**UNAIDS Submission to the UN Special Rapporteur on Violence against Women and Girls**

Thematic Report on prostitution and violence against women and girls to be presented at the UN Human Rights Council at its 56th session.

The Secretariat of the United Nations Joint Programme on HIV/AIDS (UNAIDS) welcomes the opportunity to make this submission.[[1]](#footnote-2)

The approach of UNAIDS regarding sex work is grounded in international human rights standards, and the best available data and evidence, including from consultations with communities of sex workers. UNAIDS defines sex workers to include female, male and transgender adults, over the age of 18, who receive money or goods in exchange for sexual services, either regularly or occasionally, and who may or may not self-identify as sex workers[[2]](#footnote-3) Any acts involving deceit, fraud, coercion, force or violence do not fall under the definition of sex work. Sex work is to be distinguished from all forms of sexual exploitation and trafficking.[[3]](#footnote-4)

*Question 6. Describe the linkages, if any, between prostitution and the violation of the human rights of women and girls.*

Forty years of evidence from the HIV response, including empirical research, sex-worker testimony and programmatic outcomes has clearly demonstrated that it is the conditions in which sex work occurs that affects whether or not sex workers experience violations of their human rights, rather than the fact of engaging in sex work.

The criminalization of any aspect of sex work, the stigma and discrimination experienced by sex workers, and violence perpetrated by clients, service providers, and public authorities in situations of impunity all act to create an environment that denies sex workers their human rights, including the right to health.[[4]](#footnote-5),[[5]](#footnote-6) These structural barriers are alarmingly prevalent. In 2022 UNADS reported that 168 countries still criminalize some aspect of sex work; a median of 21.9% of sex workers had experienced stigma and discrimination in the past six months (11 reporting countries); 18% of sex workers avoided accessing health-care services due to stigma and discrimination in the past 12 months;[[6]](#footnote-7) and a median of one in five sex workers have experienced violence in the past 12 months (21 reporting countries.)[[7]](#footnote-8)

Within the HIV epidemic, these structural barriers are violating sex worker’s right to health, among other rights, leaving them behind in the response. In 2022 the risk of acquiring HIV was 9 times higher for sex workers than for the rest of the adult population.[[8]](#footnote-9) However these numbers hide significant disparities. While the global median HIV prevalence among sex workers is 2.5%, this ranges from 0% to 62.3%.[[9]](#footnote-10) In Europe, HIV prevalence is notably higher among transgender sex workers compared to cisgender female sex workers.[[10]](#footnote-11) Antiretroviral therapy coverage is low among sex workers, with a global median of 65%, however once again there is a significant range reported between countries, from 1.7% to 100%.[[11]](#footnote-12)

These extreme variations in numbers demonstrates that there is no simple direct correlation between sex work and health outcomes. Rather it is largely the environment (legal and policy) surrounding sex work that affects the enjoyment of the right to health.

Criminalization of any aspect of sex work in particular has been proven to correlate with decreased ability to negotiate condom usage, reduced access to services and increased levels of violence. A 2020 study in 10 countries in sub-Saharan Africa found that in countries that criminalized sex work, the prevalence of HIV among sex workers was more than seven times higher than in countries where sex work is partially legalized. Sex workers are also more than twice as likely to be mistreated in criminalized settings versus partially legalized settings.[[12]](#footnote-13) A study from 2015 found that decriminalizing sex work would avert an estimated 33-46% of HIV infections among sex workers and their clients over 10 years.[[13]](#footnote-14) A meta-analysis conducted in 2018 found that in the context of criminalization, any repressive policing (against sex workers or clients) was associated with twice the odds of a sex worker acquiring HIV or another STI, and almost three times the odds of experiencing sexual violence from clients or other parties.[[14]](#footnote-15) A study in 27 European countries found that HIV prevalence among sex workers in countries where sex work is illegal was 4% compared to only 0.5% in countries where sex work is decriminalized. Full decriminalization appears to correlate with the lowest HIV prevalence among sex workers.[[15]](#footnote-16)

Research indicates that countries where certain aspects of sex work are decriminalized or legalized experience lower HIV incidence rates among sex workers without an increase in the overall number of individuals engaged in sex work[[16]](#footnote-17). New Zealand, for instance, decriminalized sex work and established a legal framework to protect public health and the human rights of sex workers[[17]](#footnote-18).

The World Health Organization (WHO)[[18]](#footnote-19), OHCHR[[19]](#footnote-20) and the Global Commission on HIV and the Law coordinated by the United Nations Development Programme, have both called for the decriminalization of sex work as a key element of the HIV response for sex workers and their clients.[[20]](#footnote-21) This includes decriminalization of all aspects of sex work, including acts associated with the buying and selling of sex. Further, to ensure the health and safety of sex work, UNAIDS recommend that decriminalization of sex work occurs within a broader empowerment and human rights approach, including the implementation of laws protecting them from discrimination and violence and guaranteeing their right to social, health and financial services.

Three consecutive United Nations Special Rapporteurs on the Right to Health, as well as the United Nations Human Rights Council Working Group on Discrimination against Women and Girls, have each reported on the negative impacts of criminalization on the health of sex workers and the need to decriminalize sex work.[[21]](#footnote-22),[[22]](#footnote-23),[[23]](#footnote-24), [[24]](#footnote-25)

The importance of removing harmful criminal laws that create barriers to HIV services is also addressed within the UN Political Declaration on HIV/AIDS of 2021, Member States committed to “(c)reating an enabling legal environment by reviewing and reforming, as needed, restrictive legal and policy frameworks, including discriminatory laws and practices that create barriers or reinforce stigma and discrimination.”[[25]](#footnote-26)

Likewise, the Global AIDS Strategy 2021-2026, sets targets for reductions in stigma, discrimination, gender-based violence and removal of laws criminalizing sex work, among others.

*Question 8. How is the issue of consent dealt with? Is it possible to speak about meaningful consent for prostituted women and girls?*

Sex worker organizations globally, and nationally, define sex work as a contractual arrangement where sexual services are negotiated between consenting adults, with the terms of engagement having been agreed upon between the seller and the buyer of sexual services.[[26]](#footnote-27)

As mentioned above, UNAIDS defines ‘sex workers’ to include female, male and transgender adults, over the age of 18, who receive money or goods in exchange for sexual services, either regularly or occasionally, and who may or may not self-identify as sex workers.[[27]](#footnote-28)

Sex work is work as recognized by the ILO,[[28]](#footnote-29) which recommends that in the world of work “the response to HIV and AIDS should be recognized as contributing to the realization of human rights and fundamental freedoms and gender equality for all”.[[29]](#footnote-30)

Sex work should not be conflated with trafficking, which, unlike sex work, involves coercion and deceit. Trafficking is a profound human rights violation that demands effective and comprehensive international action.[[30]](#footnote-31) UNAIDS recognizes the gravity of human trafficking and supports measures against these practices. Anti-trafficking efforts, however, should be intelligence-based and carefully tailored to combat actual trafficking situations and exploitation, and should not justify or result in criminal prosecution or other coercive measures against adults who engage in sex work on a consensual basis.[[31]](#footnote-32) Broad sweep “raid and rescue” anti-trafficking operations in known sex work locales should be avoided owing to the risk of harassment of sex workers. Where sex workers’ communities are empowered, supported and consulted, they can be strong allies for anti-trafficking efforts, providing critical information about trafficked and underage people.

*Question 10. What measures are in place to collect and analyze data at the national level with a view to better understanding the impact that prostitution has on the rights of women and girls?*

UNAIDS collects and analyzes data on sex work based on the information reported by the countries through the annual Global AIDS Monitoring and through available epidemiological and programmatic data.[[32]](#footnote-33) Under the GAM, UNAIDS collects data on prevalence of violence, stigma and discrimination, law reform, training and access to justice, as well as on access to HIV services. UNAIDS also works with countries to generate estimates for new HIV infections, treatment numbers and AIDS-related deaths. The results are reported by UNAIDS in the Global AIDS Update Report, as well as through [AIDSInfo](https://aidsinfo.unaids.org/).

The Integrated bio-behavioural survey provides specific population level estimates for the burden of HIV disease and HIV-related risk factors, including stigma, discrimination and violence and estimates for the coverage of prevention and treatment services for populations at increased risk for HIV, including sex workers[[33]](#footnote-34).

The People Living with HIV Stigma Index collects evidence on the impact of stigma and discrimination on individuals living with and affected by HIV, including sex workers, that can be utilized in advocating for the rights of people living with and affected by HIV. This tool was developed to be used by and for people living with HIV (PLHIV) and was created to reflect and support the Greater Involvement of People living with HIV and AIDS (GIPA) principle.[[34]](#footnote-35)

*Question 12. What are the obstacles faced by organizations and frontline service providers in their mission to support victims and survivors of prostitution?*

We refer to our response under question 6 regarding stigma, discrimination and criminalization, and under question 8 on the conflation of sex work and trafficking.

In addition, law enforcement practices, such as arrests and “crack downs” likewise negatively affect the health of sex workers, including because: sex workers may be discouraged from carrying condoms in places where condom possession is used by police as evidence of engaging in sex work, or police crack downs may displace sex workers and thus impair access to health and other outreach services, or the outreach services themselves may be targeted by law enforcement. This increases the risk of HIV infection and violence, and decreases access to services.[[35]](#footnote-36), [[36]](#footnote-37) Modelling based on studies from Canada and Kenya indicate that rapid elimination of violence by police, clients and strangers could avert 17–20% of new HIV infections among female sex workers and their clients in those countries within a decade.[[37]](#footnote-38)

A community-led response is essential to supporting the rights of sex workers, as well as victims of trafficking. The Global AIDS strategy calls for sex worker-led networks and organizations to be supported to provide HIV testing, treatment, prevention, and societal enabler programmes for their communities, with the following specific targets for 2025: 30% of testing and treatment services; 60% of the programmes support the achievement of societal enablers; and 80% of service delivery for HIV prevention programmes for key populations and women are to be delivered by community-, or peer-, led organizations.

*Question 13. What are some of the lessons learned about what works and what does not when it comes to stemming any negative human rights consequences from the prostitution of women and girls?*

We refer to our responses under question 6.

In addition, community-led or -based interventions led by female sex workers have been shown to increase access to and use of services, including HIV testing and use of antiretroviral therapy, and to reduce HIV infection rates.[[38]](#footnote-39) For example, among young sex workers using HIV and other services at sex worker-led outreach clinics in Nairobi, HIV prevalence fell from 17.5% in 2008–2009 to 4.8% in 2016–2017. The women reported increased condom use and more frequent HIV testing across the period.[[39]](#footnote-40)

*Question 14. Are frontline organizations and survivors' organisations sufficiently included in policymaking at the national and international level?*

No. Among countries reporting to UNAIDS, 34 countries reported no participation of sex workers in HIV decision-making[[40]](#footnote-41). Sex worker-led organizations also face barriers to participation in multilateral spaces. Integrating sex workers into policymaking, at the local, national and global level, is crucial to ensuring the realization of their rights.

*Question 15. What recommendations do you have to prevent and end violence associated with the prostitution for women and girls?*

**Recommendations on ensuring a safe and healthy workplace for sex workers with access to affordable, acceptable, accessible and quality health services, including comprehensive HIV prevention, testing and treatment service and an enabling legal and policy environment:**

1. Take steps to prevent, respond to and monitor stigma, discrimination and violence against sex workers, in partnership with sex worker-led organisations and networks, including monitoring and reporting, establishing redress mechanisms, provision of health and support services for those experiencing violence. Sensitize and educate Law enforcement and health and social-care providers should be trained to recognise and uphold the human rights of key populations including sex workers, including the right to be free from violence.
2. Decriminalize of all aspects of sex work, including the purchase, sale and management of sex work, and the strengthening of laws prohibiting discrimination and stigma.
3. Put in place programmes to sensitize and educate health-care workers and law enforcement agents, along with other essential service providers on non-discrimination and sex workers’ rights to high-quality health services including non-coercive care, confidentiality and informed consent.
4. Fund and support sex worker-led organisations to develop, implement and monitor programmes for sex workers, including in relation to service delivery and advocacy.
1. UNAIDS works to support countries, communities, and other stakeholders to remove human rights barriers and improve societal enablers such as laws, policies, reduction of stigma and discrimination and violence, gender norms and inequalities, and promote the health and wellbeing women and girls, and men and boys, trans and other gender diverse persons in all their diversity in order to end AIDS as a public health threat by 2030. Per the UNAIDS Division of labour, the United Nations Development Programme convenes the work in supporting law and policy reform in HIV and co-convenes, together with the UN Population Fund, the work on facilitating access of sex workers, among other key populations, to prevention and other HIV services, taking into accounts human rights, access to justice, stigma and discrimination, and other legal and structural barriers that impact access to services. [↑](#footnote-ref-2)
2. UNAIDS. Guidance note on HIV and sex work (2012) available at https://www.unaids.org/sites/default/files/media\_asset/JC2306\_UNAIDS-guidance-note-HIV-sex-work\_en\_0.pdf [Guidance Note]; WHO, UNFPA, UNAIDS & NSWP, Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low- and middle-income countries: Recommendations for a public health approach (2012) available at <http://apps.who.int/iris/bitstream/10665/77745/1/9789241504744_eng.pdf?ua=1>. [↑](#footnote-ref-3)
3. UNAIDS. Guidance note on HIV and sex work (2012) available at www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2009/JC2306\_UNAIDS-guidance-noteHIV-sex-work\_en.pdf [Guidance Note]; WHO, UNFPA, UNAIDS & NSWP, Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low- and middle-income countries: Recommendations for a public health approach (2012) available at <http://apps.who.int/iris/bitstream/10665/77745/1/9789241504744_eng.pdf?ua=1> [↑](#footnote-ref-4)
4. UNAIDS. Guidance note on HIV and sex work (2012). P. 2,5, 13. Available at [www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2009/JC2306\_UNAIDS-guidance-noteHIV-sex-work\_en.pdf](https://www.unaids.org/sites/default/files/media_asset/JC2306_UNAIDS-guidance-note-HIV-sex-work_en_0.pdf) [Guidance Note]; World Health Organization, Consolidated Guidelines on the HIV Prevention, Diagnosis, Treatment and Care for Key Populations (2016). [↑](#footnote-ref-5)
5. UNAIDS. HIV and Sex Work: Human Rights Fact Sheet Series 2021. Available at [HIV and sex work — Human rights fact sheet series 2021 | UNAIDS](https://www.unaids.org/en/resources/documents/2021/05-hiv-human-rights-factsheet-sex-work) [↑](#footnote-ref-6)
6. UNAIDS. The Path that Ends AIDS. 2022. [↑](#footnote-ref-7)
7. UNAIDS. 2023 UNAIDS Global AIDS update factsheet. HIV and sex workers. 2023. (<https://thepath.unaids.org/wp-content/themes/unaids2023/assets/files/thematic_fs_hiv_sex_workers.pdf>, accessed 1 December 2023). [↑](#footnote-ref-8)
8. Korenromp EL, Sabin K, Stover J, Brown T, Johnson LF, Martin-Hughes R, Ten Brink D, Teng Y, Stevens O, Silhol R, Arias-Garcia S, Kimani J, Glaubius R, Vickerman P, Mahy M. New HIV Infections Among Key Populations and Their Partners in 2010 and 2022, by World Region: A Multisources Estimation. J Acquir Immune Defic Syndr. 2024 Jan 1;95(1S):e34-e45. doi: 10.1097/QAI.0000000000003340. Epub 2024 Jan 4. PMID: 38180737; PMCID: PMC10769164. [↑](#footnote-ref-9)
9. Data reported from 85 countries. UNAIDS. 2023 UNAIDS Global AIDS update factsheet. HIV and sex workers. 2023. (<https://thepath.unaids.org/wp-content/themes/unaids2023/assets/files/thematic_fs_hiv_sex_workers.pdf>, accessed 1 December 2023). [↑](#footnote-ref-10)
10. Stengaard AR, Combs L, Supervie V, et al. HIV seroprevalence in five key populations in Europe: a systematic literature review, 2009 to 2019. Euro Surveill. 2021;26(47):2100044. [↑](#footnote-ref-11)
11. Data reported from 33 countries. UNAIDS. 2023 UNAIDS Global AIDS update factsheet. HIV and sex workers. 2023. (<https://thepath.unaids.org/wp-content/themes/unaids2023/assets/files/thematic_fs_hiv_sex_workers.pdf>, accessed 1 December 2023). [↑](#footnote-ref-12)
12. Lyons CE, Schwartz SR, et al. The role of sex work laws and stigmas in increasing HIV risks among sex workers. Nat Commun. 2020;11(1):773 [↑](#footnote-ref-13)
13. Shannon K, Strathdee SA, Goldenberg SM, et al. Global epidemiology of HIV among female sex workers: influence of structural determinants. Lancet. 2015;385(9962):55–71 [↑](#footnote-ref-14)
14. Platt L, Grenfell P, et al., Associations between sex work laws and sex workers' health: A systematic review and meta-analysis of quantitative and qualitative studies, PLoS Medicine, 2018, <https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002680> [↑](#footnote-ref-15)
15. A Reeves, S Steele, D Stuckler, M McKee, A Amato-Gauci, J Semenza. (2017) National sex work policy and HIV prevalence among sex workers: an ecological regression analysis of 27 European countries. The Lancet HIV . ISSN 2352-3018. [↑](#footnote-ref-16)
16. A Reeves, S Steele, D Stuckler, M McKee, A Amato-Gauci, J Semenza. (2017) National sex work policy and HIV prevalence among sex workers: an ecological regression analysis of 27 European countries. The Lancet HIV . ISSN 2352-3018. [↑](#footnote-ref-17)
17. New Zealand Parliament. Prostitution law reform in New Zealand. Available at: <https://www.parliament.nz/en/pb/research-papers/document/00PLSocRP12051/prostitution-law-reform-in-new-zealand> [↑](#footnote-ref-18)
18. World Health Organization. Consolidated Guidelines on the HIV Prevention, Diagnosis, Treatment and Care for Key Populations (2022) [↑](#footnote-ref-19)
19. UNAIDS and OHCHR. International Guidelines on HIV and Human Rights. 2006. Available https://www.ohchr.org/sites/default/files/Documents/Publications/HIVAIDSGuidelinesen.pdf [↑](#footnote-ref-20)
20. WHO, Consolidated Guidelines on HIV Prevention, Diagnosis, Treatment and Care for Key Populations, July 2022 https://www.who.int/publications/i/item/9789240052390 ; UNDP, Global Commission on HIV and the Law: Risks, Rights and Health, 2012 and 2018 Supplement. [↑](#footnote-ref-21)
21. UN Human Rights Committee. Report of the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, Anand Grover (A/HRC/14/20), 2010. [↑](#footnote-ref-22)
22. UN Human Rights Committee. Report of the Special Rapporteur on the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health on his visit to Algeria : Danius Puras (A/HRC/35/21/Add.1), 2017. [↑](#footnote-ref-23)
23. UN Human Rights Council. Violence and its impact on the right to health : report of the Special Rapporteur on the Right of Everyone to the Enjoyment of the Highest Attainable Standard of Physical and Mental Health, Tlaleng Mofokeng (A/HRC/50/28) 2022. [↑](#footnote-ref-24)
24. UNHRC, Working Group on discrimination against women and girls. "Eliminating discrimination against sex workers and securing their human rights: Guidance document of the Working Group on discrimination against women and girls." A/HRC/WG.11/39/1. Geneva [↑](#footnote-ref-25)
25. United Nations Political Declaration on HIV and AIDS : Ending Inequalities and Getting on Track to End AIDS by 2030. A/RES/75/294. 7 June 2021. Available at [Political Declaration on HIV and AIDS: Ending Inequalities and Getting on Track to End AIDS by 2030 (unaids.org)](https://www.unaids.org/sites/default/files/media_asset/2021_political-declaration-on-hiv-and-aids_en.pdf) [↑](#footnote-ref-26)
26. UNAIDS. Guidance note on HIV and sex work (2012). P. 15. Available at https://www.unaids.org/sites/default/files/media\_asset/JC2306\_UNAIDS-guidance-note-HIV-sex-work\_en\_0.pdf [↑](#footnote-ref-27)
27. UNAIDS. Guidance note on HIV and sex work (2012) available at https://www.unaids.org/sites/default/files/media\_asset/JC2306\_UNAIDS-guidance-note-HIV-sex-work\_en\_0.pdf [Guidance Note]; WHO, UNFPA, UNAIDS & NSWP, Prevention and treatment of HIV and other sexually transmitted infections for sex workers in low- and middle-income countries: Recommendations for a public health approach (2012) available at <http://apps.who.int/iris/bitstream/10665/77745/1/9789241504744_eng.pdf?ua=1>. [↑](#footnote-ref-28)
28. ILO. HIV and the world of work (2017) available at <http://www.ilo.org/wcmsp5/groups/public/---ed_protect/---protrav/---ilo_aids/documents/genericdocument/wcms_153110.pdf>. [↑](#footnote-ref-29)
29. ILO. Recommendation 200: Recommendation concerning hiv and aids and the world of work, adopted by the conference at its ninety-ninth session (2010) available <http://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_142613.pdf> [↑](#footnote-ref-30)
30. UNAIDS, Guidance note on HIV and sex work (2012). P. 5. Available at https://www.unaids.org/sites/default/files/media\_asset/JC2306\_UNAIDS-guidance-note-HIV-sex-work\_en\_0.pdf [↑](#footnote-ref-31)
31. UNAIDS. Guidance note on HIV and sex work (2012). P. 17. Available at https://www.unaids.org/sites/default/files/media\_asset/JC2306\_UNAIDS-guidance-note-HIV-sex-work\_en\_0.pdf [↑](#footnote-ref-32)
32. Global AIDS Monitoring 2023: indicators and questions for monitoring progress on the 2021 Political Declaration on Ending AIDS. Geneva: Joint United Nations Programme on HIV/AIDS; 2022 (https://www.unaids.org/sites/default/files/ media\_asset/global-aids-monitoring\_en.pdf, accessed 4 December 2023). [↑](#footnote-ref-33)
33. World Health Organization, US Centers for Disease Control and Prevention, Joint United Nations programme on HIV/AIDS & FHI360. Biobehavioral survey guidelines for populations at risk for HIV. Geneva: WHO; 2017. (<https://iris.who.int/bitstream/handle/10665/258924/9789241513012-eng.pdf?sequence=1>, accessed December 12, 2023). [↑](#footnote-ref-34)
34. GNP+. About the Stigma Index. (https://www.stigmaindex.org/about-the-stigma-index/) [↑](#footnote-ref-35)
35. Platt L, Grenfell P, Meiksin R, et al. Associations between sex work laws and sex workers' health: A systematic review and meta-analysis of quantitative and qualitative studies. PLoS Med. 2018;15(12):e1002680. Published 2018 Dec 11. doi:10.1371/journal.pmed.1002680 [↑](#footnote-ref-36)
36. M Decker, et al., Human rights violations against sex workers: burden and effect on HIV (2015) available at https://www.thelancet.com/action/showPdf?pii=S0140-6736%2814%2960800-X. [↑](#footnote-ref-37)
37. Shannon K, Strathdee SA, Goldenberg SM, et al. Global epidemiology of HIV among female sex workers: influence of structural determinants. Lancet. 2015;385(9962):55–71. [↑](#footnote-ref-38)
38. Ayala G, Sprague L, van der Merwe LL, Thomas RM, Chang J, Arreola S, Davis SLM, Taslim A, Mienies K, Nilo A, Mworeko L, Hikuam F, de Leon Moreno CG, Izazola-Licea JA. Peer- and community-led responses to HIV: A scoping review. PLoS One. 2021 Dec 1;16(12):e0260555. doi: 10.1371/journal.pone.0260555. PMID: 34852001; PMCID: PMC8635382. [↑](#footnote-ref-39)
39. Tago A, McKinnon LR, Wanjiru T, et al. Declines in HIV prevalence in female sex workers accessing an HIV treatment and prevention programme in Nairobi, Kenya over a 10-year period. AIDS. 2021;35(2):317–324. [↑](#footnote-ref-40)
40. National commitments and policy instrument. Geneva: Joint United Nations Programme on HIV/AIDS; 2022–2023 (https:// lawsandpolicies.unaids.org/topicresult?i=1239&lan=en, accessed 5 December 2023). [↑](#footnote-ref-41)