Sustainability Capacity of HIV/AIDS Programmes in Yogyakarta, Indonesia

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ABSTRACT
The Indonesian government established the prevalence target of HIV <0.50% in 2019 to control the spreading of HIV through the National Medium Term Development Plan. To ensure the sustainability of this development plan, a study of the strategic capacity of HIV/AIDS programmes is needed to provide an overview so that the program can be sustained over time. This study aimed to explore the sustainability capacity of HIV/AIDS programmes in Yogyakarta. This was a descriptive study utilizing a qualitative approach. The study involved 42 participants as key informants selected by a purposive sampling technique, and the data were examined using content analysis. By setting priorities of the local government supported by the Provincial Health Office and with the coordination of the Yogyakarta Province AIDS Commission, the programs are able to maintain sustainable HIV and AIDS programmes in Yogyakarta. Funding capacity, evaluation, programme adaptation and communication have not been optimal to ensure the sustainability. Stability of funding is the main obstacle to achieving the sustainability of HIV and AIDS programs. However, with good planning, partnership structure and sufficient organizational capacity, this approach can ensure the HIV and AIDS programmes will continue with the targets set by the Yogyakarta Provincial Health Office. The government in Yogyakarta needs to increase funding capacity, and improve communication to ensure sustainability. The strategy should include adaptation and evaluation of programs through strengthening private sector financing, formulating a communication plan and improving the capacity to respond to change.

1. INTRODUCTION
The Indonesian government established the prevalence target of HIV <0.50% in 2019 to control the spreading of HIV through the National Medium Term Development Plan. One of the strategies to achieve this target of the Indonesian Health Ministry for 2015 to 2019 is to create a continuum of care strategies, conducted through increasing the scope, quality and continuity of prevention programmes [1]. However, the increasing number of new cases of HIV/AIDS over time provides a formidable challenge to reach the target prevalence in 2019. Therefore, better understanding of the existing capacity to positively impact a programme’s ability to continue over the long term is needed [1]-[3].

Sustainability has been defined as the existence of structures and processes which allow a program to leverage resources to effectively implement and maintain evidence-based policies and activities [4]. Understanding sustainability as a broad framework which stretches beyond financing is important and must be present to sustain the effectiveness of existing health programmes [5]-[8]. Luke, et al. [9] developed the
Programme Sustainability Framework to assess public health programme capacity for sustainability, which includes 8 domains: organisational capacity, programme adaptation, program evaluation, communications and strategic planning, funding stability, environmental support and partnerships. To explore a programme’s capacity of sustainability, it is necessary to identify both internal aspects of program characteristics as well as contextual aspects that are outside of the programme itself which may affect the capacity of sustainability [10]-[13].

Since the Provincial AIDS Commission Secretariat was restructured in 2007, Yogyakarta is one of the provinces in Indonesia which has involved many actors and organisations in controlling HIV transmission. Our previous study involving the AIDS Commission identified several barriers, such as lack of funding and no supportive environment to facilitate effectiveness of HIV/AIDS programmes (HAPs). The long-term strategy undertaken by the Provincial Government of Yogyakarta (PGY) to maintain the sustainability of HAPs is not an easy or simple task. The sustainability response to HIV and AIDS cannot be separated from an adequate level of funding, good strategic management, partnerships, management capacity within organisations and the role of cross-coordination of the local governments’ work units by the Yogyakarta Province AIDS Commission (YPAC) [7],[9],[14].

This sustainability research focuses on the programmes or interventions in the community settings and the agencies implementing the programmes. By using qualitative data, the aim of this study was to explore the sustainability capacity of HAPs in Yogyakarta. Thus, this study may inform to local government and programme managers of factors that influence sustainability, which can be used to improve programme sustainability.

2. RESEARCH METHOD

2.1. Study setting

The study was conducted in Yogyakarta Province, which is located in the middle-southern part of Java Island. Until 2015, HIV/AIDS control programed in Yogyakarta adhered to the following fast track goals: 90% of patients know HIV infected status, 90% of people with HIV are treated and 90% of patients comply with treatment recommendations. In addition, the provincial government of Yogyakarta also created several strategies that included the transformation of HIV/AIDS financing, the transformation of HIV/AIDS services from exclusive to inclusive of other infectious diseases and encouraging community participation through sustainable comprehensive services. Figure 1 describes political support and fast track to end the AIDS epidemic in Yogyakarta, Indonesia.

![Figure 1. Political support and fast track to end the AIDS epidemic in Yogyakarta](image)

2.2. Study design and sample selection

This was a descriptive study utilising a qualitative approach [15]. This study involved 42 participants who are representative of legislative, NGOs, the provincial AIDS Commission, healthcare providers and the province health office. The participants were selected purposively based on the following...
considerations: have relevant duties and functions with HIV and AIDS programmes and regional planning, the organisation structure is responsible for health issues both at the level of policy and budgeting as well as field implementation, and is part of the institutional membership of the YPAC. Table 1 provides information concerning key informants and stakeholders.

<table>
<thead>
<tr>
<th>Institutional or Organization</th>
<th>Main constituency represented in HIV/AIDS Programmes</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial Health Office</td>
<td>Leading sectors in local HIV/AIDS policy development</td>
<td>Province and District</td>
</tr>
<tr>
<td>Development Planning Agency at Sub-National Level (Bappeda) Legislative</td>
<td>Integration of HIV/AIDS into regional development programme plans; The role of assistance in the planning and budgeting and creating legislation on HIV prevention</td>
<td>Province and District</td>
</tr>
<tr>
<td>AIDS Commission</td>
<td>Technical support and advocating partnership; Ensures strategic information systems function and utilization of data for planning and monitoring; Coordinates the involvement of the government, NGO and private sector;</td>
<td>Province and District</td>
</tr>
<tr>
<td>AIDS Commission Partnership for Preventive and Promotive Activities</td>
<td>Young generation counseling programme and HIV/AIDS education Providing information on HIV/AIDS to community; Socialization of HIV/AIDS to transport agents and drivers; Provision of information media on HIV/AIDS at tourist sites;</td>
<td>Province and District</td>
</tr>
<tr>
<td>Population and Family Planning Coordinating Board (Puskesmas) Health Services Provider</td>
<td>Provision of information and counseling center for Teenage Reproductive Health Provides VCT services and ARV provision Implementing sustainable comprehensive services</td>
<td>Province</td>
</tr>
<tr>
<td>Provincial Narcotics Board of Yogyakarta NGO</td>
<td>AIDS Commission involvement in the programme of Provincial Narcotics Board Contributing in preventive, promotive, peer support activities and key population outreach</td>
<td>Province and District</td>
</tr>
</tbody>
</table>

2.3. Guide development

The guide follows the guidelines of the sustainability assessment tool, including political support, funding stability, capacity organisation, evaluation of programme, adaptation of programme, partnership, communication and strategic planning [16]. In December 2016, the interview guidelines were tested with staff from different AIDS Commissions and civil society organisations (CSOs) to elicit questions which were either unclear or potentially difficult to answer. These 30- to 45-minute face-to-face interviews were conducted with an HIV/AIDS programmer. Participants were instructed to provide feedback on questions lacking clarity and items which could be viewed as potentially difficult to answer. Information from these interviews was used to modify items for the interview guide.

2.4. Data collection

We conducted data collection for this study from January to February 2017. Data were collected through in-depth interviews and document review, such as grant agreement GF ATM, the Provincial Medium Term Development plan and HIV/AIDS strategic planning. Interviews were conducted at the work offices of the participants, and before the interview, each participant was informed that their answers would be used for research purposes only. These involve 30- to 90-minute face-to-face interviews. During the interview, the researcher recorded using an audio recorder after obtaining approval from the respondent. The researchers also conducted double interviews to complementing the smaller amount of data.

2.5. Data analysis

Qualitative analysis of the data in this study was conducted by analysing the content of the information obtained from interviews [17]. After the data collection, the author (PS) conducted member checking to ensure that the data were processed in accordance with the answers obtained from the interviews of the participants. First, the author read the transcript and then created the matrix for coding and category [18]. To maintain the accuracy of the data collection, the author triangulated by comparing the data of interviews among the participants, and confirming information through discussions with co-authors. [19] Triangulation started by identifying the stakeholder groups such as legislative, NGOs, the provincial AIDS Commission, healthcare providers and the province health office in the program. In-depth interviews could be conducted with each of these groups to gain insight into their perspectives on program sustainability. During the analysis stage, feedback from the stakeholder groups was compared to determine areas of
agreement as well as areas of divergence. Second, the co-authors (YM, DHS) reviewed codes and themes that have been created and discussed until agreement was reached. Third, all authors discussed quotations that corresponded to the categories and themes, then agreed upon quotes used with co-authors. The data were first made into a narrative and then into the conceptual schema. After being analysed, the results were documented in a descriptive format as a thematic report (Table 2) divided into 8 capacity domains of sustainability as suggested by Luke, et al. [9],[20].

3. RESULTS AND ANALYSIS

3.1. Results

In general, the results showed that the HAPs in Yogyakarta are strongly influenced by political support and environment, stability of funding, partnerships with stakeholders and CSOs, the capacity of organisations (governments, ad hoc and community-based), capacity of evaluation programmes, programme adaptability to changes in policy and funding, the effectiveness of communications and strategic planning in response to the increasing problem of HIV/AIDS. Table 2 describes the results of the capacity analysis in Yogyakarta, Indonesia.

Table 2. Overview of HIV/AIDS Programme Sustainability Capacity in Yogyakarta

<table>
<thead>
<tr>
<th>Domain</th>
<th>Description</th>
<th>Existing Capacity of Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Support</td>
<td>Support from local government, legislative, executive, civil society organisations (CSOs) and service providers</td>
<td>Setting priorities as a major force in ensuring the participation of both government and private sectors to the sustainability multi-sector programmes</td>
</tr>
<tr>
<td>Partnerships</td>
<td>Partnerships include inter-institutional coordination structures existing partnership in Yogyakarta</td>
<td>Partnerships can contribute in the form of synergy in terms of resources and budget within existing partnership networks in order to ensure the sustainability of the programme</td>
</tr>
<tr>
<td>Organisation Capacity</td>
<td>The capacity of organisations regard to support internal resources, the role of institutions, and capacity building</td>
<td>Strengthening both internal and external support organisations provides positive outcomes for healthcare facilities, the readiness of health workers and the achievement of organisational goals</td>
</tr>
<tr>
<td>Strategic Planning</td>
<td>Planning process that is performed to determine a strategy to guide the direction and purpose of the HIV/AIDS programme</td>
<td>Local Strategy Action Plan as a guide for the implementation of HIV/AIDS activities at both the provincial and district levels that can be supported with funding sourced by the local government</td>
</tr>
<tr>
<td>Funding Stability</td>
<td>The adequacy of the budget situation, local fiscal capacity, funding sources, spending mechanisms and strategies and policies implemented by the government and CSOs</td>
<td>Capacity building and activities of CSOs are still sourced from donors. Exit strategy-city districts is uneven willingness to spend, and government-city districts are not supported by the ability of local funding</td>
</tr>
<tr>
<td>Evaluation Program</td>
<td>Measurement activities and the achievement of HIV and AIDS programmes, both programmatic and multi-sectors activities</td>
<td>Data collection mechanisms and the involvement of constituents in the evaluation still receive less attention. Participation of partners is still not consistent during the evaluation</td>
</tr>
<tr>
<td>Program Adaptation</td>
<td>Response to regulatory changes, adaptation to policy integration services program, new funding policy (GF-NFM) and institutional and innovations</td>
<td>Programme has not been able to reconcile the provision of services to constituents. New funding model is not able to provide acceleration response</td>
</tr>
<tr>
<td>Communication</td>
<td>Communication strategy with stakeholders and the general public about the HIV and AIDS programme</td>
<td>Existing communication has not been supported by the effectiveness of the message delivered</td>
</tr>
</tbody>
</table>

3.1.1. Political and environmental support

Political support for the sustainability of HAPs in Yogyakarta already exists in the form of institutional support for the establishment of the AIDS Commission, supported by funding given to the regional work units. Support also comes from both the health and non-health sectors, supporting regulations and policy, along with advocacy from the non-health sector to develop integrated activities of HAPs while supporting treatment and accompaniment by NGOs. Two informants provided the following information concerning support for such programmes:

"...prevention of HIV AIDS in the province that are promotion activities from preventive to rehabilitation...in local government there is also the AIDS commission in which there is a membership of...involvement of local government work units there, although the extent of socialisation in accordance with existing targets." (KI05)

"... in the province related to HIV and AIDS, we are already supported by the general health budget...for the control of infectious diseases...besides, we also have rules for it ..." (KI04).

Sustainability Capacity of HIV/AIDS Programmes in Yogyakarta, Indonesia (Perigrinus Sebong)
3.1.2. Funding stability

Funding stability for the sustainability of HAPs has not been implemented optimally. Funding for service aspects was supported well enough while the largest funding for accompaniment and location of people living with AIDS depends on the funding of the Global Fund (GF). The problems encountered with regard to the stability of funding involved their fundraising strategies from third parties, such as support from corporate social responsibility (CSR) programmes. While a large portion of the budget was still allocated for reagents, the government had not planned to resolve the situation if the GF stopped providing support. Two informants provided testimony about the lack of funding stability:

"For the budget we think is not enough especially if donors stopped definitely need another effort...if funding stops so we inevitably need to increase the budgets for health, especially for HIV and AIDS." (KI04)

"To the adequacy of the budget by ignoring the human aspect is still the largest portion of the purchase of reagents, while increasing the capacity of health personnel is still very little, it would be difficult to adapt when later GF no longer provided funding..." (KI12)

3.1.3. Partnerships

Participants reported that partnerships can contribute in the form of synergy in terms of resources and budget within existing partnership networks in order to ensure the sustainability of the programme. Coordination, planning, acceptability of service and involvement of members of the AIDS Commission concerning partnership were important overall. However, there exists a serious concern about the ability and quality of the partnership itself to achieve the targets set and mechanisms for coordination with CSOs which tend to rely on the programmes provided by donors. Two informants shared these concerns about partnerships:

"The partnership with networking is the way we have our local government work unit and NGOs involved in the preparation of...partnership definite programme of support for the budget and very helpful." (KI06)

"The coordination of existing contributions to the sustainability of the program is very big because we cannot work alone. Even if we are not involved in joint activities, but our programme is still delivered by our partner...yes we are working with those who helped our work...With our partnership, there was good synergy in terms of budget and support resources." (KI23)

3.1.4. Organisational capacity

In general, the organisation's response to HIV/AIDS has been supported through the formulation of policies on HIV/AIDS, provision of services, capacity-building of healthcare facilities and health human resources and corporate governance. Strengthening both internal and external support organisations provides positive outcomes for healthcare facilities and promotes the readiness of health workers and the achievement of organisational goals. Existing organisations are also supported by the role of CSOs as well as by good corporate governance and proactive responses to support the government's target performance in Yogyakarta."

"...By working with the district/city in 2019, all health centres are able to provide a minimum of early detection of HIV/AIDS...from 121 primary healthcare (PHC) as many as 59 are able to perform screening, while some hospitals have become centres for referral services for HIV/AIDS..." (K40)

3.1.5. Evaluation of programme

Programme evaluation of capacity for sustainability has more limited capacity especially for multi-sector evaluation accommodated by YPAC. One AIDS Commission programmer reported being hampered in evaluation efforts by lack of staff capacity and funding priorities. Additionally, some stakeholders and CSOs have not yet benefited from evaluations, which were conducted, and thus, evaluation of implementation still needs to be reviewed with particular regard to the role and targets of the NGOs aligned with the national targets. One informant explained the impacts of these challenges:

"Obstacles in the evaluation are still there because it still relies on regular reports from the membership of the AIDS commissions...this has an impact on when one would be evaluated. It becomes hard to be evaluated due to incomplete data. Another problem is that there are some member institutions that have not yet benefited from the presence of the evaluation. This has an impact on the motivation to collect statements becoming also reduced because he felt it was only for the benefit of Provincial AIDS Commission alone." (KI08)

3.1.6. Adaptation of programme

The Yogyakarta provincial government has been proactive in discussing the transfer of the role to responding HAPs. Participants reported that they had little difficulty in adapting to a variety of process
integrations and innovations of existing services. However, the fundamental problem is that the volunteer activities related to outreach and mentoring are continuously decreasing in number due to being supported by a new funding model, especially for CSOs, which largely rely on donors or international funding. One informant explained how some programmes have had to adapt to changing circumstances:

“New funding models have reduced the support to the peer support field workers with implications that the number continues to decline because there is no longer a budget...We finally focus on the new HIV-positive people because we hope they can be able to be independent.” (KI08)

3.1.7. Communication

Communication capacity to ensure the sustainability of the programme messages, methods and media are sufficient. However, the effectiveness of existing communication, especially for community involvement in the programmes as well as participation in the examination is still not effective. Additionally, the problem of stigma and discrimination still exist in society. Two informants shared similar views about communication channels.

“There are still people who are aware, but many who are not aware as well but we do not yet have the calculations for it...We have no research that evaluates the benefits of communication to the community”. (KI01 and KI06)

3.1.8. Strategic planning

All participants described the need for more progress in such planning, and explained how systematically developed and implemented is the Strategic Regional Action Plan (SRAD). The forum (Musrembang) and the Jogja plan are very supportive to local government planning in Yogyakarta. However, other strategies related to capacity building and the development of local financing with third parties in order to support positive environmental mitigation have not been formally stated in the documents. One informant explained about strategic planning:

“We have the guidelines of SRAD as the reference in control of AIDS in Yogyakarta...planning strategic target indicators for activity indicators in the relevant local government work unit...With consideration of the sustainability program we follow up into new local government strategic planning ...” (KI05)

3.2. Discussion

To our knowledge, this is the first qualitative study in Indonesia exploring the sustainability capacity of HAPs. Our findings indicated that political support, organisational capacity, strategic planning and partnerships are the supporting factors of mainstream sustainability of HAPs in Yogyakarta. However, the stability of funding, evaluation and adaptation of programmes and communication need to be strengthened to guarantee the sustainability of these programmes. The limitation of this study is that it does not involve any community groups who are the beneficiaries of the programme. However, this study involved participants from various stakeholder groups representing HIV/AIDS care in the community, which served to represent key population groups.

Sustainability of a health programme is a process that encourages the adaptation of a system of prevention and continuous innovation into the on-going operational conditions and provide benefits to the various stakeholders [21]. Sustainability focuses on health improvement, continuous control of health problems, maintaining programme effectiveness, access and coverage program or intervention [12],[13]. As a vertical program with significant funding from national and external aid, sustainability of the HAPs is critical. Based on their review of literature, they surmised sustainability to be affected by financial and political support, community engagement, partnership, programme adaptability, policy support, program ownership transfer, decentralisation, organisational capacity and programme setting [2],[22],[23].

In this study, our findings reflect the importance of political support and political leadership in sustainability domains as well as in strategy planning, along with partnerships to build organisation and program readiness for change [24],[25]. Karan et al. illustrated that political leadership encourages leaders to not only develop or improve the health system but also to use their inherent influence on the public or stakeholder interest. In addition, in decentralization policies in which decision making and priority setting processes have been developed, political support is important because leaders have the ability for resource allocation [26]. We highlighted the role of the governor of Yogyakarta, who has enormous influence, by the prioritisation of the regional health development plan. This is in accordance with the advice of Calhoun et al. to improve the sustainability of the programmes, partnerships must have a concrete plan of action based on the results of the analysis of both internal and external environments [16],[26].

Priority setting and strategic planning by Yogyakarta provincial governments seems to be main basis for the sustainability of the HAPs [21],[22],[27]-[29]. The partnerships that have been formed in terms
of resources and budget can contribute to developing synergy to ensure the sustainability of programmes [30]-[33]. In line with this finding, support for the Provincial Health Office in Yogyakarta by local stakeholders and CSOs in responding to HIV/AIDS issues are already showing positive results for healthcare providers, health professionals and the achievement of organisational goals. However, although political support directly influenced resource allocation, it was not found to influence funding allocation.

Our findings reflect that programme evaluation, communication and program adaptation may be related to funding. Lack of funding was a major issue for the sustainability of HAPs, particularly for partnership evaluation activities, assessment of effective communication and programmes which are much less flexibility to adapt due to limited resources [13],[34],[35]. One condition that needs serious attention is that the lack of funding has led to capacity building activities and the activities of CSOs which are still dominated by foreign aid [36]-[39]. This is a challenge given the risk of failure of response to the changes, and as a result, programmes currently are not able to achieve their targets and objectives effectively [40],[41]. In addition, the role and the effectiveness of the communications still could not improve community alignments to create participation in ensuring the sustainability of HAPs in Yogyakarta [4],[42],[43].

Stability of funding seems to be a major challenge to the sustainability of HAPs in Yogyakarta. However, with comprehensive planning, partnership structure and sufficient organisational capacity can ensure that HAPs will continue with the targets set by the Provincial Health Office of Yogyakarta [4]. Set in the strategic planning of organisational performance indicators for HIV and AIDS targets, SRAD funding changes, and various innovations are the efforts taken by the government to overcome the barriers to Yogyakarta’s stability in programme funding [44],[45]. Strategic planning becomes essential to ensure the sustainability of HIV/AIDS programmes in the province [46],[47]. In addition, the government of Yogyakarta already has documents, including a local strategy and action plan for HIV/AIDS, for the next five years that could be a reference for the licensing of HIV and AIDS response organisations and stakeholders, both at provincial and district levels in the city [44],[47],[48].

3.3. Sustainability capacity comments
Sustainability capacity models developed by Luke et al. are relevant to the conditions of the research site. This model is comprehensively able to identify and explain the ability and sustainability of HIV/AIDS programmes in the province. However, we found that different conditions are needed in this research to ensure the sustainability of all the domains, including the stability of funding and strategic planning as central aspects for the sustainability of the programme. This model is more effective when measuring the sustainability capacity before and after foreign aid funding ends. Other factors which were found during the study that also play a role in ensuring the sustainability of the programmes include community empowerment, independence, the role of NGOs and the sustainability of access to healthcare services.

4. CONCLUSION
Political support, partnership, organisational capacity and planning are important conditions to encourage programme sustainability. The stability of funding, program evaluation, ability to adapt and communication to ensure sustainability of HIV/AIDS programmes are the main barriers. Although the results of a qualitative study cannot be used to make formal generalisations, we consider the findings trustworthy enough to support most of the information about the sustainability of HIV/AIDS programmes. Suggestions to the provincial government in Yogyakarta include the need to improve advocacy to the district government so the AIDS Commission becomes a partner in the District Health Office and the need for the government to find sources of funding through developing collaborations with the private sector, such as through CSR programs. At the same time, provincial governments also need to develop funding opportunities for NGOs through contractual mechanisms, such as public service agencies to continue improving accompaniment and finding new people living with HIV.

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REFERENCES

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