationships with other women, the history of the first HIV test is at the hospital with the most common symptoms are no symptoms, the first source of information about HIV is a doctor, and the majority revealed their HIV status to their husbands. Proposed strategies that can be done by the stakeholders in accordance with these profiles are interventions in high school, pre-marriage, marriage, and the husband's workplace.

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