

The Disregarded HIV Prevention Strategies—Their Potential to Uphold the Pandemic, and the Challenges Facing Societies

Reinhard H. Dennin¹, Arndt Sinn², Zhenyuan Du³

¹Department of Infectious Diseases and Microbiology, University of Luebeck, UKSH, Campus Luebeck, Luebeck, Germany

²Centre for European and International Criminal Law Studies (ZEIS), University of Osnabrueck, Osnabrueck, Germany

³School of Economics and Management, Nanjing University of Chinese Medicine, Nanjing, China

Email: reinhard.dennin@uksh.de, sinn@uos.de, lawduzy@126.com

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Abstract

The ongoing spread of HIV after sobering news about the goal “End of AIDS” is not encouraging, apart from regional differences. We focus on the consequences of the two essentially failed HIV prevention strategies in certain countries. The first failed because the correct messages concerning preventive behavior did not reach the required levels of target populations to interrupt HIV infection chains. There was a lack of appropriate framework conditions for the target populations to engage in the required scale. The additional biomedical strategy “Treatment as Prevention” didn’t achieve the breakthrough as was hoped. The consequences thereof affect the financial burden on societies, which can take several decades. We draw attention to the unbalanced principles of proportionality to which governments are committed, but which are practiced in favor of those vulnerable people; these people abuse their autonomy and contribute to the further spread of HIV at the expense of financial burdens, social and medical care systems; this behavior is tolerated, although the transmission of HIV is mostly preventable. We point to extreme tendencies, such as the chem-sex settings, whose unswayable participants engage in indirect violence against the societies. Another possible consequence of the still uncontrolled spread of HIV is the potential for HIV to increase its virulence.

Keywords

HIV Prevention, HIV Exceptionalism, Indirect Violence, Lack of Control, Lack of Compliance

1. Introduction

Many governments around the globe have adopted guidelines for the prevention

and containment of the HIV-1 (HIV) pandemic given by the new public health (NPH) based strategy. Despite this current prevention strategy in its numerous variants including regional health care programs, the dynamic of the HIV pandemic continues with about 1.8 million newly infected people globally in 2017 [1]. The HIV pandemic is perceived as a global challenge and threat to public health. In addition, the treatment as prevention (TASP) concept was promoted in the early 2000s; it is part of the UNAIDS 90-90-90 project. Because no restrictions were imposed, these strategies have indirectly brought motivation to many of the “at-risk” people¹ to maintain risky behaviors that continue the spread of HIV. From the beginning, these vulnerable people were protected by a taboo in spite of their non-cooperation with the NPH strategy. We focus on the HIV based pandemic. The local HIV-2 epidemics are mainly confined to West African countries.

The prospects must not remain fixed solely on the epidemiological development of the HIV epidemic, but must also take into account the social and financial consequences. At-risk people cause immeasurable harm to the societies already burdened with the significant costs caused by their contra-prevention behaviors. The financial burdens may last one to two generations at least, even in the case, the UNAIDS project should work.

We intend to point out what kind of challenges have to be expected and which frameworks are required by state constitutions if the spread of HIV cannot be restricted under UNAIDS guidelines.

The methodological approach: 1) By screening the relevant Journals that focus on HIV/AIDS, STIs; 2) By screening medical information services that cover a broad spectrum of scientific journals regarding, example given, co-infections of different kind, co-morbidities that develop due to the insufficient immune-system caused by HIV, use of recreational drugs like crystal meth and more; 3) By using certain keywords in differing combinations which cover the issues we intended to discuss in our article.

2. Epidemiologic

Facts for the European Union/European Economic Area (EU/EEA) and the WHO European Region: The cumulative number of new HIV diagnoses in the EU/EEA and other countries of the WHO European Region reveal a continuing increase in new HIV diagnoses.

Although there are indications to reach the UNAIDS 90-90-90 HIV target in certain countries of the WHO European Region [2], the actual epidemiology in the European Region is not calming: “The HIV epidemic continues to rise at an alarming pace in the European Region, mostly in its eastern part, which is home to almost 80% of the 160,000 new HIV diagnoses.”² “Sexual transmission be-

¹Most-at-risk populations are defined within the strategy as men who have sex with men, transgender people, people who inject drugs, sex workers and prisoners.” (see reference 7).

²WHO,

<http://www.euro.who.int/en/media-centre/sections/press-releases/2017/1-in-2-people-living-with-hiv-in-europe-is-diagnosed-late-ecdc-and-who-urge-improvement-in-testing-practices>

tween men was the most common mode in the EU/EEA and transmission through heterosexual contact and injecting drug use was the main reported transmission modes in the east of the region.” [3]. For HIV in China see [4], in Germany [5], in Russia concerning the presently most highly at-risk group, the injecting drug users (IDU) [6].

3. HIV Prevention Strategies and Concepts

Guidelines for the prevention and alleviation of the HIV pandemic/epidemics are given by the commonly applied New Public Health based strategy, also called public learning. Its guiding purpose includes using correct messages in trying to influence at-risk people [7] at the cognitive level towards safe sex and safe use behavior to lower the density of HIV infected people in their communities. These messages are distributed both by mass communication for the general public and individuals; in particular, they should influence individual sexual behavior. However, it is reasonably useful only for people who are both able, e. g., by education, as well as the willingness to understand and to follow the messages correctly³. The designers of these concepts have preconditioned that the vast majority of the people addressed can understand and can comply with the messages. However, they have ignored both the complexity of the emotional levels of the vulnerable people as well as people in severe psychological situations, people already suffering from drug use and many others who are not able, for different reasons, to understand the messages. Proponents of these concepts have expected that even the vulnerable people would also respond appropriately by renouncing any risky behavior. They hoped to be able to interrupt the previously self-sustaining HIV infection chains. The assumption that behavioral control of these individuals with extremely instinctual predispositions could be reached with the right messages permanently and time-stably was a significant miscalculation.

At what occasions do HIV infections happen? First, it depends on different ingrained social, cultural or local traditions for sexual behavior and drug use in different parts of the globe. And, often overlooked the “sex industry” [8]. We focus on the Western World, in particular, Germany, the European Union, and Asia, in particular, China, but show interconnecting international topics. Second, HIV transmission situations range from spontaneous, casual encounters/ventures, small groups joining at bare-backing events and chemsex settings—often professionally organized via local or “geosocial” dating apps. Third, HIV infection most commonly occurs via human-to-human transmission by sex transfer in its various variants or through the exchange of HIV-contaminated items among injected drug users. A study on “Syringe Service Programs in the United States” revealed the problems with services to help these people [9]. Also, mother to child transmission (MTC) happens, in particular in low-income

³In addition, possible cultural conflicts with the messages may cause major challenges, in particular when refugees immigrate into countries with quite different cultural matrices.

countries; HIV-infection by MTC or blood transfusion is very rare in high-income countries.

The designers of prevention strategies in their various variables have not considered or have neglected the systemic multiplication potential in the wake of high promiscuity within the men sex with men (MSM) communities and settings of IDUs. These people can both infect several partners with HIV and other STIs or acquire them in a short time.

There is a reason to reconsider the “bottleneck” concept of HIV infection [10] concerning the “multiplicity infection by HIV-1 in MSM” [11]. These findings may be seen as favoring conditions for the evolution of HIV.

The epidemiological development of the HIV epidemic in Eastern Europe and Central Asia [12], Western Europe and other countries with liberal based constitutions proves that too many of these vulnerable people continue to abuse the principle of freedom of the legal systems that include “the obligation to avoid any harm to other people.” The fact is that these NPH-based strategies have ignored the libidinous, high-risk sexual behaviors, in particular, of the at-risk people; instead, these strategies are still based on liberal concepts, *i.e.*, sexual self-determination without any restrictions. In the past decades, the threatening effects there of have been reflected in the increasing prevalence of HIV-infected patients [13]. Therefore, the HIV prevention strategies have failed to convince these vulnerable people to pursue risk-free behavior guided by self-discipline and social responsibility.

4. HIV Exceptionalism [14]

4.1. The First Stage of Consequences

With the interconnection of no-name-reporting of an HIV-positive test, in contrast to hepatitis B (HVB) and hepatitis C (HCV) in certain countries, anonymity was guaranteed, no back-tracing was implemented to find index patients in order to provide them counseling and offer medical help, no mandatory duty to disclose his/her HIV-positive status to their partner(s), in particular concerning the developed, high-income countries. Name reporting of, *e.g.*, STIs are made for the collective protection of health. The reluctance against testing for HIV is based on a broad diversity of arguments from incomplete engagement [15] to a definite rejection of testing offers. Various tailor-made testing strategies could help to reach the target persons [16] [17], and to link people testing positive for HIV to health care settings.

The consequences of the effectively failed current prevention strategies can be demonstrated by information from the European Center for Disease Control and Prevention (ECDC) on late presenters: one out of two people tested positive for HIV is diagnosed late [18]. A study in 13 European cities revealed about one third of MSM were undiagnosed [19]. Furthermore, based on an ECDC study: “nearly one in six new HIV diagnoses in Europe are among people over 50” with late diagnosis at 3%” [20].

Regarding the situation of the “late presenters” in China, only data for certain regions are available [21].

In the US, the same trend was shown for older people [22]. Late diagnosis of HIV corresponds with a relatively high concentration of HIV (HIV VL) in the blood and correlates to the high infectiousness of these people. The CD4⁺ T helper cell count in the blood is an indicator of the immune status; CD4⁺ counts above 500 per 1 microliter specify a “normal” range in healthy individuals. However, in patients infected with HIV, this virus infects and destroys the CD4⁺ cells; their number, therefore, decreases with time. Treatment with antiretroviral drugs according to the TASP⁵ concept can stop and reverse this process. The report provided by the ECDC for EU/EEA presents the rate of “Late diagnosis” for 2016 (Figure 1) regarding the scaled CD4⁺ counts.

The consequences: This complex situation of no-name reporting and the late presenters favors the maintenance of HIV circulation in the human populations and benefits the intricate traits of the HIV to evolve continuously. There is marked variability in the rate of HIV disease progression, depending on genetic factors of infected people as well as HIV replication. After infection of a person,

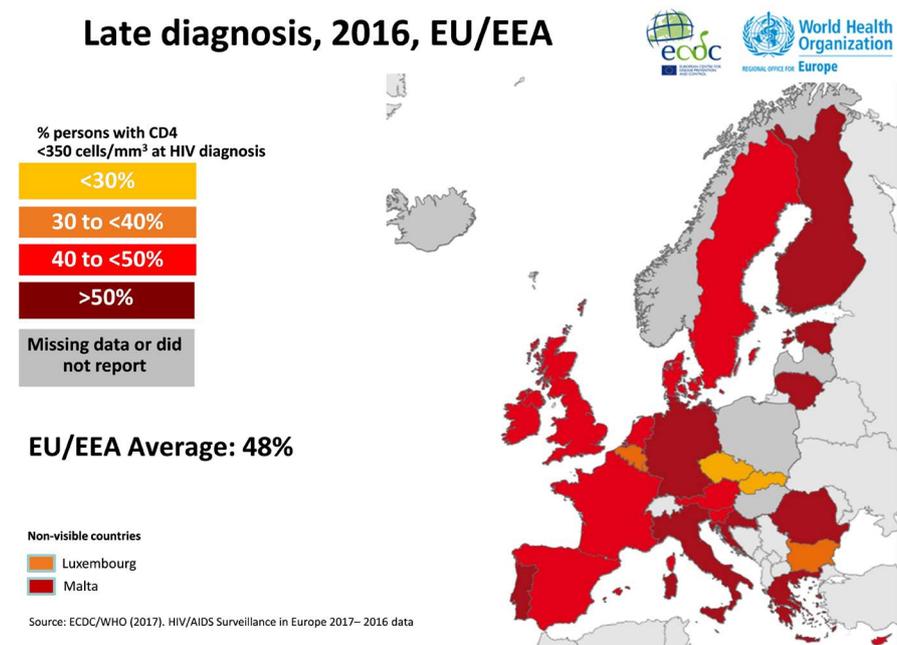


Figure 1. HIV/AIDS Surveillance in Europe 2017 (2016 data) presentation, 28 Nov 2017. Period: 01 Jan 2016-31 Dec 2016 (source see footnote⁴). Late diagnosis is shown with respect to the CD4 count.

⁴Access:

<https://ecdc.europa.eu/en/publications-data/presentation-hiv-aids-surveillance-europe-2017-2016-data>.

⁵TASP, Treatment AS Prevention; Vernazza, P., Hirschel, B., Bernasconi, E., Flepp, M. HIV-infizierte Menschen ohne andere STD sind unter wirksamer antiretroviraler Therapie sexuell nicht infektiös. Schweizerische Ärztezeitung, 89, 165-169 (2008).

<https://doi.org/10.4414/saez.2008.13252>.

besides the infection of the CD4⁺ T helper cells, HIV crosses the blood-brain barrier early and infiltrates the central nervous system (CNS) [23] [24]. Late complications may occur: neurocognitive deficits in different stages and behavior disorders [25] [26] [27]. Different populations of these late presenters who are unaware of their HIV infection for several years may become exceedingly unable to understand the correct messages of the prevention campaigns and cannot follow them; this entails that they can both infect many people for several years or acquire a super infection depending on their sexual lifestyle. They represent an ongoing hidden source that contributes to maintaining the spread of HIV. This situation is due to liberal concepts without any kind of control.

The TASP concept was promoted in 2008; it is part of the UNAIDS 90-90-90 project⁶. The slogan “Test and Treat” [28] is correct and sounds helpfully, but in order to be successful the TASP/UNAIDS concepts require both 1) testing as early as possible and 2) stringent cooperation/adherence from those taking anti-HIV (ART)⁷ medications and the obeying of the prevention messages. The sooner the HIV diagnosis is made, the sooner the medication with ART can be initiated, thus helping to hold the HIV reservoirs down and significantly improving the immune status. Late presenters, already partly suffering from restricted cognitive abilities, might have reduced ability to adhere when receiving ART. Furthermore, reports on unnoticed occurrences of blips [29], HIV RNA rebound [30] and low level viremia [31] in people with ongoing ART medications should raise awareness towards infectiousness regarding the TASP/UNAIDS concepts.

Certain countries (e.g., low-income countries with a high prevalence of HIV and high-income ones with a low prevalence of HIV) report to reach the goals set by the UNAIDS [32]. However, in other countries there are entirely different prospects, local epidemics could get out of control. Such a development was already foreseen in 2004 “HIV outpaces global response [33].

Meanwhile, it is known that depending on the country, too many HIV-naïve people and those under the ART developed reduced risk perception, followed by complacency, frivolity, etc., oftener resulting in “safer sex fatigue” [34] [35] [36]. They have accepted treatment optimism with risk-taking [37], so as to continue jauntily with sexually risky lifestyles. Three studies performed in Sub-Sahara [38], South Africa [39] and the Netherlands [40] revealed in an exemplary way the complexity of risk perception. Too many bearers of at-risk behavior in the context of this article disregard, for various reasons, a basic rule of our societies: “avoid any harm to other people” [41]. The safer-sex-fatigues have to be ex-

⁶UNAIDS, An Ambitious Treatment Target to Help End the AIDS Epidemic. The “achievable targets” are: by 2020, 90% of all people living with HIV will know their HIV status. By 2020, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy. By 2020, 90% of all people receiving antiretroviral therapy will have viral suppression.

http://www.unaids.org/sites/default/files/media_asset/90-90-90_en.pdf

⁷ART, antiretroviral therapy, *i.e.* a medication with drugs against the HIV, but it isn't a cure! The respective drugs impair HIV replication in the infected cells; cART and HAART stand for special medication protocols with different drugs.

tended to HCV: In the context of the very effective treatment options available for HCV, both increasing rates of first and reinfection with HCV are reported [42]. Failing HCV antiviral treatment in the context of reinfection with different HCV genotypes should raise awareness [43].

Regarding ART resistant HIV, quite different situations have been reported: no serious situation in the US [44] and certain areas of China [45], situations concerning “pretreatment resistance” in low and middle-income countries [46] [47] and warnings regarding the UNAIDS project [48].

4.2. The Second Stage of Consequences

In contrast to old public health (OPH) regimentations, HIV was not ranked as a regular infection like hepatitis B and hepatitis C in Germany. OPH bases on name reporting and back tracing to find index patients to help them at different levels and for the collective health protection.

For HIV infection, the NPH includes a government-granted taboo without any injunctions or legal prerequisites like a liability risk. This policy has also led to at-risk people from the various categories, in particular, the MSM in the EU⁸, having established rules for them to continue and to develop situations guided by risky behavior undisturbed; these rules are directed against the interests of societies. Policy makers tolerate the mentality of too many at-risk people being allowed to live without social responsibility to the detriment of the common good, unless, *inter alia*, a preventive anti-HIV vaccine is developed [49]. This taboo is supported by PrEP (pre-exposure prophylaxis with ART) [50], ART as part of the TASP concept and the resulting expectation of an increased life expectancy [51]. The potentiation of bodily harm caused by adding the use of recreational drugs is included. The PrEP itself has “... the potential to reduce new HIV infections” [52], but if abused, e.g., with persistent high-risk practices such as unprotected sex (e.g., anal intercourse), such situations are known to facilitate both the transmission and acquisition of other sexually transmitted infections (STIs) [53]. These situations provide additional proof of the insufficient prevention strategies/concepts and provide harmful aspects for the future spread of HIV. Too many of the at-risk people have taken lifesaving medications without a *quid pro quo*; this public care was and still is not appreciated.

Overlapping epidemics developed by vulnerable people: “at-risk” populations such as IDU and in the context of high promiscuity, e.g., by MSM and heterosexual “geosocial” networking apps, female sex workers, etc., depending on the ethnicity, country and certain aspects regarding prison inmates [54]. Meanwhile, the definition of “at-risk” has to be extended to heterosexual communities too. And there are developments, expected ones, and additional new trends that could be hazardous for the goal set to end the HIV pandemic in general and affected countries in particular. Bare backing, “... refers to intentional unsafe anal sex” [55] and chemsex settings [56] [57].

⁸According to the report of the ECDC/WHO [3].

1) To be related to most professionally organized chemsex parties, *i.e.*, sexualized drug use: sex and co-consuming psychoactive drugs, also named recreational drugs [58] [59] [60]. Such kinds of drugs like methamphetamine (crystal meth) are welcomed to "... initiate, enhance, and prolong sexual encounters"⁹ [61] and to reduce inhibitions and pains when having extreme "high-risk" sex including "sexual assault" [62].

2) These settings can represent highly concentrated densities of people infected with HIV and other STI, like syphilis, HCV [63] and HPV (high-risk types like HPV 16) [64]. These settings provide uncontrolled platforms for the spread of HIV and other STIs, which in turn are further indicators of failed prevention strategies. Also, mono- or coinfections with STI(s) are in contrast to the specifications of the TASP concept (see footnote v).

3) These settings with or without drug use that enable a higher density of HIV-infected people are also known as "HIV transmission clusters" [65] [66]. Overlapping partnerships can be established in the context of high promiscuity, e.g., promoted by both MSM and heterosexual "geosocial" networking apps [67] [68] [69]. Such kinds of settings provide effective platforms for HIV for blending its different clades (details see below, c.). The enormous potential of the dynamics of the evolution of HIV is also present in the P.R. China [70] [71] [72] [73].

4.3. The Third Stage of Consequences

Based on the exceptional status of HIV, these situations have emerged in favor of the uncontrollable people of the risk groups. They arose from a taboo that protects this minority of people against any legal consequences. This liberal approach is currently maintained, although the personal transfer of HIV is considered as bodily injury or as a homicidal offense and is classified as a criminal offense in Germany.

The evolution of HIV bases on two foundations: first, it's an intrinsic characteristic of the HIV RNA genome to mutate rapidly. The generated mutations have the potential to escape both the external attacks from ART ("ART resistance") and the immune system of its host; the "viral escape mutations" due to CD8⁺ T cell responses might have hazardous potential [74]. Second, a preexisting HIV infection does not detain a superinfection; settings such as bareback and chemsex, in particular, have been classified as clusters for blending HIV from different clades, resulting in circulating recombinant forms (CRF) [75] [76]. The behavior of too many of the highest risk-taking people who are HIV-naïve and those already infected assists the ongoing evolution of HIV [77]. This is because these people reject to follow the correct messages of the prevention campaigns; otherwise, HIV would not stand a chance.

Without ART, most of the HIV infected people would die within several years after infection; but with ART these people can expect a normal life expectancy, but not all of them. In spite of ART, HIV persists in certain CD4⁺T cells [78]

⁹So called "marathon sex".

[79] and remains replication-competent [80]. Concepts like “Kick and Kill” to eliminate these reservoirs of HIV does not work yet [81].

5. Prospects

This prevention strategy has allowed both undiagnosed HIV-infected people as well as already those already diagnosed as HIV-positive to remain hidden from any surveillance in most countries. The TASP concept has enabled vulnerable people to refrain from preventive behavior according to the prevention reports. The TASP concept is taken as a guarantee that they no longer had to fear the HIV infection, and too many of them continue transmitting HIV—and the overlooked gaps, e.g., insufficient suppression of HIV VL and its consequences.

Indirectly, governments that follow the NPH strategy, with its various variants without any legal framework to limit the misconduct of vulnerable people, have created conditions that in spite of TASP may help to sustain the HIV epidemic, at least at a reduced level. By scientific terms, this means that societies, health care systems and international funds help most of those taking ART to achieve a near-regular life expectancy, but indirectly, they also help many of them with insufficiently suppressed HIV VL to maintain the spread of HIV in many countries [82]. It is like a vicious circle.

What these people, the at-risk people, per se, and those of the heterosexual sceneries, are mostly intentionally doing when spreading HIV reflects an infringement against the correct messages of the prevention campaigns and is directed against the societies.

Governments who follow this kind of a liberal approach tolerate the selfish behavior of these vulnerable people, who take this generosity of an unlimited autonomy as a legally protected interest. Governments have allowed these unswayable people to continue their misdemeanor when spreading HIV and other STIs; these trends have reached a massive scale also in developed countries.

This situation corresponds to a certain kind of violence of those people against the current law not to harm other people and against the states, the governments and the societies that are in duty to help them when needed.

The governments are giving way; they tolerate this violence against societies as a whole.

Specific questions must gain momentum such as: How should the principle of proportionality be weighed? Two objectives need to be addressed: 1) Personal rights: Is there a limit to the current taboo on the indefensible people who sustain the spread of HIV? 2) The financial burden and its limitations: Recent publications show that funding, e.g., for ART, medical and social care, for HIV-infected individuals is limited. Given that our societies are reaching their limits: Is unlimited tolerance still valid for people who sustain the spread of HIV? Warnings regarding “A growing global issue” are long known [83]. The current status contrasts the governments’ duties to protect the societies from awkward, unpredictable, challenging impacts on the common good. As for sel-

fish behavior, how long can the consequences of the misuse of granted freedoms be imposed on societies and when are restrictions imposed [84]? Many Governments seem to have ignored this Principle of Proportionality because they also need to protect Public Health Issues—not just the interests of people who continue to spread HIV.

Some countries have noticed this problem. While protecting the legal rights of these vulnerable groups, and since these people are also high-risk groups, for public health, they have also been intervened and regulated. For example, in China, the relevant government departments are aware of the necessity of combining legal control with behavioral intervention. At the same time, appropriate measures of coordination and division were initially designed. Such as specific interventions have been made for the behavior of drug addicts, sex workers and MSM [85].

In addition to the basic legal responsibility of the government for AIDS prevention and control, community forces and non-governmental organizations also should be encouraged to participate in AIDS prevention and control projects. The community can provide life support, psychological counseling, and behavior correction for AIDS patients. The government should increase the input of service personnel, financial resources and material resources in community service and institutionalize community support. Non-governmental organizations have advantages in AIDS prevention and control because of their flexibility, effectiveness and public welfare, which can contact the group that the government hardly gets close to. Moreover, some members of non-government organizations are made up of AIDS patients or their relatives, and the experience of them is more convincing to other AIDS patients. Non-governmental organizations play a role with the government and the community to build a more perfect and efficient AIDS prevention and control system and mechanism.

In the context of the not sufficiently curbed spread of HIV, entirely different consequences have to be addressed too: The potential of an increasing virulence of the HIV. The goal of UNAIDS that the third 90% of treated people with suppressed HIV (*i.e.*, 10% are not suppressed) will contribute to the END of AIDS might not meet the realities. In the complex context of, for example, the late presenters, the geosocial sexual networks, the vulnerable people who do not follow prevention campaigns, all of these influences could lead to the ongoing spread of HIV. The more people spread HIV, the more effective it is for HIV to promote its virulence [86] [87]. An extreme situation has gained thanks to no framing restrictions for these people.

6. Comorbidities

HIV and coinfection with other STI like HCV, especially concerning coinfections of the CNS, have the potential to induce a broad spectrum of neurocognitive deficits [88] [89]. Regarding the increasing HCV mono-infections among the at-risk populations, the extra-hepatic manifestations include the CNS too

[90]. HPV infections are also known to follow sexual transmission routes, causing cervical, anal as well as oropharyngeal cancers [91] [92]. Those vulnerable people who engage in chemsex settings are at risk for connected disorders, e.g., by crystal meth [93]. Co-consumption of psychoactive drugs has both short-term restrictions of cognitive self-control, disinhibition, as well as long-term consequences such as psychotic symptoms in the case of cannabis [94], drug addiction and the health consequences of addiction, including unemployment status. In the context of consuming psychoactive drugs when having sex, the long-term effects on the health of these consumers must be considered apart from short-term consequences like an inebriation just for days. The use of cannabis has to be seen in the context of cardiovascular diseases (CVD) [95]. This situation also applies to their behavior in the context of limited ability to follow the messages for preventive behavior: cognitive deficits or disorders of various degrees. Cardiovascular risks [96] and heart failure, possibly evoking from protease inhibitors (PI) [97], in people living with HIV pose particular challenges.

7. Legal Aspects

The prevention and treatment of AIDS is not only a medical issue but also a social issue. It requires a multidisciplinary study of ethics, sociology, economics, and law. The idea of combining AIDS prevention and human rights protection has become a basic consensus in the international community through long-term practice. Experience in AIDS prevention and human rights protection in countries around the world shows that there is no contradiction between AIDS control and human rights protection. Prevention, treatment, care, and support are interrelated and mutually reinforcing. Past work has neglected the intrinsic link between them, leading to many problems, such as insufficient protection of family members of the patients and ignoring community rights, resulting in significantly reduced anti-epidemic effects. Relevant intellectual property laws, customs laws, and tax laws have hindered the supply of cheap and effective drugs and medical devices; unscientific media and even discriminatory propaganda have led to social panic and intensified social conflicts.

Order and the realization of justice cannot be separated from the law, but at present, it seems that formal legal norms enacted by the state or international organizations are not sufficient to accomplish this task. The misunderstanding of legislators and policymakers leads to the fact that many effective preventive measures, in theory, cannot play their due role in reality.

“The International Guidelines on AIDS and Human Rights” [98] and “The Basic Declaration on the Human Rights of AIDS Patients” [99] places the protection of the social rights of AIDS patients first. They are paying more attention to protecting the rights of personality, equality and freedom of AIDS patients. “The International Guidelines on AIDS and Human Rights” include support for community partnerships, legal aid services, a supportive environment, and

changes in discriminatory attitudes through education, training and the media. “The basic Declaration on the human rights of AIDS patients” also lists the right to seek and enjoy relief, the right to education, the right to enjoy a certain standard of living and social security as the fundamental rights of AIDS patients. While if there is an abuse of freedom principle for AIDS patients, the legal concepts and principles will ignore the right to know of healthy people and threaten the right to their health [100].

In addition, relevant guidelines issued by international organizations such as “The International Guidelines on AIDS and Human Rights”, also have limitations, including the principles of sex work, MSM, the status of women, drug use, voluntary testing and the emphasis on individual human rights protection, which are relevant to the specific national conditions of many countries. Although to solve this problem, the guidelines have also made some efforts in the formulation, such as emphasizing the obligations of countries to implement international human rights standards and requiring countries to implement AIDS-related programs pragmatically in specific national circumstances and to protect public health and human rights. However, “the International Guidelines on AIDS and Human Rights” overemphasizes international human rights standards and overly neglects the particularity of human rights, which cannot be entirely remedied by relying solely on specific measures. For example, in China, the right of privacy for AIDS is special. The general lack of AIDS-related knowledge among ordinary citizens in Chinese society makes AIDS considered an infectious disease related to moral fouling. HIV testing can cause AIDS patients to fear that their privacy will be discriminated after being leaked, so it is difficult to achieve voluntary testing through legislation.

Can help be expected from the law? Apart from very rare cases that came to court (in Germany), thus far: the legal systems are powerless. The law has lost its normative power in the context of the issues discussed here [101] [102]. This powerlessness of legal systems of certain countries in Europe and Central Asia is presented in the “ECDC Evidence Brief: HIV and laws and policies in Europe” [103].

In Germany, no person gets punished for being HIV-infected. That would be a clear constitutional violation. This is even though unprotected sexual contact between an infected person and a non-infected partner is the starting point for criminal consideration.

However, penalizing the infected person who has infected another person is the exception, as the courts must be able to prove a causal relationship between (sexual) contact and infection of the partner. This situation leads to the legal problem that the personal causality of a new HIV infection is barely detectable years after infection. The HIV infection is usually fatal. ART does not take the blemish of legal relevance to HIV infection.

The criminal treatment of HIV transmission is strictly legal. If a person intentionally or negligently kills or injures another person, it is immaterial how it happened. But before the law and before the criminal law, all human beings are

equal, and it is, of course, the ethical principle not to harm a person. In Germany, a person becomes not punished for being HIV-positive. This person will only be penalized if it intentionally or negligently killed or injured another person, which can also happen through the transmission of HIV.

The evaluations show that the forgoing governments prefer to recede from the violence of vulnerable people who remain resistant to current prevention campaigns. The governments admit that these people can follow their sexual selfishness next to drug abuse unchecked, to the detriment of the societies.

8. The Costs

As a consequence of liberal prevention strategies without any legal measures or other regulation for people who continue spreading HIV, the inevitable results are: Governments pursuing these inadequate policies forcing the health care systems and the societies to incur the necessary costs for at least one or two generations [104] [105]¹⁰. A multitude of prevention programs adapted to the various behaviors have to be developed to convince the most vulnerable people to join testing and medical care offers. The German Ministry of Health (BMG) stated already in 2016 to have kept the HIV epidemic at a low level [106]. Costs of the HIV epidemic have been published for the UK [107] and USA [108]. Regarding Europe, there are already warnings that “Currently, two out of three EU/EEA countries tell us that they do not have sufficient funding for prevention interventions...” [109]. More general [110] and sobering reports on stalled funds from different sources have been reported [111]. In China, the main source of funds is the central financial allocation, as well as local financial allocation, international organizations and foreign government funds. China’s “AIDS Prevention and Control Regulations” is based on the principle of prevention and combination of prevention and control. A considerable proportion is used for AIDS propaganda of medical knowledge and legal policy of AIDS.

9. Conclusions

While considerable progress has been achieved with ART/HAART, nonetheless, too many people of the diverse at-risk categories unprecedentedly continue the spread of HIV. Support by “Adherence to the care...” [112] [113] and online services [114] may be helpful to some degree. The proposals published by the ECDC/WHO are not innovative: “Multi-component interventions and the consideration of new strategies, such as the inclusion of pre-exposure prophylaxis for HIV, self-testing and assisted partner notification into the package of prevention and control interventions, could help to curb this increasing trend [115].” These intentions don’t match the realities of too many unswayable people and those with low educational levels, marginalized, homeless people unless “control interventions” can be enforced. If the current HIV prevention concepts are to be modified, then differentiated insights into the behaviors of at-risk

¹⁰Even this time span could turn out to be an illusion regarding the stalled funding financing ART.

persons must be taken into account [116]. Sex in the context of social responsibility has to be addressed [117]. The social contract states: everybody has duties to the community, sexual freedom and individual liberty must be limited to enforce these “duties”. This condition is following the Article 29 of the Human Rights Declaration. Cooperation with the prevention campaigns is required. A multitude of facts reveals that the global community is reaching a crossroad. Individual governments are facing crucial decisions. It is important to strengthen cooperation between governments, communities, non-profit organizations and people affected by AIDS, and to focus on interdisciplinary AIDS research results.

Given the current status of the ongoing spread of HIV in many regions of the globe, the validity of current policies has to be challenged. If it is not possible to persuade the incorrigible at-risk people of various categories to cooperate with the guidelines of prevention messages, then a humanitarian catastrophe may develop.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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