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Debate

HIV prevention, structural change and social values: the need for an explicit normative approach

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Abstract

Background: The fact that HIV prevention often deals with politicised sexual and drug taking behaviour is well known, but structural HIV prevention interventions in particular can involve alteration of social arrangements over which there may be further contested values at stake. As such, normative frameworks are required to inform HIV prevention decisions and avoid conflicts between social goals.

Methods: This paper provides a conceptual review and discussion of the normative issues surrounding structural HIV prevention strategies. It applies political and ethical concepts to explore the contested nature of HIV planning and suggests conceptual frameworks to inform future structural HIV responses.

Results: HIV prevention is an activity that cannot be pursued without making value judgements; it is inherently political. Appeals to health outcomes alone are insufficient when intervention strategies have broader social impacts, or when incidence reduction can be achieved at the expense of other social values such as freedom, equality, or economic growth. This is illustrated by the widespread unacceptability of forced isolation which may be efficacious in preventing spread of infectious agents, but conflicts with other social values.

Conclusions: While no universal value system exists, the capability approach provides one potential framework to help overcome seeming contradictions or value trade-offs in structural HIV prevention approaches. However, even within the capability approach, valuations must still be made. Making normative values explicit in decision making processes is required to ensure transparency, accountability, and representativeness of the public interest, while ensuring structural HIV prevention efforts align with broader social development goals as well.

Keywords: HIV/AIDS; structural approaches; values; AIDS resilience; capability approach.

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Introduction

The field of HIV prevention has increasingly seen calls to undertake structural approaches to HIV. These are a central component of the so-called combination approaches to prevention [1,2] and felt to provide an alternative to the unsuccessful individualistic or single-issue focussed interventions of the past [3–8]. Yet while efforts have been made to conceptualize how distal structural drivers may shape HIV risk [3,9], or how structural environmental factors may influence vulnerability [6,10], there has been much less consideration of the political nature of structural HIV prevention and what this may mean for planners wishing to take structural HIV approaches forward in practice.

Strategies which aim to alter the causal pathways between macro-distal structures and risk behaviour, or alternatively which shape social environments to reduce risk and vulnerability, by definition involve changes in social, economic and political sectors which can have implications beyond health alone. Typically there are a range of contested values and beliefs which are brought to bear on issues of social change, even if those changes are done in the name of reducing HIV spread. The health sciences of epidemiology, clinical medicine and medical statistics typically view values and beliefs as potential sources of bias, but public health planning has been noted to be ''far more complex than merely applying epidemiology'' [11] (p. 1158). Indeed, Savitz *et al*. argue that ''[t]he argument that epidemiology should separate the knowledge base from its implications is viewed as dangerously naive, since all decisions about science, from the choice of topics to the methods and interpretation of research, are seen as political, moral decisions'' [11] (p. 1160).

This is particularly so in the field of HIV which is historically recognized to engage with deeply contested social practices such as drug taking or sexuality [12–19]. As the field of HIV increasingly moves to consider *social* and *structural* changes to reduce HIV incidence, however, the implications move beyond the realm of behaviour or lifestyle. It is therefore critical to consider structural HIV prevention within a framework that recognizes its potential impacts on broader social development processes, considering the social values which determine such development priorities.

This paper engages with these issues in three sections. First, it presents a discussion of the insufficiency of health promotion strategies which focus on health outcomes alone. This draws on both public health and bioethics literatures which explore the inherent and often unstated value systems behind many health policy strategies. Second, the paper addresses HIV prevention specifically, considering the epidemiological realities of how structural isolation of individuals may be particularly effective in reducing HIV transmission, but how the imposition of this ''AIDS isolation'' can violate other social development goals. Finally, to present a potential means to resolution, the concept of defining structural HIV prevention as building ''AIDS resilience'' is discussed. An AIDS resilience approach would not value HIV prevention for its own sake (nor place it above other social goals), but rather work towards building the capacity of individuals and communities to resist HIV. The building of capacity is, however, conceptually aligned with a capabilities approach to human and social development, which provides a well-established theoretical basis to avoid conflicts with other social values and integrate structural HIV prevention with broader social development objectives. The paper concludes by reiterating the need for both unbiased measurement combined with explicit normative valuation to guide structural HIV prevention strategies.

Health: values and politics

Is health a-political?

There have always been political dimensions to HIV prevention [20–22]. Yet epidemiologists have often conceptualized HIV intervention in a de-politicized way, avoiding normative statements and attempting to frame policy recommendations in a value-neutral light based on assessments of effectiveness and ''what works'', evaluated solely in terms of HIV incidence reduction or proximal behaviour change [1,23–25]. While the avoidance of normative values may be useful, or even necessary, in the evaluation of biomedical efficacy, the *selection* of interventions, and therefore the factors involved in policy recommendation, requires additional considerations. All policy decisions involve choices between competing and contested outcomes, with health policy no exception [26]. Typically, a health intervention can have a range of expected, or potential, impacts beyond morbidity and mortality. Obvious ones are economic costs, but many interventions will equally have social, moral, political and other linked impacts.

Yet the field of HIV has historically been dominated by a biomedical discourse which constructs the problem of HIV infection in clinical and epidemiological terms [27–30]. The sciences of clinical medicine and epidemiology are traditionally positivist in orientation, attempting to discern universal 'facts', outside any influence from social values of beliefs. Accordingly, the methodologies applied by the health sciences (methods including epidemiological studies, analysis of medical statistics and cost-effectiveness evaluation) have developed well established guidelines to measure variables, construct models, or correctly sample population groups [31–36]. Such efforts reflect an attempt to develop the most valid and unbiased methods of *how to measure* a given outcome of interest. What they are unable to do, however, is to address the question of *what to measure* in the first place, or *how to value* what gets measured relative to other (measured or unmeasured) outcomes. Those decisions require choices to be made between competing considerations, which involves value judgement.

So, while identifying the cost per disability-adjusted life year averted for a health intervention is a question that the tools of health economics can answer, the decision on whether or not to include costs as a factor in the decision making process in the first place is *political*. Whether other social values, in addition to cost, should be considered is equally political: such as whether an intervention to reduce mortality should also be judged on how well it promotes gender equity, patient choice, poverty reduction, or other socially desirable outcomes.

Can health evidence alone guide choices?

A temptation by those working in health promotion is to take the position that decision makers must divorce themselves from values or ideology when considering health interventions. This may appear a natural extension of what health scientists must do to avoid bias or ensure validity in their measurement methods. Yet decision making is fundamentally about choice, not measurement. Valid measures are needed, but decision makers must subsequently choose how to value the different components of any policy decision [37]. Policy making is political for this very reason; it involves choices between competing values. This is why ''evidence informed policy making'' is decidedly different from ''evidence based medicine'' [38]; yet many statements endure which imply that *only* health evidence should be considered in health policy decisions. Indeed, any of the calls for ''evidence *based* policy'' which *only* consider health evidence in decision making (or which systematically exclude evidence of other impacts) are taking such approach [37,39–41].

There are two main challenges with this approach. First, in many cases the selection of health evidence itself is not without normative valuation (either implicit or explicit). Deaths can be counted, but when it comes to valuing life years, or various levels of disability, a subjective valuation system is required. The DALY provides one attempt to do this, but as such it is explicitly contestable [42,43]. Second, while the call to only consider health outcomes may seem a logical way to remain unbiased, it asks decision makers to consider *only one* of many possible social benefits. Improved health is a social value, hence it being a subject of social policy decisions and collective action. Yet so are things like poverty reduction, balancing budgets, or achieving social equality.

Within the fields of public health [44,45], global health [46], health promotion [47], and health communication [48,49] alike, a number of critical authors have pointed to the importance of value systems in shaping decisions which often go unstated or unacknowledged. A common example is the way that individualistic accounts of health production lead to political solutions which downplay the importance of social action and structural change [47], instead placing responsibility of poor health on individuals themselves. This

acts to both perpetuate social inequality [45] while at the same time justify the imposition of social controls [19,44].

Indeed, Tesh has specifically investigated the history of what she calls the ''hidden arguments'' influencing heath thinking, exploring how normative views on questions such as ''what is the nature of human beings?'' or ''what is the ideal structure of society?'' have shaped ideas of disease causation and influenced disease prevention policy over time. She states that identifying these hidden influences is not an attempt to remove value concepts from health policy considerations, but rather she argues ''that their inevitable presence be revealed and their worth be publicly discussed'' [50] (p. 3).

Bioethics, values and democracy

Calling for health (or health and cost effectiveness) to be the only consideration in health policy making must be recognized as imposing a normative system. Taken to its logical extreme, the exclusion of other social values could justify imposing health interventions against people's will or to the detriment of their human rights. The human rights aspects of health practice, however, have particularly been the subject of the field of bioethics which developed, in many ways, as a response to objectionable instances when health outcomes were placed above other social considerations. Whether it was World War II human experimentation, the Tuskegee syphilis studies, or the infecting of prisoners in Stateville penitentiary with malaria [51–53], these now infamous cases of unethical medical practice have typically involved violation of a notion of individual rights in the pursuit of a ''higher'' health goal. The health sciences have subsequently incorporated human rights considerations in the form of ethical guidelines [54–56], and the HIV field itself has seen numerous appeals to human rights approaches to insure individual freedom and liberty is not compromised in the name of HIV prevention [22,57–60].

Yet while some may see the role of bioethics as providing a set of universal moral principles on which decisions can be made, within the field of bioethics, there have been critical perspectives which point to how ethics cannot easily guide health decision making in practical terms [61]. Ethics may deal with absolute principles, but applying them to real problems (which decision makers must do in choosing between multiple ethically sound policies) lies outside the universal principles that the applied moral philosophy of ethics can address [61,62]. Even if ethical universals exist, Macklin points out that these are not the same as *moral absolutes*, and a variety of culturally relative interpretations can exist on universal ethical principles [63]. Works raising such issues often argue for appropriate empirical sociological and anthropological work to be integrated into bioethics so as to contextualize the ethical issues and meanings of health issues in practice [61,62,64]. Essentially, calls to identify and map out the normative value systems in which ethics are understood and applied.

What is therefore crucial, as Raphael argues, is that ''health promoters should be explicit about the principles and values behind their health promotion activities'' [47] (p. 355). A commitment to ethics is only one part of this. Carter *et al*. note that, despite statements of commitment to ethics in health promotion, these have not yet been well articulated and ''health promotion professionals have expressed a need for deeper examination of the values that underpin health promotion practice'' [65] (p. 467).

Engaging with values *explicitly* as Raphael states, can further help to ensure that decision making processes are subject to public scrutiny and debate. Citizens affected by policy decisions must be aware of the values that are guiding those decisions, so as to enable participation in policy process, and to be able to hold their decision makers to account [66]. These components underlie the concept of ''good governance'', which is seen to establish the principles of transparency, accountability and representation that ensure that decisions will align with the needs, views and values of citizens [67,68].

Authors presenting social perspectives on bioethics have argued that health decision making is not beyond these democratic ideals. Indeed, de Vries and colleagues explain that:

> According to one school of thought in bioethics, the role of the bioethicist is to promote democratic deliberation, contribute to civic public discourse and engage fellow citizens in conversations about the good society. Within this model of moral reflection, the bioethicist . . . makes no special claims to moral expertise. [69] (p. 671)

In summary, basing health policies on evidence of clinical efficacy *alone* (without regard to other social values: be they costs, rights, equality, or other social goals) is clearly not a-political. Critical writers on public health have noted the often hidden values driving health policy and planning, recognising the need to make such values more explicit. It is already enshrined in principles of ethics that some social considerations, such as basic human rights, must be equally considered in health decisions, but within bioethics there is also recognition of the need for democratic deliberation over which value systems should guide health strategies. This further necessitates the consideration of social values, which principles of good governance and democracy demand must be done in open and accountable ways.

AIDS isolation and avoidance of infection

The field of HIV prevention raises its own particular normative issues. Past debates have greatly focussed on the contested and moralized nature of HIV related behaviours, particularly lifestyles involving sex practices or drug taking. Yet ethical challenges further arise when considering the nature of HIV as an infectious agent. As students of basic epidemiology will know, the basic reproductive number R_0 of an infectious agent is a function of transmissibility, average rate of contact between infective and susceptible populations and the duration of infectivity [70]. As such, prevention of infections can often be achieved through isolation, of either the infective or the susceptible population, reducing the average rate of contact between the two groups.

Many behaviour change campaigns strive to achieve some form of self-imposed isolation. Messages which warn of the

risks of HIV infection typically aim to influence individual behaviour in several ways, including reducing numbers of partners, reducing coital frequency, or avoiding exposure to those of unknown HIV status. These all represent self-isolating behaviours which reduce R_0 by lowering the average rate of contact between infected and susceptible populations.

However, isolation can also be imposed structurally. It can be imposed by the *state*, such as through quarantine procedures; it can be imposed by the *environment*, such as by living in a remote location with poor access to the outside world; or it can be imposed by *society*, such as in cases where particular groups' interactions are restricted. These are typically seen problematic, despite the fact that structurally imposed isolation can be effective in reducing exposure to HIV. For example, rural (typically more isolated) locations regularly see much lower rates of HIV than urban and peri-urban centres, potentially due to the greater mobility of urban residents and wider sexual networking [71].

But while mobility has typically been seen as an important structural driver of HIV, imposing *AIDS isolation* by restriction of mobility would contradict a number of other widely held social values. Organizations like the World Bank and the United Nations Development Programme (UNDP), for instance, have promoted migration and mobility as mechanisms to achieve development [72,73]. If mobility is seen as a critical dimension of the capacity for development, but can increase the spread of HIV, a judgement must be made to decide how to manage these apparent competing social interests.

Other structural factors widely associated with HIV transmission may present similar challenges. A common claim in the HIV community is that gender inequality ''fuels'' the spread of HIV. This is no doubt based on case studies which have shown how disempowered women may be more likely to be subject to sexual abuse and violence, may be unable to insist on condom use by their partners or may be forced to resort to selling sex when they have little control over financial resources [74–78]. Yet despite this, contexts of extreme gender inequality do not necessarily manifest in high HIV prevalence at a population level.

Table 1 presents the HIV prevalence for the 10 lowest ranked countries in terms of gender inequality according to UNDP, with associated HIV prevalence data from UNAIDS. With the exception of the Central African Republic, most other nations in this 'bottom 10' see prevalence rates below 2%.

While some aspects of gender inequality have clearly been linked to increased risk behaviour, these risks will be for a given macropattern of sexual practices. In extreme cases, gender inequality may manifest in the socially structured isolation of women, with little sexual networking and low overall chance of exposure to HIV.

This result does not sit well with many health activists. It appears to justify a structural HIV prevention strategy which increases isolation or control of a group in the name of HIV prevention. The resulting feeling of unease no doubt arises from the state of cognitive dissonance resulting when considering strategies for HIV prevention that are inconsistent

Table 1. Countries with lowest (worst) gender inequality scores and HIV prevalence

Country	Gender inequality score	HIV prevalence (%)
Sierra Leone	0.755	1.6
Papua New Guinea	0.762	0.9
Central African Republic	0.763	4.7
Liberia	0.766	1.5
Saudi Arabia	0.77	No national estimate (<1% in most risk groups)
Mali	0.794	1.0
Afghanistan	0.797	<0.5
Niger	0.801	0.8
D.R. Congo	0.802	1.2–1.6
Yemen	0.835	0.14–0.2

Data from UNDP, UNAIDS, and national reports [79–82].

with other deeply held values [83]. Some may look to redress this by finding evidence of how isolation and control over women's mobility are linked to other detrimental health outcomes (such as the underutilization of reproductive health services [84]). This may appear to resolve the dilemma by allowing a conclusion that forced isolation in indeed ''unhealthy''. Yet making a decision against the imposition of extreme inequality based on the total overall health impact misses the point.

The non-justifiability of imposed AIDS isolation as a structural HIV prevention strategy must not be decided based on health considerations (e.g. HIV incidence) alone. Instead, other social consequences must be incorporated in any decision about isolating people to prevent HIV. Fundamentally, many people (both inside and outside the HIV prevention community) are opposed to forced isolation because it denies people of their freedom and independence, which are valued in their own right. Recognition of this is not ''biased'' decision making, but rather an explicit utilization of a normative framework which enables evaluation of multiple potential social outcomes.

A similar state of cognitive dissonance can exist when looking at data on wealth, poverty and HIV. While a standard discourse has blamed the spread of HIV on situations of poverty [85,86], recent analyses have shown that, in fact, it is often the wealthier individuals in the poorest African countries who face higher HIV prevalence [87,88], and higher income countries in Africa with higher national prevalence rates [89]. Numerous descriptions of how being poor can lead to risky sex (for example when food insecurity leads to transactional sex [90]) does not change the fact that poverty can also be extremely socially isolating, making it hard to have broad sexual networks. The relationship between wealth, poverty and HIV does appear to be changing over time in some parts of Africa, with falling prevalence among those of higher socio-economic status seen in Tanzania, for

instance [88,91]. But the point, again, should not be to look for any evidence that poverty is more important for HIV spread, but rather to accept that other social values must be utilized in guiding policy decisions. Just as gender inequality is socially unacceptable, perpetuating poverty in the name of disease prevention would equally be unacceptable in most value systems. As such, for any planning and policy making around HIV prevention which engage with structural and social drivers, a normative system must be used to guide judgements about desirable and potentially competing social goals.

Structural approaches and building resilience

The recent emphasis on ''structural'' approaches to HIV has grown out the failure in past attempts to change risk behaviour by provision of individuals with information alone; arguing that HIV risk behaviours can only be significantly and sustainably changed by considering the up-stream factors which shape those patterns of behaviour in the first place [1,3–5,9,92,93]. Structural factors can include community level aspects, such as gender norms, stigma or mobility of the local population, as well as broader macrosocial factors, such as legal rights or regulations, macroeconomic opportunities or national cultural institutions. Yet, while a strong case can be made that HIV prevention must be targeting these elements to achieve substantial and sustainable HIV prevention success, the preceding section has illustrated that interventions in these areas cannot be guided by consideration of HIV incidence alone.

Recent, more nuanced, social epidemiological literature addressing structural HIV drivers have begun to recognize this, calling for HIV prevention efforts that can be tailored to mitigate the risks that accompany migration, poverty reduction or gender empowerment, rather than trying to avoid these processes in the name of AIDS prevention [4,94]. Such an approach allows for an alternative strategy to HIV prevention which does not call for isolation to avoid HIV exposure, and which does not value health outcomes to the detriment of other social goals. Instead, the approach changes from one of *AIDS isolation*, to one which builds the capacity for individuals to manage those risks.

This capacity has recently been termed *AIDS resilience* by the Social Drivers Working Group of the AIDS2031 project (http://www.aids2031.org), who defines resilience as ''in place when individuals are able to manage the risks that are present in their environment'' [92] (p. 8). Using a sociologically informed approach, AIDS resilience is seen to arise from the interplay of three things: health-enabling environments, AIDS-competent communities and individual agency, as illustrated in the Figure 1.

The figure is arranged along the lines of a social-ecological model which holds that individuals are at the centre of nested layers of structural influence [95–97]. The AIDS resilience of the individual is seen to be a function of both *structure* (AIDS competent communities) and *agency* (of

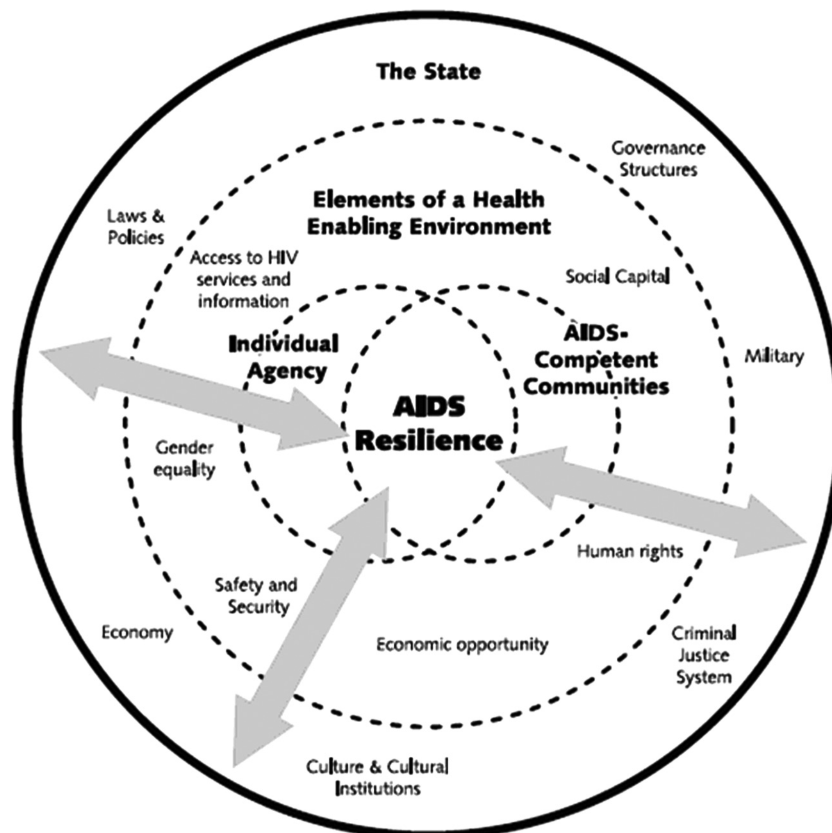

Figure 1. AIDS2031 Social Drivers Working Group's conceptualization of factors influencing AIDS resilience [45].

individuals) within the broader meso- and macroenvironment. The concept of ''AIDS competent communities'' in the figure derives from the work of Campbell and encompasses community-wide characteristics such as: knowledge and skills about HIV, social spaces to negotiate norms of behaviour, a sense of responsibility, group solidarity and social capital [98].

The AIDS2031 group particularly defines a structural *approach* to HIV prevention as one which builds resilience of this kind. This is in contrast to simply defining structural approaches as undertaking intervention which makes changes at a community or macrolevel to prevent HIV. In the latter definition, any number of non-individual interventions could be called ''structural'', including those which may be in conflict with other social values. So quarantine laws would be seen as a ''structural approach'' in that they work at a distal policy level and can reduce incidence. Alternatively defining structural approaches to HIV as those which build resilience would in theory exclude such strategies as they specifically limit or undermine individual agency.

Bringing back the normative: the capability approach

Structural prevention, as HIV resilience, as capability development

Defining a ''structural approach'' as one which builds AIDS resilience (rather than ''any non-individual level intervention'') implicitly applies a normative system in which building people's capacity to resist HIV is valued, rather than the prevention of HIV for its own sake. As the AIDS2031 report explains: ''appropriately applied structural approaches act upon intermediate determinants to create the conditions in which people are better able to make healthy choices'' [92] (p. 8). Although not cited directly as such by AIDS2031, an approach which has the ultimate goal of improving the conditions which enable choice over life outcomes is conceptually aligned with the capability approach to human and social development, originally developed by Sen [99,100].

The capability approach (for which Sen was awarded the Nobel prize in economics in 1998) largely grew from a critique of development planning which focussed exclusively on income generation as an outcome of interest. It essentially attempts to move away from single, contested, indicators of social ''good'' (such as income) to an interdisciplinary, philosophically-informed, approach which incorporates the multidimensional nature of human wellbeing [101–104]. It presents situations of poverty or inequality, for instance, as deprivations of basic capabilities, with capabilities providing the capacity for human functioning. The expansion of capabilities is taken to be a critical goal for social planning, with ''development'' defined as the process of increasing human freedoms [99,102,104]. If given the capabilities, many people might try to increase their incomes, but some individuals will forgo income for other desires. Building capabilities enables people to achieve what they desire, rather than imposing a single goal from outside.

The capability approach has been embraced widely in international development circles where there has been an enormous volume of work dedicated to reviewing, critiquing, operationalization of the approach [101,105–107]. Development studies, however, is remarkably self-critical as a field of applied study, with authors frequently questioning the successes and failures of development programmes (see for instance [108–111]). Many authors are particularly critical of the normative dimensions of development, and how development strategies impose outsider value systems or result in popular exploitation as a result of the pursuit of economic growth [112–114]. Into such a self-critical field, the capability approach has provided a particularly attractive framework which enables the promotion of a range of socially valued goals, while avoiding the imposition of external agendas. While economic growth may therefore be a value, conceptualising development as the expansion of human capabilities allows for development initiatives to reject strategies which seek economic growth at the expense of other human capacities (as might arise with highly unequal growth strategies). It also allows multiple socially valued goals to be combined, with education, equality, and income all seen as critical capabilities to improve human functioning.

Health is also included within the capability approach, with a ''healthy life'' seen as a key capability for people to function. This points to the flaw in promoting policies guided by health impacts alone. A healthy life may be important, but health is only one of multiple capabilities needed to enable individuals to achieve their full functioning potential. As such, the capability approach can be extended to the field of structural HIV prevention in order to address many of the ethical challenges in preventing HIV through social change. *AIDS isolation* would be anathema to the approach as it would deny many other human capabilities, while *AIDS resilience* would instead capture the capacity of individuals to resist the spread of disease. This also reflects more recent philosophical applications of the capabilities approach to health which argues that health itself should not be seen as the absence of disease, but rather the ability to achieve a set of vital capabilities and functionings [115].

Still need values and democratic deliberation

Despite its usefulness, the capability approach does not remove the importance and necessity of value judgements and cannot, on its own, answer the questions of which social factors should be altered in the name of structural HIV prevention. One of the largest bodies of critique of Sen's work focuses on how it fails to provide a list of the key capabilities with which to operationalise the approach, it still relies on subjective values to make choices between capabilities [104,105,116,117].

Nussbaum has specifically argued that specifying capabilities is required to take the concept forward functionally. While she admits agreement with Sen in many fundamental ways [118], she is critical of Sen's notion of development as ''freedom'' as too vague, requiring a defined set of the most important capabilities, and arguing that a normative perspective is required to consider which freedoms actually contribute to social justice [119]. Nussbaum herself proposes a set of ''central human capabilities'' aimed to ensure human dignity, constructed from a recognition of the challenges

women in particular face across the world in achieving full lives and life opportunities [118].

A gender-informed set of central capabilities, such as that proposed by Nussbaum, may be particularly relevant for HIV planners to consider in light of the importance of gender (and biological sex) in shaping women's vulnerability to both infection and impacts of HIV [77,78,120,121,122]. That said, the notion of AIDS resilience in its current form reflects an agency-centred approach, and Nussbaum has explained that her approach differs from Sen's through its emphasis on wellbeing as opposed to agency and freedoms [118].

Indeed, when directly asked why he does not provide a list of capabilities, Sen himself has responded: ''to have such a fixed list, emanating entirely from pure theory, is to deny the possibility of fruitful public participation on what should be included and why.'' He further explains that fixing a capabilities list would amount to ''a denial of the reach of democracy'' [123] (p. 77 and 78).

In his widely cited book, *Development as Freedom*, Sen further states:

> Since our freedoms are diverse, there is room for explicit valuation in determining the relative weights of different types of freedoms in assessing individual advantages and social progress. Valuations are . . . often made implicitly . . .. But explicitness . . . is an important asset for a valuational exercise, especially for it to be open to public scrutiny and criticism. [99] (p. 30)

This brings the capability approach in line with those branches of medical ethics which see the role of ethics as providing a forum for deliberative democratic assessment of what is valued in a society, as well as with notions of good governance which hold that value based decision making must be done in an open and transparent way. The capability approach can provide a normative framework that defines structural approaches as those which increase the capacity for AIDS resilience, but it does not prescribe the value of HIV prevention vis a vie many of the other social issues with which HIV is linked. That still requires social valuation, which must be transparent and open to debate.

Discussion: HIV prevention as a change for the better

Holden (1974) presents Albert Brecht's theory of scientific value relativism as asserting that ''scientific analysis cannot provide answers to questions of value: it cannot tell us what is right and wrong, good and bad'' [124] (p. 200). In this vein, this paper began by questioning whether the established health sciences of clinical medicine and epidemiology can provide answers to questions of that nature, the ''what to measure'' or ''how to value what is measured'' decisions which guide policy action. Rather than reduction to health outcomes alone, authors in the field of public health, health promotion, and bioethics alike have all noted the importance of value systems in guiding decision making, with the need for a normative approach to avoid tradeoffs between deeply held values in the name of disease prevention. This is particularly relevant in the emerging area of structural approaches to HIV, which by their nature are interlinked with a range of social concerns beyond behaviour alone, such as legal reforms, gender power imbalances, and economic opportunities.

The paper then explored how an application of the capability approach could help to avoid the conflict of values that policies of forced isolation might engender; while also providing a framework in which to understand the notion of AIDS resilience. Recent writing has identified a range of definitional and operational challenges to the concept of structural approaches to HIV [4], but the capability approach provides an extensively developed theoretical framework which may be drawn upon to move the field forward. The approach prevents the sacrifice of broader social development goals for the sake of HIV prevention, while allowing structural HIV prevention efforts to be critically assessed by evaluation of the features of individuals, communities, and their environment which successfully bring about AIDS resilience and subsequent HIV incidence reduction.

Unbiased evaluation therefore remains essential. The important place for normative judgement in HIV prevention policy does not deter from the need for valid and unbiased evidence on which to base those judgements. A structural HIV approach would embrace the need for robust HIV incidence and prevalence data. These would indicate whether a community was actually resilient to HIV, and if the correct community and macro-level factors were in place to achieve such resilience. Campbell proposes factors such as community knowledge, responsibility, solidarity, and social capital, as key components of an ''AIDS competent'' community [98]. This could be validated in a range of local settings through appropriate measurement techniques drawing on epidemiological and social survey methods. A capability framed approach to HIV prevention would also be clear that these community elements are not pursued for their own sake (although they may be in other social policies), but rather for their empirically validated ability to develop the capabilities of individuals to resist HIV in the specific context. Whatever the value system chosen, there will remain a need to measure the success of interventions, and the health sciences provide some the best methods available to undertake such measurement. This fundamentally boils down to the distinction between *measurement* and *choice*, for which both rigorous evaluation methods and value systems are mutually needed.

But if values are to be introduced to guide decision making, it is essential to make the value systems explicit, so as to enable open democratic deliberation. In addition to ensuring transparency, however, Schön and Rein (1994) have argued that the process of making belief system explicit can further help to resolve a range of seemingly ''intractable'' social policy debates which are split on moral lines [125]. The debates over provision of a cervical cancer vaccine, promotion of condoms versus abstinence, or the implementation of harm reduction policies for drug users, all serve as cases in point. Appeal to epidemiological data will rarely be convincing if opposed sides are actually disagreeing on their view of what constitutes a ''good'' society (with both sides looking for different bodies evidence to this end). If these value judgements are left unspoken or unaddressed, there will be

little progress in these critical health decisions or unequal and unfair power relations may perpetuate [44,50]. It is not always possible to change the beliefs of opposed parties, but elucidating the nature of competing value systems will ensure transparency of how values are guiding decisions, and allow a less biased assessment of the various (if competing) bodies of evidence available [83].

Ultimately, efforts to prevent HIV are attempts to change society for the better. HIV professionals must not shy away from this fact if they wish to engage in policy recommendation. However, accepting the political nature of social and structural change means also accepting that a normative system is required to decide what a better society looks like, and how we wish to get there. Inconveniently, no universal human moral system has yet to be developed, despite attempts dating back to the ancient Greeks [126]. As such, being explicit about the system of values used to guide decision making is required for transparent and democratic policy action. A capability approach can begin to help the field of structural HIV prevention develop its concepts of AIDS resilience, and avoid strategies which sacrifice other social values in the name of HIV prevention. Value decisions will still be required, though, in policy making. Engaging with the normative nature of HIV prevention directly and openly in these ways may take the first steps in overcoming some of the seemingly intractable debates over sex and drugs in which the field of HIV prevention presently resides, and the debates about social change that structural HIV strategies will no doubt face in the future.

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