



Implementation of 2030 Free From HIV/AIDS Policy in Papua According to Van Metter and Van Horn Model: A Systematic Review

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ABSTRACT

The 2030 free from HIV/AIDS program is needed to clarify the direction of achieving its goals. The research objective is to examine the existing policy measures in Papua in particular and Indonesia in general. This study used a systematic review method. Data was filtered from Google search engine, with keywords: HIV/AIDS, Papua, and Van Metter and Van Horn Model. Documents were screened from Google Scholar, PubMed, Semantic Scholar, and ResearchGate for the last 5 years (2016-2022) and government official documents, in Indonesian or English. The PRISMA diagram was used that include identification, Screening, Eligibility, and Included. The data were processed according to the Van Metter and Van Horn Model which includes 6 aspects: standards, policy sources, communication between organizations, characteristics of implementing agencies, environment, and performance. The 13 journals identified in the Included category show that HIV/AIDS is still major problem (journals no.1 to 13). The policy problems exist due to lack of the aspects of leadership and governance (n=2), facilities and facilities (n=2), communication (n=7), the willingness of implementing institutions (n=5), environmental issues (n=7) and performance problems (n=11). Meanwhile, the prioritized three problems were communication (n=7), environment (n=7), and performance (n=11) of the total journals in the Included category studied (n=13). Out of six policy aspects according to Van Metter and Van Horn model, 33% is problematic. The findings suggest more concrete steps on communication, environment and work performance to be needed in the implementation of 2030 free from HIV/AIDS program.

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ABSTRAK

Program bebas HIV/AIDS tahun 2030 diperlukan untuk memperjelas arah pencapaian tujuannya. Tujuan penelitian adalah untuk mengkaji langkah-langkah kebijakan yang ada di Papua pada khususnya dan Indonesia pada umumnya. Penelitian ini menggunakan metode tinjauan sistematis. Data disaring dari mesin pencari Google, dengan kata kunci: HIV/AIDS, Papua, dan Model Van Metter dan Van Horn. Dokumen disaring dari Google Scholar, PubMed, Semantic Scholar, dan ResearchGate selama 5 tahun terakhir (2016-2022) dan dokumen resmi pemerintah, dalam bahasa Indonesia atau bahasa Inggris. Diagram PRISMA digunakan yang meliputi identifikasi, penyaringan, kelayakan, dan inklusi. Data diolah menurut Model Van Metter dan Van Horn yang mencakup 6 aspek: standar, sumber kebijakan, komunikasi antar organisasi, karakteristik lembaga pelaksana, lingkungan, dan kinerja. Dari 13 jurnal yang teridentifikasi dalam kategori Included menunjukkan bahwa HIV/AIDS masih menjadi masalah utama

(jurnal no. 1 sampai 13). Masalah kebijakan terjadi karena kurangnya aspek kepemimpinan dan tata kelola (n=2), sarana dan prasarana (n=2), komunikasi (n=7), kemauan lembaga pelaksana (n=5), masalah lingkungan (n=7) dan masalah kinerja (n=11). Sementara itu, tiga masalah yang diprioritaskan adalah komunikasi (n=7), lingkungan (n=7), dan kinerja (n=11) dari total jurnal yang termasuk dalam kategori yang diteliti (n=13). Dari enam aspek kebijakan menurut model Van Metter dan Van Horn, 33% bermasalah. Temuan penelitian ini menunjukkan langkah-langkah yang lebih konkrit pada komunikasi, lingkungan dan kinerja yang diperlukan dalam pelaksanaan program bebas dari HIV/AIDS tahun 2030

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INTRODUCTION

The Papua Provincial Health Office reported that 43,219 out of 3.3 million Papuans were living with Acquired Immunodeficiency Syndrome (AIDS) and HIV (Human Immunodeficiency Virus) in 2020 (Dinas Kesehatan Prov Papua, 2020). Although official prevalence figures are not yet available, Health Policy Plus (HP+) estimates that 2, 15 - 2.3 percent of the adult population in Papua have been infected with HIV. Until March 2021, there were 427,201 people with HIV/AIDS, of these, 365,289 are still alive, while 61,192 people have died (Kompas, Dec. 24, 2021). The cases are spread across 29 districts/cities of Papua Province. From the latest data for the Papua Province, namely Jayapura 508 cases and Nabire 466 cases occupy the highest number of cases (Merdeka.com, 1 Dec. 2021). Papua is the fourth province with the highest HIV cases in Indonesia, and the top rank for AIDS cases. In Indonesia, as many as 68,508 people dropped out of drugs or lost to follow-up (Smith et al., 2018). A study conducted by the Ministry of Health in 2016 showed that in Papua the ratio of women and men exposed to HIV positive was 3:1 (Priestnall et al., 2020). This means that around 60% of cases reported in Papua are women, while the number of women exposed to HIV-positive nationally is only 37% (Adiningsih, 2018). A culture that does not heed safe sexual behavior is the reason why many HIV cases occur in Papuan women (Priestnall et al., 2020). Men having many partners become common, so then when we talk about reproductive numbers, from one man he may spread to several people at once is the biggest cause of this happening (Waive et al., 2018). Outside Papua, the HIV epidemic is concentrated in high-risk groups, such as sex workers, people who inject drugs, and same-sex relationships (Green et al., 2021). While in Papua and West Papua, HIV transmission occurs in a population of low-risk women, who are infected with HIV from their partners (Hutapea, 2018). The number of cases found in Papua is higher than reported because we have to admit that infrastructure issues are crucial for the Papua region (Sahiddin & Resubun, 2018).

The situation of HIV/AIDS in Indonesia is quite worrying (Andi Asrina et al., 2022). Compared to other Asia Pacific countries, the trend of HIV and AIDS transmission continues to climb, while many other countries have managed to control it (Green et al., 2021). Cambodia has succeeded in increasing access to testing and treatment and reducing new cases (Chhoun et al., 2017). Meanwhile, neighboring Malaysia has succeeded in eliminating HIV and mother-to-child transmission (Krishnan et al., 2021). Infrastructure constraints, geographical conditions, and many risky behaviors make handling HIV/AIDS in Papua - especially

during the Covid pandemic - increasingly challenging (Sofilda, 2020).

The various conditions mentioned above have made policies to handle many cases of HIV/AIDS in Papua require more intensive improvements. World AIDS Day in 2021 aims to increase awareness of the epidemic by disseminating information about HIV/AIDS with a wider target. In other words, the goal is to provide information about HIV from reliable sources, and hopefully encourage more people to seek help when they need it. With the existence of a structured policy related to the handling of HIV/AIDS, the people with it are greatly helped. Many studies related to HIV/AIDS and various ways to overcome it (Allel et al., 2022; Azzahra & Supartono, 2021; Nugrahaeni & Malik, 2013). Most of them reveal causes, treatment and rehabilitation efforts (Hasliani & Bemey, 2021; Pessiwarissa et al., 2019). This research with this systematic analysis sought to identify policy problems for HIV/AIDS prevention towards HIV/AIDS free in 2030 in Papua. The implication is that in the future, it is hoped that by knowing the strengths and weaknesses of the existing policies, they will be able to facilitate the achievement of the goals of HIV/AIDS prevention, with more quality and professionalism.

METHODS

This research used the systematic review method and PRISMA Analysis. The first step was to observe the phenomena that exist in the community, especially in Papua. After identifying the phenomenon, it was continued by looking for references that support or were related to the existing phenomenon. The third step was to determine the research method. The data in the second step of the study were filtered from the Google search engine, with the keywords: HIV/AIDS, Papua, and the Van Metter and Van Horn Model. Documents came from four sources, namely Google Scholar, PubMed, Semantic Scholar, and Research Gate (Figure 1) for the last 5 years (from 2016 onwards) supported by official documents from the Ministry of Health, provincial health offices, and the world health agency (WHO) in Indonesian or English. Document selection is carried out using PRISMA flow including identification, Screening, Eligibility, and Included (Figure 1). The final results of document selection according to keywords in the Included category are in Table 1. The group of documents in the Included category was analyzed by policy according to the Van Metter and Van Horn Model (Figure 1). The model examines aspects of resources, policy resources, inter-organizational communication, characteristics of

implementing agencies, environment, and performance. From that assessment, strengths and weaknesses were identified. The final result is discussed descriptively in the Discussion section of this article.

RESULTS AND DISCUSSION

At the initial stage, namely, Identification, obtained n=1870 from Google Search Engine where n=1619 were removed due to duplication or irrelevant to the research title. The filtered documents (n=251) consisted of Google Scholar (n=170), Research Gate (n=32), PubMed (n=15), Semantic Scholar (n=9) and other publications (n=35). Data

that was not eligible or not focused was removed (n=238) and 18 for retrieval is taken. Meanwhile, documents that deserved to be studied were included in the Included category. The details of the 13 documents are described in Table 1. The topics covered in the table include the title of the journal, the name of the researcher and the name of the publication, research methods, research results, and recommendations (Table 2).

Figure 1 shows the results of document selection filtered for the last five years (2016-onwards) using PRISMA flow. The studies eligible to be reviewed (n=13) obtained from Google Scholar, Semantic Scholar, PubMed, and Research Gate. The details of those documents are summarized in the table 2.

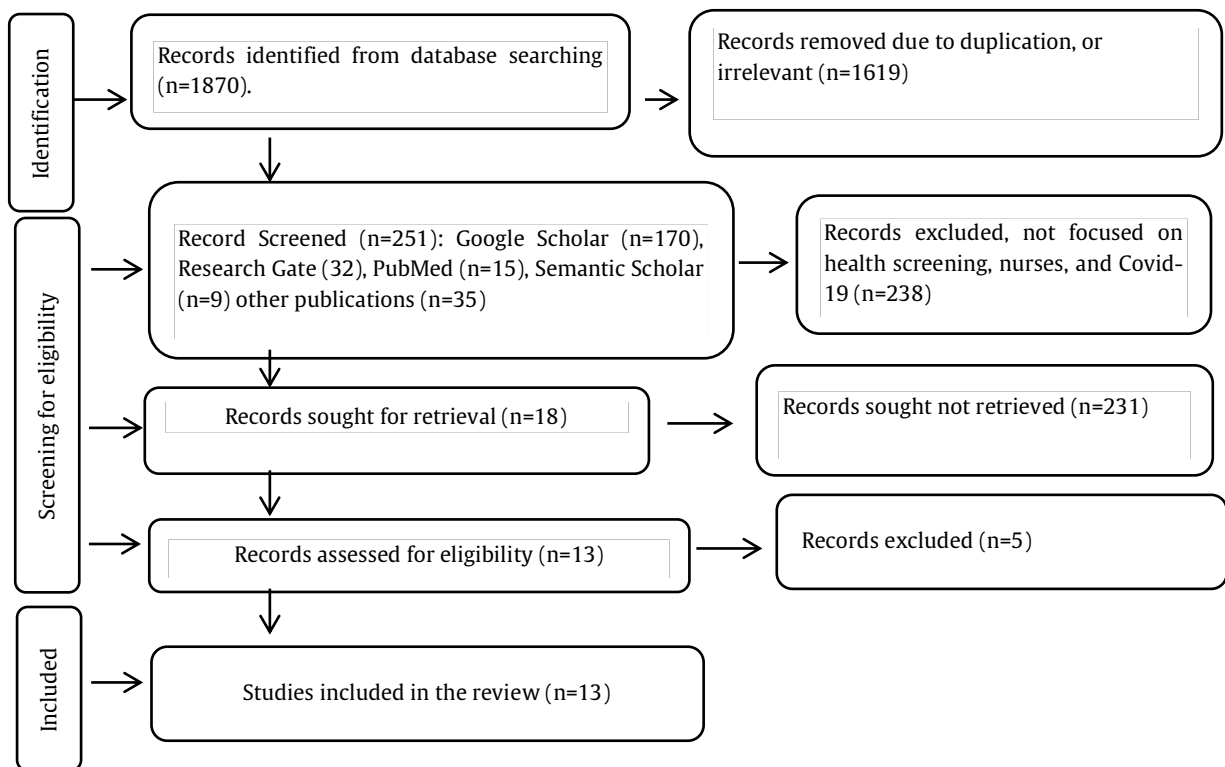


Figure 1: PRISMA Analysis

Table 1: List of Journals in the Included Category of the PRISMA Flow

No	Titles of the Journals	Authors and Year of Publication	Research Methods	Results
1	Ending AIDS in the Asia-Pacific region by 2030: Are we on track? Policy, epidemiological, and intervention insights	Green et al., 2021	Document Review Asia Pacific Region	To continue to learn from one another and sufficiently invest in implementation research and rapidly scaling up programs that work. Science combined with community partnerships and strong government leadership to create rights-based, people-centered health systems will be critical towards ending AIDS as a public health threat (Green et al., 2021)
2	From the Millennium Development Goals to Sustainable Development Goals. The response to the HIV	Wijayanti et al, 2016	Document Review, Indonesia	HIV Treatment has been secured and its prevention management needs further support from different sources. When sexually transmitted, a free condom should be distributed. Besides the use of sterile needles and the provision of free needle exchange and outreach programs (Wijayanti et

	epidemic in Indonesia: challenges and opportunities			al., 2016)
3	Global, regional, and national incidence, prevalence, and mortality of HIV, 1980–2017, and forecasts to 2030, for 195 countries and territories: a systematic analysis for the Global Burden of Diseases, Injuries, and Risk Factors Study 2017	Frank et al., 2017	Quantitative, Global	Many countries have not on the right track to reaching 2030 global targets for HIV/AIDS reduction in incidence and mortality. They will continue to be a major threat to public health. The progress needs to be hastened by expanding access to increasing investments in prevention Initiatives (Frank et al., 2019)
4	The Relationship Of Family Support With Stress In Household Women With HIV-AIDS Status In Animha Clinic, Merauke Public Hospital	Maturbong et al., 2017	Quantitative, Indonesia	HIV-AIDS among housewives need family support. Housewives with HIV-AIDS who do not have support from their families are caused by the high stigma associated with HIV-AIDS so family members who suffer from this disease are often seen as violating family norms and humiliating them (Maria Evelina Maturbongs, Rifki Sakinah Nompo, 2020)
5	Society Stigma and Self Stigma Regarding HIV and AIDS: Literature Review	Tristanto et al., 2022	Literature Review, Indonesia	Stigma against HIV/AIDS clients occurs at almost all levels of society. Factors that cause stigma are the low level of education and public knowledge about HIV and AIDS in addition to the lack of socialization or counseling, especially the modes of transmission and prevention so that people have the wrong assumptions (Aris Tristanto et al., 2022).
6	The Relationship Between Family Support With The Adherence to ARV Medication Among People Living With HIV/AIDS	Sianturi et al., 2020	Quantitative, Indonesia	Family support in supporting the respondent's compliance in taking medication, it was found that the patient did not trust the family as a close support system. Respondents prefer to get support from peers with the same conditions (Sianturi & CB, 2020).
7	Relationship Levels Of Knowledge And Perceptions With Community Stigma On HIV/AIDS Based On Age And Education In Indonesia In 2020	Menggawanti et al., 2021	Quantitative, Indonesia	The better the community's knowledge about HIV/AIDS, the better the community's response to HIV/AIDS (Rahmayanti et al., 2020)(Menggawanti et al., 2021)
8	Strategy for Policy Implementation on HIV/AIDS Prevention in Bali Province	Widnyani et al., 2022	Qualitative, Indonesia	The constraints problems are the standard and policy objectives, resources, characteristics of organizations, dispositions (attitudes) of implementers, and communication between implementing organizations and the social, political, and economic environment. There is no Regional Action Plan Strategy, Strategic Plan, or human and financial resources so they need to be maximized their performance improvement (Widnyani et al., 2022).
9	Implementation of HIV and AIDS Management Policies in the City of Bandung	Prabowo et al., 2019	Qualitative, Indonesia	The implementation of HIV and AIDS prevention policies is still not going well because of the factors externally driven by a boost program, lack of public understanding, and the absence of HIV AIDS medication (Prabowo et al., 2020).
10	Qualitative analysis of financing HIV and AIDS program in Health Office of Jayawijaya District, Papua Province	Resubun et al., 2021	Qualitative, Indonesia	The funding sources of HIV and AIDS prevention programs come from the Government (Special Autonomy Fund) and the State Budget and assistance from international NGOs every year. The HIV and AIDS from the APBN and APBN data should be reviewed to improve with the decreasing number of donor agencies (Resubun et al., 2021).
11	Viral and Host Factors are Related to the Progression of HIV Diseases in Mimika, Papua	Widiyanti and Hadi, 2019	Quantitative, Indonesia	Two factors that influence the progression of HIV disease were HIV subtypes ($p = 0.002$) and Body Mass Index ($p = 0.033$). The HIV-1 subtype also correlated with CD4+ levels with a value of $p = 0.04$ (Widiyanti & Hadi, 2019).
12	Ending the epidemic of HIV/AIDS by 2030: Will there be an endgame to HIV, or an endemic HIV requiring an integrated health system response in many countries?	Assefa et al., 2020	Document Review, Australia	Progress is off track to ending HIV. Even if Project 2030 is achieved, HIV would remain an endemic public health problem; So, so there is no endgame for HIV prevention and control beyond 2030 (Assefa & Gilks, 2020).
13	Analysis of Reproductive Health among Adolescent	Emilda, 2021	Qualitative Indonesia	The results showed that the two adolescent participants in the study had not maximally been maintaining reproductive health because of lacking of understanding from the teenagers and their families about how to maintain reproductive health (Emilda, 2021).

Table 2: Assessment by Van Metter and Van Horn Model Against the Journals in Included Category.

No	Journal No.	Sources	Policy Aspects according to Van Metter and Van Horn				Performance
			Policy Sources	Commu-nication	Implemen-ting body	Environment	
1	1	v	v	v	v	v	-
2	2	v	v	v	v	v	v
3	3	v	v	v	v	v	v
4	4	v	-	-	-	-	-
5	5	v	v	-	-	-	-
6	6	v	v	v	v	v	v
7	7	v	v	-	-	-	-
8	8	-	-	-	-	-	-
9	9	v	v	v	v	-	-
10	10	v	v	-	-	v	-
11	11	v	v	v	v	v	-
12	12	v	v	-	v	-	-
13	13	v	v	-	v	-	-
<i>n</i>		12	10	6	8	6	2

Table 1 shows that of the 13 journals in the Included category, 10 journals (n=10) were researched in Indonesia, two journals (=2) were multi-national, and one journal was in Australia (n=1). Of the 10 studies in Indonesia, four of them were conducted in Papua (n=4). All journals discuss six policy aspects according to the Van Metter and Van Horn Model with different perspectives. The journals that discuss most comprehensive point of resources, policy sources, inter-organizational communication, characteristics of implementing agencies, environment, and performance are journals no. 2 and 6, (n=2) each of which is 100%. While the ones with least fulfillment of the requirements is journals no. 8 (0%), 4 (16.6%), no.5, and no.7 33.3% respectively. Four journals (n=4) used the Document Review method, four journals (n=4) used qualitative methods, and five studies (n=5) used a quantitative approach.

Table 2 above shows that the analysis of policy aspects according to the Van Metter and Van Horn Model shows that of the 13 journals (n=13) included in the Included category, the Sources aspect is the most dominating (n=12), followed by the Policy sources aspect (n=2). While the least is the aspect of Performance (n=2).

Analysis

The two tables above prove that research on HIV/AIDS has been widely carried out both at the international, national, and regional levels such as in Papua. The summary results of journals in the Included category according to PRISMA Analysis (Table 1) show that the problem of HIV/AIDS is still big (journals no.1 to 13). The background is because of the leadership and government aspects (journal numbers 1, 3, and 10) which are part of Sources, facilities, and facilities (journal numbers 4 and 8) which are part of Policy Sources, communication (journal numbers 4, 5, 7, 8, 10, 12, and 13), willingness of institutions to implement (journal numbers 4, 5, 7, 8, and 10), environmental issues (journal numbers 4, 5, 7, 8, 9, 12, and 13) and performance (journal numbers 1, 3, 4, 5, 7, 8, 9, 10, 11, 12, and 13). This research also proved that the problem of HIV/AIDS is still a global, national and regional problem such as in Papua. In summary, the management of HIV/AIDS prevention according to the analysis of the Van Metter and Van Horn Model (Table 2) out of six policy aspects 33% is still problematic. This figure is obtained from *n* (33) divided by the total policy aspects (*n*=6) multiplied by the number of journals (*n*=13) then multiplied by 100%.

DISCUSSION

The results of the systematic review of this study which examined 13 journals, obtained 4 underlined as policy aspects to achieve the 2030 free from HIV/AIDS policy in Papua. They indicate that policy problems proven by journals exist because of the leadership and government aspects (journal numbers 1, 3, and 10) which are part of Sources. The problem are also on facilities, and advice (journal numbers 4 and 8) are part of Policy Sources. Communication (journal numbers 4, 5, 7, 8, 10, 12, and 13), the willingness of implementing institutions (journal numbers 4, 5, 7, 8, and 10), environmental issues (journal numbers 4, 5, 7, 8, 9, 12, and 13) and performance issues (journal numbers 1, 3, 4, 5, 7, 8, 9, 10, 11, 12, and 13). If prioritized, the three biggest problems faced in achieving the 2030 target for free from HIV/AIDS are communication (n=7), environment (n=7), and performance (n=11).

The AIDS Commission aims to tackle the HIV and AIDS virus so that it does not develop further through communication (Trijupitasari & Riauan, 2017). The AIDS Commission (KPA) provides information, counseling, and outreach to high-risk groups such as sex and gay peddlers, HIV/AIDS groups, and the general public (A Asrina et al., 2021). It is suggested that for the effective communication purposes they use language and terms that can be easily understood and can be digested quickly by sex peddlers, gay, and advised not to use medical language (Marthin et al., 2017). Communication patterns are supposed to be different patterns or models. It depends on which group they will provide information to so that the audience understands and can distinguish. For example, those who have been infected and those who have not been infected with HIV. In a broader sense, cross-sectoral communication is needed between policymakers who are directly related to people with HIV/AIDS and all related parties, both at the central and regional levels.

Regarding environmental aspects, researchers of agree that health status is influenced by 4 factors i.e. behavior/lifestyle, health services, genetics, and the environment (Handayani, 2018; Koniasari, 2019). The role of the environment such as the availability of infrastructure, and the role of health workers is very influential. The physical condition of the environment, co-workers, the role of family, the role of society, government policies, and race are no less important. The moderator variables, namely economy/occupation, lifestyle, and household also influence

the risk of contracting HIV/AIDS (Krishnan et al., 2021). In dealing with HIV/AIDS, the government has done a lot but it is still not optimal, as seen from the results of Sri Handayani's 2016 research entitled Analysis of the implementation of the HIV/AIDS Prevention Program in Padang City (Handayani & Mahmud, 2019). The socialization of the HIV/AIDS program in achieving the 2030 goals needs to be improved and promoted by prioritizing socio-cultural values and local wisdom.

Likewise the problem of employee performance needs to get the spotlight on HIV/AIDS prevention. Performance is measured based on five dimensions, namely productivity, service quality, responsiveness, responsibility, and accountability (Amanah et al., 2020). HIV infection tends to increase and most occurs in the productive age group, namely the 25-49 year age group and the 20-24 year age group (Allel et al., 2022; Frank et al., 2019). Productive age means that it is expected to have a positive performance (Hasudungan & Kurniawan, 2018). The productive age group in their work requires high performance. Employee performance in the assessment guidelines includes productivity, service quality, responsiveness, responsibility, and accountability (Kot & Syaharuddin, 2020). Productivity, namely the ability of employees to produce outputs/results required by stakeholders and the community (Tukayo & Hardy, 2020). Second, is service quality, namely the ability of employees to meet the expectations, desires, aspirations, and demands of stakeholders and the community (Kim et al., 2017). Third, responsiveness, namely the responsiveness of employees to the hopes, desires, aspirations, and demands of stakeholders and the community (Kot & Syaharuddin, 2020). Fourth, is a responsibility, namely the provision of services by employees by the principles or provisions for what they are responsible for (Sun et al., 2020). Fifth, is accountability, namely the provision of services by employees following the interests of stakeholders and the norms that develop in society (Mohammadipour et al., 2017). In essence, in the management of HIV/AIDS in Papua to get to an era free from HIV/AIDS in 2030, both the government and the private sector, at the international, national, or regional scope, need communication that is supported by a conducive environment and reliable performance. Without the integrated involvement of the three, as mentioned by Asseefa et al. (2020).

STUDY LIMITATION

This study only uncovered the policy problems, in a document review method, applied in the field and tried to identify the strengths and weaknesses by using reputable journals and official government or WHO documents. By not directly involving the perpetrators, HIV/AIDS clients, and patients, it is impossible to know the effect, effectiveness, and efficiency of the policy on them. Although the specific area studied is Papua, Papua is wide, and has many tribes with different anthropological, socio-cultural, economic, and geographical backgrounds (McGlynn et al., 2018; Rooshermiatie et al., 2017). Due to limited funds, time and resources, a more comprehensive study could not be carried out. Although similar research with the same method has been conducted in Bali (Widnyani et al., 2022), the focus and socio-demographic conditions and geography of Papua are different from Bali. The research in Bali emphasizes on the prevention aspect, while this study examines the implementation of policies to achieve 2030 free from HIV/AIDS.

CONCLUSION AND SUGGESTIONS

From a policy perspective, according to Van Metter and Van Horn, this research model seeks to uncover strengths and weaknesses by reviewing 13 journals filtered by PRISMA analysis. The results show three major problems faced to achieve the free from HIV/AIDS program in Papua in 2030, namely communication, environment, and performance. Concretely, the stages of achievement achieved are only about 33%. This means that hard work is still needed in the next eight years. The combination of the three components in achieving the 2030 goal of being free from HIV/AIDS in Papua is a three-in-one formula that complements each other. The weakness of the results of this study is only limited to document review. In the future, direct research is recommended by involving all parties, from people with HIV/AIDS, healthcare providers, communities, and private organizations to the government

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ETHICAL CONSIDERATIONS

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Conflict of Interest

The authors do not have any conflict of interest to declare.

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