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Targeting the ‘End of AIDS’: Historical usage of the terms ‘target’ and ‘goals’ in UNAIDS reports and what it can tell us about the ‘end of AIDS’

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STUDY-THESIS, ARTICLE 3

ABSTRACT 3
INTRODUCTION 3
BACKGROUND 6
The analytic perspective – audit culture 8
METHOD 10
RESULTS 13
'Goal' 13
'Target' 14
DISCUSSION 17
CONCLUSION 19
REFERENCES 21

KAPPEN 26

NORSK SAMMENDRAG 26
ABSTRACT 27
INTRODUCTION – OUR WORK WITH THE STUDY-THESIS 27
INTRODUCING OUR STUDY 29
THE THESIS QUESTION 32
BACKGROUND 32
The analytic perspective – audit culture 35
MATERIAL 37
Inclusion criteria 37
METHOD 37
RESULTS AND DISCUSSION 40
Results 40
Goal 40
Target 41
Other findings 44
Discussion 46
CONCLUSION 48
ACKNOWLEDGEMENTS 50
REFERENCES ONLY FOUND IN THE KAPPE: 50

VEILEDERUTTALELSE 51

APPENDIX 52

PRE-08 SUB-CORPUS 52
POST-08 SUB-CORPUS 52

Targeting the 'End of AIDS': Historical usage of the terms 'target' and 'goals' in UNAIDS reports and what it can tell us about the 'end of AIDS'

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Study-thesis, article

Abstract

Setting numerical targets and goals have become a fundamental way of governing medical issues in global health today. The global HIV effort is no exception to this, where numbers have become of great importance in the making of policies and strategies to end the HIV epidemic globally, through targets such as the 90-90-90 targets and the goal of 'ending AIDS' in 2030. Using a corpus-based discourse analysis, we track the usage of the words 'target' and 'goal' in UNAIDS' yearly reports from the last two decades in order to investigate how shifts in the meanings associated with these two terms can tell us something about how the use of targets and indicators have become part and parcel of the drive to 'end AIDS'. Our analyses showed four times increase in the use of the word 'target', which before 2008, was more associated with populations and interventions while the term 'goal' defined long-term futuristic achievements without a definitive end. Post-08 usage of 'target' and 'goal' is associated with concepts such as efficiency, and progress towards definitive deadlines, emphasizing that the present becomes actionable through a focus on future numerical targets. Our results show a shift in the ways in which UNAIDS utilize and conceptualize the words 'targets' and 'goals', and the results support the postulation that metrics have come to dominate HIV/AIDS efforts. This also shows how the end of AIDS narrative for a long time have been dominated by biomedical targets which disregards non-quantifiable health determinants of the HIV epidemic.

Introduction

Metrics and numbers have become ubiquitous in global health efforts. The use of indicators and targets within various global health programs have become a staple across the globe and subsequently a focal point in academic research on the power of metrics and targets. The global HIV/AIDS effort is no exception when it comes to the use and proliferation of numerical targets and indicators. In the drive to 'end AIDS', numerical indicators and targets have come to take center stage in policies and strategies aimed at 'ending' the HIV epidemic globally. The current era of HIV efforts has shifted from a strategy focusing on controlling

and containing HIV, to one of active elimination and 'ending AIDS' as it is framed (Kenworthy, et.al, 2018). This has been made possible through the scale up and roll out of antiretroviral treatment (ART) regimes, which has seen HIV going from a fatal to a chronic and manageable disease when people living with HIV (PLHIV) adhere to daily ART treatment. This shift from 'treatment and prevention' to 'treatment as prevention'(Cohen, 2011) has as its main goal, the effective reduction of viral load levels so that PLHIV both live healthy lives and subsequently also unable to transmit HIV onwards as long as viral level is kept at what is popularly known as 'undetectable viral loads'. In response to these shifts in biomedicine, HIV strategies and policies have also shifted. This article will investigate how numerical targets and indicators are semantically framed and understood with UNAIDS strategies.

Understanding the changes in the strategies undertaken by organizations like UNAIDS in an effort to 'end' the HIV/AIDS epidemic and examining the impact of such change will provide insight in terms of to what extent and how metrics and indicators influence strategic work in UNAIDS. Moreover, in the field of global health, problems are often measured through mathematical models and numerical projections based on evidence-based data that are interpreted as factual knowledge, and used to "offer uniform and standardized conversations about how to best to intervene, how to best conceptualize health and disease, how to best both count and be accountable, and how to best pay for it all" (Adams, 2016, p. 6). Such practices can be linked to the concept of audit culture as it has been formulated in scholarly research (Shore and Wright, 2015). Here we draw attention to the ways in which the use of numerical targets and metrics in global health has come to dominate global health goal setting and measures of what counts as successes in global health. Moreover, the prevalence of numerical targets and metrics in global health has meant that target setting has become part of how various programs can be audited and governed based on progress toward the metric set. In this way, 'governing by numbers' (Miller, 2001; Rose,1991) have become a powerful way of governing global health initiatives.

A key way in which this comes to the fore in the global HIV efforts has been through the formulation of various global targets to be set in order to 'end AIDS'. These practices have involved both numerical target setting and temporal date settings, that is, at what time these targets should be reached. Perhaps the most visible set of targets within the global HIV efforts have been the 90-90-90 targets formulated by UNAIDS. There targets were launched in 2014 as an effort to increase the availability of treatment. The target stipulates that by 2020, 90% of all people living with HIV will know their HIV status; 90% of all people with

diagnosed HIV infection will receive sustained antiretroviral therapy; and 90% of all people receiving antiretroviral therapy will have viral suppression. Since the realization that people who live with HIV and who adherer to daily antiretroviral treatment both live long healthy lives while at the same time are unable to transmit HIV onwards, the goal of viral suppression is no longer just an individual clinical goal for the individual, but is indeed now a global goal formulated at the level of the population.

This study seeks to supplement research literature which has focused on how metrics and numbers functions within global health with an emphasis on the linguistic changes that has happened within the last 23 UNAIDS reports. Rather than focusing on the numbers or metrics themselves, we are concerned with linguistic terms such as 'targets' and 'goal'. The focus on terms such as 'targets' and 'goals' are interesting in as much as it can tell us something about how such terms change during the last two decades of the work that UNAIDS have done. Moreover, such changes in linguistic meaning can show us what connotations and association emerge linked to these terms and subsequently, what this can tell us about the 'end of AIDS' narrative.

The words 'target' and 'goal' have multiple meanings, but they are both synonyms as objectives to be achieved. As such our research interests lies in investigating the linguistic meaning making that is produced in connection with the words 'target' and 'goals' and how these terms have changed across the last twenty-three years within UNAIDS reports. We argue that these changes are not innocuous; rather we argue that the shift in meaning bespeaks of a discourse wherein the end of AIDS is farmed in very technocratic and numerical ways. Moreover, the shift in meaning bespeaks of a turn towards 'governing by numbers' and targets that is by now well-known in global health (Adams, 2016; Lancaster & Rhodes, 2021).

UNAIDS documents from the last 20 years will be the source for our analysis. UNAIDS is the Joint United Nations Programme on HIV and AIDS, and is leading the global effort to end AIDS by 2030. As UNAIDS say themselves: "Without UNAIDS, there would be no strategic vision for the AIDS response." (UNAIDS, 2018, p. 3). They provide "strategic direction, advocacy, coordination and technical support needed to catalyze and connect leadership from governments, the private sector and communities to deliver life-saving HIV services." (UNAIDS). Yearly, they write reports on progress, with evaluation and discussion around their commitments and goals. In terms of methodology, we will utilize a corpus-based approach in order to address our research question. Powered by computer technology, corpus analysis, allows for linguistic analysis of texts stored in a machine-readable form using a purpose-built software program, and proves useful in identifying repeated patterns across a

large number of texts. The corpus method will enable us to capture the regularities associated with 'goal', and 'target' within our textual data. We will first identify and compare the patterns in eleven documents published between 1998 and 2008, and another twelve between 2009 and 2020. 2008 is chosen as a cut-off point, because of the global financial crisis which became a turning point for UNAIDS to review and redesign its global strategy (Kenworthy et al., 2018, p. 960). Based on the findings obtained from the corpus-based analysis, this study will argue that there has been a shift in the ways in which UNAIDS utilize and conceptualize words such as 'targets' and 'goals' and that this shift shows the ways in which metrics has come to dominate HIV/AIDS efforts as well as how metrics are made to matter within UNAIDS.

Background

In the past, HIV was a worldwide cause of morality, however the development of antiretroviral treatment has normalized life expectancies for people who live with HIV (PLHIV) and through daily adherence to ART, people who live with HIV are now unable to transmit HIV onwards to others (Alice K. Pau et al., 2014) shifting the infection from a fatal to a chronic condition (Persson, 2013; Persson, Newman, & Ellard, 2017). The biomedical advances mediated through ART led to the adaption of U=U (undetectable equals untransmittable), a term explaining that adhering to treatment leads to undetectable viral loads, effectively ending onwards transmission of HIV. Changing the global AIDS strategies from treatment *and* prevention, to treatment *as* prevention (TasP), which was supported by the results from the HPTN 052 trial which documented U=U in practice and which gave rise to the 'End of AIDS' slogan (Cohen et al., 2018).

In a historical perspective, these improvements in treatment lead to, among other things, the UNAIDS' formulation of what has become known as the 90-90-90 targets in 2014 (UNAIDS, 2014). Viewing the statistics in table 1, there are optimistic developments happening from 2014 when the 90-90-90 targets were established to the most recent data in 2021. There has been a reduction in AIDS related deaths with almost 50%, an increase in patients with access to treatment by almost double from 14.8 mill to 28.7 mill. However, when looking at the data in the HIV estimates factsheet from UNAIDS, the changes are not as impressive, since 1999-2021 the prevalence in adults was 0.7% of the population (UNAIDS, 2022a). The incidence has dropped in the last seven years, from 2 to 1.5 million people. Even though fewer people die of AIDS related complications and more people are in treatment,

more people are living with HIV in total in 2021 compared to 2014. The unmoving prevalence can be due to the fact that the same amount of people have HIV, despite that fewer people contract the virus, because the mortality has gotten down and people with HIV live longer.

	2014	2021	Change
Newly infected (incidence)	2 mill	1,5 mill	-25,00 %
Everyone living with HIV	36,9 mill	38,4 mill	4,10 %
With access to treatment	14,8 mill	28,7 mill	94,0 %
AIDS related deaths	1,2 mill	0,65 mill	-45,80 %

Table 1: numerical developments between 2014 and 2021, regarding HIV statistics (UNAIDS, 2022a).

The definition of the 90-90-90 targets as described in the introduction uses metrics to track progress towards the goal which was to be reached in 2020. However, the 90-90-90 numbers do not tell the whole projection behind the model. The first 90% is conditional to the prevalence of HIV in the total population. The two next 90s stipulates the percentage dependent on the previous percentage, which means that UNAIDS compare the amount of people on antiretroviral treatment with viral suppression to the amount of people knowing their status (not against the prevalence in total). Therefore, another way of framing the 90-90-90 goal is that 90% of all people with HIV will know their HIV status; 81% of all people with HIV will receive antiretroviral treatment; 73% of all people with HIV will have viral suppression. This leaves us with the question: what about the 10-10-10 (Auerbach, 2019)? Or rather, what happens to the 10-19-27?

There are also other problematic aspects with the ‘End of AIDS’ campaign and the 90-90-90 slogan. While the “treatment as prevention” (TasP) declaration helped boost enthusiasm and brought a renewed focus on biomedical advances and a focus on treatment (Nguyen et al., 2011), this both undermined the focus on the quality of life to the patients and prevention efforts itself. Firstly, prevention efforts keep being deeply underfunded (Nguyen et al., 2011) and as many scientists have warned, the HIV epidemic is not on track to end, and the lack of scale-up on prevention may have weakened the global fight to combat HIV (Bekker et al., 2018).). Secondly, as Leclerc-Madlala et al criticize, the metrics that UNAIDS used to set the goal of 2020 do not consider all the health determinants of the disease, only

achieving treatment results. Continuing, they stipulate the difficulties of meeting the first 90-goal of early diagnosis and treatment, when social inequalities and stigmatization is not given attention (Nguyen et al., 2011). They explain that these factors "determine vulnerability to acquiring HIV and accessibility of diagnosis and treatment" (Nguyen et al., 2011). As such, the 90-90-90 targets have been critiqued as being too focused on treatment outcomes and less attentive to the social context of care for many who live with HIV. Andersson et.al make a similar claim when they examined the impact of interventions from 2010-2018 that aimed to reduce stigma experienced by people living with HIV. Their review points out that although the UNAIDS 90-90-90 targets have gained a lot of impact in the epidemic, what they call "fourth 90" – health-related quality of life – is still in need of attention, and stigma and discrimination remain as obstacles for achieving this last forth 90 (Andersson et al., 2020).

The analytic perspective – audit culture

Our theoretical inspiration in this article comes from two different yet interrelated field of inquiry; scholarship on audit culture and secondly, scholarship on the performativity of numbers, and subsequently, the role of targets, both as numerical entities and as grammatical terms.

Audit culture denotes how accountability now is more and more mediated through exhaustive data recordings and evaluation of progress, as well as through the utilization of target indicators and metrics. This phenomena is not only a question about quantification, but also another way to control the world, through numbers and metrics, new way of controlling and governing has opened up which allow for new ways of disciplining both people and programs. Program evaluation and accountability makes it possible to assess and improve the effectiveness of public health programs as well as demonstrating that the funds are being used in an appropriate and effective manner (Owczarazak, et al: p. 1; see also Napp, Gibbs, Jolly, Westover, & Uhl, 2002). Audit culture and global metrics are occurrences that both describe the extensive inflation and importance of numbers in global health. In the book *Metrics, what counts in global health* by Vincanne Adams et.al, the authors explains how metrics are technologies of counting that form global knowledge (Adams, 2016, p. 6**)**. Ideally, metrics form a standardized and uniformed conversation about interventions, the concept of health and disease, accountability and funding (Adams, 2016, p. 6). Although the potential contribution of evaluating data is to improve health services, the results often benefit the funders' agenda by demonstrating fiscal prudence, efficiency and accountability to funders, rather than produce information that gain the community-based organization. (Owczarzak et

al., 2016). As Owczarzak argues: “monitoring and evaluation approaches based primarily on measurable, well-defined indicators may unintentionally cause organizations to distance themselves from aspects of their work that are difficult or impossible to measure by the means of evaluation required by donors” (Owczarzak et al., 2016, p. 2, *see also* Holma & Kontinen, 2012). For example, this might lead to a situation wherein aspects that are harder to quantify like activities and programs that aim to increase empowerment, and make social and cultural change are not taken into account (Owczarzak et al., 2016, p. 3). Moreover, the actual work of auditing progress might distract employees from providing quality services since the focus becomes the numerical targets rather than the overarching goals or visions of a programme (Owczarzak et al., 2016, p. 3; *see also*: Hull, 2012; Oldani, 2010; Strathern, 2000a). Some other aspects Owczarzak points out is: a) quantifiable metrics can obscure qualitative understanding about agent performance, participant experience and overall quality (Owczarzak et al., 2016, p. 3; *see also*: Kipnis, 2008; Reynolds, 2014), and b) auditing results can widen the gap between administrators and the service providers (Owczarzak et al., 2016, p. 3; *see also*: Hull, 2012). Owczarzak argued in a study of audit culture within HIV prevention agencies, that chasing numbers and proving eligibility, only encourages “a prioritization of meeting recruitment goals, contributed to a sense of competition between agencies, and created a reluctance to work together to best serve a particular geographic region or target population” (Owczarzak et al., 2016, p. 16). In addition, the study finds that a narrowly defined targeted group made the health providers sense that meeting the numbers were more important than the HIV prevention services. Moreover, providers sensed that they were unable to give health services to people that did not fit the right categories. Some agencies also reported that the reporting requirements and number goals felt punitive instead of supportive, and overall gave them less autonomy (Owczarzak et al., 2016, p. 16)

Our second line of inspiration comes from scholarship on the performative function of numbers and metrics. Such scholarship have to a large degree focus on numerical numbers and how they become performative, i.e. how they make things happen and how numbers produce action (Beer, 2016; Callon, 1998; Rhodes & Lancaster, 2020a). One key aspect, which is important for our work on the shift in the conceptual meaning of the words goal and target, is how metrics, but also linguistic framings of goals and targets, always also implies a future to come. As such, referencing terms such as goals and targets “equip as well as shape actions in the present in light of the futures they project” (Rhodes & Lancaster, 2020a, p. 2). As such, it become key to map how the meaning associated with terms such as target and goals shifts and changes as this has implications for the ways in which the present becomes

actionable by referencing future goals and target. In such an analysis, the terms target and goal can be seen as 'speech acts' (Austin, 1975), and in combination with metric, they not only describe global health realities, but indeed, create and make them. Governing through metrics and by referencing targets and goals, the global HIV effort becomes part of what scholars have called 'anticipatory governance' (Adams, Murphy, & Clarke, 2009; Aykut, 2019). The term target and goal implies something to be reached for, and as such, the use of terms such as goal and target within the global HIV effort show how HIV governance implies the governing of the present by recourse to the future.

Numbers provide a common language that presents materials of science with an aim of precision and a sense of control (Rhodes & Lancaster, 2020a, p. 1). Rhodes et al described numbers "as entities which are differently according to their means, methods and events of production" (Rhodes & Lancaster, 2020a, p. 1), suggesting how enumerations can project different realities based on their origin. The authors explain how numbers come to be of value, by their effect as "predictors, targets, and metrics" in intervention and policy with potential to be "*performative actors* with *governing potential* in the constitution of health" (Rhodes & Lancaster, 2020a, p. 1). The HIV epidemic is an example of a global health issue using numbers as predictors, as well as targets of interventions, e.g. UNAIDS' 90-90-90 goal, systematically enumerating health problems to evaluate progress. As such, and through the lens of audit culture, it become important to not only focus on metrics themselves, or the function of numbers, but also to pay attention to the ways in which linguistic terms such as target and goal change and operate within discourse.

Method

Referencing our research question, i.e. investigating the shift in the use of 'goal' and 'target' within UNAIDS documents, this study adopts a corpus-based method which allows researchers to examine a corpus, i.e. a large collection of texts stored electronically based on certain parameters to be analyzed using a dedicated software. The corpus-based method has been used in the study of healthcare and illness, e.g. to examine communication in healthcare encounters, particularly between the health adviser and patients (Adolph et al. 2004), to examine patients' messages to doctors on a doctor-operated online platform in order to identify the most dominant topics of discussion (Harvey et al. 2007; Gray et al. 2008), to examine the metaphors of illness (Hommerberg et al. 2020, Hendricks et al. 2018), to identify the way in which dementia is framed in the British press (Bailey et al. 2021), and to study

adolescents' perception of HIV and AIDS (Atkins and Harvey 2010, Brookes, Atkins and Harvey 2022). However, relatively little corpus-based research has been done to investigate the institutional voice and shift in healthcare and medicine featured in texts. In the case of UNAIDS, it clearly changed its comprehensive strategy after the financial crisis, as will be shown later in this section (e.g. Kenworthy et al., 2018). Nevertheless, discussions of how such change is spelled out in actual documents and the impact the change in the discourse or a global strategy of such global organizations like UNAIDS have been scarce. This study, therefore, draws on a corpus-based method to establish a discursive pattern concerning the UNAIDS' AIDS/HIV eradication and prevention strategy pre- and post-2008.

We chose 2008 as the cut-off point for the sub-corpora because targets and goals of the HIV/AIDS epidemic during the last decade evolved in tandem with the financial crisis (Kenworthy et al., 2018, p. 960). The year 2008 was a critical point for global health since the financial crisis hit every corner of the world. For UNAIDS, the funding went from 'scale-up 'to 'scale-down' due to a series of important donor withdrawals (Kenworthy et al., 2018, p. 962, see also Kaiser Family Foundation (KFF) and UNAIDS, 2017; Zaracostas, 2012). In the article *Chronicity, crisis, and the "end of AIDS",* the author writes that the "focus on biomedical advances also underpinned a post-2008 global fiscal environment in which governments and donors were withdrawing support for long-term financial and political investments in HIV prevention and treatment" (Sangaramoorthy: p. 2; see also Kates, Wexel, & Lief, 2016), emphasizing a turning point in the epidemic where the relationship between the donors and the recipients changed drastically. Below we present a table of the corpus and the division of it.

OMC UNAIDS corpus (built for the purpose of this study)	
1998-2008 (pre-2008 UNAIDS sub-corpus, named Pre-08)	2009-2020 (post-2008 UNAIDS sub-corpus, named Post-08)
11 texts	12 texts
570 329 characters	575 724 characters

Table 2. Corpus construction

While there are many corpora and relevant supporting software programs available, this study uses the Oslo Medical Corpus (OMC[1]), compiled and developed by the research team at the Centre for Sustainable Healthcare and Education (SHE) at the University of Oslo, for many reasons. One of them being that the provenance of each text is carefully documented and available online, making it easier for researchers to identify the source, author, and the year of publication, which are all crucial elements to consider when interpreting the data/evidence. Moreover, the retrieved concordance lines associated with the search word ('goal', and 'target' in this case, discussed in more details below) could have been narrowed further down to only those sources by UNAIDS, and even the specific texts could be selected in the 'sub-corpus' section within the OMC user interface. The software program ModNLP enables researchers to establish the prominent pattern easily. The frequency list, for example, which lists all the lexical items used in the text in question, can be further refined with one button where function words that have little lexical meaning, such as articles like 'a' and 'an' and propositions like 'of' and 'to', are removed. Among the functions that the ModNLP presents, this study will specifically use the visualization tool 'Mosaic' and 'concordance lines', among other functions available within the software suite: the former (i.e. 'Mosaic') will return the list of collocates (i.e. the words that appear in the vicinity of a search word), in the order of its collocation strength that are calculated based on its observed frequency against it expected frequency in the corpus selected (OMC, 2022), while the latter will allow us to identify discursive patterns associated with the search word. Through this methodology we will be able to map the linguistic changes in meaning associated with the terms of target and goals. Furthermore, through the mapping of these shifts we are better equipped to see how the 'end of AIDS' discourse is underpinned by a logic of target setting very much reminiscent of audit culture and the dominance of goals and target setting as priorities in global health.

[1] https://www.oslomedicalcorpus.net

Results

As stated earlier, this study investigates how the terms 'target' and 'goal' are used in the UNAIDS' documents. The analysis begins by investigating the word 'goal', before examining patterns associated with 'target'.

'Goal'

In the Pre-08 sub-corpus there is a total of 151 lines featuring 'goal*', including 'goal', and 'goals'. The analysis of the patterns revealed that 'goal*' collocates with "millennium development goals", education (and "access to all"), ending poverty, equality and combat HIV/AIDS. In addition, the word is associated with the phrase "longer-term" and the phrase "of universal access" to [HIV] treatment to all who need it (see figure 1). In the Post-08 sub-corpus, the search for the word "goal*" provides 215 lines. While there is not a big difference in the number of lines featuring 'goal*' between Pre-08 and Post-08 corpora, there is more talk about "sustainable" and "outcome-oriented" goals to "achieve" or "reach" the end of AIDS. This shift to profitable and efficient goals is a good example of the change in UNAIDS' strategies after the biomedical turn where the medical advances were used by public health experts and policy-makers to scientifically justify the *End of AIDS* narrative (Kenworthy et al., 2018, p. 964) . This could be understood in light of the shift from long-term to short-term commitments after the global financial crisis. The collocation of the terms 'goal' with sentences that detonates productivity could be seen as signaling UNAIDS' prioritization now focuses on how *goals* now become more and more associated with productivity, and cost-effectiveness.

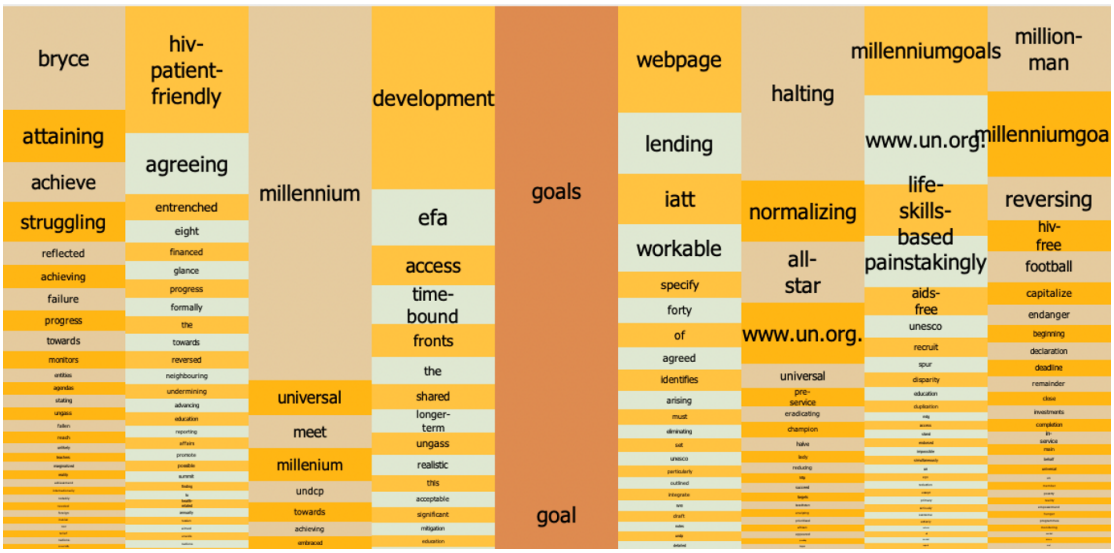

Fig 1: Mosaic representation of Goal* in the sub-corpus "pre-08"

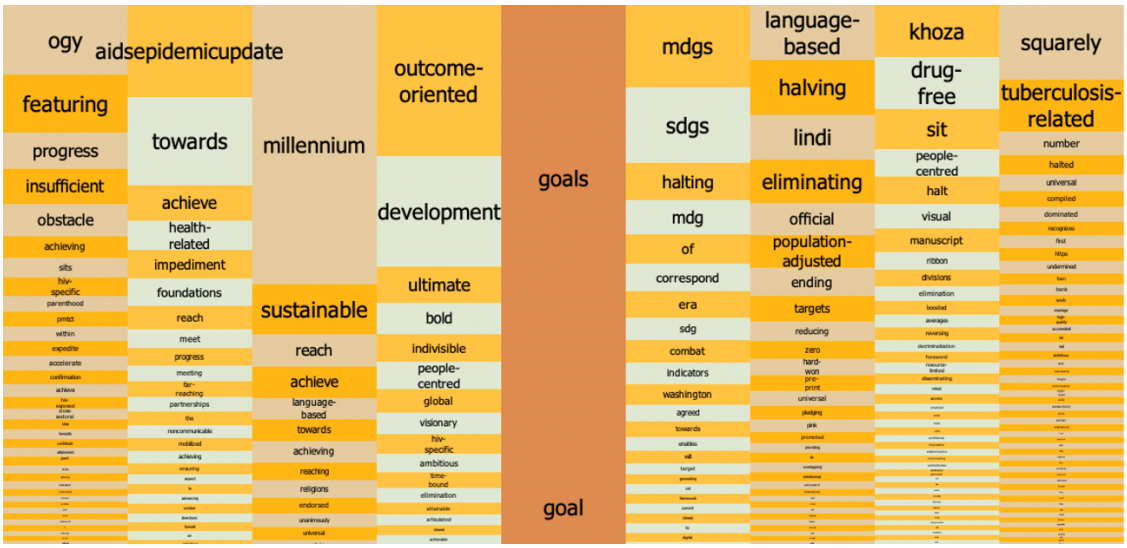

Fig. 2: Mosaic representation of Goal* in the sub-corpus "post-08"

'Target'

Among the two items we examined, i.e. 'goal' and 'target', the latter presents the most striking difference in terms of the number of concordance lines between Pre-08 and Post-08, as shown in Table 3. The table provides statistics on the overall use of the word 'target'. In Post-08, the number of times 'target*' mentioned in UNAIDS documents increased almost four times its usage in comparison to the pre-2008 corpus. However, what should be noted is that the use of the word 'target' changes grammatically. More specifically the change of frequency of the verbs (to target, targeted, targeting) and the nouns (target, targets). In both sub-corpora 'target' and 'targets' are used more frequently than 'to target', 'targeted' and 'targeting'. After 2008, the use of the nouns 'target' and 'targets' combined increased from 59,5 to 91,8% In comparison, the verbs 'to target', 'targeted' and 'targeting' combined was reduced from 40,5% to 7,7%.

	Pre-2008	**Post-2008***
Target/Targets	141 times (59,5 %)	835 times (91,8 %)
[To+]Target**/Targeting/targeted	96 times (40,5 %)	70 times (7,7 %)
=Target*	237 times	910 times

Table 3. The number of instances of 'target(s)/targeting/targeted' pre-2008 and post-2008

Post-2008 we also discovered that “target-setting” and “target-related” was included 3 and 2 times respectively when we searched on the word “target” (the last 0,5%). It did not correlate to anything meaningful, therefore not included in the table.

**In both sub-corpora the search of ‘Target’ correlated only 5 times each to the phrase “to target”. We are basing the results on the premise that the other 976 times the singular term ‘Target’ were used, it was used as a noun.

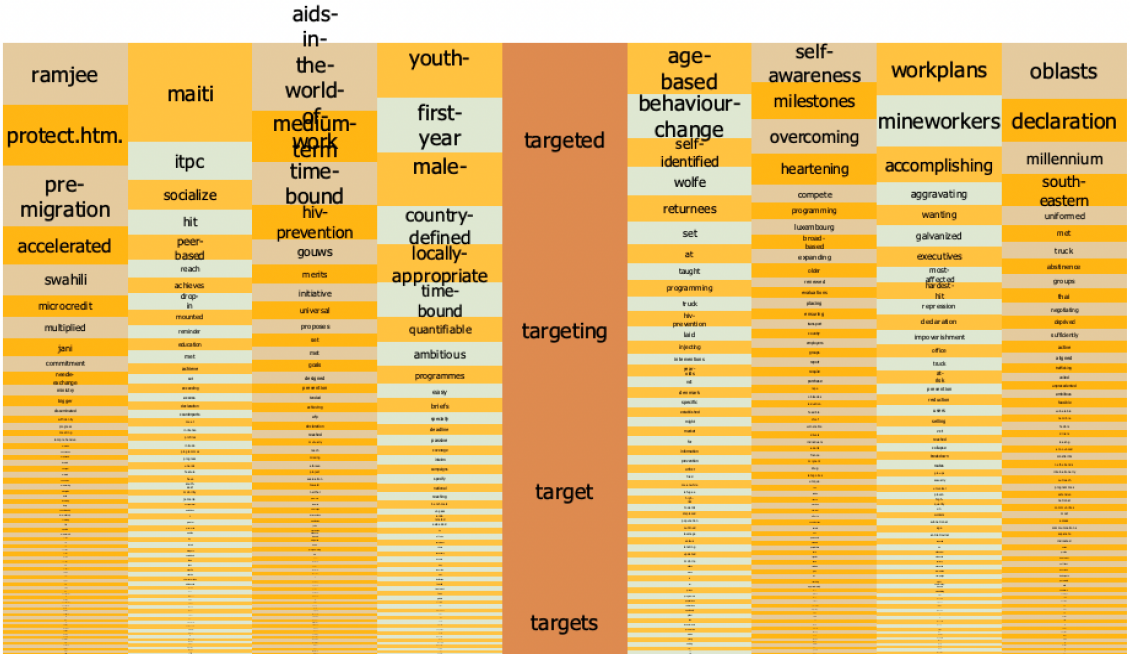

Fig. 3 Mosaic representation of Target* in the sub-corpus “pre-08”

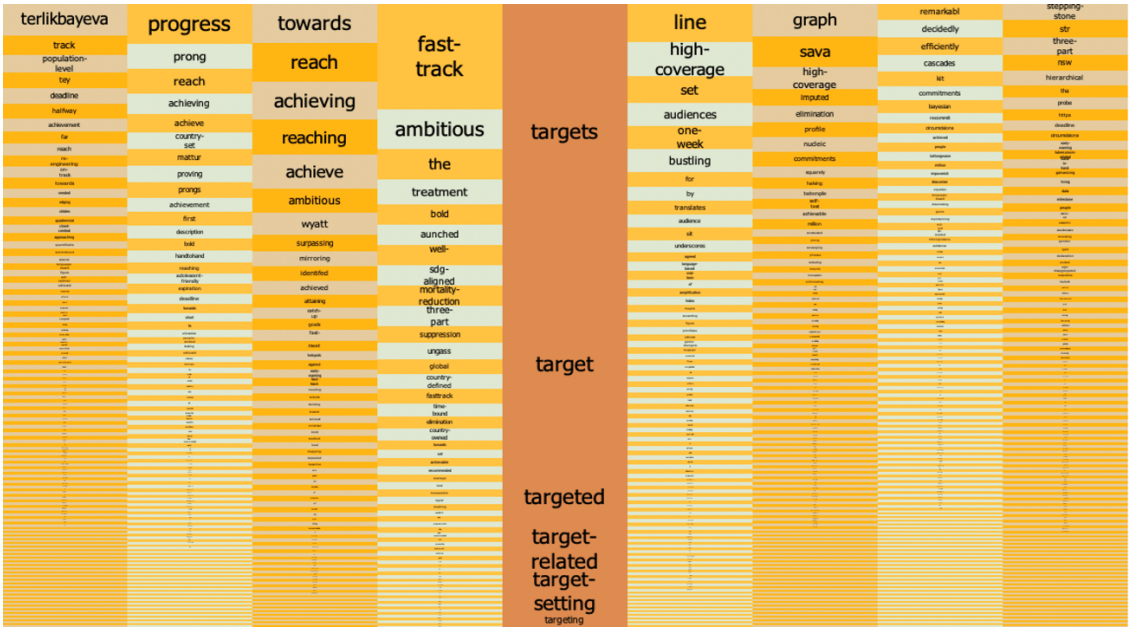

Fig. 4 Mosaic representation of Target* in the sub-corpus “post-08”

There are 456 definitions of "target" in the Oxford English Dictionary[2]. These definitions imply that the word 'target' can have many different interpretations and connotations considering which context it is used in. There are many definitions, however those that may be most relevant to this study: something to be aimed at; a victim or a prey; an object in physics or for a medical intervention; or an amount or a result to aim at which one strives to achieve (Oxford, 2023a). The noun also has different general attributes, such as 'target-firing' or 'target-practice', and describe designating an object of attack, such as a target group or population (Oxford, 2023a). Continuing, 'target' as a verb could mean something to protect or shield; to use someone as a target; to signal a position using a target; to plan something to meet an objective; to aim at a target; to identify something/someone as a target; to aim on a course (Oxford, 2023b). Moreover, the meanings of 'target' have evolved from the 14th century being related to combat, something to be aimed at, shields and then in the 20th century new definitions arise related to something to accomplish, fulfill, or in a medical and biological meaning of the word (Oxford, 2023a, 2023b). This understanding of the meaning of the word can be applicable to interpret the change in the use of 'target' provided in the section over. Firstly, the increase of the use of 'target*` by roughly 380% could tell us that UNAIDS concerns themselves more now, than before 2008, with 'target' in general. Secondly, the increase in the use of the noun (target, targets) and the decrease in the use of the verb (to target, targeting, targeted), can exemplify the shift in attention to the objectives they try to achieve. With the Oxford definitions in mind, both noun and verb could define as something to aim at, however the noun is the only attribute to a future achievement. This references our earlier argument about the function of targets as 'technologies of anticipatory governance' and the ways in which target as a noun implies a future to come, demanding action in the present. We find this pattern as a good example of the shift from a discourse which focused on target as an action to be taken such as 'targeted treatment' or 'targeted testing' or, 'target group' to a discourse which, post-08, have more and more come to use target as a way signaling the achievement of different targets such as the 90-90-90 targets. This change can be illustrated further using figure 3 and 4. Described in figure 3, the words which correlates with 'target*' is split in both a population/group/drugs to aim at or describe, and to an objective to measure or reach (a future goal). In figure 4, one can see that the words which correlates with 'target' are now more and more describing how target(s) are to *achieve/reach/reaching* something and at the same time, describes a process which focuses on the *progress towards* a

[2] https://www.oed.com/

target which is described as *bold* and *ambitious.* We can also see a collocation between the phrase "fast-track-" and "treatment-" targets, relating to the 2020 of reaching the 90-90-90 targets and 2030 deadline of the UNs SDGs.

Discussion

Through our findings, we suggest that we can see a shift in the language around 'target', and 'goal' in the sub corpora pre- and post-08. We see changes in how UNAIDS frames its objectives and how they measure the progress of their ambitions in regards to enumerations and numbers. This is particularly evident in the case of the word 'target' which clearly shows the turn towards target setting as a way of governing global health and in this case the global HIV effort. The shift is evident and can be seen through the ways in which target changes from being used as a verb and a noun, to mainly be utilized as a noun. No longer a verb or a 'doing' but now more and more a destination to be reached, target becomes a noun linking the present with the future.

Through this shift, target as a term comes to denote a form of governing through numbers, which is future oriented. Within this discourse, the present becomes actionable by recourse to the future (Rhodes & Lancaster, 2020a). Moreover, the grammatical shift mentioned a moment ago, to a noun, indicate that there has been a shift in how UNAIDS prioritize their actions. In the corpus we have compiled, target setting becomes an important part of the ways in which the HIV effort is enacted. Through the target setting of certain numbers, chief amongst these, the 90-90-90 targets, we argue that target setting and metrics have become the predominantly way of governing global HIV effort.

In a different vein, we want to draw attention to how the use of the term target in UNAIDS documents also denote a certain spatial and temporal discourse. First, the use of target can be seen a way of describing a place to be reached for in the future, i.e. a place where we have reached our targets and the end of AIDS has come about. This is similar to the arguments that Tim Rhodes and Kari Lancaster have made in relationship to hepatitis C elimination and the use of targets in that context (Lancaster & Rhodes, 2020b). Secondly, the shift in the use of the term target also becomes associated with a process of reaching something, a race or an activity, which we must do in the present in order to reach this in the future. This argument echoes once again arguments made by Rhodes and Lancaster who argue for the same sort of logic when it comes to hepatitis C elimination and the 'race to eliminate' hepatitis C (Lancaster & Rhodes, 2020b). By shifting from target as a verb, to

target as a noun, the very phrase, in combination with the dates 2020 and 2030, creates a destination in time (Rhodes & Lancaster, 2020a, p. 157); targets and goals are no longer a form of direct 'doing' but become places in time to be reached such as *reaching the 90-90-90 targets in 2020 or 'ending AIDS' in 2030.*

Equally important in our analysis of the shift of the use of the term target, is the subtle but important shift it signals in HIV governance. Shifting from more often being used as a verb to principally a noun signals how 'governing by numbers' have become the main focus of the term target. In this way, target as a term shows us how numerical targets become 'technologies of governance' (Rhodes & Lancaster, 2020a). As we have noted, the shift in the usage of goal and target within UNAIDS documents shows how target and goals as linguistic terms, when combined with metrics and calendar dates, serves as powerful means of 'orienting social action in the present' (Wilkie, Savransky, & Rosengarten, 2017:4) by referencing future targets and goals. In this way, we can perhaps state that the use of the term target and its collocation with numbers such as the 90-90-90 targets describes a form of action where it is the future that becomes the yardstick for action in the present.

Target setting makes the future actionable in the present (Lancaster & Rhodes, 2020b; Rhodes & Lancaster, 2020a) and as such, it also makes the governing through numbers a form of governing which always also includes a focus on the future. The danger here is of course that the targets shifts from being a sort of means towards an end, in this case, the end of AIDS, and rather, the means turns into ends, i.e. the targets become the main focus and other aspects of the HIV effort becomes relegated to the margins and left behind. In our case this could be a focus on quality of life; reduction in stigmatization; the removal of criminalization of HIV transmission, which still is prevalent globally; and finally, a more holistic view on the lived experience of PLHIV.

This shift, it can be argued, bears a clear link to the changes in global health regarding governing global health through numbers. Progress become seen as quantifiable values which are seen a neutral and transparent and they are thus often time not scrutinized. The alleged neutrality of numbers and subsequently their collocation with terms such a targets, and goals, have become dominant in dictating global health strategies and have come to influence global health politics. As Adams states, "[s]pecific numbers can certainly move policy, confer political allegiance, guarantee funding, even bring about health" (Adams, 2016, p. 9). We argue that our analysis supports this claim by showing that in UNAIDS documents, numbers are increasingly being used to audit different aspects of the global HIV effort and that numerical targets have become important governing tools used to prioritize what goals and

target should be seen as a priority. Furthermore, this shows how the change in the language around the terms ‘goal’ and ‘target’ are being justified by metrics. These trends show how numbers are projected as claims of truth trusted to convey a promise of a future without AIDS, with the pressure on ‘achieving’ and ‘reaching’ goals and targets ‘efficiently’ and ‘profitable’ that also is described by UNAIDS themselves as ‘bold’ and ‘ambitious’.

There are weaknesses and limitations of the study. We only studied the annual UNAIDS reports where they provided a snapshot of the global changes and the perception of the future. This only represent a small sample of the general strategies within global health on the topic of HIV/AIDS. In addition, we have only tried one way of dividing the sub-corpora before and after 2008. Moreover, numbers are not coded as characters, in the same way as words are. Therefore, when we are analyzing concordance lines, numbers are lost in the mosaic. This means that for instance the phrase ’90-90-90 target’, cannot be studied in the corpus-study, without changing the original coding.

Conclusion

Auditing progress through technologies of counting to monitor and evaluate approaches has become the premise of factual knowledge in global health today. This includes the HIV epidemic, where numbers have become a subject of extensive inflation and importance when making policies and strategies to end the HIV epidemic globally, e.g. the 90-90-90 goal by 2020 and the ‘ending of AIDS’ by 2030. The discourse of a future without AIDS was founded on changes happening in the financial world after the crisis of 2008. However, as Kenworthy states “the irony of this discourse is that, though intended to elicit further commitments to the HIV/AIDS fight, it may instead elicit a complacency among donors and governments”, who as El-Sadr, Harripersaud, and Bayer (2014, p. 166) write, may perceive it as ‘minimizing the challenges that remain’ (Kenworthy et al., 2018, p. 962). These challenges represent the neglect of health factors that are harder to quantify and measure, although of big importance to people living with HIV (PLHIV), e.g. stigmatization, discrimination and life quality. In addition, the ‘treatment as prevention’ declaration is ultimately founded on the premise that tens of millions of people adhere to life-long treatment daily. This means that scale up of sustainable and long-lasting treatment programs must be made available to all who live with HIV. Moreover, the 90-90-90 target was, by rights, criticized for omitting a broader focus on social conditions and quality of life. The usage of targets within the UNAIDS documents bespeaks of a highly biomedical focus, a focus wherein the audit culture of controlling

through numbers is not just a form of governing by numbers, but a form of power which ultimately focuses on biomedical means to ‘end AIDS’. These biomedical means become the mediators for reaching the targets set out in the UNAIDS documents and as such, there is a risk that the end of AIDS will be an end solely based on biomedical numerical targets that are to be reached for.

In this article, we wanted to document how we could utilize the concept of audit culture and connect it to the 90-90-90 target and the ‘future without AIDS’ narrative. Moreover we have tried to trace this, through changes in the language around ‘target’ and ‘goal’. The patterns in our findings presented a shift from a general focus where ‘target’ aimed more often at populations and interventions and ‘goal’ defined long-term futuristic achievements without focusing on a definitive end.

On the other hand, post-2008 usage of ‘target’ and ‘goal’ have become terms which are associated with concepts such as efficiency, and progress towards a definitive deadlines. As UNAIDS themselves present in their report in 2022, the progress towards ending AIDS by 2030 is in danger due to insufficient investment and action (UNAIDS, 2022b). However, a less visible critique would be how the use of metrics and target setting itself within the global HIV effort might be fraught. A continual problem is of course how the biomedical targets projects an unrealistic future which in many way disregards non-quantifiable health aspects for PLHIV.

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Kappen

Norsk sammendrag

BAKGRUNN: Revisjonssamfunnet har de siste tiårene invadert flere deler av nasjonale og internasjonale sektorer, deriblant global helse. Helseutfordringer blir kvantifisert gjennom matematiske modeller og brukt som evidensbasert kunnskap som styrer dannelsen av strategier, intervensjoner og fordeling av økonomiske intensiver. HIV-epidemien er ikke utelatt dette skiftet. Denne corpus-baserte studien vil utforske hendelsene som inspirerte til dannelsen av 90-90-90 målet og det 'End of AIDS by 2030', og om denne kan kobles til revisjonssamfunnet. Hvordan rettferdiggjør de dagens kontroll og styringen av den globale epidemien? Hva blir borte når helseutfordringer blir kvantifisert, og hva skjer med aspekter som ikke kan måles med tall?

METODE: Ved å bruke en corpus-basert discourse analyse skal vi se på språket i et stort antall dokumenter som har blitt publisert av UNAIDS. Studien fokuserer på ordene 'target' og 'goal' i to sub-corpora som er delt inn i pre- og post-2008.

RESULTAT: Analysen av pre-2008 sub-corpus viser et mer generelt fokus hvor 'goal' ble brukt om mer langsiktige målsettinger uten slutt-dato, og 'target' oftere ble brukt til å nevne konkrete populasjoner og minoriteter. Post-2008 viste derimot at 'goal' og 'target' ble brukt om målsettinger som skulle oppnås effektivt og lønnsomt med kortsiktig tidsperspektiv.

KONKLUSJON: Studiet viser endringer av bruken av ordene 'target' og 'goal'. UNAIDS endrer hvordan de formulerer og bruker målsettinger og hvordan de måler progresjonen ved hjelp av styringstall. De numeriske målene UNAIDS har satt til 2020 og 2030 er tilsynelatende utenfor rekkevidde, men organisasjonen selv ser ikke ut til å kritisere de mangelfulle sidene av de matematiske modellene de har brukt for å danne målsettingene. Dette eksemplifiserer hvordan mektige organisasjoner slik som UNAIDS fortsatt har forbedringspotensialer til tross for deres viktige arbeid i kampen mot en av våre største helseutfordringer i nyere tid.

Abstract

Setting numerical targets and goals have become a fundamental way of governing medical issues in global health today. The global HIV effort is no exception to this, where numbers have become of great importance in the making of policies and strategies to end the HIV epidemic globally, through targets such as the 90-90-90 targets and the goal of 'ending AIDS' in 2030. Using a corpus-based discourse analysis, we track the usage of the words 'target' and 'goal' in UNAIDS' yearly reports from the last two decades in order to investigate how shifts in the meanings associated with these two terms can tell us something about how the use of targets and indicators have become part and parcel of the drive to 'end AIDS'. Our analyses showed four times increase in the use of the word 'target', which before 2008, was more associated with populations and interventions while the term 'goal' defined long-term futuristic achievements without a definitive end. Post-08 usage of 'target' and 'goal' is associated with concepts such as efficiency, and progress towards definitive deadlines, emphasizing that the present becomes actionable through a focus on future numerical targets. Our results show a shift in the ways in which UNAIDS utilize and conceptualize the words 'targets' and 'goals', and the results support the postulation that metrics have come to dominate HIV/AIDS efforts. This also shows how the end of AIDS narrative for a long time have been dominated by biomedical targets which disregards non-quantifiable health determinants of the HIV epidemic.

Introduction – our work with the study-thesis

In January 2021 we had a one-week introduction course in knowledge management. This was a part of MED5095 where our project thesis also where introduced. During the next few weeks, we got in contact with Tony Sandset and Eivind Engebretsen, who works for SHE - Sustainable Health Education at University of Oslo (UiO). They presented an opportunity using a corpus-based discourse analysis. At the time, they were at the beginning of their work on Oslo Medical Corpus (OMC), and the idea was that we would find an interesting dissertation based on the articles that were included there. We, June and Alida, decided to work together on this project and wanted to write an article together with them. Together with Tony and Eivind we discovered that the changes in the HIV epidemic was worth trying to analyze using this type of method and software. The 1st of May was the deadline for delivering the project outline, including the choice of topic and supervisor(s).

We already began to work on our project thesis back in June 2021. We then had three zoom-meetings with our supervisors and a group from Manchester with Mona Baker in the lead. The purpose with these meetings were for us to be introduced to and learn about how to use the software that we would use during our work with the project. For us it was a bit challenging at the beginning, but after some practice we started to understand more of how it worked. During the summer and autumn we also read some articles, and started to gather the texts we wanted to include in our corpus. It was not until January 2022 we got to work more continuously on the project. We gathered many articles and were also receiving several articles from our supervisor, Tony Sandset. The original plan was that all the texts fulfilling the criteria would be fully plotted into the software before the first writing period so that we could begin to work on the analysis, but this became delayed several times, and not finished until fall 2022. Therefore we focused mainly on understanding the history of the HIV-epidemic, learning more about the UNAIDS, and also starting to draw attention to the developments in audit culture. The next few months we had some meetings with our advisors and wrote a text explaining what, why and how we would do this study.

When the autumn semester in 2022 started we made a plan to work with the project once every two weeks. In this period we worked on using the software to find patterns in the language. We looked for e.g regularities and repeated patterns in the texts. Moreover, we began to write our draft and we continued to read about the global changes in the HIV epidemic. Also, we had a few meetings with our supervisors discussing our progress, analysis and making a plan for the finish. In this period we had to decide how we wanted to part up the HIV-history timeline. Since the UNAIDS was formed in 1996 we mainly focused on the period after 1996, but to possibly find some patterns we needed to divide the periode from 1998 until 2019. We spent a lot of time figuring out how we wanted to divide it, but eventually we decided to split the period into two; before 2008 and after 2008. Two of the reasons for that was the financial crisis in 2008 in itself and also the change in the development of biomedical advances in treatment and care. This division allowed us to create two sub-corpus: one pre-2008 and one post-2008.

Also, during the fall, our supervisors introduced us to Kyung Hye Kim, who worked with them on the OMC project. She is a professor in literature from South Korea, and an expert in using the corpus-discourse analysis. After a few meetings, we quickly realized the value of including her in our work. She has been a great help for us during the analyzes, understanding

the results, and during the writing where she has written much of the methodology part and helped with improvements throughout the text.

When the second writing period began, we quickly started to work with our project thesis again. The first week we focused on reading and writing about the introduction and background. The following week, we continued this work, and began analyzing and writing our results. We also met with Tony Sandset and Kyung Hye Kim, discussing the progress and analysis. The third week we began working on the "kappe" with the norwegian summary, we continued working on all aspects of the article, now more on language and precision, we also started working on the draft for discussion. Also we met with Tony again, for suggestions and tips moving on. Because of sickness, the fourth week had to be a bit slower. We did some reading, worked on the precision of the introduction regarding the essence of the study and discussed suggestions made by supervisors. The fifth week, before Christmas, we worked on the "kappe", we finished the first draft of the discussion, worked more on the introduction and audit culture part and made a progress report. The first week in 2023 we had another meeting with Tony Sandset and we began the finishing progress of our article and "kappe". The final weeks before submitting the thesis, we finalized the reference list, front page, table of contents and the finishing touches of the text. We sent emails back and forth with our supervisors, received a lot of feedback and help to finish the work. Happily, we finished the thesis the week of the due date.

Introducing our study

Metrics and numbers have become ubiquitous in global health efforts. The use of indicators and targets within various global health programs have become a staple across the globe and subsequently a focal point in academic research on the power of metrics and targets. The global HIV/AIDS effort is no exception when it comes to the use and proliferation of numerical targets and indicators. In the drive to 'end AIDS', numerical indicators and targets have come to take center stage in policies and strategies aimed at 'ending' the HIV epidemic globally. The current era of HIV efforts has shifted from a strategy focusing on controlling and containing HIV, to one of active elimination and 'ending AIDS' as it is framed (Kenworthy, et.al, 2018). This has been made possible through the scale up and roll out of antiretroviral treatment (ART) regimes, which has seen HIV going from a fatal to a chronic and manageable disease when people living with HIV (PLHIV) adhere to daily ART

treatment. This shift from 'treatment and prevention' to 'treatment as prevention'(Cohen, 2011) has as its main goal, the effective reduction of viral load levels so that PLHIV both live healthy lives and subsequently also unable to transmit HIV onwards as long as viral level is kept at what is popularly known as 'undetectable viral loads'. In response to these shifts in biomedicine, HIV strategies and policies have also shifted. This article will investigate how numerical targets and indicators are semantically framed and understood with UNAIDS strategies.

Understanding the changes in the strategies undertaken by organizations like UNAIDS in an effort to 'end' the HIV/AIDS epidemic and examining the impact of such change will provide insight in terms of to what extent and how metrics and indicators influence strategic work in UNAIDS. Moreover, in the field of global health, problems are often measured through mathematical models and numerical projections based on evidence-based data that are interpreted as factual knowledge, and used to "offer uniform and standardized conversations about how to best to intervene, how to best conceptualize health and disease, how to best both count and be accountable, and how to best pay for it all" (Adams, 2016, p. 6). Such practices can be linked to the concept of audit culture as it has been formulated in scholarly research (Shore and Wright, 2015). Here we draw attention to the ways in which the use of numerical targets and metrics in global health has come to dominate global health goal setting and measures of what counts as successes in global health. Moreover, the prevalence of numerical targets and metrics in global health has meant that target setting has become part of how various programs can be audited and governed based on progress toward the metric set. In this way, 'governing by numbers'(Miller, 2001; Rose,1991) have become a powerful way of governing global health initiatives.

A key way in which this comes to the fore in the global HIV efforts has been through the formulation of various global targets to be set in order to 'end AIDS'. These practices have involved both numerical target setting and temporal date settings, that is, at what time these targets should be reached. Perhaps the most visible set of targets within the global HIV efforts have been the 90-90-90 targets formulated by UNAIDS. There targets were launched in 2014 as an effort to increase the availability of treatment. The target stipulates that by 2020, 90% of all people living with HIV will know their HIV status; 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy; and 90% of all people receiving antiretroviral therapy will have viral suppression. Since the realization that people who live with HIV and who adherer to daily antiretroviral treatment both live long healthy lives while at the same time are unable to transmit HIV onwards, the goal of viral suppression

is no longer just an individual clinical goal for the individual, but is indeed now a global goal formulated at the level of the population.

This study seeks to supplement research literature which has focused on how metrics and numbers functions within global health with an emphasis on the linguistic changes that has happened within the last 23 UNAIDS reports. Rather than focusing on the numbers or metrics themselves, we are concerned with linguistic terms such as 'targets' and 'goal'. The focus on terms such 'targets' and 'goals' are interesting in as much as it can tell us something about how such terms change during the last two decades of the work that UNAIDS have done. Moreover, such changes in linguistic meaning can show us what connotations and association emerge linked to these terms and subsequently, what this can tell us about the 'end of AIDS' narrative.

The words 'target' and 'goal' have multiple meanings, but they are both synonyms as objectives to be achieved. As such our research interests lies in investigating the linguistic meaning making that is produced in connection with the words 'target' and 'goals' and how these terms have changed across the last twenty-three years within UNAIDS reports. We argue that these changes are not innocuous; rather we argue that the shift in meaning bespeaks of a discourse wherein the end of AIDS is farmed in very technocratic and numerical ways. Moreover, the shift in meaning bespeaks of a turn towards 'governing by numbers' and targets that is by now well-known in global health (Adams, 2016; Lancaster & Rhodes, 2021).

UNAIDS documents from the last 20 years will be the source for our analysis. UNAIDS is the Joint United Nations Programme on HIV and AIDS, and is leading the global effort to end AIDS by 2030. As UNAIDS say themselves: "Without UNAIDS, there would be no strategic vision for the AIDS response." (UNAIDS, 2018, p. 3). They provide "strategic direction, advocacy, coordination and technical support needed to catalyze and connect leadership from governments, the private sector and communities to deliver life-saving HIV services." (UNAIDS). Yearly, they write reports on progress, with evaluation and discussion around their commitments and goals. In terms of methodology, we will utilize a corpus-based approach in order to address our research question. Powered by computer technology, corpus analysis, allows for linguistic analysis of texts stored in a machine-readable form using a purpose-built software program, and proves useful in identifying repeated patterns across a large number of texts. The corpus method will enable us to capture the regularities associated with 'goal', and 'target' within our textual data. We will first identify and compare the patterns in eleven documents published between 1998 and 2008, and another twelve between 2009 and 2020. 2008 is chosen as a cut-off point, because of the global financial crisis which

became a turning point for UNAIDS to review and redesign its global strategy (Kenworthy et al., 2018, p. 960). Based on the findings obtained from the corpus-based analysis, this study will argue that there has been a shift in the ways in which UNAIDS utilize and conceptualize words such as 'targets' and 'goals' and that this shift shows the ways in which metrics has come to dominate HIV/AIDS efforts as well as how metrics are made to matter within UNAIDS.

The thesis question

We want to investigate how the audit culture that modeled the 90-90-90 targets and the 'future without AIDS' narrative can be traced through changes in the language around the words 'target' and 'goal'. We are concerned about what is lost in metrics when it seems like quality is surpassed by quantity, and the issues that arise when numbers govern the discourse of the epidemic. We want to examine how these words have been used differently during the epidemic when considering the audit culture and the metric shift in global health, by analyzing frequencies, definitions, grammatics, correlations and more.

Background

In the past, HIV was a worldwide cause of morality, however the development of antiretroviral treatment has normalized life expectancies for people who live with HIV (PLHIV) and through daily adherence to ART, people who live with HIV are now unable to transmit HIV onwards to others (Alice K. Pau et al., 2014) shifting the infection from a fatal to a chronic condition (Persson, 2013; Persson, Newman, & Ellard, 2017). The biomedical advances mediated through ART led to the adaption of U=U (undetectable equals untransmittable), a term explaining that adhering to treatment leads to undetectable viral loads, effectively ending onwards transmission of HIV. Changing the global AIDS strategies from treatment *and* prevention, to treatment *as* prevention (TasP), which was supported by the results from the HPTN 052 trial which documented U=U in practice and which gave rise to the 'End of AIDS' slogan (Cohen et al., 2018).

In a historical perspective, these improvements in treatment lead to, among other things, the UNAIDS' formulation of what has become known as the 90-90-90 targets in 2014 (UNAIDS, 2014). Viewing the statistics in table 1, there are optimistic developments happening from 2014 when the 90-90-90 targets were established to the most recent data in 2021. There has been a reduction in AIDS related deaths with almost 50%, an increase in

patients with access to treatment by almost double from 14.8 mill to 28.7 mill. However, when looking at the data in the HIV estimates factsheet from UNAIDS, the changes are not as impressive, since 1999-2021 the prevalence in adults was 0.7% of the population (UNAIDS, 2022a). The incidence has dropped in the last seven years, from 2 to 1.5 million people. Even though fewer people die of AIDS related complications and more people are in treatment, more people are living with HIV in total in 2021 compared to 2014. The unmoving prevalence can be due to the fact that the same amount of people have HIV, despite that fewer people contract the virus, because the mortality has gotten down and people with HIV live longer.

	2014	**2021**	**Change**
Newly infected (incidence)	2 mill	1,5 mill	-25,00 %
Everyone living with HIV	36,9 mill	38,4 mill	4,10 %
With access to treatment	14,8 mill	28,7 mill	94,0 %
AIDS related deaths	1,2 mill	0,65 mill	-45,80 %

Table 1: numerical developments between 2014 and 2021, regarding HIV statistics (UNAIDS, 2022a).

During the history of HIV, there have been positive changes happening on multiple levels. In many countries legal rights have changed both for people living with HIV as well as for LGBTQ+ communities. While work is uneven and fragmented globally, there has been a shift in parts of the world where PLHIV and LGBTQ+ communities have gained grounds when it comes to rights, more social acceptance, better living conditions, and decrease in stigmatization and discrimination. Moreover, many developments have happened in regards to knowledge around HIV as a virus as well as , biomedical advances and treatment options, ranging from treatment for people living with HIV to pre-exposure prophylaxis (PrEP). Nevertheless, these changes have been uneven, and highly fragmented globally; stigma still abounds for PLHIV as well as key populations at risk of HIV; treatment options and access is limited in many settings; human rights continue to be violated in the context of HIV; and the uneven funding of HIV efforts across the globe still led to ill-health and unequal access to care.

Key populations as defined by UNAIDS, sex workers, people who use drugs, transgender people, and gay men and other men who have sex with men (UNAIDS, 2017),

have been disproportionally affected the epidemic from the start. In the beginning, intravenous drug users and gay men and other men who have sex with men were particularly affected, but later also sex workers, transgender people and people in jail (and other incarcerated people) were affected. Moreover, the disease affects different parts of the world unequally, for instance Eastern Europe; Sentral Asia; the Middle East; North Africa and Latin America are areas with high burden of disease, and alarmingly they have also seen increases of HIV-infections in the last decade.

The definition of the 90-90-90 targets as described in the introduction uses metrics to track progress towards the goal which was to be reached in 2020. However, the 90-90-90 numbers do not tell the whole projection behind the model. The first 90% is conditional to the prevalence of HIV in the total population. The two next 90s stipulates the percentage dependent on the previous percentage, which means that UNAIDS compare the amount of people on antiretroviral treatment with viral suppression to the amount of people knowing their status (not against the prevalence in total). Therefore, another way of framing the 90-90-90 goal is that 90% of all people with HIV will know their HIV status; 81% of all people with HIV will receive antiretroviral treatment; 73% of all people with HIV will have viral suppression. This leaves us with the question: what about the 10-10-10 (Auerbach, 2019)? Or rather, what happens to the 10-19-27?

There are also other problematic aspects with the 'End of AIDS' campaign and the 90-90-90 slogan. While the "treatment as prevention" (TasP) declaration helped boost enthusiasm and brought a renewed focus on biomedical advances and a focus on treatment (Nguyen et al., 2011), this both undermined the focus on the quality of life to the patients and prevention efforts itself. Firstly, prevention efforts keep being deeply underfunded (Nguyen et al., 2011) and as many scientists have warned, the HIV epidemic is not on track to end, and the lack of scale-up on prevention may have weakened the global fight to combat HIV (Bekker et al., 2018). Secondly, as Leclerc-Madlala et al criticize, the metrics that UNAIDS used to set the goal of 2020 do not consider all the health determinants of the disease, only achieving treatment results. Continuing, they stipulate the difficulties of meeting the first 90-goal of early diagnosis and treatment, when social inequalities and stigmatization is not given attention (Nguyen et al., 2011). They explain that these factors "determine vulnerability to acquiring HIV and accessibility of diagnosis and treatment" (Nguyen et al., 2011). As such, the 90-90-90 targets have been critiqued as being too focused on treatment outcomes and less attentive to the social context of care for many who live with HIV. Andersson et.al make a

similar claim when they examined the impact of interventions from 2010-2018 that aimed to reduce stigma experienced by people living with HIV. Their review points out that although the UNAIDS 90-90-90 targets have gained a lot of impact in the epidemic, what they call "fourth 90" – health-related quality of life – is still in need of attention, and stigma and discrimination remain as obstacles for achieving this last forth 90 (Andersson et al., 2020).

The analytic perspective – audit culture

Audit Culture and the Performativity of Targets

Our theoretical inspiration in this article comes from two different yet interrelated field of inquiry; scholarship on audit culture and secondly, scholarship on the performativity of numbers, and subsequently, the role of targets, both as numerical entities and as grammatical terms.

Audit culture denotes how accountability now is more and more mediated through exhaustive data recordings and evaluation of progress, as well as through the utilization of target indicators and metrics. This phenomena is not only a question about quantification, but also another way to control the world, through numbers and metrics, new way of controlling and governing has opened up which allow for new ways of disciplining both people and programs. Program evaluation and accountability makes it possible to assess and improve the effectiveness of public health programs as well as demonstrating that the funds are being used in an appropriate and effective manner (Owczarazak, et al: p. 1; see also Napp, Gibbs, Jolly, Westover, & Uhl, 2002). Audit culture and global metrics are occurrences that both describe the extensive inflation and importance of numbers in global health. In the book *Metrics, what counts in global health* by Vincanne Adams et.al, the authors explains how metrics are technologies of counting that form global knowledge (Adams, 2016, p. 6**)**. Ideally, metrics form a standardized and uniformed conversation about interventions, the concept of health and disease, accountability and funding (Adams, 2016, p. 6). Although the potential contribution of evaluating data is to improve health services, the results often benefit the funders' agenda by demonstrating fiscal prudence, efficiency and accountability to funders, rather than produce information that gain the community-based organization. (Owczarzak et al., 2016). As Owczarzak argues: "monitoring and evaluation approaches based primarily on measurable, well-defined indicators may unintentionally cause organizations to distance themselves from aspects of their work that are difficult or impossible to measure by the means of evaluation required by donors" (Owczarzak et al., 2016, p. 2, *see also* Holma & Kontinen, 2012). For example, this might lead to a situation wherein aspects that are harder to quantify

like activities and programs that aim to increase empowerment, and make social and cultural change are not taken into account (Owczarzak et al., 2016, p. 3). Moreover, the actual work of auditing progress might distract employees from providing quality services since the focus becomes the numerical targets rather than the overarching goals or visions of a programme (Owczarzak et al., 2016, p. 3; *see also*: Hull, 2012; Oldani, 2010; Strathern, 2000a). Some other aspects Owczarzak points out is: a) quantifiable metrics can obscure qualitative understanding about agent performance, participant experience and overall quality (Owczarzak et al., 2016, p. 3; *see also*: Kipnis, 2008; Reynolds, 2014), and b) auditing results can widen the gap between administrators and the service providers (Owczarzak et al., 2016, p. 3; *see also*: Hull, 2012). Owczarzak argued in a study of audit culture within HIV prevention agencies, that chasing numbers and proving eligibility, only encourages "a prioritization of meeting recruitment goals, contributed to a sense of competition between agencies, and created a reluctance to work together to best serve a particular geographic region or target population" (Owczarzak et al., 2016, p. 16). In addition, the study finds that a narrowly defined targeted group made the health providers sense that meeting the numbers were more important than the HIV prevention services. Moreover, providers sensed that they were unable to give health services to people that did not fit the right categories. Some agencies also reported that the reporting requirements and number goals felt punitive instead of supportive, and overall gave them less autonomy (Owczarzak et al., 2016, p. 16)

Our second line of inspiration comes from scholarship on the performative function of numbers and metrics. Such scholarship have to a large degree focus on numerical numbers and how they become performative, i.e. how they make things happen and how numbers produce action (Beer, 2016; Callon, 1998; Rhodes & Lancaster, 2021). One key aspect, which is important for our work on the shift in the conceptual meaning of the words goal and target, is how metrics, but also linguistic framings of goals and targets, always also implies a future to come. As such, referencing terms such as goals and targets "equip as well as shape actions in the present in light of the futures they project" (Rhodes & Lancaster, 2020a, p. 2). As such, it become key to map how the meaning associated with terms such a target and goals shifts and changes as this has implications for the ways in which the present becomes actionable by referencing future goals and target. In such an analysis, the terms target and goal can be seen as 'speech acts' (Austin, 1975), and in combination with metric, they not only describe global health realities, but indeed, create and make them. Governing through metrics and by referencing targets and goals, the global HIV effort becomes part of what scholars have called 'anticipatory governance' (Adams, Murphy, & Clarke, 2009; Aykut, 2019). The term target

and goal implies something to be reached for, and as such, the use of terms such as goal and target within the global HIV effort show how HIV governance implies the governing of the present by recourse to the future.

Numbers provide a common language that presents materials of science with an aim of precision and a sense of control (Rhodes & Lancaster, 2020a, p. 1). Rhodes et al described numbers "as entities which are differently according to their means, methods and events of production" (Rhodes & Lancaster, 2020a, p. 1), suggesting how enumerations can project different realities based on their origin. The authors explain how numbers come to be of value, by their effect as "predictors, targets, and metrics" in intervention and policy with potential to be "*performative actors* with *governing potential* in the constitution of health" (Rhodes & Lancaster, 2020a, p. 1). The HIV epidemic is an example of a global health issue using numbers as predictors, as well as targets of interventions, e.g. UNAIDS' 90-90-90 goal, systematically enumerating health problems to evaluate progress. As such, and through the lens of audit culture, it become important to not only focus on metrics themselves, or the function of numbers, but also to pay attention to the ways in which linguistic terms such as target and goal change and operate within discourse.

Material

Inclusion criteria

Texts are selected from the UNAIDS website (UNAIDS.org)>>> 'resources' >>> 'publications' >>> choose 'reference report' under 'type'. Continuing, strategic reports that are narrative in nature, global in scope and report on global issues are included, forming the corpora. Excluding the texts that solely focus on data/metrics (there are different reports which only report in data, the so-called UNAIDS data reports), the regional reports and topic specific reports, e.g. reports on cervical cancer and right to health.

For viewing the totality of the corpora, please see Appendix 1 and 2 on page 52.

Method

Referencing our research question, i.e. investigating the shift in the use of 'goal' and 'target' within UNAIDS documents, this study adopts a corpus-based method which allows researchers to examine a corpus, i.e. a large collection of texts stored electronically based on certain parameters to be analyzed using a dedicated software. The corpus-based method has

been used in the study of healthcare and illness, e.g. to examine communication in healthcare encounters, particularly between the health adviser and patients (Adolph et al. 2004), to examine patients' messages to doctors on a doctor-operated online platform in order to identify the most dominant topics of discussion (Harvey et al. 2007; Gray et al. 2008), to examine the metaphors of illness (Hommerberg et al. 2020, Hendricks et al. 2018), to identify the way in which dementia is framed in the British press (Bailey et al. 2021), and to study adolescents' perception of HIV and AIDS (Atkins and Harvey 2010, Brookes, Atkins and Harvey 2022). However, relatively little corpus-based research has been done to investigate the institutional voice and shift in healthcare and medicine featured in texts. In the case of UNAIDS, it clearly changed its comprehensive strategy after the financial crisis, as will be shown later in this section (e.g. Kenworthy et al., 2018). Nevertheless, discussions of how such change is spelled out in actual documents and the impact the change in the discourse or a global strategy of such global organizations like UNAIDS have been scarce. This study, therefore, draws on a corpus-based method to establish a discursive pattern concerning the UNAIDS' AIDS/HIV eradication and prevention strategy pre- and post-2008.

We chose 2008 as the cut-off point for the sub-corpora because targets and goals of the HIV/AIDS epidemic during the last decade evolved in tandem with the financial crisis (Kenworthy et al., 2018, p. 960). The year 2008 was a critical point for global health since the financial crisis hit every corner of the world. For UNAIDS, the funding went from 'scale-up 'to 'scale-down' due to a series of important donor withdrawals (Kenworthy et al., 2018, p. 962, see also Kaiser Family Foundation (KFF) and UNAIDS, 2017; Zaracostas, 2012). In the article *Chronicity, crisis, and the "end of AIDS",* the author writes that the "focus on biomedical advances also underpinned a post-2008 global fiscal environment in which governments and donors were withdrawing support for long-term financial and political investments in HIV prevention and treatment" (Sangaramoorthy: p. 2; see also Kates, Wexel, & Lief, 2016), emphasizing a turning point in the epidemic where the relationship between the donors and the recipients changed drastically.

The biomedical turn with the developments on ART and TasP can also be argued to stipulate a division in the epidemic. Although, harder to argue a specific date of this change, the medical advances during the first decade of 2000, and the End of AIDS narrative formulated in 2011 all accounts for a shift happening around the same time as the financial crisis. Below we present a table of the corpus and the division.

OMC UNAIDS corpus (built for the purpose of this study)	
1998-2008 (pre-2008 UNAIDS sub-corpus, named Pre-08)	2009-2020 (post-2008 UNAIDS sub-corpus, named Post-08)
11 texts	12 texts
570 329 characters	575 724 characters

Table 2. Corpus construction

While there are many corpora and relevant supporting software programs available, this study uses the Oslo Medical Corpus (OMC[3]), compiled and developed by the research team at the Centre for Sustainable Healthcare and Education (SHE) at the University of Oslo, for many reasons. One of them being that the provenance of each text is carefully documented and available online, making it easier for researchers to identify the source, author, and the year of publication, which are all crucial elements to consider when interpreting the data/evidence. Moreover, the retrieved concordance lines associated with the search word ('goal', and 'target' in this case, discussed in more details below) could have been narrowed further down to only those sources by UNAIDS, and even the specific texts could be selected in the 'sub-corpus' section within the OMC user interface. The software program ModNLP enables researchers to establish the prominent pattern easily. The frequency list, for example, which lists all the lexical items used in the text in question, can be further refined with one button where function words that have little lexical meaning, such as articles like 'a' and 'an' and propositions like 'of' and 'to', are removed. Among the functions that the ModNLP presents, this study will specifically use the visualization tool 'Mosaic' and 'concordance lines', among other functions available within the software suite: the former (i.e. 'Mosaic') will return the list of collocates (i.e. the words that appear in the vicinity of a search word), in the order of its collocation strength that are calculated based on its observed frequency against it expected frequency in the corpus selected (OMC, 2022), while the latter will allow us to identify discursive patterns associated with the search word. Through this methodology we will be able to map the linguistic changes in meaning associated with the terms of target and goals. Furthermore, through the mapping of these shifts we are better equipped to see how the 'end

[3] https://www.oslomedicalcorpus.net

of AIDS' discourse is underpinned by a logic of target setting very much reminiscent of audit culture and the dominance of goals and target setting as priorities in global health.

Results and discussion

Results

As stated earlier, this study investigates how the terms 'target' and 'goal' are used in the UNAIDS' documents. The analysis begins by investigating the word 'goal', before examining patterns associated with 'target'.

Goal

In the Pre-08 sub-corpus there is a total of 151 lines featuring 'goal*', including 'goal', and 'goals'. The analysis of the patterns revealed that 'goal*' collocates with "millennium development goals", education (and "access to all"), ending poverty, equality and combat HIV/AIDS. In addition, the word is associated with the phrase "longer-term" and the phrase "of universal access" to [HIV] treatment to all who need it (see figure 1). In the Post-08 sub-corpus, the search for the word "goal*" provides 215 lines. While there is not a big difference in the number of lines featuring 'goal*' between Pre-08 and Post-08 corpora, there is more talk about "sustainable" and "outcome-oriented" goals to "achieve" or "reach" the end of AIDS. This shift to profitable and efficient goals is a good example of the change in UNAIDS' strategies after the biomedical turn where the medical advances were used by public health experts and policy-makers to scientifically justify the *End of AIDS* narrative (Kenworthy et al., 2018, p. 964) . This could be understood in light of the shift from long-term to short-term commitments after the global financial crisis. The collocation of the terms 'goal' with sentences that detonates productivity could be seen as signaling UNAIDS' prioritization now focuses on how *goals* now become more and more associated with productivity, and cost-effectiveness.

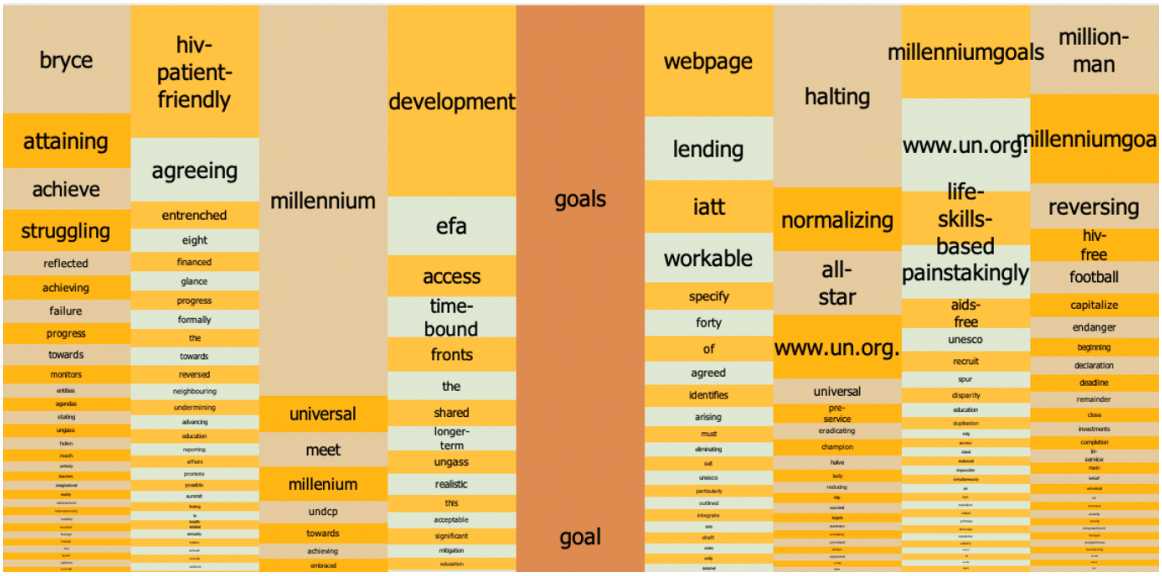

Fig 1: Mosaic representation of Goal* in the sub-corpus "pre-08"

Fig. 2: Mosaic representation of Goal* in the sub-corpus "post-08"

Target

Among the two items we examined, i.e. 'goal' and 'target', the latter presents the most striking difference in terms of the number of concordance lines between Pre-08 and Post-08, as shown in Table 3. The table provides statistics on the overall use of the word 'target'. In Post-08, the number of times 'target*' mentioned in UNAIDS documents increased almost four times its usage in comparison to the pre-2008 corpus. However, what should be noted is that the use of the word 'target' changes grammatically. More specifically the change of frequency of the verbs (to target, targeted, targeting) and the nouns (target, targets). In both sub-corpora 'target' and 'targets' are used more frequently than 'to target', 'targeted' and 'targeting'. After 2008, the use of the nouns 'target' and 'targets' combined increased from

59,5 to 91,8% In comparison, the verbs ‘to target’, ‘targeted’ and ‘targeting’ combined was reduced from 40,5% to 7,7%.

	Pre-2008	**Post-2008***
Target/Targets	141 times (59,5 %)	835 times (91,8 %)
[To+]Target**/Targeting/targeted	96 times (40,5 %)	70 times (7,7 %)
=Target*	237 times	910 times

Table 3. The number of instances of ‘target(s)/targeting/targeted’ pre-2008 and post-2008

Post-2008 we also discovered that “target-setting” and “target-related” was included 3 and 2 times respectively when we searched on the word “target” (the last 0,5%). It did not correlate to anything meaningful, therefore not included in the table.

**In both sub-corpora the search of ‘Target’ correlated only 5 times each to the phrase “to target”. We are basing the results on the premise that the other 976 times the singular term ‘Target’ were used, it was used as a noun.

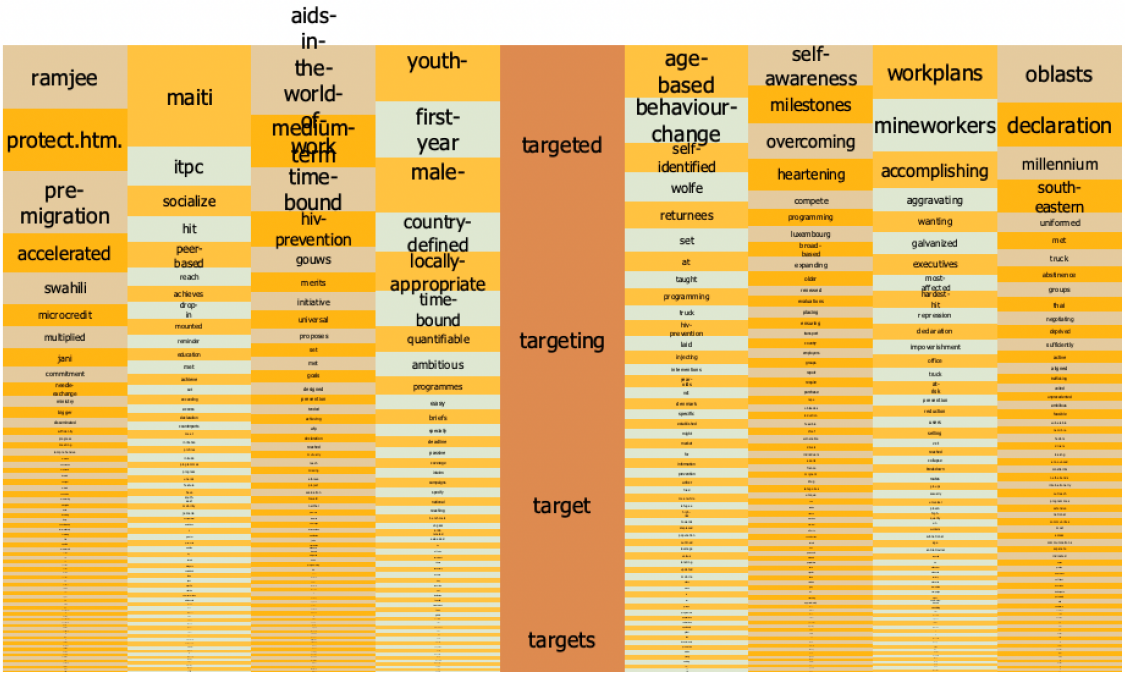

Fig. 3 Mosaic representation of Target* in the sub-corpus “pre-08”

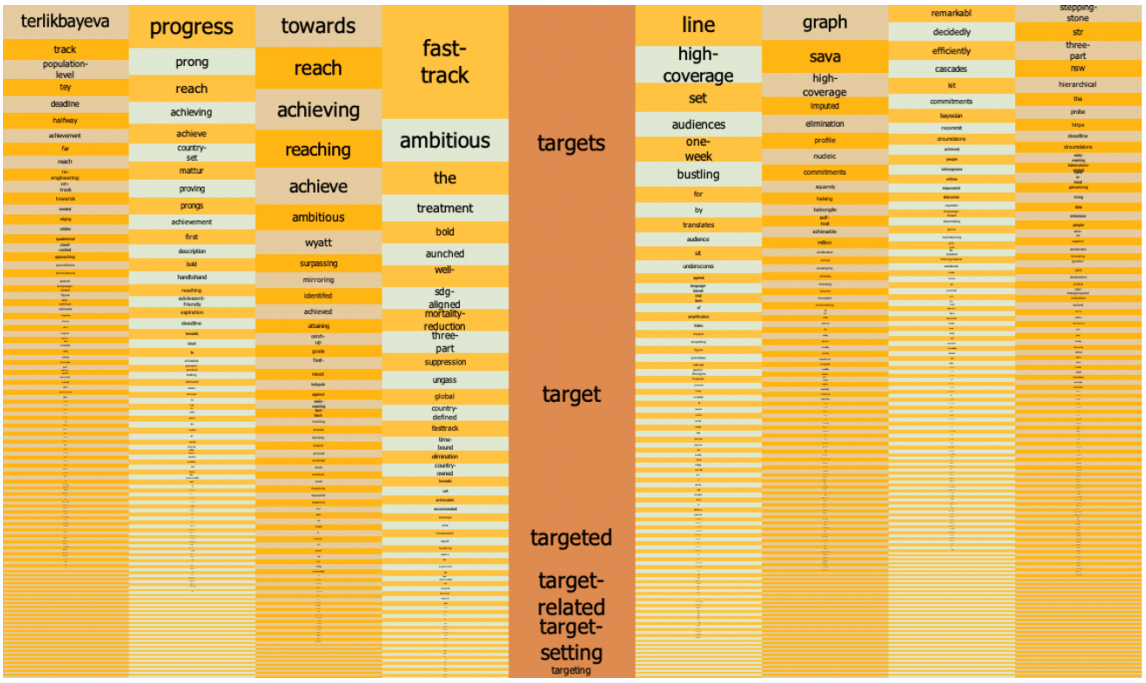

Fig. 4 Mosaic representation of Target* in the sub-corpus "post-08"

There are 456 definitions of "target" in the Oxford English Dictionary[4]. These definitions imply that the word 'target' can have many different interpretations and connotations considering which context it is used in. There are many definitions, however those that may be most relevant to this study: something to be aimed at; a victim or a prey; an object in physics or for a medical intervention; or an amount or a result to aim at which one strives to achieve (Oxford, 2023a). The noun also has different general attributes, such as 'target-firing' or 'target-practice', and describe designating an object of attack, such as a target group or population (Oxford, 2023a). Continuing, 'target' as a verb could mean something to protect or shield; to use someone as a target; to signal a position using a target; to plan something to meet an objective; to aim at a target; to identify something/someone as a target; to aim on a course (Oxford, 2023b). Moreover, the meanings of 'target' have evolved from the 14th century being related to combat, something to be aimed at, shields and then in the 20th century new definitions arise related to something to accomplish, fulfill, or in a medical and biological meaning of the word (Oxford, 2023a, 2023b). This understanding of the meaning of the word can be applicable to interpret the change in the use of 'target' provided in the section over. Firstly, the increase of the use of 'target*` by roughly 380% could tell us that UNAIDS concerns themselves more now, than before 2008, with 'target' in general. Secondly, the increase in the use of the noun (target, targets) and the decrease in the use of the verb (to

[4] https://www.oed.com/

target, targeting, targeted), can exemplify the shift in attention to the objectives they try to achieve. With the Oxford definitions in mind, both noun and verb could define as something to aim at, however the noun is the only attribute to a future achievement. This references our earlier argument about the function of targets as 'technologies of anticipatory governance' and the ways in which target as a noun implies a future to come, demanding action in the present. We find this pattern as a good example of the shift from a discourse which focused on target as an action to be taken such as 'targeted treatment' or 'targeted testing' or, 'target group' to a discourse which, post-08, have more and more come to use target as a way signaling the achievement of different targets such as the 90-90-90 targets. This change can be illustrated further using figure 3 and 4. Described in figure 3, the words which correlates with 'target*' is split in both a population/group/drugs to aim at or describe, and to an objective to measure or reach (a future goal). In figure 4, one can see that the words which correlates with 'target' are now more and more describing how target(s) are to *achieve/reach/reaching* something and at the same time, describes a process which focuses on the *progress towards* a target which is described as *bold* and *ambitious.* We can also see a collocation between the phrase "fast-track-" and "treatment-" targets, relating to the 2020 of reaching the 90-90-90 targets and 2030 deadline of the UNs SDGs.

Other findings

In the beginning, we had an idea that the term 'number' could project the metric development in UNAIDS strategies after 2008. During our analysis we discovered interesting findings in regard to the term, however we did not find them strong enough to be included in the article. We are presenting the results together with a discussion of the word.

Using "number*" as a search word, 1025 concordance lines and 1336 lines are retrieved from Pre-08 and Post-08 corpora respectively. The analysis of concordance lines featuring 'number*' revealed that numbers are defined in different ways across the two time periods. While 'number*' in both Pre-08 and Post-08 collocates strongly with words like large, increasing, total, annual, growing, estimated , 'number*' in the Pre-08 sub-corpus is strongly associated with a general description of numbers like unrounded, rounded, cumulative. However, in the post-08 sub-corpus, there is a much stronger focus on collocating the word 'number' to specific terms such as unquantified, largest, and highest. Another pattern identified is the change in the population or target that are being measured with the word 'number' ("number of …"). Pre-2008, we see that UNAIDS more often focused on the number of "people, persons, orphans, adults, heterosexually- required, countries" in a broader

and non-specific way, most used is the phrase “number of people/persons living with HIV/the virus”. In the sub-corpus post-2008, numbers seem to more often describe measures of progress. Most used is the number of “new HIV infections”; “people accessing”; “people dying”; “people acquiring”; “people living with”; “people on/taking/receiving antiretroviral treatment”. The most used phrase with numbers is “Number of new HIV infections”, with 113 lines in the sub-corpus post-2008, as viewed in the extract in figure 3. What does this new shift of collocations tell us, and what could it mean in regards to describing a form of audit culture and governing by numbers within UNAIDS?

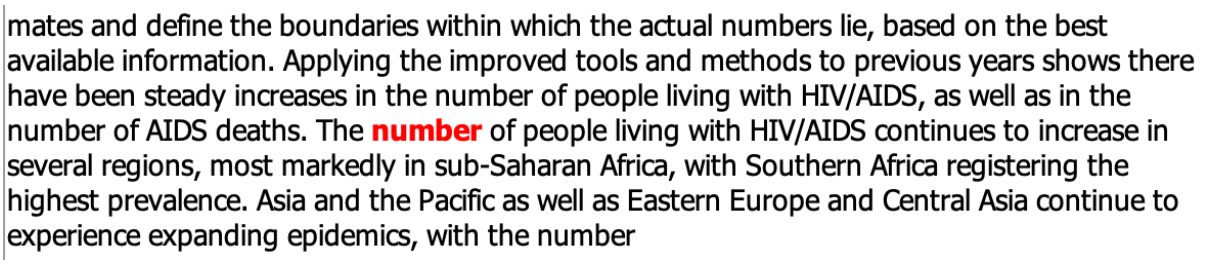
mates and define the boundaries within which the actual numbers lie, based on the best available information. Applying the improved tools and methods to previous years shows there have been steady increases in the number of people living with HIV/AIDS, as well as in the number of AIDS deaths. The **number** of people living with HIV/AIDS continues to increase in several regions, most markedly in sub-Saharan Africa, with Southern Africa registering the highest prevalence. Asia and the Pacific as well as Eastern Europe and Central Asia continue to experience expanding epidemics, with the number

Fig. 3 - An example of an extract from a concordance line searching for ‘number*’

‘Number’ seems to project different views pre- and post-2008, from accounting for different populations and minorities (often “number of people living with”), to more focus on the measurable, quantitative metrics and statistics (such as “Number of new HIV infections”; “people accessing”; “people dying”; “people acquiring”). Even though it might not be the clearest and most convincing finding, there is a change in the language describing ‘number’ in the pre-08 and post-08 sub-corpora. There are similarities between them, but results suggest a change from a general to a metrical description of ‘number’. Though these results are harder to argue and might not hold as much importance, they do bear a clear link to audit culture. We notice that UNAIDS after 2008 relies more on the metrical aspects of the epidemic to illustrate the yearly progress. This practice of documentation , sustainability and accountability (possibly to provide the ‘evidence’), can be explained by UNAIDS’ effort to convey donor commitment. It also wins the trust of the investors and proves the value of money (Kenworthy et al., 2018, p. 962, see also Amaya, Caceres, Spicer, & Balabonova, 2014), while further being exacerbated by the loss of attention to the populations and minorities suffering of HIV (which were more prominent pre-2008). Moreover, around the same time that we discover this change of usage, numbers became more impactful for UNAIDS’ progress evaluation. They started to produce numbers and figures articles yearly from 2010. The articles provide “a quick snapshot of the state of the AIDS response” and the

progress the previous year (UNAIDS, 2010), exemplifying the shift towards governing by numbers.

As stated in the start of the section, the analysis of the term 'number' shows a shift in the usage. However, we understand the findings as both vague and hard to argue. More importantly they do not with certainty show the connection to audit culture, as we hoped. Ultimately, number define that something is measured, but the word in itself does not project the metrics.

Discussion

Through our findings, we suggest that we can see a shift in the language around 'target', and 'goal' in the sub corpora pre- and post-08. We see changes in how UNAIDS frames its objectives and how they measure the progress of their ambitions in regards to enumerations and numbers. This is particularly evident in the case of the word 'target' which clearly shows the turn towards target setting as a way of governing global health and in this case the global HIV effort. The shift is evident and can be seen through the ways in which target changes from being used as a verb and a noun, to mainly be utilized as a noun. No longer a verb or a 'doing' but now more and more a destination to be reached, target becomes a noun linking the present with the future.

Through this shift, target as a term comes to denote a form of governing through numbers, which is future oriented. Within this discourse, the present becomes actionable by recourse to the future (Rhodes & Lancaster, 2020a). Moreover, the grammatical shift mentioned a moment ago, to a noun, indicate that there has been a shift in how UNAIDS prioritize their actions. In the corpus we have compiled, target setting becomes an important part of the ways in which the HIV effort is enacted. Through the target setting of certain numbers, chief amongst these, the 90-90-90 targets, we argue that target setting and metrics have become the predominantly way of governing global HIV effort.

In a different vein, we want to draw attention to how the use of the term target in UNAIDS documents also denote a certain spatial and temporal discourse. First, the use of target can be seen a way of describing a place to be reached for in the future, i.e. a place where we have reached our targets and the end of AIDS has come about. This is similar to the arguments that Tim Rhodes and Kari Lancaster have made in relationship to hepatitis C elimination and the use of targets in that context (Lancaster & Rhodes, 2020b). Secondly, the shift in the use of the term target also becomes associated with a process of reaching something, a race or an activity, which we must do in the present in order to reach this in the

future. This argument echoes once again arguments made by Rhodes and Lancaster who argue for the same sort of logic when it comes to hepatitis C elimination and the 'race to eliminate' hepatitis C (Lancaster & Rhodes, 2020b). By shifting from target as a verb, to target as a noun, the very phrase, in combination with the dates 2020 and 2030, creates a destination in time (Rhodes & Lancaster, 2020a, p. 157); targets and goals are no longer a form of direct 'doing' but become places in time to be reached such as *reaching the 90-90-90 targets in 2020 or 'ending AIDS' in 2030.*

Equally important in our analysis of the shift of the use of the term target, is the subtle but important shift it signals in HIV governance. Shifting from more often being used as a verb to principally a noun signals how 'governing by numbers' have become the main focus of the term target. In this way, target as a term shows us how numerical targets become 'technologies of governance' (Rhodes & Lancaster, 2020a). As we have noted, the shift in the usage of goal and target within UNAIDS documents shows how target and goals as linguistic terms, when combined with metrics and calendar dates, serves as powerful means of 'orienting social action in the present' (Wilkie, Savransky, & Rosengarten, 2017:4) by referencing future targets and goals. In this way, we can perhaps state that the use of the term target and its collocation with numbers such as the 90-90-90 targets describes a form of action where it is the future that becomes the yardstick for action in the present.

Target setting makes the future actionable in the present (Lancaster & Rhodes, 2020b; Rhodes & Lancaster, 2020a) and as such, it also makes the governing through numbers a form of governing which always also includes a focus on the future. The danger here is of course that the targets shifts from being a sort of means towards an end, in this case, the end of AIDS, and rather, the means turns into ends, i.e. the targets become the main focus and other aspects of the HIV effort becomes relegated to the margins and left behind. In our case this could be a focus on quality of life; reduction in stigmatization; the removal of criminalization of HIV transmission, which still is prevalent globally; and finally, a more holistic view on the lived experience of PLHIV.

This shift, it can be argued, bears a clear link to the changes in global health regarding governing global health through numbers. Progress become seen as quantifiable values which are seen a neutral and transparent and they are thus often time not scrutinized. The alleged neutrality of numbers and subsequently their collocation with terms such a targets, and goals, have become dominant in dictating global health strategies and have come to influence global health politics. As Adams states, "[s]pecific numbers can certainly move policy, confer political allegiance, guarantee funding, even bring about health" (Adams, 2016, p. 9). We

argue that our analysis supports this claim by showing that in UNAIDS documents, numbers are increasingly being used to audit different aspects of the global HIV effort and that numerical targets have become important governing tools used to prioritize what goals and target should be seen as a priority. Furthermore, this shows how the change in the language around the terms 'goal' and 'target' are being justified by metrics. These trends show how numbers are projected as claims of truth trusted to convey a promise of a future without AIDS, with the pressure on 'achieving' and 'reaching' goals and targets 'efficiently' and 'profitable' that also is described by UNAIDS themselves as 'bold' and 'ambitious'.

There are weaknesses and limitations of the study. We only studied the annual UNAIDS reports where they provided a snapshot of the global changes and the perception of the future. This only represent a small sample of the general strategies within global health on the topic of HIV/AIDS. In addition, we have only tried one way of dividing the sub-corpora before and after 2008. Moreover, numbers are not coded as characters, in the same way as words are. Therefore, when we are analyzing concordance lines, numbers are lost in the mosaic. This means that for instance the phrase '90-90-90 target', cannot be studied in the corpus-study, without changing the original coding.

Conclusion

Auditing progress through technologies of counting to monitor and evaluate approaches has become the premise of factual knowledge in global health today. This includes the HIV epidemic, where numbers have become a subject of extensive inflation and importance when making policies and strategies to end the HIV epidemic globally, e.g. the 90-90-90 goal by 2020 and the 'ending of AIDS' by 2030. The discourse of a future without AIDS was founded on changes happening in the financial world after the crisis of 2008. However, as Kenworthy states "the irony of this discourse is that, though intended to elicit further commitments to the HIV/AIDS fight, it may instead elicit a complacency among donors and governments", who as El-Sadr, Harripersaud, and Bayer (2014, p. 166) write, may perceive it as 'minimizing the challenges that remain' (Kenworthy et al., 2018, p. 962). These challenges represent the neglect of health factors that are harder to quantify and measure, although of big importance to people living with HIV (PLHIV), e.g. stigmatization, discrimination and life quality. In addition, the 'treatment as prevention' declaration is ultimately founded on the premise that tens of millions of people adhere to life-long treatment daily. This means that scale up of sustainable and long-lasting treatment programs must be made available to all who live with

HIV. Moreover, the 90-90-90 target was, by rights, criticized for omitting a broader focus on social conditions and quality of life. The usage of targets within the UNAIDS documents bespeaks of a highly biomedical focus, a focus wherein the audit culture of controlling through numbers is not just a form of governing by numbers, but a form of power which ultimately focuses on biomedical means to 'end AIDS'. These biomedical means become the mediators for reaching the targets set out in the UNAIDS documents and as such, there is a risk that the end of AIDS will be an end solely based on biomedical numerical targets that are to be reached for.

In this article, we wanted to document how we could utilize the concept of audit culture and connect it to the 90-90-90 target and the 'future without AIDS' narrative. Moreover we have tried to trace this, through changes in the language around 'target' and 'goal'. The patterns in our findings presented a shift from a general focus where 'target' aimed more often at populations and interventions and 'goal' defined long-term futuristic achievements without focusing on a definitive end.

On the other hand, post-2008 usage of 'target' and 'goal' have become terms which are associated with concepts such as efficiency, and progress towards a definitive deadlines. As UNAIDS themselves present in their report in 2022, the progress towards ending AIDS by 2030 is in danger due to insufficient investment and action (UNAIDS, 2022b). However, a less visible critique would be how the use of metrics and target setting itself within the global HIV effort might be fraught. A continual problem is of course how the biomedical targets projects an unrealistic future which in many way disregards non-quantifiable health aspects for PLHIV.

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UNAIDS. (2010). AIDS Scorecards: Overview: UN AIDS report on the global AIDS epidemic. Nov 23, 2010. Retrieved Jan 19, 2023, from https://www.unaids.org/en/resources/documents/2010/20101123_aids_scorecards

Veilederuttalelse

Veilederuttalelse for June og Alida

Studentene har bidratt aktivt i alle ledd i denne prosjektoppgaven. Studentene har aktivt formulert forskningsspørsmålene knyttet til artikkelen, samlet inn litteraturen som ligger til grunn for studien samt at de har bidratt aktivt til design av studien med tanke på metoden som er brukt i studien. De har begge to aktivt tatt ansvar for både fremdriften av prosjektet samt organiseringen av arbeidet og har dermed vist en stor grad av selvstendighet og faglig ansvar. De har vist en stor evne til å lære seg nye metoder samt å sette seg inn i et stort samfunnsmedisinsk felt (HIV/AIDS i global helse). De har vist en stor grad av faglig utvikling når det både gjelder metode bruk samt innsikt i feltet de har jobbet med.

Når det gjelder selve skriveprosessen så har begge studentene bidratt aktivt til å skrive oppgaven både når det gjelder kappen og selve artikkelen. De har vist en stor vilje til å jobbe aktivt med artikkelen og har vært hoved bidragsytere til artikkelen og følgelig oppfyller alle krav til førsteforfatterskap av artikkelen. De har bidratt til alle deler av artikkelen og har tatt initiativ i alle ledd av artikkelen. Når det har vært nødvendig har begge kandidatene spurt om innspill fra veiledere og har jobbet godt med tilbakemeldinger fra veiledere. Begge kandidatene har vist at de kan jobbe selvstendig samtidig som de har vært veldig gode på å ta imot tilbakemeldinger på arbeidet de har gjort fra veiledere. Begge kandidatene har vært veldig samarbeidsvillige og har bidratt på en veldig positiv måte til både skriveprosessen samt til forarbeidet til artikkelen. Det har vært en god prosess igjennom alle skriveperiodene og kandidatene har disponert tiden veldig godt samt hatt en god progresjon helt fra starten av. Det er ingenting å utsette på jobben kandidatene har gjort samt det endelige resultatet både når det gjelder kappen og artikkelen i seg selv.

Appendix

Pre-08 sub-corpus

File name	Characters	Year	Title
omc000002	7 637	1998	AIDS epidemic update: December 1998
omc000033	17 061	1999	The UNAIDS Report 1999
omc000003	54 787	2000	Report on the global HIV/AIDS epidemic - June 2000
omc000028	10 314	2001	AIDS epidemic update
omc000035	79 429	2002	Report on the global HIV/AIDS epidemic 2002
omc000029	15 366	2003	AIDS epidemic update: December 2003
omc000039	89 844	2004	Report on the global AIDS epidemic, 4th global report 2004
omc000036	47 603	2005	AIDS epidemic update: December 2005
omc000004	203 257	2006	Report on the global AIDS epidemic: A UNAIDS 10th anniversary special edition
omc000038	18 767	2007	AIDS epidemic update: December 2007, UNAIDS, WHO
omc000017	26 264	2008	Annual Report: Towards Universal Access

Appendix 1: *Pre-08 sub-corpus, a total of 11 reports by UNAIDS published yearly between 1998-2008, consisting of 570 329 characters.*

Post-08 sub-corpus

File name	Characters	Year	Title
omc000040	13 387	2009	*Annual Report 2009*
omc000032	52 207	2010	*Report on the global AIDS epidemic 2010*
omc000037	79 450	2011	*GLOBAL HIV/AIDS RESPONSE. Epidemic update and health sector progress towards universal access*
omc000041	23 456	2012	*Global report. UNAIDS Report on the global AIDS epidemic 2012*
omc000042	38 357	2013	*Global report. UNAIDS Report on the global AIDS epidemic 2013*
omc000001	10 329	2014	*90-90-09: An ambitious treatment target to help end the AIDS epidemic 2014*
omc000006	38 298	2015	*On the Fast-Track to end AIDS 2016-2021 Strategy*
omc000034	2 392	2016	*Global AIDS update 2016*
omc000027	46 780	2017	*Ending AIDS: Progress towards the 90-90-90 targets 2017*
omc000026	92 917	2018	*Miles to go closing GAPS, breaking barriers, righting injustices 2018*
omc000031	91 197	2019	*Communities at the centre: Defending Rights, Fighting Barriers, Reaching people with HIV services 2019*
omc000005	86 954	2020	*Seizing the moment Tackling entrenched inequalities to end epidemics 2020*

Appendix 2: *Post-08 sub-corpus, a total of 12 reports by UNAIDS published yearly between 2009-2020, consisting of 575 724 characters.*