SYNTHESIS OF EVALUATIONS OF HIV/AIDS ASSISTANCE



Synthesis of Evaluations of HIV/AIDS Assistance

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Table of contents

1.	Intr	oduction	4	
2.	Pre	vention	9	
2	2.1	Information campaigns and condom marketing		
2	2.2	Treatment of other sexually transmitted diseases (STD's)		
2	2.3	Voluntary counselling and testing		
2	2.4	Male circumcision		
2	2.5	Prevention of mother to child transmission	17	
2	2.6	Overall assessment of the evaluations of preventive interventions	19	
3.	AR	Γ, opportunistic infections and palliative interventions		
3	3.1	Anti-Retroviral Treatment (ART)	23	
3	3.2	Opportunistic infections, palliative treatment and home-based-care		
4.	Imp	pact mitigation	29	
5.	5. Donor coordination			
6.	. Monitoring and evaluation			
7.	7. Conclusion			
8.	Ref	erences	43	
	Appendix 1. Terms of Reference			
Аp	Appendix 2. International assistance to HIV/AIDS			

List of abbreviations

ABC Abstinence, Behavioural change and Condoms

ARV Anti-Retroviral drugs

ART Anti-Retroviral Treatment

CGD Centre for Global Development

DFID Department for International Development

GAMET Global HIV/AIDS Monitoring and Evaluation Support Team

GFATM Global Fund to fight AIDS, Tuberculosis and Malaria

HAART Highly Active Anti-Retroviral Treatment

ILO International Labour Organisation

M2M Mothers to Mothers (PMTCT programme in South Africa)

M&E Monitoring and Evaluation NAP National AIDS Programme

MAP Multi-country Assistance Programme

PEPFAR President's Emergency Plan for AIDS Relief
PMTCT Prevention of Mother to Child Transmission

Sida Swedish International Development Cooperation Agency

STD Sexually Transmitted Diseases

UNAIDS United Nations Joint Programme on HIV/AIDS

UNESCO United Nations Educational, Scientific and Cultural Organisation

UNFPA United Nations Population Fund

UNGASS United Nations General Assembly Special Session

UNICEF United Nations Children's Fund

USAID United States Agency for International Development

VCT Voluntary Counselling and Testing

1. Introduction

The international HIV/AIDS assistance is growing rapidly. The latest update from the Kaiser Foundation¹ shows that both commitments and disbursements for HIV/AIDS increased more than three-fold over the period 2002 to 2006. As a result, international HIV/AIDS assistance from the G8, EU, and other donor governments reached its highest level ever in 2006. The total HIV/AIDS assistance in 2006 was USD 5.6 billion, of which USD 4.5 billion was provided through bilateral channels.²

The surge of funding represents a historical opportunity to begin to reverse the global spread of HIV/AIDS and to mitigate the suffering caused by the disease. The key question is, of course, how? How do governments and international development cooperations spend money in the most effective and efficient manner towards this objective?

This study cannot answer this comprehensive and complex question. It can, however, assist in getting a better overview of the current evidence base, which then can be used as input to answering the key question of how to spend the money. More specifically, the current study provides a synthesis of donor financed HIV/AIDS interventions based on existing evaluations. The basis for the study is thus the evaluations made by bilateral and multilateral donors of their HIV/AIDS programmes.

Reading the evaluations focus will be on whether they can provide knowledge about how to design effective and efficient HIV/AIDS interventions. This choice of focus

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¹ See: The Kaiser Foundation and UNAIDS (2007). In addition, Appendix 2 of this report provides a brief overview of the size and composition of development assistance flows to this area. The Kaiser Foundation does unfortunately not provide an estimate of how the funding is divided between different types of interventions. No other consolidated and comprehensive source for this kind of information could be found.

² This includes earmarked multilateral commitments and USD 943 million to the Global Fund which is adjusted to represent the HIV/AIDS share of funding.

is to some extent unfair because it disregards other important outputs and functions associated with evaluations. This, for example, includes feedback about whether a programme is implemented as planned, whether it achieved its objectives, whether the budget and its priorities needed adjustments, and whether corruption was avoided. An evaluation focusing on these issues will "score low" in the assessment provided here – but could still be a good evaluation meeting its terms of reference.

The reasons for focusing on the knowledge evaluations provide about intervention design are:

- O HIV/AIDS appeared approximately 30 years ago. Over this relatively short period the understanding of the disease as well as of the best way to fight it has undergone frequent and dramatic changes. This is, for example, the case when it comes to Anti-Retroviral Treatment (ART). Ten years ago few would have believed that it would ever be considered an option in developing countries let alone that it would be scaled up to national coverage. The frequent and dramatic changes imply that it is difficult (if not impossible) to duplicate past programmes. The changes in tools and context thus necessitate additional analyses to identify components and attributes of successful programmes. Donor evaluations consequently have an obligation to contribute to the creation of knowledge and insights about HIV/AIDS intervention design.
- O The above mentioned significant increase in funding is expected to continue for at least the coming three to five years. Thus many new actors and stakeholders will become active in the field of HIV/AIDS in the near future, necessitating a systematic collection and dissemination of knowledge and experience.

The focus on understanding which interventions work implies that the level of success of a specific programme in principle is of secondary importance. What matters is whether the one can learn from the evaluation (and the programme that is evaluated). This observation rests on two key arguments: (i) that it is possible to learn from both a success and a failure and (ii) that a successful outcome does not automatically imply increased knowledge of what works and why.³ A prominent example of the latter is the ongoing discussion of whether A (Abstinence), B (Behavioural change) or C (Condoms) were responsible for the observed decline in prevalence in

5

³ In practice, agencies will, of course, still duplicate successful programmes despite that they might lack real knowledge of whether: (i) the good outcomes can in fact be attributed to the programmes, (ii) changes could be made to make the programme even more effective, and (iii) the programme is actually suited to the con-

Uganda during the latter half of the 1990s.⁴ By implication, this study will not provide a list or describe the successful HIV/AIDS interventions but rather discuss what can be learned from these.

To expand the search for answers HIV/AIDS evaluations will be supplemented by the evaluations and studies available in peer-reviewed journals and working papers. The peer-reviewed literature on HIV/AIDS is vast and growing rapidly, making it almost impossible to provide a comprehensive and all-inclusive study. It was therefore decided to rely primarily on meta-studies and reviews of interventions such as, for example, Cochrane reviews. In addition to making the task manageable, this also ensures that the knowledge included as basis for the study is comprehensive, balanced, and based on a certain level of consensus. The self-evident drawback is that it excludes the more recent research, which may not be an insignificant problem in a context of a field undergoing rapid change. This has to be kept in mind when reading the study.

Throughout the analysis "donor evaluations" will refer to the evaluations conducted and published by the development cooperation agencies, whilst "peer-reviewed evaluations" will refer to those identified in peer-reviewed journals or as working papers.⁵

In this context HIV/AIDS programmes are defined as programmes specifically addressing HIV/AIDS. This is not a trivial definition given the attempts to "mainstream" HIV/AIDS. The effort to widen the fight against the disease has resulted in incorporation and integration of HIV/AIDS activities in all types of programmes ranging from education programmes to public works programmes and even financial sector programmes. The exclusion of cross-cutting initiatives is not based on a premonition that these programmes by nature are less effective (no evidence exists to test such a notion), nor is it because they occupy a lesser share of the available resources (indications are that the systemic, cross-cutting approach to fighting HIV/AIDS is gaining in prominence). It is primarily based on a need to manage the scope of the analysis and a real lack of evidence on cross-cutting efforts.⁶

As for the subject area of the evaluations and the peer-reviewed articles focus will be on sub-Saharan Africa but relevant and interesting studies from other regions will be included as well. No restrictions will be made based on whether the pro-

⁴ See Cohen (2003) and Singh et al. (2003)

⁵ Donors may in parallel allow and/or co-fund the peer-reviewed evaluations of the programmes subject to evaluations. It is, however, not possible to adjust for such practice, and it would still be fair to expect that donor evaluations should mention and possibly include these results in their own evaluations.

⁶ This is, for example, the case in the evaluations of the DFID HIV/AIDS strategy – see Drew (2006) and Drew (2007).

gramme(s) subject to evaluation were implemented in a concentrated or a generalized epidemic.

The evaluations included in this study were identified through a comprehensive search of available websites and databases, initially resulting in the identification of 67 evaluations from 19 different donors (12 of which were bilateral)⁷. Subsequently, the identified evidence gaps were covered by peer-reviewed evaluations and studies.⁸

The identification of the studies was based on the following five criteria:

- o **Timeliness** (the studies/evaluations should be as recent as possible)
- o Geographical focus (focusing on but not restricted to sub-Saharan Africa),
- o **Evaluation methodology** (seeking to include innovative evaluations)
- o **Organisation** (representing both bilateral and multilateral donors)
- o **Intervention area** (attempting to cover all types of interventions)

Application of the above mentioned criteria implied that 29 evaluations were not included on the final list – the majority because they were too descriptive or had a strategic rather evaluative orientation. The 38 remaining evaluations can be categorized as follows:

Type of intervention	Number of evaluations
Prevention	25
Treatment (ART)	9
Palliative and opportunistic infections	4
Mitigation	7
Cooperation	9

The following initial observations can be made:

⁷ A few additional evaluations were added while going through those initially selected.

⁸ A separate report detailing the search and the reports/evaluations found are available upon request.

⁹ The categorization is indicative and several evaluations cover more than one area, hence the total number of evaluations exceeds 38.

- 1. The focus on prevention is natural given that treatment was not considered as a policy option before the end of the 1990's. In addition, as noted by Ainsworth et al. (2005), the portfolio of HIV/AIDS programmes is relatively young, implying that the number of evaluations of treatment programmes will increase in the coming years.
- 2. The process of finding the evaluations was not easy. Considerable time and effort was spent to identify the relevant studies. This mirrors an earlier observation made by Peersman and Rugg (2004)¹⁰, indicating that efforts to make HIV/AIDS knowledge more accessible and synthesize the findings has yet to yield results.
- 3. The HIV/AIDS literature is extensive, making it likely that the search has missed relevant studies. The present review should, however, still provide a relatively comprehensive view of the current donor evaluation literature.

Following this introduction, subsequent chapters analyze the various HIV/AIDS interventions, starting with prevention (Chapter 2) before moving on to treatment and palliative interventions (Chapter 3), impact mitigation (Chapter 4) and international cooperation (Chapter 5). Next, the monitoring and evaluation activities are the subject of Chapter 6, before Chapter 7 concludes, summarizing the key lessons of the study.

8

¹⁰ Ainsworth et al. (2005), Rugg and Novak et al. (2004), and Godal (2005) also identify the need to make key results and studies accessible to programme managers, evaluators and other key stakeholders.

2. Prevention

Prevention remains the mainstay of the fight against HIV/AIDS. Preventive interventions have, however, evolved considerably since the late 1980's. Back then, public information campaigns in character and design resembled vaccination campaigns. This implied "vaccinating" the affected populations with correct knowledge of HIV infection pathways and prevention after which they were assumed to change their behaviour accordingly. Since then, it has become evident that information is necessary but by no means sufficient. It has moreover become apparent that preventive interventions have to apply a variety of instruments and approaches to overcome obstacles presented by stigmatization and reluctance to change behaviour.

Although seeking to be as comprehensive as possible, this overview excludes preventive interventions that have not yet been used as a basis for policies and programmes. This includes vaginal microbicides¹¹, micronutrient interventions¹² and vaccinations.¹³

Initially it should be pointed out that preventive interventions in developing countries 14 suffer from a lack of information about the proper impact measure, namely incidence. Instead, preventive interventions have had to look at prevalence, which, for this purpose is fraught with obvious (and frequently acknowledged) problems. It is moreover not likely to improve anytime soon, as the infrastructure and resources to set up incidence surveillance systems do not exist. 15 Furthermore, the ongoing roll-out of treatment is most likely to exacerbate the problem as a higher share of patients will survive longer causing prevalence to increase. The inaccuracy of refer-

¹¹ Finley et al. (2006) provides a summary-form overview of the microbicide preclinical and clinical pipeline.

¹² Friis (2006) concludes that although interventions to improve micronutrient intake and status could contribute to a reduction in the HIV impact, more research is needed before specific recommendations can be made.

¹³According to most experts, a commercially viable and effective AIDS vaccine will, in the absence of a striking breakthrough, not be available within the next 10-15 years.

¹⁴ As pointed out by Martha Ainsworth (Centre for Global Development, 2006).

¹⁵ It is perhaps possible to use the measured prevalence from first time pregnant women consulting the antenatal care clinics as an indicator of incidence. It, however, will be biased (only covering the first time pregnant women that consult such clinics) and most likely also necessitate changes to data collection procedures.

ring to prevalence as a measure of impact will be repeated several times in this study.

2.1 Information campaigns and condom marketing

In order for a preventive intervention to be effective, knowledge of how and where the disease spreads is necessary. As described by Rugg et al. (2004) this essential knowledge was missing in the early phase of the response to HIV/AIDS. This prompted the allocation of substantial resources to fill this knowledge gap. As a result, current day preventive interventions in developing countries can be based on considerable knowledge of transmission risks¹⁶ and sexual behaviour, which in some cases exceeds the comparable knowledge base available for developed countries.¹⁷

Unfortunately, the expansion of knowledge about what determines the spread of the disease does not extend to knowledge about the determinants of successful information campaigns. None of the donor evaluations that include assessments of this type of interventions are able to extend the evaluation beyond programme outputs (and in some cases not even this far).

Overall, one intermediary output of the already undertaken HIV/AIDS informational campaigns is a significant increase in general knowledge about HIV/AIDS. Accordingly, in many developing countries the majority of the population know basic facts about HIV/AIDS. Whilst this constitutes an important base for future programmes the extent to which the increased knowledge has resulted in changes in behaviour is not known. Overall, very little is known about the effect that individual programmes have on, for example, knowledge about HIV/AIDS and behaviour. The evaluation of the national programme in Benin (USAID 2006b) is one of the better donor financed evaluations, establishing the level and extent of knowledge prior to the intervention. Unfortunately, the evaluation set-up lacks a control group, making it impossible to assess whether the observed increase in knowledge is attributable to the programme, let alone whether if it caused changes in recipient behaviour.

The lack of operational, programme-related knowledge is even more critical when it comes to the information campaigns targeted at high-risk groups such as intravenous drug users, commercial sex workers, and men who have sex with men. Although reaching these high-risk groups is critical for preventive success regardless of

¹⁶ It should in this context be mentioned that Bertozzi et al. (2006) are unable to find any assessments of the cost-effectiveness of surveillance programmes.

¹⁷ See Welling et al. (2006).

the stage of the epidemic, it is also, as documented by UNFPA (1999a) and UNFPA (1999b), notoriously difficult to reach these groups.

This is in part because the success of the preventive strategies depends upon local acceptance of sexual practices that are socially censured and stigmatized. It has, however, remained a key priority for donor agencies like the World Bank (see Dayton, 1998) and UNFPA (see UNFPA, 2002). More specifically, the 1996 World Bank strategy "Confronting HIV/AIDS" sought to circumvent the reluctance of local governments to deal with the issue by allocating the task to local NGOs. This strategy was, however based on an overestimation of the capacity of local NGOs and did not achieve the intended results. ¹⁸ This is unfortunately not atypical of the interventions designed to reach the marginalized, high risk groups. Hence, despite good intentions and the acknowledged high importance, donor evaluations have little to tell about how to overcome the barriers associated with stigmatization and sanctions.

One area that has received considerable attention is school based prevention programmes. This is in part because of the significant impact HIV/AIDS has had upon the young population¹⁹. In addition, there is a belief that an early introduction to HIV/AIDS information and risk (i.e. prior to or not long after the sexual debut) stand a better chance of affecting sexual behaviour and habits. UNICEF has been particularly active within this field, and UNICEF (2001) provides a summary evaluation of the programmes implemented from 1992 to 2001. Concerning the school based interventions (predominantly life skills programmes) it is noted that output indicators exist but that the actual changes in young people's attitude and behaviours are uncertain and unknown. Even less is known about the out-of-school programmes, which in addition is targeting youths that are likely to have a higher risk of getting infected with HIV. Here, however, the discouraging conclusion by UNICEF (2001) is that the organisation has no solid basis for comparing results. A similar conclusion is reached in a review of 68 programmes directed at HIV/AIDS and sexual health education on young people's sexual behaviour (UNAIDS 1997). Here it is concluded that: "inadequate attention has been paid to evaluation of sexual health education and therefore programmes have not benefited from lessons learned in the past."

The evidence base concerning school based interventions, however, improve once the evaluations available in peer-reviewed journals are included. Gallant and Maticka-Tyndale (2004) identify 11 programme evaluations – the majority of which rely on quasi-experimental designs with pre-post test assessments. Ten of the eleven

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¹⁸ See Ainsworth et al. (2005).

¹⁹ According to Gallant and Maticka-Tyndale (2004) more than 80% of those currently living with HIV/AIDS are aged between 15 and 24 and three quarters of these are living in sub-Saharan Africa.

programmes included in the review are able to demonstrate a significant improvement in the students' HIV/AIDS knowledge. Some (seven of the eleven) of the programmes surveyed by Gallant and Maticka-Tyndale sought to affect attitudes whilst a few (three of the eleven) also looked for changes in sexual behaviour. Whilst the attempt to change attitudes did report some degree of change. More specifically, programmes targeting primary school children had some success in influencing sexual behaviours compared with those targeting older, secondary school children. In addition, some success was noted among youth who were virgins at programme initiation compared to those already sexually active. For older youth (e.g., 17–18 years of age), no programmes were able to affect a change in sexual behaviours (e.g., abstinence and number of partners), although one programme was able to increase condom use.

A closer look at the study that was only able to document minimal and not statistically significant effects on student knowledge (e.g. Kinsman et al. 2001) opens a potentially problematic dimension of this type of intervention. The programme designers (e.g. Kinsman and co-authors) attribute the lack of effect to a (deliberate) lack of direct implementation assistance and monitoring. If this is correct, the programme was in effect, relying too much on the teachers' abilities to design and implement the HIV/AIDS information activities in their classrooms. But if special support and resources are needed to generate an effect, this could hold considerable cost and capacity implications for any effort to scale up school-based prevention programmes.

These findings should also be contrasted with the recent findings by Duflo et al. (2006). This study presents the results from a randomized evaluation comparing three different interventions: (i) teacher-based HIV/AIDS training, (ii) student activities related to prevention and the use of condoms, and (iii) reducing the costs of education. Duflo et al. find that the teacher-based training had little impact on students' knowledge, attitudes, and behaviour. In addition, teacher-based training was found to have no effect on the number of unwanted pregnancies, which was used as an (acknowledged imperfect) proxy for unprotected sex.²⁰ Interestingly, it was found that reducing the cost to pupils/students of education reduced school drop-out rates, teen marriage, and childbearing. This is both indicative of the complexity of the issue and that HIV/AIDS prevention can work through alternative channels.

Returning to the communication programmes directed at the general population, a systematic review of the effectiveness of these programmes conducted by Bertrand

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²⁰ It was not permitted to test for HIV infections in the student population, prompting Duflo and others to use unwanted pregnancies as a proxy rather than just relying on the potentially biased self-reported sexual activity.

et al. (2006) is discouraging. Apart from noting some success in getting people to abstain from high risk behaviour, little is known about the outcomes and impact of this type of interventions. Bertrand et al. (2006) notes that based on the available evidence it is not possible to answer the critical question of why some campaigns are better than others. This is partly due to the lack of a proper monitoring system and partly because the design of many interventions (according to Bertrand et al., 2006) are weak or flawed. The latter renders attempts to measure the outcome and impact of the programmes impossible. In addition, the problem of attribution remains difficult to overcome as (almost) all acknowledge that single factor explanations predominantly can be used to support ideological positions.²¹

The problems of creating a testable environment also affect the evidence on cost-effectiveness of this type of intervention. Significantly, Bertozzi et al. (2006) cannot identify any studies that have included cost-effectiveness assessment as an integrated part of information programmes or school based programmes.

Turning next to condom marketing, another long-time mainstay of HIV/AIDS prevention programmes, the situation is not much different. Although it has been established that condoms are effective, condom information and marketing is still associated with considerable controversy as well as local barriers caused by reluctance or discomfort associated with open discussions about sexually related matters. Despite these barriers informational campaigns and social marketing has caused condom use to grow rapidly in many developing countries – albeit from a very low initial level (Hearst and Chen 2004). Some of the problems lowering the effectiveness of condoms campaigns include: that condoms are used infrequently, that condoms are used for family planning purposes only, and/or that they are not used by people in high-risk of HIV transmission. The precise extent and nature of these problems are, however, not known as evaluations of this type of programmes (at best) records programme outputs (number of condoms distributed and/or number of vendors).

In sum, the number of evaluated information and awareness programmes is disappointingly low – especially taking into account the considerable resources and efforts spent in this area over time. It can, of course, be argued that the perceived role of correct information has changed from being a necessary and sufficient condition to being a necessary but not sufficient condition. This change of strategy can likewise in part be attributed to the experiences from the first generation HIV/AIDS campaigns that resulted in a wide dissemination of HIV/AIDS knowledge but failed

²¹ This includes, for example, the claim that A (Abstinence) of the ABC strategy provides sufficient basis for HIV/AIDS preventive interventions.

to limit the spread of the disease. In this context it is, however, important to point out that this conclusion cannot be backed by evaluation findings as the evaluative set-up for this type of interventions were either missing or deficient. This goes in particular for the evaluations completed by the development cooperation agencies, which only rarely extend beyond a description and record of programme outputs. To further complicate matters, information and condom marketing campaigns have changed over time as behavioural change counselling and follow-up interventions increasingly are integrated into the programmes, making it even more difficult to utilize the (few) lessons that do emerge from the existing evaluations.

2.2 Treatment of other sexually transmitted diseases (STD's)

None of the donor evaluations cover this type of interventions. However, based on a number of highly publicized clinical trials, treatment of other sexually transmitted diseases could have the potential to be included as part of a comprehensive package of preventive interventions. The generation of the evidence base and the evidence base itself are, however, not straightforward.

First, the Mwanza trial (Grosskurth et al. 1995) appeared to provide an answer to the question of why HIV was spreading so much faster in Africa than elsewhere. Although set in a specific setting in rural Tanzania, the results (and most notably the reduction in HIV incidence in the group receiving STD treatment) had a huge impact on the international HIV/AIDS community (see Phillpott 1999). The Mwanza results were perceived to provide a plausible explanation for the rapid spread of HIV/AIDS in sub-Saharan African, and provide agencies with an effective intervention to counter the spreading of the disease. Three years later, however, the Rakai trial (Wawer 1999) found no effect of an STD intervention on the incidence of HIV-1 infection. This came as a shock to those who had expected a corroboration of the Mwanza results.

Looking at the results of both the Mwanza and the Rakai trials Grosskurth et al. 2000, however, claim that the results may be complementary rather than contradictory. This viewpoint is seconded by UNFPA (2002). The argument is that control of STD's is a cost-effective and beneficial HIV-prevention measure in settings where HIV prevalence is low or moderate (Mwanza-like settings), whilst it may not always be cost-effective in settings with a low prevalence of STD and a high prevalence of HIV (Rakai-like settings). ²² Hogan and Salomon (2004) furthermore points to the

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²² Askew & Berer (2003) and Hogan et al (2007) also conclude that STD control is important for HIV/AIDS control.

established biological mechanisms²³ as well as the opportunity to counsel and test people seeking treatment as further arguments for considering this intervention.

Overall, consensus appears to be that treatment of other sexually transmitted diseases under some circumstances can be part of an effective preventive effort. Little is, however, known about how to scale up this type of intervention outside controlled trials. Furthermore, as pointed out by Bollinger et al. (2004) no information about treatment seeking behaviour is currently available for the relevant countries.

2.3 Voluntary counselling and testing

As noted by De Cock (2007) current efforts to expand access to treatment means little without more general knowledge of HIV sero-status. At present approximately 80% of the people living with HIV in low and middle income countries do not know that they are infected. Moreover, it is sometimes only a fraction of those who have been tested that actually knows the result of the test. Fear of stigmatization and/or social exclusion leads especially women to opt not to know. Voluntary or involuntary, this ignorance affects prevention efforts because the infected (and their partners) are less likely to change their behaviour. It furthermore affects the efforts to treat the infected because people typically seek medical help very late in the disease progression, rendering the treatment less effective (potentially leading to lower adherence). Voluntary counselling and testing is consequently perceived to be an integral part of both preventive and treatment programmes – in many cases providing the link between the two.

Unfortunately, donor evaluations do not contribute to the knowledge about the effects and design of this type of intervention. None of the donor evaluations proceed beyond recording the number of programme outputs (number of people counselled, number of counselling sites, etc.). As a result, donor evaluations provide only very limited information about the qualitative nature of the VCT offerings (what is being said and what is offered to the infected?).

Turning to the peer-reviewed evaluations, Wellings et al (2006) conducts a global review of behaviour change interventions, including VCT. Here, the effectiveness of the interventions are found to increase where information is supplemented by skill building and counselling (such as use of condoms and safe sex negotiations), where theory guides design, where several delivery methods are used and where context and need for sustainability is taken into account. These findings are, however, not

²³ Indicating that people infected with other STDs and in particular those with genital ulcers face a higher risk of infection.

directly applicable to a developing country context given that the lack of and/or deficiencies of the health infrastructure in these countries pose a significant barrier.

A randomized trial conducted in Tanzania, Kenya and Trinidad²⁴ measured changes in self-reported sexual behaviour following counselling. The results indicate that voluntary counselling and testing is most effective when offered to couples and in high-prevalence settings. As reported by Hogan and Salomon (2005) the overall assessment emerging from the controlled trials is that VCT appear to be able to reduce risky sexual behaviour among recipients, but that the effects of stigma and deficient infrastructure on treatment seeking behaviour is unknown.

2.4 Male circumcision

Male circumcision is another intervention which has attracted much attention due to a number of highly publicized clinical trials. However, as is the case for the STD interventions, large scale programmes that test circumcision as an intervention has yet to appear.

Looking at the evidence base, Gray et al. (2007) reports from a controlled trial in Rakai, Uganda that HIV-1 incidence is lower in the circumcised group than in the control group. This finding holds regardless of the socioeconomic, behavioural and sexually transmitted disease subgroup. Based on these results Gray et al. (2007) recommend circumcision for HIV prevention in men. A similar conclusion is reached by Bailey et al. (2007) conducting a controlled trial among young men in the urban area of Kisumu, Kenya. Overall, the Rakai and Kisumu trials found at least a 53% and 51% reduction in risk of acquiring HIV infection, respectively.

Based on these results²⁵ an international expert consultation was conducted in May 2007 (WHO-UNAIDS 2007a). Here it was concluded that the effectiveness of male circumcision in reducing female-to-male transmission of HIV had been proved beyond reasonable doubt. As a consequence, male circumcision was recommended as part of a comprehensive HIV/AIDS prevention package. The experts, however, emphasized that high awareness should be on preventing that false beliefs about the protective nature of circumcision undermine other preventive interventions.

²⁴ See: The Voluntary HIV-1 counseling and testing efficacy study group (2000).

²⁵ The findings of the South African Orange Farm Intervention Trial published in 2005 were also part of the evidence base.

In addition, the experts recommended further research on, treatment seeking behaviour, on whether changes in behaviour are related to the intervention²⁶, and on the extent to which the intervention can be used in resource constrained environments.

2.5 Prevention of mother to child transmission

It is estimated that children born of HIV-positive mothers have approximately 15-40% risk of getting infected themselves during birth. The administration of a short course of ARV can, however, reduce transmission risk by circa 50%. According to Reithinger et al. (2007) less than 10% of the infected pregnant women in developing countries currently receive antiretroviral prophylaxis. Donor interest in this type of programmes is based on a growing recognition that the benefits of providing ARV based prevention can go beyond the child at risk. This could, for example, create positive spill-over effects with respect to counselling, information, psychosocial support, behavioural changes and maternal health.²⁷

Most of the donor evaluations of PMTCT projects follow the already established pattern of providing a descriptive list of project outputs without establishing a baseline or a control group to assess the effect/outcomes of the programme. In general, the PMTCT evaluations find an increase in outputs and intermediary outcomes, but do not establish a link to impact, nor are analyses of cost or cost-effectiveness provided. The problems associated with the evaluations are exemplified by the UNICEF survey of PMTCT programmes (UNICEF 2003). More specifically, this review does not consider the problems associated with scaling up on the basis of the available evidence. Is there, for example, a bias in the selection of test sites? What is the impact of the existing infrastructure? What is the relative risk of infection? And what is the cost-effectiveness associated with an extension of the programmes to include breastfeeding (guidance, provision of substitute milk and support infrastructure)?

Another problem related to the evaluations of PMTCT programmes is identified by Reithinger et al. (2007). Reithinger et al. notes that an effective PMTCT programme depends on the design and execution of a sequence of steps. The necessary steps include: registration of the HIV-positive, pregnant women, obtainment of consent to test, receiving the test results, picking up the prophylactic treatment, taking the drug as prescribed, and receiving follow-up care and advice. Low coverage at any of these steps will compromise the overall programme effectiveness. Taking a close

²⁶ This could, for example, include men dropping condoms and/or practicing high-risk sex because they (mistakenly) perceive themselves to be 100% protected against HIV/AIDS.

²⁷ This consideration is in stark contrast to the early assessment by Dayton (1998) that prevention of mother to child transmission (PMTCT) should not be a priority public intervention, mostly because it did too little to halt the general spread of HIV/AIDS.

look at the indicators used by PEPFAR to evaluate their PMTCT programmes, Reithinger et al notes that linked observations enabling programme managers to address the problem are not generated as part of the PEPFAR monitoring and evaluation (M&E) activities. By implication, the M&E efforts cannot assist in improving the overall effectiveness of the programme.

The USAID evaluation of the South African Mothers-to-mothers (M2M) programme (Baek et al., 2007) is a notable exception²⁸ to the purely descriptive evaluations. According to Beak et al. the efforts to scale up PMTCT programmes typically face the following three constraints: (i) community perceptions and norms can make it difficult to receive medications during pregnancy and to abstain from breastfeeding, (ii) health centres are often over extended not being able to provide adequate support and follow-up, and (iii) women often drop out of the programme and/or have a low adherence to treatment and advice.

The M2M programme seeks to address these barriers by involving HIV-positive mothers as mentors and role models for programme participants. In addition, the evaluation of the M2M programme is based on a rigorous and theory guided collection of data before and after implementation. The results were encouraging: Matched up against non-participants, programme participants experienced greater psychosocial well-being, had greater use of PMTCT services, and also had better PMTCT outcomes. It was moreover found that the M2M programme kept women linked to health facilities for a longer period. This type of solid, evidence-based conclusion would not be possible without the stringent and systematic evaluation design. The only real shortcoming of the evaluation is the lack of attention to costs and cost-effectiveness – not least because the programme is based on an approach that could prove effective in terms of overcoming the barrier of overworked and deficient local health systems.

Peffer et al. (2001) presents model-based calculations of the costs of different types of PMTCT interventions in an urban area in Mozambique. The basic version of the intervention is found to be cost-saving. The provision of substitute milk is interestingly found to be more expensive and less cost-effective than hiring additional staff to augment and broaden the services provided. In general, the provision of substitute milk is found to deliver relatively small benefits (saving the lives of eight children compared to 132 through the provision of nevirapine). This is notable because

²⁸ Another exception is the WHO-UNAIDS (2007b) study from Botswana relating PMTCT to the impact of reducing child mortality, showing that there is not a demonstrable impact, without however being able to establish the cause.

the relative cost-effectiveness is not considered by any of the other evaluations making recommendations in this direction.

2.6 Overall assessment of the evaluations of preventive interventions

Overall, the evaluations of preventive interventions can be characterized as follows:

- O Almost all donor evaluations are based on a combination of desk reviews of the available documentation, case studies/field visits and interviews with key stakeholders. Very few donor evaluations establish the baseline prior to intervention, collect data, or include a control group to assess programme effects. Although not many in number, the peer-reviewed evaluations do to some extent fill these gaps – but only for small scale projects and not sufficient to guide scaling up efforts.
- O With the possible exception of the early perception that the dissemination of knowledge was a sufficient condition for effective prevention, the evaluations do not assist in the assessment of whether, for example, a programme failure can be attributed to a faulty design or a poor implementation.
- O The majority of the donor evaluations focus extensively on case stories based on qualitative observations often only telling the story of how the project has resulted in several outputs. The final report on the IMPACT programme (USAID, 2007a) is an example of excessive reliance on case studies in the presentation of programme results.
- O There is very limited focus on cost, cost-effectiveness and sustainability. However, as documented by Bertozzi et al. (2006) this problem is not exclusive to donor evaluations but extends to all studies within HIV/AIDS.²⁹ A recurrent problem is that HIV/AIDS in many organisations is treated as cross-cutting issue without a central budget line. This is, for example, the problem encountered by Drew (2006) making an interim assessment of DFID's "Taking Action" strategy. The cross-cutting nature of HIV/AIDS interventions makes it difficult just to assess the total funds allocated to HIV/AIDS, rendering cost-benefit analyses almost impossible.

different types of interventions and cannot substitute for actual studies of cost-effectiveness, taking into account local capacity and constraints. This problem is particularly acute for the interventions that rely heavily on the existing infrastructure like, for example, ART.

²⁹ Two notable exceptions are: Creese et al. (2002) and Hogan et al. (2005). The former estimates cost effectiveness on the basis of standardized information from the respective studies, whilst the latter is based on model-based estimates of the cost-effectiveness of different types of preventive interventions. Although very valuable this type of study will only provide an indication of the relative order of magnitude between the different types of interventions and cannot substitute for actual studies of cost-effectiveness, taking into

O There are virtually no attempts to link programme output to outcomes and impact. As pointed out by Rugg and Novak et al. (2004) expected outcomes usually overlap across different programmes. This obviously inhibits attempts to trace outcomes back to specific programmes. As a consequence, almost all M&E efforts focus on programme outputs. Consequently, no attempt is made to link programme outputs to overall impact, which is typically measured on the national level. It is essentially a case of the "missing middle", implying that very little is known about how programme outputs contribute towards the final impact.

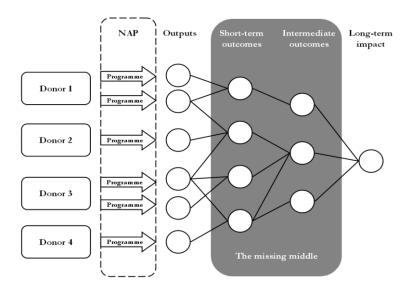


Figure 2.1 The "missing middle" in a multi-agency M&E logic model

The problem of the "missing middle" is illustrated by figure A, which is adapted from Rugg and Novak et al (2004). In the example four donors implement programmes under a NAP (National AIDS Programme), each of which generates traceable outputs. At the same time long-term impact is being measured – typically at the national level. A very prominent example of the "missing middle" is the aforementioned discussion of whether A (abstinence), B (behavioural change) or C (condoms) were responsible for the observed decline in prevalence in Uganda during the latter half of the 1990s.³⁰

O As noted by Brugha (2007) there is a tendency for international donors to focus on very broad national indicators (such as prevalence, number of people receiving treatment, etc). From the perspective of the organisations this implies that they can document their achievements in an easily communicable manner. It does, however, also make it virtually impossible to assess and

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³⁰ See Cohen (2003) and Singh et al. (2003)

improve the effectiveness of the mix and size of the programmes implemented – just as it becomes difficult to prioritize between programmes.

The monitoring and evaluation problems associated with the addressing the "missing middle" will be discussed further below.

3. ART, opportunistic infections and palliative interventions

While the HIV/AIDS epidemic in the first decade was characterised by the dreadful lack of treatment³¹, this situation radically changed in the mid 1990's. This process was marked by the successive international AIDS conferences of Vancouver in 1996 and Durban 1999. First, the 1996 Vancouver AIDS conference provided the venue for the announcement of the first effective anti-retroviral treatment (ART). This was in the form of triple therapy (using three drugs simultaneously) often named Highly Active Antiretroviral Therapy (HAART). Subsequently, the 1999 Durban AIDS conference was the starting and reference point for the international campaign to make ARV's³² accessible to developing countries. This movement was fuelled by the immoral contrast between prohibitively high prices in the context of developing countries on the one hand and the potential availability of an effective treatment for thousands, if not millions, of poor people in same countries on the other. Intense NGO and public pressure in combination with the parallel process of securitization of HIV/AIDS created a huge movement to make ARV available. The focus of public attention was (and to some extent remains) driving down prices of first-line treatment combinations.

While it is fair to say that the ART issue became politicized, almost a symbol or showcase for world injustice, the available evidence in terms of evaluations and scientific studies underpinning the drive to rapidly up-scale ART was fairly limited. It was predominantly based on small-scale interventions, many of them essentially pilot-projects in character. Actually, some studies indicated that ART would be associated with very low cost-effectiveness compared to other HIV/AIDS interventions. This was, for example, a key message emerging from Creese et al.'s (2002) study that summarized the available knowledge on cost-effectiveness of different interven-

³¹ It was, of course, possible to provide treatment of opportunistic infections and palliative treatment.
³² Throughout the analysis the difference between ART (Anti-Rertroviral Treatment) and ARV (Anti-RetroVirals) is that ART refers to the full treatment intervention (including testing, support, and surveillance), whilst ARVs only refer to the drugs – typically, first-line drugs.

tions. Despite this evidence, the world community (subject to increased public and highly opinionated pressure) moved forward accelerating access to ART. In recent years the movement to expand access to ART has been spearheaded by the WHO's "3 by 5"initiative, and has received considerable support from international stakeholder like the Global Fund (GFATM, 2002), the US President's Emergency Plan For AIDS Relief (PEPFAR, 2003) and the Clinton Foundation's HIV/AIDS Initiative (Clinton Foundation, 2002).

3.1 Anti-Retroviral Treatment (ART)

The treatment scene was and still is very dynamic, characterised by rapidly changing prices of the first-line drugs and to a lesser extent the prices for second line drugs and other commodities needed (e.g. test kits and lab costs), as well as changing treatment schemes and increasing insight into the problems associated with the implementation of large scale ART provision.

Attempts to characterize this field are further hampered by the dearth of both donor and peer-reviewed evaluations. A lack of studies, which most likely can be attributed to the fairly short time-span since ARV prices dropped to accessible levels, but also to the fact that large scale initiatives (e.g. GFATM) did not allocate substantial resources for concurrent research, a problem clearly described by Bennett et al in 2006. For that reason, there are still very few major evaluations or studies assessing the efficiency of ART in poor developing countries.

Looking first at the **number of people on ART**, this is reported regularly by the programmes. The numbers are increasing, with some countries, e.g. Brazil, Botswana and Thailand, achieving impressive rates in terms of proportion of eligible HIV-positive persons on treatment. However, for a majority of the developing countries suffering under generalized epidemics access to ART is constrained by limited affordability³³, deficient local health capacity, very limited knowledge about sero-status in the general population, and lack of funds. Still, the accumulated coverage is increasing and evaluations and studies are not capturing the latest figures.

In the context of scaling up ART coverage proper **adherence** is one of the frequently raised concerns not least regarding sub-Saharan Africa. The initial scepticism was among other things caused by the problems generally experienced with adherence to other forms of medications³⁴ in combination with the exceptional high requirements for adherence to ART. Nevertheless, the available evidence has yet to

³³ See, for example, Attawell and Mundy (2003) and Ivers et al. (2005)

³⁴ This is, for example, documented by Vermeire et al and DiMatteo et al. (2004) as referenced in Hardon et al (2006).

support the scepticism. Most studies have shown remarkably high adherence rates in poor developing countries, actually comparative (Attawell and Mundy 2003) or better (Mills and Shillcut 2004) than achieved in many OECD countries. It is, however, important to realise that although adherence rates may seem high measured as an average percentage³⁵ this may mask much lower adherence if measured as the proportion of patients that achieve the adherence rate of 95% needed to minimise risk of treatment failure and resistance. This is exemplified by Hardon et al (2006) who find that one third of the patients on ARVs in Botswana fail to reach this level. It is moreover important to emphasize that many ART programmes still are quite small and that they in many cases employ quite strict patient screening criteria. Consequently, the current high level of adherence may not be possible in a scaled-up and comprehensive coverage programme. Furthermore, adherence will also depend on the quality of the interaction with patients, which could cause adherence levels to drop when scaling up (as pointed out by a number of analysts, e.g. Mills and Shillcut 2006, Revenga et al 2006).

The WHO Adherence Working Group recommended in 2006 that both average adherence levels³⁶ and the percentage of patients achieving at least 95% adherence should be used as outcome measure. Moreover, Hardon et al. (2006) calls for clearer guidelines for adherence monitoring and support, and points to the utility of small scale studies conducted by local researchers and health workers using a combination of qualitative and quantitative rapid assessment tools. The analyses of key factors affecting adherence by Johnson and Witt (2007) and Hardon et al (2006) can be summarised as follows:

- Costs incurred while seeking treatment. This includes user fees, transport costs and foregone wages or income
- o Time spent while seeking treatment. This includes waiting time and time spent due to frequent drug refills
- O Side effects associated with the treatment
- Reluctance to taking the drugs among people who do not know the patients HIV status due to the stigma associated with HIV.
- Lack of quality counselling and community support

³⁵ This is defined as number of tablets taken correctly as a proportion of those prescribed as mentioned by Laing & Hodgkin as referred by Hardon et al. (2006)

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³⁶ Hardon et al (2006) recommends this to be defined as the percentage continuing ART after one year.

In summary, a number of factors may constrain adherence but reported adherence levels are so far high. Whether this can be attributed to programme and resource specific factors or whether they are related to patient specific attributes and incentives is not known. However, recently research showing low retention rates of patients on ART (e.g. Rosen et al 2007) as well as other new research results has given reason for renewed concern in relation to adherence (Wakabi 2008). Hence, attempts to scale up treatment should seek to address the shortage of knowledge about this important area.

The interest in maintaining a high level of adherence is not only related to securing a reasonable efficacy of treatment but also to the need to maintain very high adherence rate³⁷ in patients in order to avoid the development of **resistant HIV strains**. So far the evidence has not given reason to be alarmed about the development of resistance, but this could change as treatment is scaled up and/or more programmes are surveyed. As pointed out by Petersen et al (2006) the problem is very complex also regarding microbiological and epidemiological issues.

Another key concern has been whether the availability of ART would result in increased **risk behaviour** – an effect which has been seen in developed countries (Lamptey, 2002). There is evidence in the literature included here that this is not the case for people on ART (Crepaz et al 2004 (developed countries), Kennedy et al 2007 (developing countries)). Actually Kennedy et al (2007) found that people on ART had reduced risk behaviour, but also cautions that the review is based on only three studies and limited data and therefore does not allow strong conclusions. In developed countries it was found that people's beliefs about ART and the effect of low viral load may promote unprotected sex (Crepaz et al. 2004), while little is yet known in developing countries, and no systematic reviews documenting the effect of the availability of ART on risk behaviour in the population at large was found, although this clearly is an issue of significant importance.

In relation to ART, and on the positive side, many have argued that the possibility of treatment will lead people to be tested, and knowing their HIV-status may reduce risky sexual behaviour. It was, however, not possible to find comprehensive evaluations or studies on this rather complex issue.

Another matter is that lowering viral count reduces **transmission** although the degree to which this in practice reduces the spread of HIV is not yet clearly documented (many authors, e.g. referenced by Lamptey, 2002). This, however, is a two-edged sword, on one hand the effect is evidently desirable on the other hand knowl-

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³⁷ Individual patients achieving at least 95% adherence.

edge of this effect may lead to increased risk-taking behaviour (see discussion above).

All of the above mentioned factors: treatment outcomes, adherence, resistance, and related changes in awareness, testing, treatment seeking behaviour and sexual behaviour contribute to overall programme effectiveness, making it a very complex area to assess. Some quite thorough evaluations/studies have shown considerable efficacy in certain settings, but for obvious reasons not many studies have yet been conducted on larger scale programmes. Ivers et al (2005) in a meta-analysis noted clear although varying efficacy of ART in resource poor countries on lowering viral count (outcome), actually comparable to results in developed countries, particularly if medication was free. On the issue of how much longer people on ARV lives Attawel and Mundy (2003) indicates varying results and quotes figures from Brazil indicating an increase in median survival rate from 18 to 58 moths. WHO-UNAIDS (2007b) in their evaluation found "reasonable evidence of an association of ART scale-up and adult mortality..." in Botswana. In terms of output, e.g. number of persons put on ARV many programmes have shown considerable results (see above).

This leads to a discussion of **cost-effectiveness** where the difference between ART and other forms of HIV/AIDS interventions has diminished over time due to the dramatic reductions in the prices of especially the drugs included in the first line treatment regimen. Still, ART still stands out as having a lower cost-effectiveness than many other interventions (Hogan et al 2005, Bertozzi et al 2006). If second line treatment is included this difference becomes even more startling (see for example the programme in Thailand reviewed by Revenga et al (2006)). On the other hand at least for some more well off countries like Thailand ART still is comparable with other fairly expensive interventions such as many forms of cancer treatment, which economically and technically should be within reach for countries at this level of economic development (Revenga et al 2006). It should moreover be noted that given the fairly low in depth knowledge of the effects of different interventions, cost-effectiveness data are in most cases based on a vast number of assumptions³⁸.

One of the most difficult issues to include correctly in the cost-effectiveness analyses and one of the most essential resources needed to meet the ambitious targets for ART coverage is **human resources** – health personnel. This constraint is pointed out by several studies (e.g. Hirschorn et al 2006, IoM 2006, Schneider et al. 2006, Attawell and Mundy 2003) and is maybe the most difficult to solve in the short to medium term, as it demands not only resources but also training capacity. There are

³⁸ As pointed out by authors such as Hogan et al.(2007).

several estimates of the number of staff needed, and the numbers of qualified staff required are daunting. Hirschorn et al (2006), for example, estimate that the human resources needed to implement The WHO 3-by-5 strategy to be in the range of 20,000-100,000 core clinical staff. As most countries do not have unemployed health staff to draw on, an additional and often severe problem is that HIV/AIDS activities may reduce staff availability for other priority programmes, as noted by the Joint External Evaluation of the Health Sector in Tanzania: "key personnel are being diverted from priority activities, e.g. malaria control and maternal health" (Cowi & others 2007). One important factor influencing the need for human resources is decisions regarding the skill mix needed for the different interventions (e.g. whether a nurse can replace a doctor for certain tasks).

The constraints imposed by insufficient health personnel and deficient infrastructure are related to the key issue of **sustainability** of ART. This is widely acknowledged as a formidable problem given the cost involved for LDCs experiencing generalized epidemics, the huge dependency on donor funding and the well-known tendency for donor priorities to shift³⁹. The cost factor also depends on how effective different HIV/AIDS interventions are with the highest cost incurred in a situation of effective ART combined with ineffective prevention, resulting in continued high number of new HIV positive (incidence) that together with existing HIV positives will live longer on ARV resulting in a high number of patients on ARV (Over 2004). This not unlikely scenario emphasises the broader issue of assigning a high priority to prevention alongside ART, not only to avoid spiralling cost but also to control the epidemic, as highlighted by many organisations and authors and illustrated by Baggaley et al's (2003) modelling of the effect of different scenarios for ART and prevention efforts. The need for renewed attention to prevention of HIV infections in the context of a country with rapid up-scaling of ART was also recently pointed out by the Joint External Evaluation of the Health Sector in Tanzania (Cowi & others 2007).

While it is fairly easy to ensure **equity** and gender balance in small donor driven pilot-projects, major up-scaling particularly in situations with lack of the required staff will create problems, as clearly illustrated by benefit incidence studies on general health service consumption in poor countries, showing that the higher income groups often consume a disproportionate amount of the government funded services (e.g. Gwatkin 2004). This poses a problem not least to many donors, for whom equity and gender balance are top-priorities for their development assistance. The issue has not yet been subject to systematic evaluation or major studies, but one

³⁹ One can for example only speculate what the implication of the rapidly increasing focus on climate change may be for the current interest in and funding for HIV/AIDS.

study regarding palliative care (Harding et al. 2005b) clearly documents that equity is an important problem.

3.2 Opportunistic infections, palliative treatment and home-based-care

The uptake and impact of treatment of opportunistic infections and of palliative treatment was not the topic of nor actually mentioned in most of the identified evaluations and studies. Harding et al (2003 & 2005a&b) has, however, done comprehensive reviews of the latter. They found in 2003 that national strategies were largely absent and a pressing need for expansion of palliative and end-of-life services and the need for advocacy in this context were highlighted. In 2005 it was found that both hospice and home palliative care improved patient outcomes, but the lack of evidence on efficiency was pointed out, furthermore the issue of equity in access was raised. Most of the evidence on palliative care stems from developed countries.

It was not possible to identify substantive evaluations or studies to assess homebased care interventions.

4. Impact mitigation

The effects of HIV/AIDS in terms of people dying with all what it entails of suffering and economic impact, is further aggravated by the fact that it primarily affects people in the productive age, substantially adding to the economic effect, as Lamptey (2002) puts it: "large numbers of young children and older adults will have to be supported by a shrinking proportion of productive adults". In addition it is creating a huge societal problem of orphans, both in terms of care for the orphans, as well as in terms of their future ability to fit into and contribute to society. Not many evaluations address these issues.

Orphans & Vulnerable Children: It was only possible to find one evaluation⁴⁰ addressing this issue, and this was limited to the issue of sustainability of NGO projects where it found that the majority had good prospects for sustainability. Collaboration with government was generally found to be very important in this context. (Rosenberg et al. 2007).

Workplace interventions: In terms of securing human rights but also of increasing VCT and ART, workplace interventions have a lot of potential. Most studies rely on self reporting from company executives. In 2007 Mahajan et al. found that national legislation and firm-level policies are important; that larger firms and certain sectors are more active; and that there is a danger of "burden-shift" to public sector and households. Also in this area there is a lack of systematic and solid evidence, which is unfortunate as evidence on possible cost-savings for the affected companies may be instrumental in persuading more companies to become active within the field of HIV/AIDS.

Human Rights: Mainly due to the stigma associated with being HIV positive, issues concerning human rights, particularly discrimination of HIV positives, are central to dealing with the epidemic. It was, however, not possible to identify substantive evaluations or studies to assess this important component.

⁴⁰ Not including studies of single interventions, but only donor evaluations and review/meta-studies, and apart from the PERFAR evaluation indicating provision of support to over 2 million orphans (IoM 2006).

Economic impact mitigation: Many studies describe the economic impact of HIV/AIDS, and interventions for example in the agricultural sector have also aimed at mitigating these, but these interventions have not been the subject of substantive evaluations or studies.

In conclusion, despite the importance of impact mitigation surprisingly little in terms of evaluations or studies trying to synthesise more broad-based insight was found.

5. Donor coordination

The international HIV/AIDS assistance is composed of an extensive and heterogeneous set of contributing organisations. Overall consensus can, however, be reached on the fact that focus should be on the poorest countries and the poorest segments within these countries. In addition, all stakeholders agree that these communities should be reached with cost-effective and easy to use interventions, and that all have to collaborate and coordinate efforts to be able to obtain these objectives.

According to UNICEF (2001) inter-organisational collaboration and coordination can come about through the following three (not mutually exclusive) mechanisms:

- 1. Mandated design. A central agency or the recipient governments allocate and align the different tasks.
- 2. Standardization. Adaptation of common measures, formats and procedures makes it easier for organisations to cooperate, enabling them to focus on their comparative advantages.
- 3. Trial and error. Adaptive learning enables organisations to gradually acknowledge and experience the benefits of cooperation, prompting them to take steps in this direction.

To date, the underlying premise behind the aid-effectiveness debate has been to seek to reduce transaction costs through harmonisation and alignment – in effect opting for the second of the three mechanisms mentioned above. This is also the case within the HIV/AIDS community. Here, organisations spearheaded by UNAIDS have sought to increase and forward standardization. This has, for example, been extended to: the monitoring and evaluation approach (UNAIDS, 2000), the construction of a set of national impact indicators (UNAIDS, 2002), and the "Three ones principle" (UNAIDS 2005a). One could argue that the latter com-

⁴¹ The "Three ones" calls for one organizing national authority that all donors work with; one national strategic plan that all donors use to plan their activities; and one comprehensive national M&E plan that all donors work to support.

bined with operational (and enforced) national plans in the end can constitute a "mandated design".

The success of this indirect approach to enhanced cooperation and collaboration is, however, dependent on three conditions. First, that sufficient knowledge must be available to form the basis for the standardisation. Second, that some measures must be put in place to control the implementation and adherence to the standards. Third, that individual institutions must be willing (and able) to identify their comparative advantage and focus on this.

As for control and enforcement of standards it can also come about through three different (not mutually exclusive) policy instruments: (i) directives and mandatory adherence, (ii) financial incentives and/or condition for support, and (iii) analyses and reports demonstrating expected benefits of adherence to the standards. As for the first policy instrument, the opportunity and willingness to dictate what autonomous organisations and governments should does not exist. The second policy instrument of financial incentives and aid conditionality has, to our knowledge, not been used to increase adherence to HIV/AIDS standards. As a result, UNAIDS has to rely on trying to convince other stakeholders of the benefits of adhering to the agreed standards. It is, however, still too early to pass a verdict on whether these attempts have resulted in actual changes of practice and adherence to the standards.

As for the willingness of organisations to focus exclusively on their comparative advantage it is not evident that this will be straightforward. Considerable overlaps exist between the different organisations. Following UNICEF (2001) the following areas of overlapping responsibilities can, for example, be identified for UNICEF: adolescent health (UNICEF & UNFPA), safe motherhood (UNFPA and WHO), child labour (ILO and UNFPA) and education (UNESCO). For any organisation of this size a decision to focus resources and competences on (fewer) comparative advantage areas could entail considerable transformational costs. In addition, it could require having to give up areas with a higher public profile and/or greater chance of generating results. Accordingly a reorientation towards the comparative advantages might (despite it being efficient and beneficial for the entire aid community) not make sense for the individual organisation in the short to medium term.

It has unfortunately not been possible to identify evaluations of attempts to generate and/or forward donor coordination and collaboration. The only evaluation addressing an aspect related to cross-agency collaboration is Sida (2007). The focus of this evaluation is the assessment of the effectiveness of a regional organisation directed at enhancing the exchange of knowledge and ideas across sub-Saharan African countries. Perhaps symptomatically, the evaluation does not consider the effect

upon the individual beneficiaries (the national HIV/AIDS programmes). Instead, focus is on internal management issues related to making the regional institution supported by Sida more operational.

The problems pertaining to harmonisation and alignment of the big HIV/AIDS initiatives (e.g. GFATM) have been pointed out by many observers and also concretely noted in Tanzania. Here it is stated that "the coordination and integration of HIV/AIDS services...between Government of Tanzania and Global Health Initiatives and within Global Health Initiatives and the different donor partners remains challenging" (Cowi & others 2007). The Centre for Global Development in Washington DC has recently initiated a research project⁴² that will take a closer look at the collaboration and coordination between the three biggest HIV/AIDS donors.⁴³ This project has, however, yet to produce results.

⁴² See: http://www.cgdev.org/section/initiatives/_active/hivmonitor.

⁴³ The three biggest donors are: The Presidents Emergency Plan for AIDS Relief (PEPFAR), The World Bank's Multi-country Assistance Programme (MAP) and the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM).

6. Monitoring and evaluation

This study has repeatedly returned to the problems associated with deficient or altogether missing monitoring and evaluation of HIV/AIDS programmes. In general, the majority of the donor evaluations can be characterized as:

- Relying almost excessively on desk studies, case studies and stakeholder interviews, only very rarely including a systematic collection of quantitative and/or qualitative information before and/or after the implementation of the programme.
- Excluding almost completely any assessments of cost, cost-effectiveness and sustainability of the programmes.
- O Ignoring the question of whether and to what extent programme outputs contributes towards improving the overall (often national) impact measures. The combination of programme evaluations focusing outputs and national impact measures has resulted in a "missing middle" where no one is seeking to understand if and how programme outputs affect the overall (shared) impact objectives.
- O Disregarding the crucial issue of whether the programme subject to evaluation can be scaled up. This goes for both the identification of hurdles to scaling up as well as estimates of the resources necessary to do so.

Several other studies have made similar observations. Ainsworth et al (2005), for example, note that "the severe lack of good information on which to base decisions is a theme that runs through most – if not all – HIV/AIDS strategy and project documents." This could prompt the question of whether the monitoring and evaluation activities of HIV/AIDS programmes are worse than in other health programmes.

Judging from the example set by the World Bank, this does (unfortunately) not appear to be the case. Alderman (2002) reports that 70% of World Bank health sector

completion reports show 'no data' for outputs or outcome. Moreover, in many cases neither borrower nor the World Bank can attest to results achieved beyond anecdotes. In addition, Ainsworth et al. (2005) finds that the technical ratings of already completed HIV/AIDS projects are similar to those achieved by other health projects.

It can, however, be argued that the stakes are higher within the field of HIV/AIDS. The underlying argument would be that M&E activities within HIV/AIDS are of particular interest because the current level of funding could be temporary. This prediction of a medium to long-term falling level of funding is not based on an assessment that the developed world cannot afford to maintain the current level of funding, it can. Donor interests has, however, previously been shown to be fickle. Furthermore, institutional constraints in terms of political attention and organisational focus will limit the number of key causes. As a consequence, HIV/AIDS programmes could eventually be replaced by programmes designed to stop global warming or another emerging case.

But if the current high-level of funding and activity results in institutional development and/or a generation of new knowledge about how to design and implement effective and efficient interventions this would enhance the value and efficiency of future assistance. A similar argument has recently been raised forcibly by Garrett (2007), emphasizing an urgent need to build institutional and human capacity to the point of having workable local institutions as well as to document and analyze what is working and why. Given that HIV/AIDS monitoring and evaluation efforts should have received special attention, what can explain the current dearth of quality evaluations? The following explanations have been proposed: a perceived sense of urgency, lack of clear HIV/AIDS strategies, a fear of critical evaluations, a sense that results and impact are difficult to attribute to a single programme, and missing incentives to evaluate. These are five not mutually exclusive explanations that will be considered below.

The notion that a perceived sense of urgency⁴⁴ is an obstacle to conducting M&E activities within the field of HIV/AIDS is based on a fear that agencies skip the often time consuming task of setting up an M&E infrastructure to be able to disburse funds faster. An example of such a perception is provided in the evaluation of the German bilateral assistance to HIV/AIDS. In this context, the German programmes were criticized for not paying sufficient attention to M&E (BMZ 2004). A critique to which the Ministry responded as follows: "It has largely become an interna-

⁴⁴ This has been suggested by Ainsworth et al (2005), Center for Global Development (2006) and Peersman and Rugg (2004).

tional consensus that HIV/AIDS projects should be considered as "emergency relief"... This means that evaluation criteria, particularly with regard to the issue of sustainability, must be subjected to differentiated assessment."

One way that agencies try to avoid delays and still conduct proper monitoring and evaluation is to implement the M&E infrastructure as they go along.⁴⁵ This is, for example, the case for the ongoing World Bank MAP programmes. According to Ainsworth et al. (2005) one of the key policy objectives behind the decision to have a concurrent implementation of the M&E infrastructure was the sense of urgency. Unfortunately, the available evidence indicates that the M&E initiatives have not been implemented as planned in the MAP programmes. This was in part because M&E budgets were used as reserve funds, and in part because they were not earmarked for their initial purpose.

The second obstacle of lacking clear HIV/AIDS strategies is reported to be a problem in the recent interim evaluation of DFID's Taking Action Strategy (Drew, 2006) and in the evaluation of the UNICEF response to HIV/AIDS in 1990's (UNICEF, 2001).

Whether a fear that critical evaluations will have a negative effect upon the funding to HIV/AIDS really acts as an obstacle to HIV/AIDS evaluations (as is claimed by Bennett et al 2006) is difficult to assess. Not surprisingly, it has not been possible to identify documentation of this obstacle.

The fourth obstacle mentioned is the perception that results and impact are too difficult to attribute to a single programme, reducing the need as well as the value of conducting evaluations. Considerations of this nature are reported by Bennett et al. (2006), who find that global programmes increasingly question whether it makes sense to measure intermediary outcomes and outputs. This discussion has, according to the coordinator of the World Bank HIV/AIDS evaluation, Martha Ainsworth (CGD 2006), been taken too far. Ainsworth points out that one needs to differentiate between a pure transfer of funds and, for example, technical assistance. In the case of the former fungibility makes it very difficult and close to meaningless to talk about attribution, whereas it would make sense to uncover how the latter affects outcomes and long-term impacts. In this context it should perhaps also be added that M&E activities, as mentioned previously, may address several other objectives. Hence, M&E activities will add value even if attribution is close to impossible.

The fifth obstacle, the lack of incentives to evaluate, is stressed repeatedly by Wilson (2004) and Ainsworth et al. (2005). Bennett et al. (2006) furthermore points out that

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⁴⁵ See, for example: Bennett et al (2006), Hogan and Salomon (2004) and Ainsworth et al. (2005)

the output of properly conducted monitoring and evaluation often is a public good, implying that individual agencies will under invest in this activity compared to what is optimal for society. As for the lack of attention to M&E activities, it is perhaps best illustrated by reference to the evaluation of the AusAid programme in Papua New Guinea (AusAid, 2005). Here, M&E guidelines were published $3\frac{1}{2}$ years after the start of the programme and less than a year before it ended.

What can be done to improve the quality and relevance of HIV/AIDS evaluations? Several different proposals can be identified. Some like Brugha (2007) and Bennett et al. (2006) propose an increased involvement of external researchers. Others like Bertozzi et al. (2006) and Peersman and Rugg (2004) suggest that efforts are made to make the already existing evidence more accessible. Given that Ainsworth et al (2005) finds that even key World Bank staff has limited knowledge of the World Banks own analytical work, it would appear that there is a clear need for this type of surveys. However, as mentioned by Peersman and Rugg (2004), the overall paucity of methodologically sound evaluations will put a limit to the total benefits to be gained from this approach.

Another option could be to sit back and wait. The portfolio of HIV/AIDS programmes is still young. One could just wait for the evidence and knowledge to accumulate? However, despite the fact that considerable progress has been made it is unlikely that the problem will solve itself. The World Bank MAP programmes are, as mentioned above, likely to suffer from the problems associated with having the M&E infrastructure implemented on the go. At the same time most of the PEPFAR indicators are of a global nature, measuring impact which not necessarily is attributable to the interventions. Finally, Brugha (2007) asserts that the Global Fund appears to be leaving the project appraisal form because it is too time consuming and makes it difficult to get an overview. Instead the Global Fund appears to move towards a global indicator approach, in which case upcoming evaluations would do little to fill the identified knowledge gaps. A brief survey of some of the biggest HIV/AIDS donors does not suggest that the upcoming evaluations will solve the problem.

A different option could be to focus on the incentives to conduct M&E activities. Wilson (2004) illustrates this point by reference to the difference between World Bank HIV/AIDS Programmes and Global Fund projects. The former does not require partners to have a functioning M&E system, whilst the latter emphasises results-based disbursement and requires partners to establish and maintain M&E systems. According to Wilson (2004) this results in Global Fund recipients prioritizing monitoring and evaluation activities. Moreover, increased focus on incentives to

evaluate could have an even higher appeal if the activities were designed to assist programme managers in improving their programmes. This could, for example, include the addition of a rudimentary longitudinal monitoring set-up in PMTCT interventions, which, as pointed out by Reithinger et al. (2007), would enable programme managers to infer where programme effectiveness and efficiency can be improved.

Yet another option, which could be combined with all of the above, would be to introduce a more integrated approach to evaluation and programme design. As a result, one could, for example, conduct an impact evaluation with controls – even within national coverage programmes. In this context Feachem (2004) directs attention to the nationwide hepatitis B vaccination in The Gambia and the implementation of the 'Progressa' income transfer scheme in Mexico. In both countries it was concluded that the roll-out of a national programme could be randomized in a way that was ethical and that would not disadvantage citizens in comparison with an unrandomized roll-out. Hence, by utilizing the inevitable delays in rolling out a national programme, evaluators obtained a set of controls. This proved especially valuable in the case of the Progressa programme, which provided supplementary food to school children in Mexico. More specifically, the households that received food supplements did not increase primary enrolment – a finding that in the absence of a control group would have lead to a conclusion that the programme was ineffective. The inclusion of a control group, however, revealed that the controls had experienced a decline over the same period, identifying an improvement attributable to the programme that would have gone unnoticed without the inclusion of controls.

A related and necessary activity is to strengthen the local capacity to undertake evaluations. According to the World Bank's Global GAMET initiative only half of the 35 countries receiving support from GAMET have M&E frameworks and operational M&E plans. Currently, less than one third of the 35 countries have M&E systems that are regularly reporting on key performance indicators. 46 As pointed out by Meda (2004), the international community had underestimated the evaluation capacity in the developing world. Therefore, donors and international organisations now need to provide the incentives and support for a local development of evaluation capacity. This, obviously, needs to be seen in a long-term perspective given the considerable time it takes to build up and maintain local capacity.

Another option is, as pointed out by Martha Ainsworth (CGD, 2006), to set more manageable objectives. Many evaluations tend to focus on too many objectives and

⁴⁶ This information was found on the GAMET homepage: http://go.worldbank.org/UMIJGMCOL0 accessed on 10 December, 2007.

questions, making it impossible to dig deep enough to find useful and operative knowledge.

This study is concerned with evaluations and more comprehensive studies (constituting some level of consensus as e.g. meta-studies, Cochrane Reviews and reviews of studies). Clearly many agencies have quite elaborate monitoring and reporting systems in place, as exemplified by the "2006 Report on the global HIV/AIDS epidemic from UNAIDS" (its 10th anniversary special edition) and the yearly country based UNGASS reports. They do, however, rarely provide evidence for the efficiency of specific interventions and are by their nature not independent sources of assessment.

Finally, organisations need to accelerate the collaboration and harmonisation of monitoring and evaluation efforts. As pointed out Rugg and Novak et al (2004) increased collaboration and coordination are essential as no single agency adequately can respond to the growing need for M&E data and insights. This is a difficult and long-term process, which only gets more difficult by postponement (c.f. earlier remarks about the difficulties associated with generating collaboration).

To sum up, what is needed is knowledge about how to design and implement effective and efficient HIV/AIDS intervention. In addition, there is a desperate need for information about the cost and cost-effectiveness of these interventions. Both types of knowledge are currently not available from the donor evaluations.

The identification of these knowledge gaps is not based on a belief that evaluations can come up with a list of preferred and ranked interventions for any context. This is, of course, not possible. But the current situation where the necessary knowledge often does not exist or (at best) is held by the experienced people working in the field does not bode well for the ongoing expansion of HIV/AIDS interventions and coverage.

Of course, evaluation and comparison of different designs is not easy as evaluators have to be able to differentiate whether a success/failure can be attributed to the design, to the implementation or to changes in the environment. Complex questions like these can to some extend be answered by using some form of controlled experiments, which, however, often face practical and political obstacles. Another problem is that this type of evaluation almost inevitably will cause delays in the implementation (and disbursement of funds).

However, as demonstrated by the evaluation of the South Africa Mothers-to-Mothers programme (Beak et al., 2007) it <u>can</u> be done. Whether it <u>will</u> be done essentially depends upon the political and organisational will to do so.

7. Conclusion

This synthesis of HIV/AIDS evaluations indicates that the international community lacks knowledge about how to spend the considerable funds raised. Although unlikely to constrain activities and programme implementation, the lack of solid and systematically assessed knowledge most certainly will constrain effectiveness and efficiency. In this context, the fact that many experienced health professionals working within the field of HIV/AIDS most likely already possess necessary knowledge and know-how constitutes a certain irony, as this knowledge could become far more valuable if collected, analysed and made available for others.

The stakes are especially high when it comes to scaling up ART treatment, which will put considerable pressure on national health systems and holds considerable risks. This includes, for example, the uncertainty related to the question of whether adherence can be kept sufficiently high to minimize drug resistance as well as possible changes in risk behaviour. The presence of potentially significant negative externalities makes it imperative that the involved agencies begin to collect knowledge about how scaling up ART affects the health systems, patients and other involved parties.

Up until recently, a perceived sense of urgency in combination with rapid and dramatic changes in knowledge of and tools available to address the disease has resulted in little accumulation of useful and up-to-date knowledge. Most dramatically, it has given rise to the problem of the "missing middle". This prevents health officials from assessing the isolated and collective efficiency of the programmes implemented in a country and curbs attempts to prioritise national HIV/AIDS plans to make better use of the available resources.

The key question in this context is: who should address the above mentioned problems? Individual programme managers and evaluators neither have the resources nor the incentives to address problems of this magnitude and complexity. National governments on the other hand are unlikely to have the resources to undertake such tasks. This implies that the onus falls upon the multilateral organisations which have access to the necessary expertise and funding. Any attempt to undertake such an endeavour would have to be well coordinated and represent a workable compromise between being as comprehensive and detailed as possible and addressing the operational need for pragmatic and workable solutions. The current situation of huge investments in and scaling-up of what essentially amounts to unproven medical technology without sufficient follow-up research to enable timely corrective measures is potentially a waste of resources and could have severe side effects. It must be addressed.

This is no simple task. The initial campaigns based on an implicit rationale of just having to "vaccinate" the population with correct knowledge have been replaced by comprehensive and multifaceted programmes, which in many ways⁴⁷ resemble chronic disease programmes of developed countries.

Obviously, the fight against HIV/AIDS cannot wait until knowledge is complete, but agencies are currently missing opportunities to: (i) integrate monitoring and evaluation into programmes, (ii) to improve the incentives to undertake them, and (iii) to strengthen the local capacity to assist and eventually assume responsibility for these activities. It is time that the pressing need to address these issues is recognized outside the evaluation and research communities – otherwise the current surge of activities and funding could end up leaving very little behind.

In summary, the following recommendations from this study must be emphasized:

- Globally the need for research should be analysed and priorities agreed; it
 appears that these would particularly be in the areas of identifying the most
 cost-effective approaches as well as in relation to the scaling up of interventions.
- Sufficient funds for research and evaluation must as a matter of urgency –
 be allocated by organisations and within programmes multilaterally, bilaterally as well as in developing countries.
- o Programmes and interventions should incorporate in their design methods to evaluate the intervention and particularly to provide evidence on efficiency.
- Organisations should consider harmonising and aligning their evaluation activities in order to utilise the resources used for evaluations better in terms of addressing the questions that globally needs answering.

⁴⁷ This includes, for example, the need for follow-up, the fact that a successful outcome depends on successive and interrelated interventions, and the existence of complementary inputs and outputs.

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Appendix 1. Terms of Reference

October 2007

Danida reference: 104.A.1.e.78

Background

Several donors, including Danida, have in recent years increased assistance to the fight against HIV/AIDS and further increases are planned for the coming years. A number of evaluations have already been carried out of HIV/AIDS related donor support, but many of these evaluations focus on the assistance of a single agency, and the relatively steep increase in the support to HIV/AIDS related activities as well as the increasing number of development cooperation agencies active in this area have increased the demand for an easily accessible synthesis of existing evaluations and related studies.

In order to inform not only Danida, but also colleagues abroad, the Evaluation Department of Danida has decided to commission a synthesis of a number of available finalised evaluations of support to the fight against HIV/AIDS. The sample of evaluations covered by the synthesis will be identified by the consultants, but will be approved by the Evaluation Department of Danida.

A number of evaluations are also ongoing, and Irish Aid is considering making a study of these ongoing evaluations. The two studies will coordinated in order to complement each other.

Objective

The synthesis has three main objectives:

1. First, to make a list of existing finalised evaluations and relevant studies of support related to HIV/AIDS based on the Internet. In addition an overall assess-

51

ment of the size and composition of the assistance to HIV/AIDS will be provided based on OECD CRS data.

- 2. Second, to make a synthesis of main findings and recommendations of an identified sample of evaluations and studies.
- 3. Thirdly, to make a methodological assessment of the evaluations included in the sample.

Output

The final report will be a synthesis report of not more than 30 pages plus appendices. The final synthesis report will be published and made available on the Internet by the Evaluation Department of Danida.

In addition the intention is to present the synthesis report on a workshop organised by the Evaluation Department. It will also be considered to offer a presentation of the report to Irish Aid in Dublin.

Scope of work

i) As it is necessary to know the overall size of the flows as well as the relative roles of the different development cooperation agencies, a set of tables describing the size and distribution of this type of assistance as well as an overview of the key development cooperation agencies and their respective roles will be prepared and provided as an appendix to the report.

A list of evaluations and studies, which will also be annexed to the report, will constitute the basis for the identification of the sample of evaluations and studies to be assessed in more detail. The consultants will search the Internet for evaluations and relevant studies, and the final list will also contain a short presentation of each evaluation and study.

Based on the list the consultants will propose a sample of evaluation and studies to be analysed in more detail in the report. The sample, which will be approved by the Evaluation Department of Danida, should be selected based on explicit criteria like

- O Regional coverage? Here focus will be on sub-Saharan Africa
- O Type of Development Cooperation Agency? Both bilateral and multilateral evaluations and studies will be included

- Type of intervention? Here the coverage will include both preventive, curative and palliative interventions
- Time period covered? Focus will be on evaluations conducted within the last decade

Evaluations and studies of general support and capacity building within the health sector as well as evaluations and studies of support provided for medical research and drug development within the field of HIV/AIDS will not be included in the sample. The synthesis report will to the extent possible not include assessments of individual HIV/AIDS projects and programmes and only secondary sources will be used.

- ii) For each evaluation and study in the sample the consultants will prepare a summary of:
- 1. The key findings. What are, for example, the conclusions regarding the effectiveness of different preventive interventions and what is the verdict on programmes that involves subsidized procurement, distribution and use of HAART therapy in developing countries? And what are the advantages and disadvantages of different support modalities?
- 2. The scope. Is the evaluation or study, for example, restricted to certain sectors? What is the timeframe considered? What is the geographical focus? Does it include more than one type of intervention, and do the evaluations consider spill-over effects outside the health sector and/or the area of HIV/AIDS?
- 3. The recommendations for future evaluations within this field.

Based on the assessment of each evaluation and study in the sample the consultants will prepare an overall synthesis of main findings and recommendations.

iii) The report will also include a methodological assessment of the strength and weaknesses of different approaches to evaluating assistance to HIV/AIDS programmes. This will entail a detailed assessment of: the methods applied in the evaluations and studies in the sample. What type of data is typically available and to what degree do evaluation methods take these into consideration? For all methods considered the robustness and the general applicability of the results will be considered. Does the evaluation or study, for example, include control groups when evaluating the effect of an intervention? Is the baseline established before the intervention? Is rate of return calculation used? And do the evaluations consider if

and how project efficacy can be translated into an efficient and sustainable policy intervention after the end of the (pilot) project?

Management, Timing and Reporting

The Synthesis Evaluation will be managed by the Evaluation Department of Danida, but officials from other departments in Danida, in particular FNG, will be consulted during the elaboration of the Synthesis Evaluation.

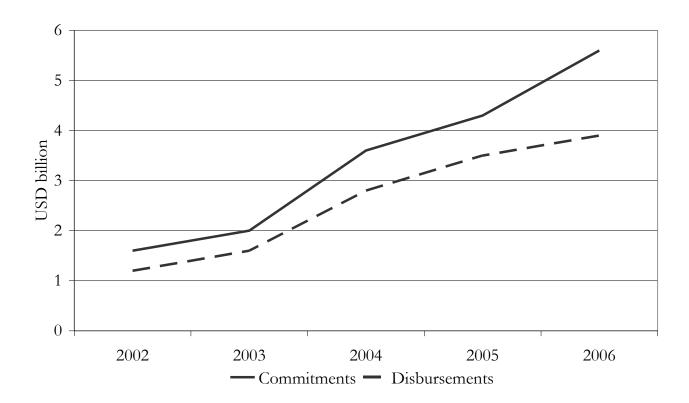
The work of the consultants will commence at October 20, 2007, and the proposed set of evaluations and studies to be included in the sample will be presented to Danida not later than November 10, 2007.

A draft report will be submitted to the Evaluation Department of Danida not later than December 10, 2007, and a final report not later than two weeks after comments to the draft report have been received from the Evaluation Department of Danida.

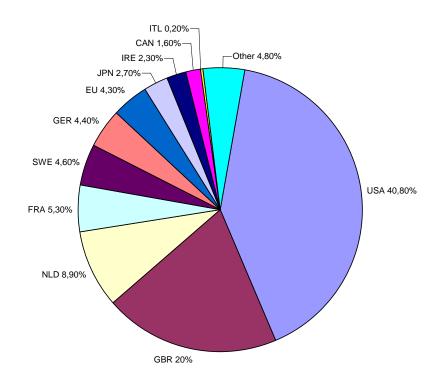
Appendix 2. International assistance to HIV/AIDS

The Kaiser Foundation (2007) provides the latest available data on international assistance for AIDS in low- and middle-income countries provided by donor governments, including the Group of Eight (G8), the European Commission (EC), Ireland, the Netherlands, Sweden, Switzerland, and other donor governments who provide international development assistance. The data were collected and analyzed through a collaborative effort between UNAIDS and the Kaiser Family Foundation.

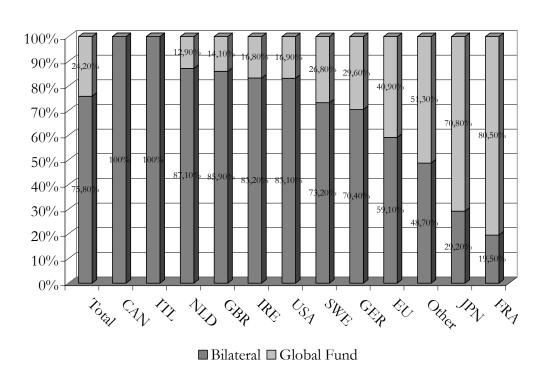
Trends in total HIV/AIDS assistance, 2002-2006



Distribution of total HIV/AIDS disbursements, 2006



Funding channels for HIV/AIDS disbursements, 2006



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Other Evaluation Studies:

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