



## “I’m A Role Model”: Healthy Lifestyle of People Living with HIV in Special Region of Yogyakarta

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### ABSTRACT

The life expectancy of people living with HIV (PLHIV) has significantly increased due to advances in antiretroviral therapy, although it remains influenced by clinical, social, and lifestyle factors. This study aims to explore the healthy lifestyle practices of PLHIV in the Special Region of Yogyakarta, particularly in the context of stigma and discrimination. Using an ethnographic approach, data were collected through in-depth interviews with five informants (three men, two women) and documentation of activities within the Pita Merah Jogja (PMJ) community. Findings show that PLHIV perceive themselves as role models through the practice of healthy lifestyles, which include physical activity, diet, sleep regulation, avoidance of smoking and alcohol, stress management, weight maintenance, adequate hydration, supplement use, and safe sexual behavior. These practices are gendered and contextual: men PLHIV emphasize physical discipline, openness with partners, and self-control, while women PLHIV associate healthy lifestyles with family responsibilities, long-term survival, and adaptive strategies to maintain stamina. Challenges include economic constraints, workload, insomnia, discrimination in healthcare and the workplace, family stigma, and comfort-related preferences that affect condom use consistency. Adaptive strategies include substituting local foods, flexible exercise scheduling, napping, medical consultation, and cultural acceptance. These findings affirm that the healthy lifestyles of PLHIV are shaped not only by medical factors but also by the complex interplay of gender roles, social stigma, and cultural contexts. Therefore, HIV interventions should integrate gender-sensitive and culturally responsive approaches to support the sustainable quality of life of PLHIV.

**Keyword:** Role Model, Healthy Lifestyle, PLHIV

### ABSTRAK

Harapan hidup orang dengan HIV (ODHIV) kini semakin panjang berkat kemajuan terapi antiretroviral, meskipun masih dipengaruhi faktor klinis, sosial, dan gaya hidup. Penelitian ini bertujuan memahami praktik gaya hidup sehat ODHIV di Daerah Istimewa Yogyakarta, khususnya dalam menghadapi stigma dan diskriminasi. Dengan pendekatan etnografis, data diperoleh melalui wawancara mendalam terhadap lima informan (tiga pria, dua wanita) serta dokumentasi aktivitas anggota komunitas Pita Merah Jogja (PMJ). Hasil menunjukkan bahwa ODHIV memaknai dirinya sebagai role model melalui praktik gaya hidup sehat, meliputi aktivitas fisik, pola makan, pola tidur, menghindari rokok dan alkohol, pengelolaan stres, menjaga berat badan, kecukupan air mineral, penggunaan suplemen, serta perilaku seksual sehat. Praktik ini bersifat gendered dan kontekstual: ODHIV pria menekankan disiplin fisik, keterbukaan dengan pasangan, serta pengendalian diri, sementara ODHIV wanita mengaitkan gaya hidup sehat dengan tanggung jawab keluarga, keberlanjutan hidup, dan strategi adaptif menjaga stamina. Hambatan yang muncul antara lain keterbatasan ekonomi, beban kerja, insomnia, diskriminasi di layanan kesehatan dan dunia kerja, stigma keluarga, serta preferensi kenyamanan yang memengaruhi konsistensi penggunaan kondom. Strategi adaptasi dilakukan melalui substitusi makanan lokal, fleksibilitas waktu olahraga, tidur selingan,



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konsultasi medis, hingga penerimaan kultural. Temuan ini menegaskan bahwa gaya hidup sehat ODHIV tidak hanya ditentukan oleh faktor medis, tetapi juga oleh interaksi kompleks antara peran gender, stigma sosial, dan konteks budaya. Dengan demikian, intervensi HIV perlu mempertimbangkan aspek gender dan kultural untuk mendukung kualitas hidup ODHIV secara berkelanjutan.

**Kata Kunci:** Panutan, Gaya Hidup Sehat, ODHIV

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## 1. Introduction

The life expectancy of people living with HIV (PLHIV) has significantly increased, with many now achieving life expectancies comparable to those of individuals without HIV (Hayes, 2023). However, Hayes emphasizes that this progress is dependent on multiple factors, including access to treatment, the quality of care, and clinical indicators such as CD4 cell count and viral load. Individuals with higher CD4 levels and undetectable viral loads have substantially better prognoses. Moreover, comorbidities and chronic conditions such as cardiovascular disease, cancer, or liver disease also influence their quality of life. Injection drug use further decreases life expectancy due to increased risks of infection and overdose. Additionally, broader determinants, such as socioeconomic status, education, genetics, psychological stress, and lifestyle, also shape both the length and quality of an individual's life (Hayes, 2023). As an upper-middle-income country, having temporarily dropped to lower-middle-income status due to the impact of the COVID-19 pandemic in 2020, Indonesia reports an average life expectancy of 62 years for men and 65.7 years for women (UNAIDS, 2023).

In the previous discussion, Hayes (2023) noted that lifestyle is among the key factors influencing life expectancy and quality of aging in PLHIV. A healthy lifestyle has been associated with improvements in both life span and overall well-being. According to the WHO (1999), a healthy lifestyle refers to a pattern of living aimed at reducing the risk of serious diseases and premature death through positive behavioral changes. This approach not only focuses on disease prevention but also promotes comprehensive well-being physically, mentally, and socially. By choosing a healthier lifestyle, individuals are more likely to enjoy various aspects of life for a longer period (WHO, 1999).

From a cultural perspective, Dundon (2009) investigated the meaning of a healthy lifestyle among the Gogodala community in Papua New Guinea. He described the local concept of *ela gi* (lifestyle) as encompassing adherence to customary laws, moral values, and harmonious relationships with the environment—all of which are believed to play essential roles in disease prevention, including HIV and AIDS. Among the Gogodala, a healthy lifestyle is not defined solely in biomedical terms, but as a manifestation of moral and responsible living, especially in the regulation of sexual behavior in accordance with religious teachings and local traditions. Sexual activity is considered safe only within the bounds of Christian-sanctioned marriage, and condom use, as promoted in the ABC (Abstinence, Be faithful, Condom) strategy, is often perceived as a violation of spiritual and social norms (Dundon, 2009). This illustrates a divergence in understanding between medically driven definitions of a healthy lifestyle and culturally embedded interpretations, such as those held by the Gogodala community.

As previously highlighted, an increasing number of PLHIV are now living longer lives due to advances in medical treatment. However, aging with HIV presents unique challenges, making it important to explore how PLHIV define successful aging. In a study conducted by Solomon et al. (2017), 24 participants aged 50 years and older in Canada engaged in in-depth interviews that revealed six key themes underpinning the concept of successful aging. The first theme was accepting limitations. Many participants recognized that they could no longer perform certain activities as they did in their youth and had learned to adapt accordingly. One participant stated, “(successful aging is) being able to look ahead and to honestly adjust to doing less over the long haul” (P5). Another shared, “I’m in a happy place. I could be happier but I mean I’m sort of accepting. I’m accepting what my life is” (P14), indicating a realistic acceptance of current circumstances.

The second theme was the importance of staying positive. Optimism and gratitude were found to bolster participants' mental resilience. Several reported that maintaining a cheerful outlook helped them endure difficult days, even when fatigued or dealing with health complications. One participant confidently declared, “I have this mindset, you know what I mean? I’m going to bop till I drop” (P7). The third theme was maintaining social supports. Participants identified social connections, as provided by family, friends, HIV communities, and broader environments, as essential for alleviating loneliness and countering the stigma often associated with HIV. One participant admitted that seeking help was initially difficult, but over time, they learned that others were willing to support them (Solomon et al., 2017).

The fourth theme involved taking responsibility for one's health. According to Solomon et al. (2017), participants were diligent in managing their treatment, advocating for their healthcare needs, and actively becoming the primary managers of their own health conditions. Closely related to this was the fifth theme, living a healthy lifestyle. Participants adopted healthier eating habits, avoided tobacco and drugs, ensured adequate sleep, managed stress, and some began exercising regularly. Awareness of their compromised immune systems motivated them to make wiser and healthier life choices. The final theme was engaging in meaningful activities. Whether through employment, volunteer work, or small daily tasks, maintaining purposeful activity contributed significantly to their sense of well-being. One participant shared, "... it doesn't matter what I have to keep me busy as long as to me it's meaningful and productive" (P5).

The healthy lifestyle practices described by PLHIV in Solomon et al. (2017) study are further complemented by findings from Montgomery et al. (2017), who explored the experiences of PLHIV participating in a community-based exercise programme (CBEP) in Toronto, Canada. Each participant joined the program with different motivations and goals, some wished to build muscle strength, reduce joint pain, or increase energy for daily tasks. Participants engaged in individualized exercise programs that ranged from 45 minutes to 2 hours per session, two to five times per week. The sessions included a variety of physical activities such as weightlifting, endurance training, flexibility exercises, and balance routines. Over the course of the 16-week program, participants reported substantial improvements. Physically, they experienced increased energy, reduced pain, better sleep quality, and improved capacity for daily activities. Mentally, they reported enhanced self-confidence and mood, with several expressing pride in their achievements throughout the program (Montgomery et al., 2017).

A similar picture of healthy lifestyles among people living with HIV (PLHIV) has been observed outside Indonesia. The subsequent question, however, concerns how healthy lifestyles are practiced by PLHIV in our country, where individuals continue to be haunted by stigma from their social environment. In Jayapura, for instance, PLHIV have experienced highly complex and challenging psychological changes, ranging from sadness, crying, fear, rejection, and depression to suicidal ideation (Sembiring, 2024). Fear and stigma from their surroundings often lead many PLHIV to withdraw, conceal their HIV status from family and friends, and refrain from opening up even to those closest to them. This situation is exacerbated by prevailing negative perceptions and fear surrounding HIV and AIDS, which frequently result in social exclusion, even by family members. The widespread belief that HIV and AIDS represent moral punishment further contributes to the social isolation of PLHIV (Ninef et al., 2023). Similar experiences have also been reported in Bali, where some participants in Hidayat et al. (2022) study faced stigma from family members who considered HIV positivity to bring shame and damage extended family and community relationships. In certain cases, individuals were expelled from their homes after disclosing their HIV status. Such familial stigma is particularly painful in Indonesia, where cultural norms emphasize strong family ties as a primary source of social support (Hidayat et al., 2022).

The Special Region of Yogyakarta records the lowest number of PLHIV compared to the other five provinces on the island of Java, with 478 cases identified between January and June 2024 (Kemenkes RI, 2024). This may be related not only to its smaller population compared to other Javanese provinces but also to other contextual factors. Despite the relatively low prevalence, the health conditions of PLHIV in Yogyakarta reveal diverse dynamics, particularly in navigating stigma and social discrimination. Mahamboro et al. (2020) found that stigma originates not only from the broader public but also from close sources such as healthcare providers, family members, and the participants' own moral judgments. Participants reported frequent experiences of discriminatory treatment in hospitals, such as being neglected without care for several days, healthcare workers appearing reluctant to touch or treat them, and generally unfriendly attitudes. These experiences created discomfort and reluctance to return to such facilities.

Within community settings, participants described being shunned by neighbors, with others avoiding physical proximity or refusing to sit nearby out of fear of contracting HIV (Mahamboro et al., 2020). Such stigma and discrimination are largely fueled by a lack of public understanding about HIV transmission routes (Febrianti & Winandari, 2022). Discrimination was also evident within families, including practices such as separating personal eating utensils, avoiding physical contact, or distancing themselves when the participant was ill (Mahamboro et al., 2020). As a result, many PLHIV conceal their status to protect family reputation and minimize negative consequences. In reality, as emphasized by the Kemenkes RI (2016), HIV transmission occurs through four primary pathways: unprotected sexual intercourse, blood transfusion or blood products from an HIV-positive person, the use of contaminated needles, and mother-to-child transmission during pregnancy, childbirth, or breastfeeding. Thus, avoiding physical contact with PLHIV constitutes a form of unjustified discrimination.

Moreover, many PLHIV acknowledged the presence of self-stigma, rooted in internalized moral judgments regarding their HIV status (Mahamboro et al., 2020). HIV-related stigma is reinforced by Javanese cultural and religious values that interpret HIV as divine punishment for moral and religious transgressions (Agnes & Songwathana, 2021). It is often associated with perceived immoral behaviors such as promiscuity or engagement with commercial sex workers. Consequently, some participants expressed feelings of guilt, despair, and self-perceptions of being “dirty” or “sinful” (Mahamboro et al., 2020). These moral perspectives deepen feelings of shame and hinder the pursuit of social support. To cope, PLHIV adopt concealment strategies, employing coded language or specific symbols understood only by fellow PLHIV or those already aware of their condition (Listiana, 2013). Such strategies enable social interaction and community acceptance, albeit while carrying significant psychological burdens due to stigma. Against this backdrop of challenges, questions remain: how do PLHIV in Indonesia pursue healthy lifestyles? What practices constitute these lifestyles? And what obstacles hinder their path toward maintaining health? These are the central questions that this study seeks to address.

## 2. Method

This qualitative study employed an ethnographic approach and was conducted between July and September 2025 in the Special Region of Yogyakarta. The research focused on one community actively engaged in HIV and AIDS issues, particularly in empowering people living with HIV (PLHIV), namely Pita Merah Jogja (PMJ). PMJ was selected as the primary entry point for data collection due to its open membership network, willingness to participate in the study, and active involvement in advocacy and awareness-raising activities related to HIV and AIDS in Yogyakarta. Furthermore, the organization offered access to rich data, given the limited number of ethnographic studies exploring in-depth how PLHIV conceptualize and practice healthy lifestyles.

Data collection was carried out using two methods: in-depth interviews and documentation. The in-depth interviews aimed to explore PLHIV’s knowledge of healthy lifestyles as well as the subjective meanings underlying their practices. A total of five informants were interviewed, representing diverse social backgrounds, ages, and genders in order to capture a range of perspectives (Table 1). Social background, particularly occupation, was considered in relation to how informants’ work and workplace environments support or constrain healthy lifestyles, given the persistence of workplace stigma and discrimination. Saputra et al. (2025) noted that workplace discrimination against PLHIV manifests in various forms, such as recruitment denial, contract termination, restricted career advancement, and is exacerbated by social stigma and weak legal protections, thereby limiting occupational opportunities for PLHIV. Age differences were taken into account to compare generational perspectives on healthy lifestyles, while gender was explored in relation to the distinct challenges faced by men and women. Women living with HIV often experience heightened risks due to gender inequality, including men dominance over women’s bodies and vulnerabilities to transactional sex driven by economic disparities (Amin, 2015). Interviews were conducted flexibly, scheduled according to participants’ availability, and held in mutually agreed locations such as workplaces or PMJ’s regular meeting locations.

Table 1. Characteristics of Informants

Informant	Age	Gender	Recent Education	Occupation	Marital Status	Partner’s HIV Status
BU	33	Man	Senior High School	Employee	Unmarried	-
PA	44	Man	Bachelor Degree	Employee	Marry	Non-PLWHIV
BA	34	Man	Bachelor Degree	Self-employee	Unmarried	-
LI	44	Woman	Senior High School	Housewife	Marry	Non-PLWHIV
TI	49	Woman	Junior High School	Daily worker	Widow	-

Documentation consisted of fieldnotes and photographs, which aimed to capture participants’ healthy lifestyle practices. Data analysis followed the reflexive thematic analysis approach (Braun & Clarke, 2006; Braun et al., 2019), focusing on how PLHIV construct and negotiate healthy lifestyles. Interview recordings were transcribed verbatim and anonymized, alongside fieldnotes. All data were repeatedly read for

familiarization, and a participant codebook was developed (Lazuardi, 2019), containing informants' profiles and details of their healthy lifestyle practices. This process facilitated an understanding of each informant's knowledge and enabled the generation of initial analytic insights.

### 3. Result and Discussion

The findings show that PLHIV in the Special Region of Yogyakarta construct themselves as role models who are capable of confronting stigma and discrimination through the practice of healthy lifestyles. This role model identity derives from their active involvement as educators in various activities related to HIV and AIDS issues, from local to national levels. As role models, the informants exemplify best practices in adopting healthy lifestyles among PLHIV. Such an identity not only serves as resistance against negative stereotypes attached to HIV-positive bodies but also as a strategy to demonstrate that they remain empowered, productive, and socially worthy. Through efforts to maintain physical health, psychological stability, and social engagement, PLHIV reaffirm that living with HIV does not prevent them from leading a quality life. This awareness is reflected in their choices to adopt healthy lifestyles, including physical activity, dietary practices, sleep regulation, avoidance of smoking and alcohol, stress management, weight maintenance, sufficient hydration, use of supplements, and safe sexual behaviors.

#### 3.1. Physical Activity

The study reveals variations in how men and women informants interpret and engage in physical activity. For men participants, exercise was viewed as a means to maintain stamina while also managing health-related conditions. BU reported routinely walking at least 6,000 steps daily in line with WHO recommendations and swimming once or twice a week. He emphasized the benefits of exercise in improving sleep quality and overcoming chronic insomnia:

“At least 6,000 steps a day must be achieved, as recommended by WHO. ... After exercising, by 11 pm I already feel sleepy, by midnight I fall asleep. So, at least, my daily sleep needs are fulfilled” (BU, 33 years)

BA integrated physical activity into his profession as a yoga instructor. Practicing yoga five times a week and fitness twice a week, he experienced both physical benefits, such as increased muscle strength and diabetes prevention, and psychological benefits, particularly in managing panic attacks. In contrast, PA rejected formal exercise, emphasizing instead “inner exercise” through happiness. For him, family support and emotional stability were sufficient to maintain health, highlighting that healthy living is not only medically defined but also shaped by moral and spiritual values. This reflects Dundon (2009) findings in Papua New Guinea, where healthy lifestyles are understood not only medically but also through moral, spiritual, and emotional dimensions. Figure 1 illustrates a yoga activity organized by PMJ members to commemorate Indonesia's 80th Independence Day.



Figure 1. Yoga practice by PMJ members

Unlike men, women participants often interpreted physical activity as a commitment to sustaining family health and long-term wellbeing. LI routinely walked with her husband, who had a history of diabetes, and occasionally joined online aerobic classes. Her primary motivation was to remain healthy for her children while supporting her husband's healthy lifestyle. TI engaged in daily walks and light exercise guided by YouTube videos, but her work as a catering laborer often disrupted these routines. To adapt, she incorporated exercise into short breaks during work:

“For exercise... well, I do it in between things, like when the chicken isn’t cooked yet or the packing isn’t ready. In those breaks, sometimes I go out for a walk. I just look for the opportunity” (TI, 49 years)

For both women, physical activity was not only about personal health but also tied to domestic responsibilities and family obligations. The main challenges for both men and women participants were limited time, fatigue, and occupational demands. BU admitted sometimes delaying exercise due to exhaustion from work, while BA emphasized consistency and commitment to avoid interruptions. For women, LI described difficulties waking up early and dependence on her husband’s schedule, while TI struggled with the long working hours required by her catering job. Adaptive strategies included rescheduling exercise to the evening, compensating with longer sessions on subsequent days, or incorporating physical activity into domestic or work routines. These findings demonstrate that physical activity among PLHIV in Yogyakarta is flexible and contextual, shaped by occupational dynamics, gender roles, and family support. Despite limitations, both men and women PLHIV demonstrated creativity in sustaining consistent physical activity as part of a healthy lifestyle.

### 3.2. Dietary Practices

The study also shows that dietary practices among PLHIV in Yogyakarta are not uniform but vary between men and women, with adaptive strategies shaped by economic conditions, health status, and cultural values. Men participants tended to emphasize nutritional control by reducing fatty foods and increasing protein intake, whereas women participants emphasized simplicity, household food availability, and the emotional significance of meals. BU stressed nutritional balance by ensuring the presence of both protein and vegetables in every meal, aligning with WHO (2003) guidelines emphasizing the importance of protein and fiber for immune support. His diet included eggs, tofu, tempeh, chicken, fresh vegetables, and fruits such as oranges and watermelon. His adaptive strategy involved maintaining consistency within his financial means, such as substituting meat with more affordable plant-based proteins. He explained:

“My principle has always been that every meal must include protein and vegetables. So, my daily protein and fiber needs are always met.” (BU, 33 years)

BA adjusted his diet to align with his physical activity as a yoga instructor. He deliberately reduced consumption of white rice, fried foods, and sweetened drinks, replacing them with protein sources such as eggs, tuna, and meat, alongside high-fiber foods such as sweet potatoes, edamame, leafy greens, and traditional herbal drinks like wedhang uwuh (Figure 2). His adaptive strategy was food substitution, replacing high-risk foods (fat, sugar) with healthier sources of energy and protein.

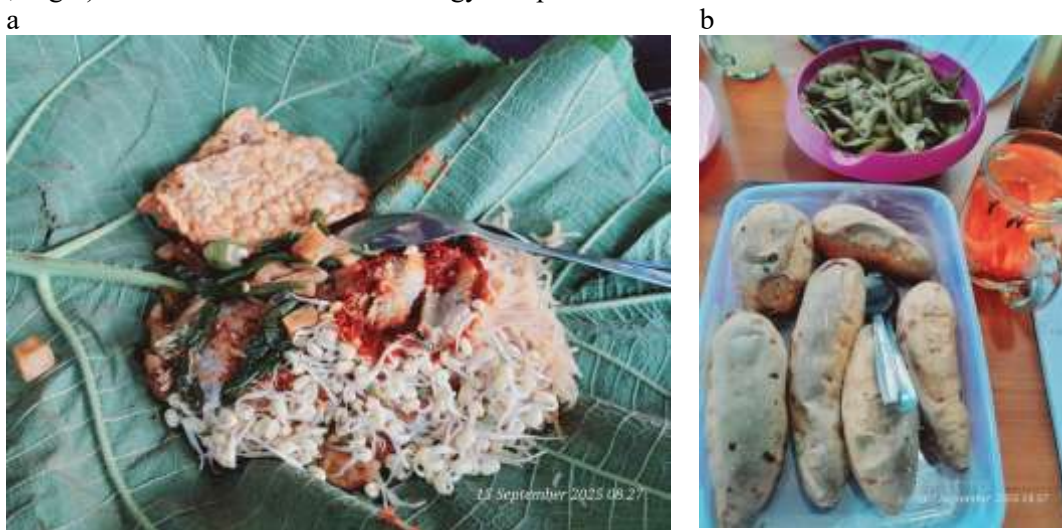


Figure 2. (a) Traditional rice dish with tempe and tuna; (b) sweet potatoes, edamame, and wedhang uwuh

By contrast, women participants emphasized simple household-based diets. LI consumed mostly vegetable-based dishes such as soups, stir-fried watercress, water spinach, chayote, banana blossoms, and bitter

melon, combined with protein sources such as tempe, tofu, chicken, and fish. When feeling weak, she supplemented her diet with mung beans or red beans for energy. As a housewife, LI's adaptive strategy involved relying on affordable, locally available foods that were also suitable for her family's preferences. TI, on the other hand, associated healthy eating not solely with nutritional value but with the enjoyment of meals. She consumed simple foods based on taste, adhering to the principle that healthy food is food that can be enjoyed. For her, emotional satisfaction and gratitude were integral to health:

“For me, eating healthy means being able to enjoy the food. No matter how good it is, if you cannot enjoy it, then it's not healthy food.” (TI, 49 years)

The main challenges in maintaining a healthy diet included economic constraints, limited time due to work commitments, and social stigma restricting access to nutritious foods. BU and BA often had to adjust their healthy menus according to financial resources, while LI and TI faced dilemmas balancing family nutritional needs with household economic conditions. Adaptive strategies included food substitution (e.g., replacing meat with tofu or tempe), reliance on affordable local foods (leafy vegetables, sweet potatoes, mung beans), and integrating healthy meals into family routines. Ultimately, healthy diets among PLHIV in Yogyakarta were not solely guided by biomedical nutritional standards but emerged through negotiation among bodily needs, economic realities, and Javanese culinary culture.

### 3.3. Sleep Regulations

Sleep regulations constitute a crucial aspect of healthy living among PLHIV in Yogyakarta, directly influencing immunity, mental health, and daily quality of life. Interview findings revealed gendered differences in sleep experiences, shaped by employment demands, mental health status, and domestic responsibilities. For men informants, sleep patterns were often associated with work rhythms and psychological conditions. BU reported a history of insomnia that frequently disrupted his sleep quality. He acknowledged that insufficient sleep impaired his concentration at work and weakened his immunity. To address this, BU adopted adaptive strategies such as engaging in regular physical activity, walking at least 6,000 steps per day and swimming once a week to relax his body. He emphasized the importance of sufficient sleep:

“Adequate sleep feels good. The body feels fresh, the mind is more focused. But if I lack sleep, I get drowsy, tired, bored, and eventually lose focus at work... the immune system will decline” (BU, 33 years).

Similarly, PA adjusted his routine by going to bed earlier, at 10 p.m., and limiting gadget use before bedtime. He believed this strategy helped stabilize his emotions and reduce stress. BA stressed the necessity of 6–8 hours of sleep as a non-negotiable requirement for maintaining physical and mental condition, particularly given his demanding schedule as a yoga instructor and entrepreneur. In contrast, women informants' sleep patterns were more affected by domestic responsibilities and informal work. LI maintained a relatively regular schedule, sleeping at 10 p.m. and waking at 4:30 a.m., which she reported made her feel refreshed and emotionally balanced. Unlike LI, TI faced significant challenges due to her catering business, which often required her to work until late at night. Consequently, her sleep pattern was irregular, as she was accustomed to staying awake until the early morning hours and compensating with daytime or afternoon sleep. TI recognized that inadequate sleep left her body easily fatigued:

“When I have enough sleep it feels good, but when I lack sleep, my head aches, my body feels sore and stiff.” (TI, 49 years)

To adapt, TI practiced napping during work breaks and shared household tasks with family members to reduce her physical burden. These findings suggest that men PLHIV tended to emphasize discipline and exercise as strategies to regulate sleep quality, while women PLHIV more frequently encountered external obstacles such as domestic duties and income-generating work that disrupted their rest rhythm. Key challenges across both genders included insomnia, work demands, and entrenched habits that were difficult to change. Adaptive strategies encompassed exercise, scheduled sleep routines, reducing gadget use, napping, and sharing domestic roles. Thus, sleep patterns among PLHIV in Yogyakarta are highly contextual, simultaneously shaped by biological, social, and cultural factors.

### 3.4. Avoiding Cigarettes and Alcohol

The study found that practices of avoiding cigarettes and alcohol among PLHIV in Yogyakarta varied, shaped by past experiences, socio-economic conditions, and gender. Men informants (BU, PA, and BA) exhibited different trajectories. BU was a former smoker and alcohol consumer who successfully quit after a long process, involving medical consultation and personal determination. He acknowledged that the greatest challenge lay in the addictive nature of nicotine and the social environment's familiarity with smoking, necessitating a gradual strategy to fully quit. Conversely, PA had never been interested in smoking or alcohol, despite having worked in a bar, considering his disinclination to be both biological and personal preference. He recalled his early experience of trying alcohol as deeply unpleasant:

“It only reached my mouth, before I even swallowed, I already spat it out.” (PA, 44 years)

BA had tried with cigarettes and alcohol in social contexts but did not develop dependence. He viewed smoking and drinking as both financially wasteful and physically harmful. This economic perspective illustrates how resource constraints can function as motivation to avoid unhealthy habits. In contrast, women informants demonstrated distinct challenges. LI had never smoked or consumed alcohol but was frequently exposed to secondhand smoke, making her a passive smoker. This illustrates how women living with HIV face health risks despite not directly engaging in such behaviors. TI, meanwhile, had tried smoking and alcohol but did not consider them essential. She consumed them only during certain social occasions, primarily for reasons of togetherness and affordability:

“If someone offers, I'll join. But I won't buy it myself. What matters is food and the children.”  
(TI, 49 years)

TI's narrative highlights how women PLHIV often negotiate healthy lifestyles in relation to family priorities and economic conditions, compared with men who more directly contend with addiction and peer pressure. These findings confirm that adaptive strategies for avoiding cigarettes and alcohol are gendered. For men, strategies focused on self-control, personal resolution, and social network selection to reduce exposure. For women, strategies were closely tied to household economic priorities, caregiving roles, and the ability to refuse in social situations. Common challenges included addiction, environmental exposure, and social pressure, while adaptive strategies included gradual cessation, medical consultation, substitution with healthier activities, and using family needs as a shield to avoid consumption. These findings align with previous studies showing that smoking and alcohol consumption worsen health outcomes among PLHIV, including increased risk of opportunistic infections and accelerated disease progression (Míguez-Burbano et al., 2009; Braithwaite et al., 2008). WHO (2014) also emphasizes that quitting smoking and avoiding alcohol provide immediate benefits for immunity and quality of life among PLHIV.

### 3.5. Stress Management

Stress represents a significant challenge for PLHIV in Yogyakarta, arising from a combination of medical burdens, social stigma, family responsibilities, and experiences of discrimination in workplaces and healthcare settings. Findings revealed gendered differences in stress sources and adaptive strategies, with gender roles and discriminatory experiences shaping coping mechanisms. Among men PLHIV, stress was often triggered by work-related pressures, social expectations, and workplace discrimination. PA recounted repeated pressure from several companies regarding his need for monthly ARV medication, where he was forced to choose between resignation or termination due to being perceived as unproductive:

“Ten days later I was given two letters, one for resignation and one for dismissal... in the end I chose resignation.” (PA, 44 years)

His HIV status made it increasingly difficult to secure employment, as other companies rejected him for similar reasons, causing prolonged stress regarding his family's economic stability. The situation changed when PA was employed by an NGO focused on HIV and AIDS, where he felt the workplace was more inclusive and supportive, allowing him to work without concealing his status. This institutional acceptance served as a crucial adaptive strategy, alleviating psychological burdens and improving his quality of life. Currently, PA experiences stress mainly during high-pressure periods such as work audits. To cope, he seeks emotional support through conversations with his partner and family, as well as light recreation such as

watching films. Echoing Triratnawati (2021), family acceptance and support function as a form of healing—not in the sense of being cured of HIV, but in a broader sense of social and mental well-being.

BU also described discrimination in healthcare. He recalled feeling uncomfortable when repeatedly questioned about HIV risk factors during an emergency room visit unrelated to HIV, leading him to report the incident to the Health Office as an act of advocacy. He noted that discrimination in healthcare not only added to his personal stress but also endangered other PLHIV who may be unaware of their rights. BU further explained that he sometimes experienced sudden episodes of anxiety, which he managed through distraction, exercise, and meditation. BA shared that he coped with economic pressures and family challenges through acceptance, aligning with the concept of “accepting limitations” identified by Solomon et al. (2017) as a foundation of healthy aging with HIV.

For women PLHIV, stress was more closely linked to family dynamics, experiences of loss, and social stigma. LI admitted she was prone to stress due to overthinking, particularly when lacking sufficient activities. Her strategies included staying active through exercise, temporary withdrawal, or sleeping to relieve tension. TI faced severe stress due to multiple life losses, including the deaths of her husband and one of her children, compounded by social stigma. However, she adopted an attitude of “*ndablek*” (indifference to others’ judgments) as a survival strategy:

“Why should I be stressed? They don’t think about me anyway. So I just stay calm. Whenever I face problems or incidents, I take it slow. I never let it occupy my mind.” (TI, 49 years)

This approach reflects Javanese cultural values of *nrimo* (acceptance) and resilience as adaptive responses to life pressures. The analysis demonstrates that stress management challenges differ by gender. For men, stress was exacerbated by structural discrimination in workplaces and healthcare, prompting advocacy and active coping strategies. For women, stress was more often tied to social stigma and overthinking, managed through acceptance, emotional resilience, and cultural meaning-making. These findings highlight that stigma and discrimination not only hinder healthcare and employment access but also intensify the mental burden of PLHIV.

### 3.6. Maintaining an Ideal Body Weight

Maintaining an ideal body weight is an essential component of healthy living among PLHIV in Yogyakarta. Body weight is perceived not only as a physical measure but also as an indicator of health, comfort in daily activities, and even self-identity. The findings reveal gendered differences in weight management experiences, shaped by biological, psychological, and sociocultural factors. Among men, awareness of body weight was more often linked to the prevention of comorbidities. BA, for instance, regularly monitored his weight through gym facilities equipped with in-body training devices (Figure 3).



Figure 3. Informant’s body weight record connected to a mobile application

This awareness aligns with WHO (2003), which highlights the importance of monitoring nutritional status among PLHIV, given that rapid weight loss can serve as a strong predictor of disease progression.

Similarly, BU recognized that his mild obesity could increase the risk of metabolic disorders such as hypercholesterolemia and hypertension, making him more vigilant about weight management. This observation is consistent with Koethe & Heimbürger (2010), who demonstrated that both significant weight loss and obesity elevate the risk of metabolic complications in PLHIV. Obesity, in particular, has been linked to insulin resistance, hypertension, and cardiovascular disease (Koethe et al., 2016). In contrast, PA held a different perspective, regarding weight management not as a medical priority but rather as a matter of comfort and family support. Although he once attempted dieting, he ultimately prioritized flexibility:

“I once tried intermittent fasting, but my wife said: don’t worry about dieting, what matters is that you’re healthy. If your clothes don’t fit, just buy new ones.” (PA, 44 years)

This perspective underscores that men’s interpretation of body weight is not homogeneous, but rather shaped by personal experiences and social support. For women, body weight dynamics were more closely related to ARV regimens and psychosocial motivations. LI reported weight stagnation and even weight loss when using efavirenz, which caused gastric disturbances and insomnia. Her condition improved after switching to the TLD regimen:

“After starting TLD, my weight began to increase. My whole life I was only 45–46 kilos, now I can reach 49. Oh my, my weight has gone up.” (LI, 44 years)

This change resonates with clinical findings that certain ARV regimens, including tenofovir/lamivudine/dolutegravir (TLD), may induce weight gain in some patients (Norwood et al., 2017). Meanwhile, TI emphasized the importance of maintaining physical appearance and body weight as a personal motivation to remain healthy:

“To maintain my physique, appearance also matters. Even though I am almost 50, I try to look young. This keeps me motivated to stay healthy and not think too much about being HIV-positive.” (TI, 49 years)

TI’s narrative illustrates the psychosocial dimensions of weight management, where appearance functions not only as a symbol of health but also as a strategy to sustain self-esteem and counter internalized stigma. Thus, maintaining an ideal body weight among PLHIV is not solely a medical practice but also a negotiation of identity and survival strategy. Among men, the focus was largely medical and disease-preventive, whereas among women it was more strongly tied to ARV side effects and appearance. These findings confirm that weight management among PLHIV is shaped by the complex interplay of biological, psychological, and sociocultural factors.

### 3.7. Adequate Water Intake

Adequate water intake is a vital aspect of a healthy lifestyle for PLHIV, as it directly relates to kidney function, drug metabolism, and immune defense. The WHO (2003) underscores that proper hydration plays an essential role in maintaining renal health and preventing metabolic complications, particularly for individuals undergoing long-term ARV therapy. However, ensuring sufficient water intake is not always straightforward, as it is influenced by personal experiences, childhood habits, taste preferences, and occupational conditions. Among men PLHIV, awareness of hydration often emerged after experiencing health problems. BA, for instance, began consuming 1.5–2 liters of water daily after experiencing back pain, which he associated with dehydration:

“I once had back pain from not drinking enough... After reading more, I realized the kidneys also need hydration. So I started drinking more, and eventually I recovered.” (BA, 33 years)

Similarly, BU emphasized the physiological role of fluids in distributing oxygen and nutrients throughout the body. In contrast, PA admitted that his water intake remained insufficient, often replaced with tea or sweet drinks. He recalled a doctor’s advice to consume at least six liters of water per day for kidney health, yet his childhood habits made prioritizing plain water difficult:

“I know water is important, especially for the kidneys since I take medication daily. But I struggle with my ego, preferring other drinks over water.” (PA, 44 years)

The main challenges for men lay in preferences for non-water beverages and ingrained habits, with adaptive strategies including carrying a tumbler, relying on reminders from partners, or gradually following medical advice. For women, hydration practices were more closely tied to ARV routines and domestic responsibilities. LI maintained a disciplined intake of around two liters daily, fully aware that her kidneys had to work harder to process medication, and she regularly underwent annual laboratory testing. This aligns with Valle & Haragsim (2006), who found that intensive hydration of up to 2.5 liters daily reduced serum creatinine elevations among patients treated with foscarnet for HIV-related opportunistic infections. In contrast, TI admitted to preferring sweet drinks such as iced tea during work, with an average of only 1.2 liters of water daily. Nevertheless, she acknowledged the importance of fluids in maintaining energy and immunity. This reflects findings by Popkin et al. (2010), who emphasized that while hydration is essential, preferences for other beverages often displace water intake, potentially impairing renal function and metabolism over time.

Overall, adequate hydration among PLHIV in Yogyakarta is not merely a medical issue but one influenced by social, cultural, and economic factors. Men faced challenges primarily related to long-standing beverage preferences, while women were more affected by occupational demands. Adaptive strategies included carrying water from home, combining water with preferred drinks, and relying on family or community support to reinforce hydration practices. These findings demonstrate that hydration constitutes part of a broader negotiation of healthy living with HIV.

### 3.8. Supplements

The use of supplements serves as an additional strategy for some PLHIV to maintain health, particularly to sustain stamina and immunity alongside ARV therapy. However, this practice varied markedly between men and women, influenced by workload, physical condition, preferences for natural ingredients, and awareness of potential supplement–ARV interactions. Among women, supplement use was more frequently associated with physical demands and the need to sustain daily stamina. LI reported taking vitamin C (e.g., Enervon C) during out-of-town activities but remained cautious about product selection, deliberately avoiding echinacea due to its potential to impair immune function:

“We have to be careful with supplements, because if they contain echinacea, it worsens immunity. So I usually use Enervon C.” (LI, 44 years)

This demonstrates women’s critical awareness of supplement–ARV interactions, consistent with Ladenheim et al. (2008), who showed that echinacea poses risks due to its immunostimulatory properties, which could increase HIV-infected lymphocytes and potentially elevate viral load. TI likewise reported consuming vitamin B-complex or vitamin C, sourced from public health centers or purchased independently, to prevent fatigue from her daily work:

“To maintain stamina. Because my work is heavy. I have to keep our bodies strong so I don’t collapse.” (TI, 49 years)

These practices illustrate women’s adaptive strategies, using supplements to sustain productivity under heavy physical and economic burdens. In contrast, men generally viewed supplements as temporary or even unnecessary. BU preferred “real food” such as vegetables, fruits, and protein (animal or plant-based), resorting to supplements only when facing nutritional deficiencies, such as hair loss or insomnia. BA noted that he had used amino acid supplements during college while actively exercising, but now preferred natural sources such as eggs, chicken, vegetables, and fruit, citing concerns about long-term chemical risks. This indicates men’s tendency to rely on diet and physical activity, contrasting with women’s more practical use of supplements to support daily stamina. These findings are consistent with Irlam et al. (2010), who emphasized that vitamin and mineral supplementation may improve nutritional status among PLHIV in the short term, though long-term benefits remain inconclusive and interactions with ARV therapy must be carefully considered. Drain et al. (2007) further demonstrated that vitamins A, B, C, and D play important roles in enhancing immunity and reducing opportunistic infections. However, LI’s case underscores that uninformed supplement use may pose significant risks. Thus, supplement practices among PLHIV in Yogyakarta cannot be separated from gender, workload, and lifestyle preferences. Women tended to use supplements as an adaptive strategy to cope with physical fatigue and maintain stamina, while men were more inclined toward natural diets and situational supplement use.

### 3.9. Healthy Sexual Practices

Healthy sexual behavior is a critical aspect of the lifestyle of PLHIV, as it relates to self-protection, partner safety, and the quality of intimate relationships. Findings indicate gendered differences in how men and women living with HIV interpret and practice healthy sexual behaviors. Among women, sexual health practices were strongly influenced by fears of transmitting HIV to partners or children. LI emphasized consistent condom use, even though she had already achieved an undetectable viral load. She explained:

“I routinely use condoms. Yes, even though I am undetectable. Being undetectable means not transmitting. But for my own peace of mind, because without condoms I would always feel afraid.” (LI, 44 years)

Nevertheless, her consistent condom use did not preclude the possibility of pregnancy planning. With medical support, adherence to ART, and careful monitoring of her viral load, LI successfully underwent pregnancy and gave birth to an HIV-negative child. This outcome demonstrates the effectiveness of the Prevention of Mother-to-Child Transmission (PMTCT) program. Her experience affirms that HIV is not an absolute barrier for women who wish to have children and that vertical transmission can be prevented with appropriate medical interventions. In Indonesia, PMTCT has been a national priority, employing integrated strategies such as antenatal screening, partner counseling, and newborn monitoring (Kemenkes RI, 2019). LI's story shows that women living with HIV can not only maintain their own health but also act as agents of change by challenging the stigma that often positions them as “sources of transmission.” In this sense, healthy sexual behavior extends beyond intimacy protection to include safe, ethical, and meaningful reproductive planning.

TI's experience contrasted with LI's. She admitted never feeling comfortable using condoms, either with her late husband or with later partners, instead relying on ART adherence and her undetectable status as reassurance of safety. Additionally, TI highlighted genital hygiene as part of her sexual health strategy. This suggests that, for some women, condom negotiation remains difficult, especially when influenced by partners' sexual preferences. Men participants approached healthy sexual behavior primarily through openness about HIV status and mutual agreements with partners. PA disclosed his HIV status to his prospective wife prior to marriage, accompanied by education on risks and prevention. Once he achieved undetectable status, he and his wife agreed to have condomless intercourse in pursuit of pregnancy. Similarly, BU emphasized transparency with his partner and continued condom use as an additional preventive measure, despite his clinical non-transmissibility. These findings align with literature advocating holistic safer-sex approaches. The WHO (2016) underscores that consistent condom use, adherence to ART, and open communication with partners constitute the core pillars of HIV prevention. Taken together, the study suggests that men tend to frame healthy sexual practices around transparency, moral responsibility, and therapeutic adherence, whereas women more often internalize fear of transmission and prioritize personal comfort in sexual relations.

## 4. Conclusion

This study shows that men and women living with HIV in Special Region of Yogyakarta practice healthy lifestyles in diverse ways, yet both interpret these practices as strategies to confront stigma and discrimination. Men participants tended to emphasize physical discipline, nutritional control, openness with partners, and abstinence from cigarettes and alcohol, while women participants associated healthy living more with family responsibilities, life continuity, and adaptive strategies to sustain stamina. Challenges were gender- and context-specific. In physical activity, time constraints, fatigue, and work burdens were major obstacles, particularly for women balancing domestic roles. In diet, economic limitations and social stigma restricted access to nutritious food, prompting adaptive strategies such as substitution and reliance on affordable local ingredients. In sleep, men struggled more with insomnia, whereas women faced disrupted rest due to domestic and informal labor demands. In avoiding cigarettes and alcohol, men confronted addiction and peer pressure, while women were more often exposed to passive smoking or faced negotiation in social situations. Stress management for men was exacerbated by workplace and healthcare discrimination, while women's stress was linked more to social stigma and experiences of loss. With regard to maintaining ideal body weight, men emphasized comorbidity prevention, whereas women's concerns were more related to ARV side effects and appearance. In hydration practices, men's main challenge was preference for non-water beverages, while women's constraints stemmed from work routines. In supplement use, men tended to be selective and preferred natural foods, whereas women emphasized supplements as practical supports for stamina under heavy workloads. Finally, in sexual health practices, men highlighted openness and agreement with partners, while women faced dilemmas balancing fear of transmission, reproductive desires, and comfort preferences that

affected condom consistency. In conclusion, healthy lifestyles among PLHIV in Special Region of Yogyakarta are both gendered and contextual, shaped at the intersection of medical demands, social stigma, and gendered role dynamics. The adaptive strategies identified reveal the creativity and resilience of individuals in sustaining health despite structural and personal constraints.

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