

SYSTEMATIC REVIEW: INTERVENTION FOR PREVENTION HIV/AIDS ON ADOLESCENCE

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ABSTRACT

Background: The number of sufferers of human immunodeficiency Virus (HIV)/ AIDS continues to increase every year. Prevention spread HIV/ AIDS on adolescence were needed. Purpose: The purposed this review was to identified intervention for prevention HIV/ AIDS on Adolescence population. Methods: This study used systematic review design. Search engine with Google Scholar, Pubmed, Proquest, and Ebscho host. Article published between 2019 until 2021. Inclusion criteria: English language, and program can applicated for adolescents (12-19 years old), adolescent without HIV/ AIDS. Exclusion criteria: adolescent with disorder or mental health, uncomplete project research, qualitative design, critical appraisal value under 50. Findings: There are no studies that focus on HIV / AIDS prevention intervention during the Covid-19 pandemic. However, there are 6 articles that discuss HIV / AIDS prevention in adolescents that can be adopted during the Covid-19 pandemic. Conclusion and Recommendation: The use of methods that pay attention to physical distancing such as telemedicine / tele-health can be adopted during a pandemic. However, what needs to be researched is the effectiveness of these interventions during the Covid-19 pandemic.

Keywords: HIV prevention in covid-19 AND adolescent prevention HIV

1.INTRODUCTION

Acquired Immunodeficiency Syndrome (AIDS) is an infectious disease caused by infection with the Human Immunodeficiency Virus which attacks the immune system. This infection causes sufferers to experience a decrease in body resistance so that they are easily infected with various diseases. The number of people living with HIV in the world is increasing every year. These sufferers spread all over the world. In 2013, there were 35 million people living with HIV / AIDS in the world. Meanwhile, 1.5 million deaths due to AIDS, consisting of 1.3 million adults and 190,000 children aged <15 years (Infodatin, 2014).

Person-to-person transmission is one of the causes of the massive development of HIV / AIDS. HIV / AIDS sufferers do not look at their age and the younger people diagnosed with HIV / AIDS. Sexual behavior at risk is one of the causes of transmission of this disease in the

community (Aziz, 2019). Sexual transmission adolescent have implication on health and well-being, teenage pregnancy is significant cause of school drop-out, which limits girls future potential and employment opportunities (Glassman, et.al, 2012).

Prevention HIV from sexual at risk in a pandemic COVID-19 is complicated. COVID-19 presents a local and global challenge. Key consideration for “safer sex” must address the immediate risk of new coronavirus (SARS-CoV-2) transmission and potential exacerbation of risk for HIV transmission (Newman, et al, 2020).The Covid-19 pandemic is impacting the delivery of health care services everywhere, and although in the early stages, the results of disruptions are becoming clearer (Deurado et, .all, 2020). The Purposed this study to identified intervention for prevention HIV/ AIDS on adolescent in Covid-19 pandemic era.

2.METHODS

The method of this study is systematic review. Searching article used 4 electronic source engine journal pro quest, ebscho host, PubMed, and Google scholar. The study followed the preferred reporting items for systematic reviews and meta-analysis (PRISMA) model. Selection article using *crow assessment tools* 11. Therefore, for this review, only published research articles related. All procedure can apply in pandemic covid-19. Summary of finding article presented on scheme and result of systematic review finding presented on table 1.

Phase 1: Identified all smoking cessation use smartphone on adolescent or teenagers

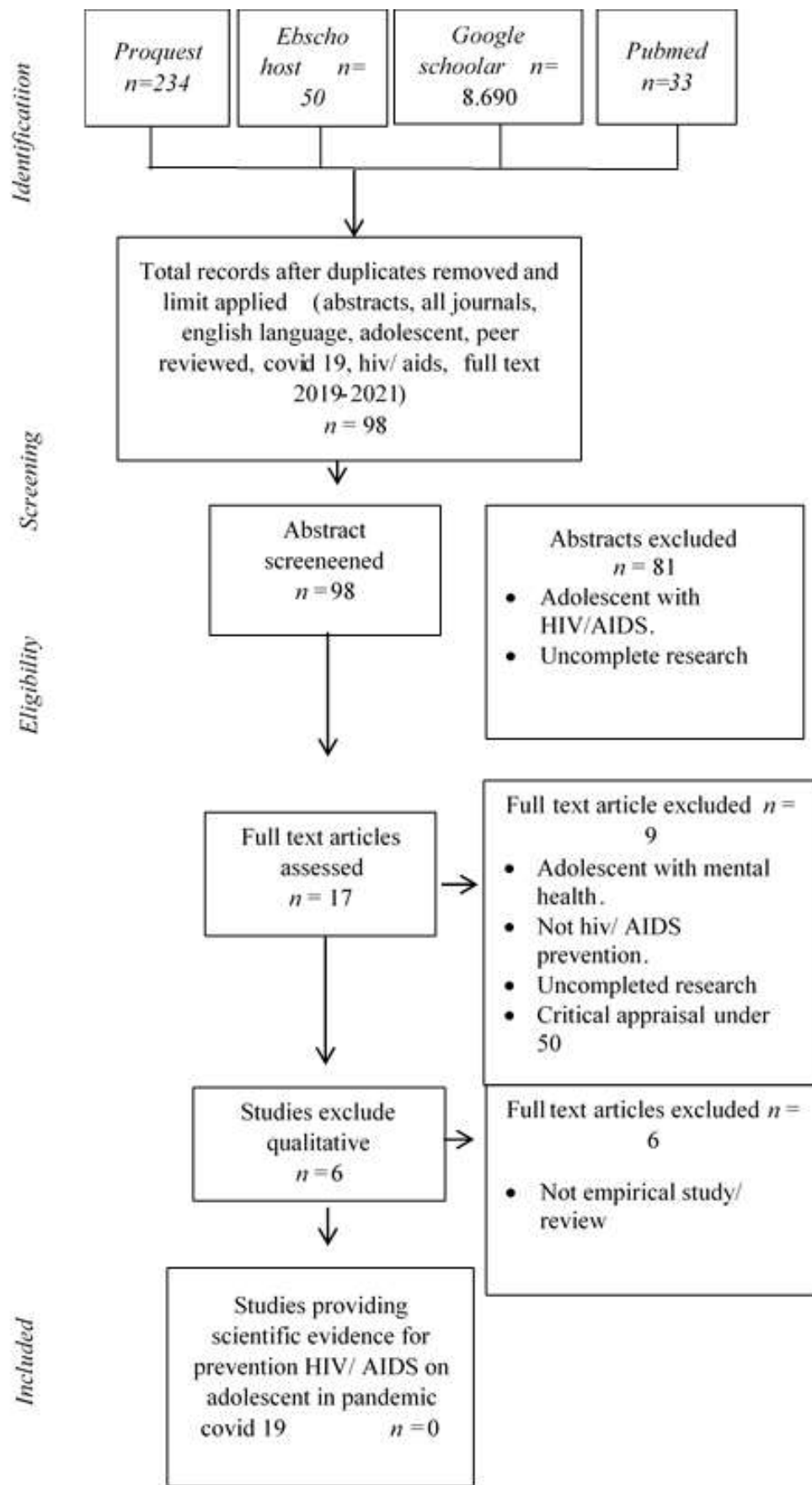
A literature search was conducted using the databases Google scholar, PubMed, ebscohost, and pro quest. Broad search term was intervention for prevention HIV/ AIDS on Adolescence in Covid-19 pandemic. The search term used were as follows: adolescent AND prevention HIV AND covid-19. Peer reviewed articles on the topic of HIV/ AIDS prevention used were published between 2019 and 2021 include for review. Inclusion criteria: English language, experiment/ quasi experimental design, and program can applicants for adolescents (12-19 years old). Exclusion criteria: adolescent with disorder or mental health, incomplete project research, qualitative design, critical appraisal value under 50.

Phase 2: Critical appraisal value

Critical appraisal for article found use crow critical appraisal tools 11. The articles which are relevant with inclusion and exclusion criteria will be rated abstract and others components. The article value must be upper than 50.

Phase 3: Identified which programs from the literature review were available.

Identification is done by assessing the possibility of implementing the intervention. All procedures can be applied in pandemic Covid-19.



Skema 1. Summary article finding

3.RESULTS

Phase 1: Identified all intervention for prevention HIV/ AIDS on adolescent.

There are no articles studied provided scientific evidence for intervention for prevention HIV/ AIDS on adolescent in pandemic Covid-19. Majority prevention HIV/ AIDS on adolescent before Covid-19 pandemic and look like review from research before covid-19. Researches on adolescent are 2 themes. The themes are:

1. Online approach.
2. Face to face approach

Following careful review of the 234 articles from proquest, 50 ebscohost, 33 articles PubMed, and 8.690 article from Google scholar. Only 5 articles may be adopted in covid-19 pandemic era but its need to research the effect of the intervention.

Phase 2: Critical appraisal value

Five articles were appraisal with crow appraisal tools. No one article found can appraisal.

Phase 3: Identified which interventions from the literature review were available in Covid-19 pandemic.

1. Online Media

Mobile technologies and social media offer powerful tools to reach, engage, and retain youth in HIV prevention and care interventions and deliver personalized, theory-based health content. Technology use is ubiquitous among youth, from a variety of backgrounds and offers many opportunities for connecting youth to digital health intervention, including those that address HIV prevention and care behaviors. Overview and current status of iTech randomized controlled trials possible adopted in Covid 19 pandemic (Lisa et all, 2020):

Study Number Name	Priority Population	Primary Outcome	Planned Covid-19 Adjustment
ATN 138 Youthrive	Youth living with HIV	HIV viral load	All visits virtual, home based lab collection
ATN 142 P3	Young men who have	PrEP adherence by DBS	All visits virtual, home-based

	sex with men		lab collection
ATN 143 compare (LYNX and Mychoices)	HIV negative young men sex with men	HIV testing, PrEP uptake	All visits virtual, home-based lab collection
ATN158 LifeSteps	YMSM newly initiating PrEP	PrEP adherence by DBS	All visits virtual, home-based lab collection
ATN 160 TechStep	HIV- negative transgender youth	Sexual risk behaviors, PrEP uptake	All visits virtual, home-based lab collection

Telemedicine is feasible and acceptable for use in HIV-infected persons and is an effective way to expand HIV care. Telemedicine can reduce transportation barriers in urban areas, including traffic, long travel distance, or limited transportation (Roger, 2020). Whether telemedicine for HIV services will be sustained may be determined by whether payers continue reimbursement parity after the COVID-19 crisis ends. Open door health now uses zoom for healthcare for patient encounters, but also offers telephone visits when patients have technological challenges with videoconferencing. Patients are scheduled over the phone, receive a text message with a zoom link prior to their visit, check in with front desk staff on zoom, and then meet with providers in a private zoom room.

In fact there is health promotion online on adolescents in pandemic covid-19 has a chance. All activity from work makes online activity higher than before pandemic. Online activity on adolescents used for formal education and others.

2. Face to face approach

Face to face method must be aware with health protocol COvid-19 such us physical distancing and used mask. Most clinical services in-person appointment was reserved only for those deemed medically necessary (Roger, 2020). Providing testing of outside facilities to the extent possible to reduce exposure risk to COVID-19.

4.DISCUSSION

The aim of this systematic review was to identify intervention for prevention HIV/ AIDS on Adolescent in pandemic Covid-19 era. Recruitment process based on activities of peer-educators in social media platforms and hook up apps only.

Promotion follow –up is only online through social media platforms and smartphone text messages. Peer navigators helps to schedule face to face appointments and/or Tele-health. The organizational of the reception chairs respects the distance of least two and half meters, and all spaces have hand sanitizer.

Table 1. Research adoptable review finding

Researcher	Participant	Duration	Method	Result
Ines Dourado, lalo Magno, Fabiane Soares, Paula Massa, Amy Nunn, Shona Dalal, Alexandre Grangeiro. Brazil (2020)	Recruitment based on the activities of peer- educators in social media platforms and hook up apps only.		Telemonitoring	Promotional video on social platform, radio programs on spotify and, “lives” and IGTV in instagram, led by peer-educators featuring as drag queens and digital influences
Lisa Hightow-Weldman, kate muessig, kristina Claude, Jessica Roberts, Maria Zlotorzynska, Travis Sanchez.(2020)			iTech	Overview and current status of iTech randomized controlled trials.
Peter A. Newman, Adrian Guta. (2020).	113 respondent aged 18-29 years.			Marginalized communities tend to experience lack of confidence and mistrust in the face of public health responses develop without community representation. Combination HIV prevention in the new pandemic must expand not only to address COVID-19, but to foreground social determinant of health, including intersectional discrimination and syndetic burden.

<p>Brooke G rogers, Cassie, S.C, Emily Adams, Matthew murphy, Cynthia stewart, Trisha Arnold, Philip A. Chan. Amy Nunn (2020).</p>	<p>Respondent with HIV</p>	<p>Telemedicine, zoom, telephone, and text messaging</p>	<p>Both patients and providers report high levels of satisfaction with telemedicine, and providers can overcome most obstacles to providing clinical services.</p>
<p>Stuart Rennie, Wairimu Chege, Leah, et.all (2021)</p>			<p>Additional consideration should be given to appropriately balancing domain of risk (eq. physical versus social), addressing the vulnerability of research staff and community partners. And responding to unanticipatable ancillary care needs of partisipants and community.</p>
<p>Alexandra, vrazo, Rachel G., et all (2020)</p>			<p>Providing testing of outside facilities to the extent possible to reduce exposure risk to COVID-19.</p>

5.CONCLUSIONS

This systematic review was identified there are no interventions for prevention transmission HIV/ AID on adolescents during Covid-19 pandemic (2019 - 2021). According from systematic review there are some method can adopted in pandemic covid-19 era such us used social media and face to face method with health protocol covid-19. Combining HIV prevention in the new pandemic must expand not only to address Covid-19, but to foreground social determinants of Health (Newman, et al, 2020).

Lessons learned from successful HIV behavioral and policy responses developed. These necessary actions and the circumstances due to the covid-19 pandemic involve both long and short-term ethical implications for HIV prevention. Protecting adolescents from acquiring SARS- COv-2 while sustaining essential HIV services is an immense global health challenge. Tailored family friendly program me adaptation for case finding for these populations have the potential to limit SARS-cov-2 transmission while ensuring the continuity of live saving HIV case identification and treatment efforts.

REFERENCES

- Aziz, A., Efliani, D., & Redho, A. (2020). *PERILAKU SEKSUAL PENDERITA HIV / AIDS DALAM UPAYA PENCEGAHAN PENULARAN DI RSUD ARIFIN ACHMAD*. 3(2), 112–119.
- AJPH COVID-19 From HIV to COVID-19 : Focusing on and Engaging Adolescents and Young Adults During the Pandemic*. (2020). 110(11), 1650–1653.
- Armstrong, W. S., Agwu, A. L., Barrette, E., Ignacio, R. B., Chang, J. J., & Colasanti, J. A. (2021). *Innovations in Human Immunodeficiency Virus (HIV) Care Delivery During the Coronavirus Disease 2019 (COVID-19) Pandemic : Policies to Strengthen the Ending the Epidemic Initiative — A Policy Paper of the Infectious Diseases Society of America and the HIV Medicine Association*. 2019, 9–14. <https://doi.org/10.1093/cid/ciaa1532>.
- Dourado, I., Magno, L., Soares, F., Massa, P., Nunn, A., & Dalal, S. (2020). *Adapting to the COVID - 19 Pandemic : Continuing HIV Prevention Services for Adolescents Through Telemonitoring , Brazil*. 1994–1999. <https://doi.org/10.1007/s10461-020-02927-w>.
- Eghtessadi, R., Mukandavire, Z., Mutenherwa, F., Cuadros, D., & Musuka, G. (2020). International Journal of Infectious Diseases Safeguarding gains in the sexual and reproductive health and AIDS response amidst COVID-19 : The role of African civil society. *International Journal of Infectious Diseases*, 100, 286–291. <https://doi.org/10.1016/j.ijid.2020.08.086>.
- Emirie, A. G., Iyasu, A., Gezahegne, K., Jones, N., & Presler-marshall, E. (2020). *Experiences of vulnerable urban youth under covid-19 : the case of youth living with HIV*. August.
- Ethics, M., Rennie, S., Chege, W., Schrupf, L. A., Luna, F., Klitzman, R., Moseki, E., Brown, B., Wakefield, S., & Sugarman, J. (2021). HIV prevention research and COVID - 19 : putting ethics guidance to the test. *BMC Medical Ethics*, 1–11. <https://doi.org/10.1186/s12910-021-00575-w>.
- Gamarel, K. E., Sevelius, J. M., Neilands, T. B., Kaplan, R. L., Johnson, M. O., Nemoto, T., Darbes, L. A., & Operario, D. (2020). *based approach to HIV prevention for transgender women and their partners : study protocol for a randomised controlled trial testing the efficacy of the ‘ It Takes Two ’ intervention*. <https://doi.org/10.1136/bmjopen-2020-038723>.

- Glassman, Amanda and Silverman, Rachel and McQueston, Katherine, Adolescent Fertility in Low- and Middle-Income Countries: Effects and Solutions (May 8, 2012). Center for Global Development Working Paper No. 295, Available at SSRN: <https://ssrn.com/abstract=2102763> or <http://dx.doi.org/10.2139/ssrn.2102763>
- Goga, A., Bekker, L. G., Perre, P. Van De, El-sadr, W., Ahmed, K., Malahleha, M., Ramraj, T., Ramokolo, V., Magasana, V., & Gray, G. (2020). Centring adolescent girls and young women in the HIV and COVID-19 responses. *The Lancet*, 396(10266), 1864–1866. [https://doi.org/10.1016/S0140-6736\(20\)32552-6](https://doi.org/10.1016/S0140-6736(20)32552-6)
- Guilamo-ramos, V., Benzekri, A., & Thimm-kaiser, M. (2021). *A Triadic Intervention for Adolescent Sexual Health : A Randomized Clinical Trial*. 145(5).
- Infodatin. (2014). *Pusat Data dan Informasi Kementerian Kesehatan RI. Situasi dan Analisis HIV AIDS*. Retrieved from <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=2ahUKEwjcreblfXdAhWHL48KHeFAAL8QFjABegQICBAC&url=http%3A%2F%2Fwww.depkes.go.id%2Fresources%2Fdownload%2Fpusdatin%2Finfodatin%2FInfodatin%2520AIDS.pdf&usq=A0vVaw3hf04xU8Lp0UwGyr5A5u9k>
- Newman, P. A., & Guta, A. (2020). How to Have Sex in an Epidemic Redux : Reinforcing HIV Prevention in the COVID - 19 Pandemic. *AIDS and Behavior*, 24(8), 2260–2264. <https://doi.org/10.1007/s10461-020-02940-z>.
- Nolan, C., Packel, L., Hope, R., Levine, J., Baringer, L., Gatere, E., Umubyeyi, A., Sayinzoga, F., Mugisha, M., Turatsinze, J., Naganza, A., Idelson, L., Bertozzi, S., & McCoy, S. (2020). *Design and impact evaluation of a digital reproductive health program in Rwanda using a cluster randomized design : study protocol*. 1–16.
- Operario, D., King, E. J., & Gamarel, K. E. (2020). Prioritizing Community Partners and Community HIV Workers in the COVID - 19 Pandemic. *AIDS and Behavior*, 24(10), 2748–2750. <https://doi.org/10.1007/s10461-020-02896-0>.
- Rogers, B. G., Suttan, C., Adams, E., Murphy, M., Stewart, C., Arnold, T., Chan, P. A., & Nunn, A. (2020). Development of Telemedicine Infrastructure at an LGBTQ + Clinic to Support HIV Prevention and Care in Response to COVID - 19 , Providence , RI. *AIDS and Behavior*, 24(10), 2743–2747. <https://doi.org/10.1007/s10461-020-02895-1>.

- Singer, R., Crooks, N., Johnson, A. K., Lutnick, A., & Matthews, A. (2020). COVID - 19 Prevention and Protecting Sex Workers : A Call to Action. *Archives of Sexual Behavior*, 49(8), 2739–2741. <https://doi.org/10.1007/s10508-020-01849-x>.
- Stephenson, R., Chavanduka, T. M. D., Rosso, M. T., Sullivan, S. P., Pitter, R. A., Hunter, A. S., & Rogers, E. (2021). Sex in the Time of COVID - 19 : Results of an Online Survey of Gay , Bisexual and Other Men Who Have Sex with Men ’ s Experience of Sex and HIV Prevention During the US COVID - 19 Epidemic. *AIDS and Behavior*, 25(1), 40–48. <https://doi.org/10.1007/s10461-020-03024-8>.
- Vrazo, A. C., Golin, R., Fernando, N. B., Killam, W. P., Sharifi, S., Phelps, B. R., Gleason, M. M., Wolf, H. T., Siberry, G. K., & Srivastava, M. (2020). *Adapting HIV services for pregnant and breastfeeding women , infants , children , adolescents and families in resource-constrained settings during the COVID-19 pandemic.* 1–10. <https://doi.org/10.1002/jia2.25622>.
- Weidman, L. H., Muessig, K., Claude, K., Roberts, J., Zlotorzynska, M., & Sanchez, T. (2020). Maximizing Digital Interventions for Youth in the Midst of Covid - 19 : Lessons from the Adolescent Trials Network for HIV Interventions. *AIDS and Behavior*, 24(8), 2239–2243. <https://doi.org/10.1007/s10461-020-02870-w>