

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Daniel C. Montoya (CN=Daniel C. Montoya/OU=OPD/O=EOP [OPD])

CREATION DATE/TIME:17-AUG-1999 10:13:39.00

SUBJECT: FW: updated PACHA minutes

TO: Marisa B. Van Saanen (CN=Marisa B. Van Saanen/OU=OPD/O=EOP@EOP [OPD])
READ:UNKNOWN

TEXT:
Were these incorporated into the minutes?

dcm
----- Forwarded by Daniel C. Montoya/OPD/EOP on 08/17/99
10:13 AM -----

"Hall, Andrea" <AHall@s-3.com>
07/28/99 11:08:03 AM
Record Type: Record

To: Daniel C. Montoya/OPD/EOP
cc:
Subject: FW: updated PACHA minutes

Daniel,

Attached are the June 1999 PACHA full council minutes with R. Aragon's comments/changes.

Please let me know if there are any more changes or if the minutes can be made final.

Thanks,
Andrea

> -----Original Message-----
> From: Ross, Julia
> Sent: Wednesday, July 28, 1999 10:56 AM
> To: Hall, Andrea
> Subject: updated PACHA minutes
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===== ATTACHMENT 1 =====
ATT CREATION TIME/DATE: 0 00:00:00.00

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FullCouncilMeeting June7

8,1999RadissonBarceloHotelWashington,DC MINUTES

Present:

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araArandaNaranjo,Ph.D.JudithBillings,J.D.CharlesBlackwell,J.D.JerryCade,M.D.Lyn
neM.CooperRabbiJosephA.EdelheitRobertFogelDebraFraserHowzeKathleenGerusPhyllisG
reenbergerNilsaGutierrez,M.D.,M.P.H. B.ThomasHendersonMichaelT.Isbell,J.D.Rona
ldJohnsonAlexandraMaryLevine,M.D.SteveLewMiguelMilanes,M.P.A.HelenH.Miramontes,
R.N.MichaelRankin,M.D.H.AlexanderRobinson,M.B.A.DebbieRunionsSeanSasserBenjamin
Schatz,J.D.DeniseStokesCharlesQuincyTroupeBruceWeniger,M.D.

(5(#(#Xd5 PresentfromONAP: (X(#(SandraThurman,Director X * DanielMontoya,
ExecutiveDirector,PACHA D!+ ToddSummers,DeputyDirectorDanielMontoya,ExecutiveDi
rector,PACHADanielMontoya,ExecutiveDirector,PACHA

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.AltagraciaPerez

'#3 5(#(#X[5)\$3 h+&5 Monday,June7,1999 MorningGeneralCouncilSession b

Cdr.R.ScottHitt,Chair,openedtheThirteenthMeetingofthePresidentialAdvisoryCounci
lonHIV/AIDS(PACHA)at8:30a.m.HeimmediatelyintroducedSandraThurman,DirectoroftheO
fficeofNationalAIDSPolicy(ONAP),asshehadtoleavetheCouncilmeetingearlytoattendth
eWhiteHouseConferenceonMentalHealth. SandraThurman,Director,ONAP,andToddSumme
rs,DeputyDirector,ONAP UpdateonONAPActivities "r > VaccineResearchCenter(
VRC): Ms.Thurmanbeganbyannouncingthededicationofthe 6 DaleandBettyBumpersVaccin
eResearchCenterattheNationalInstitutesofHealth(NIH)onWednesday,June9.ShesaidPre
sidentClintonwasscheduledtoparticipateintheceremony,andnotedthatDr.HaroldVarmus
andDr.AnthonyFauciwouldgivepresentationsonthestateofvaccineresearch. JeffordsKe
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dingtechnicalassistancetoanyStateinterestedinawaiver. CongressionalBlackCaucus(

CBC): ONAPhasbeenworkingwiththeCBCtobegin a dialogueonservingcommunitiesof color.Aroundofmeetingsisscheduledtobeginthisweek. U.S.ConferenceofMayors: DuringtheweekendofJune1213,ONAPwillmeetwiththeU.S. ConferenceofMayorstodiscussurbanissuesandHIV/AIDS.TwentyoneAIDSCoordinatorswillattendthemeeting,andRyanWhiteauthorizationwillbeamongthetopicsaddressed. CentersforDiseaseControlandPrevention(CDC): Mr.Summersreportedthatseveral

CouncilmembersparticipatedinaMaymeetinginAtlantaonthe KnowYourStatuscampaign,andnotedthatDr.HeleneGayleoftheCDCwouldbegivingtheCouncilanupdate duringthecurrentCouncilmeeting.TheCDC'spreventionplanningprocessisunderwaytoassesstheagency'sprioritiesforHIVpreventionfunding.Mr.SummerssaidONAPencouragedCDC,andCDCagreed,tincludecommunitygroup participationinthatassessment.AworkinggroupofCDC'sCommunityAdvisoryBoardwilllookatprioritiesdraftedbyCDC,andwillanalyzewhattheagencyisdoingwiththe\$640millionallocation.TherehasbeenconsiderablediscussionofthisissueatCDC,theOfficeofManagementandBudget(OMB),andonCapitolHill.ONAPshopeisthattheprocesswillleadto developmentofanoverarchingplanforreducingHIVinfections.Mr.SummerssaidhedidnotknowthestatusoftheHealthCareWorkerGuidelines.RegardingtheSurveillanceGuidelines,hesaidCDC hadhiredLarry GostinofGeorgetownUniversityLaw Schooltoworkonproposedprivacyandconfidentialitystandards.HHSwasnotsatisfiedwiththosestandards,soitiscurrentlyredraftingandstrengtheningthem.ONAPexpectstogeta reportfromHHSonthestatusoftheguidelinessoon.ONAPwantstomakesurethattheconfidentialitystandardsareasstrongastheothersectionsofthedraftguidelines.Onthefulltimeequivalent(FTE)issue,Mr.SummerssaidCDCisintheprocessofredoingitsbudgetprocesstoclarifywhere theagency'smoneyisgoingandhowitisbeingused,particularlywithrespecttoadministrative areas. African/AfricanAmericanSummit: Ms.ThurmanreportedthattheexpandedPresidential MemoonthestateoftheepidemicinAfrica isstillbeingdrafted.ONAPisstillgettinginputfrommembersofthedelegationtoAfrica,butsheexpectsthememowillbereleased shortly.ONAPstaffrecentlyattendedtheAfrican/AfricanAmericanSummitinGhana.ReverendSullivan,acivilrightsleader,foundedthetradeconference10yearsago,and5,000people attendedtheeventthisyear.ThiswasthefirsttimeHIV/AIDSwasontheconferenceagenda.ONAPwasexcitedtoparticipateintheeventbecauseongoingleadershiponHIV/AIDSisneededinthereligiouscommunityandintheAfricanAmericancommunity.SeveralHeads ofStatefromAfricaparticipated.AlexanderRobinson,whoattendedtheevent,saidtherewassignificantdiscussionoftheimpactofHIVoneconomicdevelopmentinAfrica.HesaidtheconferencehadmadeanimpactonAfricanAmericanleaders,includingJesseJacksonandtheEditorofEssencemagazine,who heardthemessageaboutAIDSinAfricaandAIDSamongAfricanAmericansinanew way.Ms.ThurmansaidJesseJacksongavea5minutespeechonAIDSinAfricabeforetheAfricanAmericandelegationdepartedfromAndrewsAirForceBase.Shesaidthiswassignificantbecauseitwasahighprofilecorporateandpoliticalgroup.SecretaryofLaborAlexisHermanalsoincludedHIV/AIDSinherspeechesforthe firsttime,reflectingamultisectoralapproachtot heissuewithinGovernment.Ms.ThurmansaidReverendSullivanwouldbearrivinginWashingtononTuesday,June8,tomeetwithPresidentClintonforapostSummitdebriefing.Ms.Thurman saidshewouldattendthatmeetingaswell. StateDepartment,USAID,andOtherAgencies: Ms.ThurmansaidONAPhasbeenworking withFrankLloyd,UnderSecretaryforGlobalAffairsattheDepartmentofState,toreenergizetheStateDepartment'sresponsetotheepidemic.ONAPhopesforsomemovementfromwithintheDepartmentnowthatMr.Lloydisinplace. Ms.ThurmansaidsheispleasedthattheDepartmentsofCommerceandLaborareshowingmore leadershiponHIV/AIDS;bothareparticipatingintheWhiteHouseWorkingGroupontheexpandedPresidentialMemo.Sheaddedthattheissueofcompulsorylicensingcontinuestopercolate,andshelooksforwardtoadialoguewiththeCouncilonthisverycomplexissue.Mr.SummersaidtheStateDepartmentrecentlyreleasedacompendiumofU.S.GovernmentprogramsinvolvedininternationalAIDSefforts.Inconjunctionwiththereleaseofthatdocument,theDepartmentsentcablestoHeads ofMissionsdirectingthemtoengage theircounterpartsontheissueofHIV/AIDS,withcorrespondingtalkingpoints.TheDepartmentisalsoatchetingupitsefforts inWashington.Mr.Summersrecentlyattendedameetingwith11or12Ambassadors totheUnitedS

tates, Mr. Lloyd, and other representatives from the Department of State and the U.S. Agency for International Development (USAID) to elevate HIV/AIDS as a foreign policy issue. Ms. Thurman stressed that the Administration's HIV/AIDS work on the international front in no way detracts from its work on the domestic front, but that a global perspective is needed.

Sperm Donation: Mr. Summers said the Food and Drug Administration (FDA) had spoken too far & soon on sperm donation regulations. The White House and HHS still need to be briefed on the issue. ONAP is expecting a briefing from Kevin Thurman in the next 2 weeks. Whatever the FDA's policy is, it will be closely scrutinized.

302Bs: Mr. Summers said there is a battle underway on Capitol Hill regarding 302Bs, which 60% are the allocations given by the Appropriations Committee to each of the subcommittees. The allotments that were handed out corresponded to budget caps established in the past and do not correspond to the income currently flowing into the Government. Mr. Summers said the budget cuts that would be required to maintain the established caps would be draconian. The Labor + & 8 HHS cuts would be approximately \$101.2 billion. This could come out of programs like Ryan White, HIV prevention, and research.

Needle Exchange: Ms. Thurman reported that bills have been introduced in both the House and Senate to ban indirect funding of any program supporting needle exchange. ONAP is organizing a meeting of private funders to facilitate the dissemination of information on needle exchange through private channels. The meeting is planned for fall. Mr. Summers added that HHS is currently drafting a street-level guide on the science of needle exchange.

Questions and Comments: (x) Responding to a question from Regina Aragon, Ms. Thurman said she did not know whether the President would veto any freestanding legislation banning indirect or direct funding of needle exchange programs, but she committed to speaking to the President about it. Ms. Aragon said final HIV surveillance guidelines issued by CDC later this year should be free of bias. She stated that the Council hopes that ONAP will continue monitoring this issue to ensure that the final draft does not continue to be biased against non-name-based reporting systems and that the presentation of the scientific evidence on the deterrent effects of names reporting be presented fairly. Robert Fogel asked about the status of the President's understanding of the need for greater funding on global health issues. Ms. Thurman said the President certainly understands the need for greater funding, and that Administration officials at the highest levels are paying attention to it. She said she should have an idea on appropriations for global health in the next week. Benjamin Schatz asked for an update on the Health Care Worker Guidelines. Dr. Eva Seiler of CDC reported that the guidelines are still at CDC. Dr. Jeffrey Koplan read the draft guidelines (#4) and felt more work needed to be done. He was concerned that there were not enough patient protections, so the guidelines are now being repackaged. Ms. Thurman volunteered to call both + & 8 Kevin Thurman and Dr. Koplan to inquire about a timetable for release of the guidelines.

Dr. R. Scott Hitt + PACHA Interim Activities & 11 Dr. Hitt reported on three major activities since the last PACHA meeting.

Meeting with Kevin Thurman: The Executive Committee met with Mr. Thurman on April 27, ^ during which Committee members focused on several recurring issues.

Access to Care: Dr. Hitt emphasized to Mr. Thurman that the Council wants to see a big plan. A

one or two pager from HHS outlining a policy on access to care would indicate some leadership on the issue.

Know Your Status Campaign: Dr. Hitt said the Committee made it clear that a big, bold initiative is needed, including CDC as well as the White House and ONAP. If CDC continues to lead on this, the campaign may get lost in the bureaucracy. Leadership from above is needed.

Needle Exchange: Dr. Hitt emphasized that new, updated science needs to be disseminated to health experts and legislators across the country. He noted that the opposition has been active in getting its message out, whereas HHS has been silent. A more public role on the part of HHS would have an impact.

Surveillance Guidance: The language has not been finalized yet. The Executive Committee is encouraging HHS to state that unique identifiers are as good as names reporting. From the Council's viewpoint, either one would be satisfactory. This is currently a hot issue in California, where a names reporting bill was recently scuttled, and a unique identifiers bill is pending.

Office of Minority Health (OMH): The Committee urged the Administration to do whatever it + & 8 can to ensure that the \$8 million in OMH funding that was left out of the FY1999 appropriations bill be restored so that the planned programming can begin. Health

hCare Worker Guidelines: Mr. Thurm did not know the status of these. & HHS Regional Meetings: These ended in early June. The Council wants a report on any action taken as a result of these meetings. Mr. Thurm said HHS wants to revamp how they look at AIDS within the Department. Overall, Dr. Hitt said the meeting with Mr. Thurm was hard edged. The Executive Committee conveyed the feeling that there is a lack of leadership at HHS. Issues are not moving. The next PACHA Executive Committee meeting with Mr. Thurm is scheduled for July 13. HHS Secretary Donna Shalala has committed to attend the October Council meeting. Mr. Summers emphasized that the meeting with Mr. Thurm did have an impact. Following the meeting, Mr. Thurm expressed some frustration to several HHS colleagues that the issues identified by the Council were not moving fast enough. Dr. Hitt also said he met with the National Organizations Responding to AIDS (NORA) Executive Committee to discuss coordinating timing and strategies on many of the same issues. NORA is focusing on Ryan White reauthorization. Dr. Hitt asked NORA to keep the Council informed on their activities regarding Ryan White. Letter on Omnibus Appropriations Bill: The Council sent a letter to the President discussing the potential negative impact of the bill on publicly funded HIV/AIDS research. Letter on the Early Treatment of HIV Act of 1999: The Council also sent a letter asking the President to support the intent of this legislation. Questions and Comments: Mr. Summers noted that Dr. Paul Gais would be starting June 14 as the NIH Agency representative at ONA and would be acting in this role for the next 6 months. Mr. Summers and Daniel Montoya noted that Dr. Gary Nabel of the NIH VRC was unable to attend the current Council meeting due to planning for the VRC dedication, but is interested in attending the October meeting. Dr. Hitt directed Mr. Montoya to set up conference calls to meet with Dr. Nabel. Dr. Hitt stressed that Council members need to be educated on the compulsory licensing issue, which the International Subcommittee is taking up in its meeting. He said it is important that members not let a few individuals on the Council sway their opinion on the issue, because it is so complex. He added that the Council needs to address it, though it has not been a priority issue to date. Dr. Hitt said the Council should also consider whether it wants to issue a progress report this fall. He would like input from subcommittee chair on what such a report should look like, whom it should address, and what message it should convey. Mr. Anderson asked Mr. Summers if Ms. Thurman could present a statement from the Council on global health appropriations during her meeting with the President and Reverend Sullivan on June 8. Mr. Summers responded that this would violate White House protocol, but that perhaps Ms. Thurman could mention the Council's position. Afternoon General Council Session %0!0

Access to Care Panel Presentation DE Dr. Hitt introduced the panel of three Government representatives. Ms. Aragon and Thomas *V%6 Henderson served as cofacilitators of the panel. Ms. Aragon, representing the Services h+&8 Subcommittee, began by providing some background on the issue of access to care. She noted that 2 years ago, HHS issued national Guidelines for the Treatment of HIV Disease. These guidelines were hailed by AIDS advocates as a much needed national standard of care. Access to care is one of the Council's six priorities, and Council members have discussed the issue with the President and with Mr. Thurmon on many occasions. The Services Subcommittee has identified a number of key issues related to access to care. 1. The critical role of supportive services. Addressing medical care is not enough. Supportive ^ serv ices that facilitate access to care must also be considered. 2. Appropriations. Congressional spending caps threaten access to care. 3. Disparate outcomes across racial and ethnic groups. HIV related health outcomes continue to vary by race and ethnicity. Eliminating these disparities must remain a priority for the Council and the Administration. 4. Medicaid. The Subcommittee has looked at eligibility criteria. The requirement that someone must be every sick and disabled before qualifying for Medicaid directly contradicts the treatment guidelines, which encourage early access to care. On Medicaid reform, the Jeffords Kennedy bill includes demonstration projects that could help address access to care, and the Pelosi Torricelli legislation would allow States to expand Medicaid. Ms. Aragon said the purpose of the panel discussion was to address an overarching plan to ensure access to the Public Health Service standard of care. What is the baseline for ensuring access to care? What is the plan to reach populations that do not currently have access to care? Daniel Mendelson, Office of Manage

ment and Budget (#4 M Mr. Mendelson began his presentation by describing several concerns he has as the congressional appropriations process moves forward. Regarding the 302B allocations, he noted that the level of funding in the current House Labor HHS bill is down about 18 percent from last year, while the funding level in the Senate appropriations bill is down about 13 percent from last year. The 18 percent decrease on the House side would translate into a cut in Ryan White funding of about \$254 million. HHS has calculated that this would result in a loss of services to 69,000 people. Mr. Mendelson called this a crisis situation, and encouraged the Council to get the message out to the American people. CDC's reduction is about \$118 million for HIV prevention. Mr. Mendelson said there is a problem within CDC, part of which is perception. The perception problem is that some of the money that should be going into HIV prevention accounts can't be found. What happens is that there are some line items within CDC where it is very clear that the money is going into HIV prevention, and there are other line items where an allocation methodology is applied. In the latter case, some fraction of the activities of local public health officials is attributable to HIV prevention. The CDC has initiated a process to assess this. Mr. Mendelson encouraged the Council to let CDC know that this is a priority. He said the Council needs to make sure that CDC programs have the same political cachet as Ryan White programs. Representatives Coburn, Bliley, and Arme have sent a letter to the General Accounting Office (GAO) requesting a full audit of Federal HIV/AIDS programs. This could appear as a appropriations rider and could compromise funding streams and public perception of how money is being spent. Mr. Mendelson mentioned a second potential appropriations rider issue regarding needle exchange. This year's rider would take the position that funds are fungible, prohibiting any recipient of Federal funding from running a needle exchange program. It would deny money to virtually all needle exchange programs currently operating. OMB will oppose this effort, using three arguments. The first is a States' rights position, e.g., telling States how to spend their money is wrong. The Administration will try to get States to oppose the rider. Second, OMB will point out that the rider would result in a degradation of services. CDC will identify which services will be disrupted. Finally, OMB will emphasize that a broader ban is directly at odds with the scientific evidence. Regarding the Jeffords-Kennedy bill, Mr. Mendelson said OMB is pleased that the demonstration projects will remain intact. It is critical that the bill be brought to the Senate floor. The demonstration projects will be flexible enough to accommodate waivers for States like Maine.

Eric Goosby, M.D., Health Resources and Services Administration

Y Dr. Goosby stated that bringing HIV positive populations without access to care into a continuum of care has been a leading priority for HHS over the last 2 years and will continue to be a priority over the next 3 years. The Health Resources and Services Administration (HRSA) and CDC are the lead agencies in this effort. HRSA has taken on a motto of "100 percent access and zero percent disparity." There is an ongoing effort to look at the linkages between existing lines of treatment such as STD clinics, family planning clinics, community health centers, and migrant farm worker health clinics as reservoirs for patients who need to be identified and brought into the AIDS care delivery system. HRSA is working with the Health Care Financing Administration (HCFA) to develop innovative relationships with State Medicaid programs to help people without sources of payment. The data coming out of the recent Chicago and Geneva meetings, and from Johns Hopkins University, indicate that this will be a cost-effective approach in the long run. Dr. Goosby added that HRSA is trying to delineate the factors that contribute to the disparities in longevity, entry into care, development of opportunistic infections, stage of care upon entry into the medical delivery system, and mortality data among minority populations in the United States.

h+&8 Mike Hash Health Care Financing Administration

b z_ Mr. Hash said HCFA's strategic plan for AIDS has focused on three areas: coordination of services, access to quality care services, and access to care itself. With respect to coordination of services, HCFA has established a working group with HRSA to address ways to maximize coordination between the provision of funds through the Ryan White Act and through Medicaid and Medicare. Last November, HCFA sent a letter to State Medicaid directors urging them to make coordination of service delivery programs a high priority. Accompanying the letter were two publications: one addressing coordination between Medicaid and Title I of the Ryan White Act, and one addressing coordination between State AIDS [Eps?] 6 and Medicaid. In addition

ion, a survey of State Medicaid Directors is being conducted by the AIDS Treatment Network with support from the Henry Kaiser Family Foundation. The survey addresses State Medicaid coverage and eligibility policies as they relate to persons with HIV, e.g., prescription drug coverage, viral load testing, and new models of service delivery. All but four States have completed the survey to date. HCFA is in the process of analyzing the results. On quality of care, HCFA is taking steps to maximize adherence to standards of care. A working group at HHS is looking at ways to operationalize the NIH Treatment Guidelines within Federal and State health care delivery programs. The group has taken steps to disseminate the guidelines: the adult guidelines were republished in the Annals of Medicine, and the pediatric guidelines were published in the Morbidity and Mortality Weekly Report. Both sets of guidelines were also sent out with the State Medicaid Director letter. Last September, HCFA published a notice of proposed rule making implementing certain provisions of the Balanced Budget Act of 1997 with respect to Medicaid and managed care. In that regulation, HCFA solicited comments on the best strategy for ensuring the highest standards for private managed care plans that wish to contract with States to provide services to Medicaid eligible persons. HCFA is also participating in a maternal and child health program with State public health departments to develop an appropriate initiative to inform HIV positive pregnant women and new mothers of infants at risk for HIV of the significance of starting therapy early. Regarding access to care, HCFA, OMB, and HHS have been working with Maine to flesh out a proposal for an 1115 waiver. The Maine proposal was submitted last November, and Federal meetings with representatives from Maine are continuing. Outside of 1115 waivers, 16 States now have specially targeted home and community based service waivers.

Questions and Comments: Mr. Henderson asked the panel to comment on Federal development of a broad plan to ensure 100 percent access to quality care across populations. How do the pieces fit together? What is the time frame? Dr. Goosby acknowledged the difficulty in reaching populations that are becoming increasingly disenfranchised from the mainstream delivery system. But he said HRSA is looking at a 3 year time frame in which the agency would start to see decreasing numbers of people out of care, decreasing numbers of seroconversions, etc. The idea is to create across three agencies "HRSA, CDC, and the Substance Abuse and Mental Health Services Administration (SAMHSA)" an expectation of service integration and program coordination, combining treatment and prevention services. He said HRSA needs to start asking grantees to view their role as a net of care, so that cooperative relationships are part of the Federal expectation. This would be implemented in the form of guidance, expectation and technical assistance delivered by the Federal Government.

Dr. Goosby said there has been an acceptance of this vision at the leadership level in all three agencies, but there are some big holes in the reimbursement arena as well as a lack of infrastructure. Some rural and urban areas may prove problematic. This year, there will be three urban demonstration projects coordinated by CDC to integrate services across funding lines. These demonstration should serve as models. There is also an effort underway to integrate across HIV, STD, and TB programs at the local level. This initiative will begin in 20 cities in FY 1999. Mr. Henderson asked Dr. Goosby to quantify the universe of those without access to care. Dr. Goosby said HRSA believes there are about 300,000 HIV positive persons out of care and uninsured. These individuals live predominantly in urban settings, and more than 50 percent are members of minority groups. Pockets in the Native American community, and in San Juan and the Virgin Islands, also pose a challenge in terms of access to care. Mr. Mendelson noted that it is extremely difficult to redirect streams of Federal funding, and trying to do so may threaten one's base of support. He also said the Government's inability to address access to care for HIV positive persons has resulted from the fragmentation of the public health delivery system. The Administration did try to address this with a \$1 billion, 5 year initiative in this year's budget. Mr. Mendelson told the Council that OMB is very open to making changes in the appropriations process and in the President's budget request next year. Terje Anderson commented that he would like to see concrete numbers put forward as part of a broad plan on access to care. Dr. Goosby agreed that high risk populations in each city need to be concretely identified, along with their geographical locations and behavioral patterns. Once these numbers are derived, the ways in which prevention services interface with each population must be addressed. He said HRSA has attempted to move the dialogue in that direction.

direction, but it has been difficult. The Federal Government is used to thinking in terms of States and cities, not specific populations. h+&8 Mr. Henderson stressed that the 300,000 figure needs to be broken down into segments for which strategies to improve access can be implemented. Dr. Stephen Abel asked Dr. Goosby what methodologies are available through Ryan White to carry out quality assessments, and if such assessments could be mandated into HRSA programs. Dr. Goosby responded that few methodologies are available. HRSA understands this need and in the last year has shifted its focus for technical assistance onto quality assurance. The agency recently hired Dr. Michael Johnson to develop a quality assurance capability at HRSA that will encompass technical assistance and the AIDS educational training centers. The agency has reorganized its resources to make quality assurance a real priority. Dr. Goosby also noted that the tight administrative caps in Ryan White make it difficult to place a large expectation on grantees to develop a quality assurance capability. The HCSUS study pointed out these areas of deficiency. Mr. Mendelson said it is very difficult to keep outcomes measures current, particularly when treatment is evolving as rapidly as it is for HIV/AIDS. Therefore, he is concerned about tying specific outcomes measures to money. It could have unanticipated consequences. Mr. Hash added that HCFA is working to find ways to hold integrated health care plans accountable for meeting appropriate standards and to demonstrate performance improvement annually. Ms. Stokes questioned the Government's ability to go beyond outcomes measures to define quality care, assessing factors such as patients' ability to get appointments with their local Ryan White-funded physician. Dr. Goosby said it would be difficult to get to that level of intimacy with a grantee and suggested that the appropriate Federal role in a situation where inpatient care is being provided with good outcomes measures should be discussed. h+&8 Returning to the issue of Ryan White administrative caps, Ms. Aragon said it is important for HRSA to be able to keep and use the 1 percent technical assistance and evaluations that are available through the Ryan White Care Act, rather than have these funds distributed to other HHS programs. This would allow HRSA to provide more robust technical assistance and evaluation. Mr. Summers added that perhaps funds could be obtained through channels that are not designated as HIV or AIDS specific, such as the Minority Health Professions Act. Mr. Robinson emphasized the need for Federal agencies to specifically address the lack of infrastructure in racial and ethnic minority communities. Where the infrastructure exists, HIV/AIDS dollars either are available or have been distributed. Rabbi Joseph Edelman asked the panel if the estimated 69,000 persons drop in the number of HIV-positive individuals served as a result of the House budget cuts is included in the 300,000 figure of HIV individuals currently out of care. The panel agreed that the 69,000 figure is probably not included in the 300,000 total. Rabbi Edelman also asked Dr. Goosby to explain HRSA's and CDC's timidity on the Know Your Status campaign in light of HRSA's goal to identify all seropositive individuals. Dr. Goosby responded that the two efforts are relinked and that both agencies hope they will complement each other. Mr. Robinson added that it is critical to normalize the idea of being tested. Dr. Hitts said he thinks the 300,000 out of care number is an underestimate, considering that there are about 900,000 HIV-positive individuals in the United States, and it is estimated that at least 10 percent do not know their status. Mr. Fogel asked the panel to explain why various HIV/AIDS initiatives are moving so slowly h+&8 through the Federal process. Referring specifically to 1115 waivers, Mr. Hash noted that HCFA takes care to consider what kinds of precedents it might be setting and what kinds of unintended consequences might occur as a result of the agency's decisions on waivers. The agency must contend with a variety of statutory restrictions, and budgetary and programmatic concerns, to preserve Medicaid as an entitlement program. Mr. Summers noted that, in the case of 1115 waivers, and specifically the Maine waiver, the process is a dialogue with the State involved, so delays are incurred on the part of both Federal and State negotiators. Lynne Cooper commented that the lack of supportive services is often the biggest obstacle to access to care. Mr. Anderson told the panel that a sense of urgency needs to be instilled in the Administration regarding making life-saving treatments available to HIV-positive individuals. Barbara Aranda Naranjo stressed the need for the Administration to expand access to care for the 300,000 individuals living with HIV who are out of care. She noted that these individuals are doing it on their own, so it is important for the Council to advocate for them to Washington to advocate for themselves, so, so it is important for the Council to advocate

peresentrepresenttheirintertests.Bringingthediscussiontoconclusion,Ms.Aragonsai doneofthemostimportantthingsmentionedbythepanelwasthefigureof300,000outofcarein dividuals.Shesaidthisfigureshouldserveasastartingpointtoestablishaplantobroaden accesstocare,andrequestedthatpanelmembersconveytheCouncilsrequestforacomprehens iveplantoSecretaryShalala.Mr.MendelsonnotedthatmanypeopleintheAdministrationhad workedhardtopushtheJeffordsKennedybillthrough,andthatthelegislation,ifpassed,wo uldaddresssomeoftheCouncilsfundamentalconcerns. h+&8 Dr.Hittsummedupbysayingtha tleadershipandcoordinationareclearlylackingineachoftheagenciesrepresentedonthep anel.Hereiteratedtheneedforaonepagememofromeachagencyoutliningtheobstaclestoimp rovingaccesstocareandsettingforthanoverallplanandaproactiveapproach. Tuesday, June8

AfternoonGeneralCouncilSession L PublicComment WayneTurner,ACTUP,Washing ton,DC "r Mr.TurnerdiscussedAIDSaccountabilityandtheneedtostrongenthecommunity oversightofFederalAIDSfunding.HetoldtheCouncilaboutatrialunderwayinPuertoRico,w hereeightpeoplehavebeenchargedwithembezzling\$2.2millioninFederalAIDSfunds.Sixof theeighthavepleadedguilty,andtheGovernorofPuertoRicoisimplicatedinreceiving\$250 ,000inAIDSfundsforhis1992politicalcampaign.Activistsareholdingdailyvigilsoutsid ethecourthousebringingattentiontothefactthatwhenAIDSmoneyisstolen,people die.Mr.T urnersaidtheminorityleaderofthePuertoRicoStateLegislaturewrotealettertoSecretar yShalalain1993outliningirregularitiesandconflictsofinterestviolationsconcerningA IDSfunds.Heposedthequestion:IfHRSAhadcarriedoutitsoversightfunctionin1993,howma nypeoplemightstillbealive?HesaidthesituationinPuertoRicoisnotanisolatedone.Coun cilmembersneedtoexaminewaystostrengthenoversightsothatthisdoesnotkeep happening. ACTUP,theAIDSAccountabilityProject,andothershavecalledforaGAOperformanceauditon AIDSfunding.HenotedthatitwasRepublicanRepresentativesCoburn,Bliley,andArmeywhow rotealettertoGAOrequestinganaudit. h+&8 Mr.Turnerofferedtwwproposals:TheGAOaudi tmustbecarriedout,andconflictsofinterestrulesmustbeenforced.InWashington,DC,fore xample,only4of60planningcouncilmembersarenotdrawingsalariesandarenotboardmember soforganizationsreceivingFederalAIDSmoney.Theplanningcouncilsarebuiltinstructur esforcommunityoversight,andmembershiprequirementsneedtobeadjustedtoensuretherei snoconflictsofinterest. Comments: L HelenMiramontescommentedthatsaidtheCounci lshoulldexercisecautioninsupportingtheauditMr.RobinsonsaidtheCouncilhadbeeneng agedwithlocalagenciestosupportthemtheiroversightactivities,buttheCouncilcould playagreaterroleinthisarea.Mr.AndersonnotedthattheHRSAAIDSAdvisoryCommitteemeti nMaytodraftaseriesofrecommendationsregardingthereauthorizationoftheRyanWhiteAct .Oneoftherecommendationsstatedthatatleast51percentofthemembershipofanyplanningb odyshouldbefreeofanyconflictsofinterestasdefinedinthelaw.DebraFraserHowzeurgedth eCounciltobecautiousaboutsupportingtheperformanceaudit.Shenotedthat,historicall y,everytimealargeamountoffundingisdirectedtocommunitiesofcolor,acallforanauditf ollows.ShesaidtheAIDScommunityshouldwaittoseehowthingsplayoutinPuertoRicobefore layingblame.Dr.ArandaNaranjoandHelenMiramontesalsoquestionedtheintentofthosebeh indtheauditrequest.CharlesTroupstressedthattheissueofmisappropriationoffunds is indeedapartisanone,andthattheAIDScommunityshouldnotlooktoRepublicansforsympathy andsupport. SubcommitteeReports %0!0 . ResearchSubcommittee (#4 Dr.Levinefi

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rsity in England with the University of Nairobi in Kenya, is focusing on a DNA viral approach to a vaccine. This initiative is expected to move into clinical trials later this year. A second partnership is using Venezuelan equine encephalitis as a vector for testing a vaccine. This initiative joins Venezuela and South Africa and is expected to move into clinical trials in early 2000. IAVI also received a \$25 million donation from Bill Gates, which will be distributed in sums of \$5 million a year. The subcommittee anticipates a conference call with IAVI over the summer to offer the Council assistance. Dr. Judith Auerbach of the Office of AIDS Research at NIH also spoke to the subcommittee about behavioral interventions. The NIH budget for behavioral and social science research increased by 21 percent this year; the only other increase that was comparable was for vaccines, which rose by 31 percent. The money being spent this year for behavioral interventions research is \$213 million, while the vaccine funding level is \$148 million, a figure that is still very low. NIH is looking at settings as they relate to minority populations, gender, and drug use, and is doing very applied, focused, intervention-based research. The subcommittee asked Dr. Auerbach to provide a complete listing of research projects in this area. Dr. Levine noted that Dr. Neal Nathanson should be commended for moving quickly in this direction. NIH's funding priorities in this area are on primary prevention, secondary prevention, and methods. The subcommittee expressed a concern that there is a disconnect between NIH and CDC that impedes the translation of research into actual interventions. Dr. Helene Gayle of CDC agreed that this is a problem and that an administrative mechanism is needed. The subcommittee also stressed that all of the players need to be communicating all of the time. Dr. Gayle said she would take these concerns back to CDC. If nothing happens by the next Council meeting, the subcommittee will make a formal recommendation regarding these issues. The subcommittee scheduled three conference calls for July 21, August 18, and September 15 or 16, all at 10:00 a.m. One call will be with Dr. Nabel, one will be with IAVI, and one will be related to the Pelosi bill. Dr. Hitt asked if there had been any opposition to the Pelosi bill. None of the Council members had heard of any opposition. He also asked about coordination on the vaccine effort. Dr. Levine said the Council should wait to be briefed by Dr. Nabel at the next meeting. Ms. Miramontes noted that the AIDS Vaccine Advocacy Coalition (AVAC) had just released a report called Eight Years and Counting on the vaccine effort. She called AVAC and requested enough copies to reach Council members. Prevention Subcommittee Mr. Robinson reported that the subcommittee discussed CDC efforts related to prevention. First, a CDC Advisory Committee working group is carrying out an inventory of CDC's AIDS-specific programs and examining their priorities. Dr. Gayle said this process should be completed by July or August, and a report will be issued. The subcommittee expressed some skepticism about the value of this process, but decided there are some benefits, such as broader access to information. Dr. Gayle said she would update the subcommittee once the process is completed. Since the process is an internal one, the subcommittee is concerned about the objectivity of any resulting recommendations. Mr. Robinson noted that the GAO audit will occur simultaneously, and this has sparked a commitment among some to implement significant changes in CDC's approach. Second, the subcommittee received an update on the Know Your Status campaign. Members were impressed that the CDC has worked to build a week of activities around National Testing Day. However, the cross-agency leadership needed to bring a national focus to this campaign is not evident. Therefore, the subcommittee has committed to biweekly meetings with representatives from HHS, CDC, and ONAP to gauge their progress on the campaign, and to coordinate access to and use of resources and contacts. The subcommittee also suggested that a CDC coordinator for the campaign be placed at ONAP. After some discussion, it was decided that Dr. Hitt would send a memo to Mr. Thurman prior to the July 13 meeting recommending placement of an FTE coordinator by CDC at ONAP. Ms. Thurman said Dr. Gayle had been trying to recruit someone to take the position but had not been successful. Dr. Hitt said he would call Dr. Gayle to reinforce the message that the FTE is a priority for the Council. At Dr. Hitt's suggestion, it was decided that Mr. Anderson would send out a general broadcast fax email to all Council members following each biweekly meeting on the Know Your Status campaign to update everyone on campaign activities. The subcommittee also discussed the Health Care Worker Guidelines. Dr. Gayle said that CDC's review of the guidelines should be complete within a week to 10 days, and the document would then be forwarded to HHS. Dr. Hitt suggested

ed including a request for a timeline on the guidelines in the memo to Mr. Thurm. Mr. Montoya reminded all subcommittee chairs that they should submit in writing any items to be included in the memo to Mr. Thurm prior to the July 13 meeting. Finally, Mr. Robinson mentioned that the update on the 1996 youth report [is this from CDC?] is underway, and is expected to be released by World AIDS Day. The subcommittee also recommended that Dr. Koplan be invited to the October meeting when Secretary Shalala is present. Dr. Hitts suggested that the Council's Executive Committee try to schedule a preliminary meeting with the Secretary and Mr. Thurm before the October meeting. Racial and Ethnic Populations Subcommittee b Dr. Nilsa Gutierrez said the subcommittee decided to organize a presentation to the full Council on the character of the epidemic in Latin communities, to be given at the October meeting. An outline of the presentation was distributed to each Council member. The presentation will address six areas: a general overview of Latino subpopulations; the health status of the Latino population; HIV infection trends and problems of underreporting; the particularities of the health care infrastructure in Latino populations; the impact of substance abuse and use in the spread of HIV infection; and the case of the Virgin Islands, where the Government is facing bankruptcy and a rapid degradation of services is occurring. The presentation will take 90 minutes. How the epidemic has affected the gay Latino community, women, and inmates will also be addressed. Dr. Hitts said the presentation was a good idea, but that the Executive Committee needed to rethink logistics and scheduling for the October meeting in order to fit everything in. z+&8 Ms. Aragon suggested that Latino community leaders be invited to the October meeting for the presentation and a follow-up meeting. Dr. Gutierrez said the subcommittee had also decided to begin to include the Latino perspectives of nongovernmental organizations, immigration coalitions, and public interest attorneys in subcommittee meetings. Aspects of the epidemic in Mexico and Puerto Rico will also be discussed in future subcommittee meetings. Mr. Montoya said he needed to clear logistics for the Latino presentation with the subcommittee. Steve Lew added that the subcommittee would also like to schedule a discussion of Asian and Pacific Islander (API) populations at a future Council meeting. Charles Blackwell noted that the President just signed an executive order on API health care issues, and that the issue might be appropriate for the December Council meeting. He added that the Council may need to revisit a discussion on Native American populations, and that an interim meeting of the subcommittee might be needed. Mr. Montoya said the Council should push for the new Presidential Committee on API to schedule a presentation on HIV/AIDS to highlight not just health issues related to HIV, but education and labor issues as well. International Subcommittee !

* Mr. Anderson reported on several presentations before the subcommittee on the compulsory licensing issue, including those from the Pharmaceutical Research and Manufacturers of America (PhRMA), Medecins Sans Frontieres, the World Bank, the Joint United Nations Programme on HIV/AIDS (UNAIDS), the Health Gap Coalition, and consumer advocates. Mr. Anderson said the ways in which U.S. copyright, patent, and trade policies affect compulsory licensing are not easily understood, and the subcommittee is struggling to understand all of the h+&8 issues and implications. The subcommittee would like to focus on two tasks: (1) a further examination of current and future U.S. policy on compulsory licensing, which would involve hearing from U.S. Government agencies, and (2) a fact-finding of perspectives from the developing world. A conference call or interim subcommittee meeting with several U.S. Government representatives is tentatively planned for this summer. Mr. Anderson also emphasized that the U.S. Government's response to HIV/AIDS on a global scale needs to be considered as part of the discussion on compulsory licensing. Mr. Anderson said he would distribute copies of the written statements submitted by those presenting before the subcommittee. Mr. Montoya indicated his staff member would be writing a summary of the subcommittee session on compulsory licensing. Mr. Anderson said the subcommittee should be able to make a presentation on compulsory licensing to the full Council by the December meeting. Mr. Montoya said his office would be sending out a lot of information on compulsory licensing, and stressed that each Council member has a responsibility to read the information because the issue is so complex. Mr. Anderson noted that the Council needs to determine what parallels exist with regard to compulsory licensing for other drugs and diseases. Dr. Hitt mentioned that The Village Voice had published an article about Vice Pre

sident Gores !

* position on compulsory licensing in South Africa. Ms. Thurman said her office had drafted talking points in response to the article. She said the Vice President had not sided with the pharmaceutical industry perse, but had advocated strong patent protection and finding a balance between providing incentives for drug development and protecting profits. Mr. Anderson clarified that South Africa is not currently using compulsory licensing, but a law is on the books that would allow it. There is concern in the U.S. trade community about the health and potential impact of this law. Ms. Thurman noted that there have been times when the United States and other countries have used compulsory licensing, so the Administration is gathering information and determining what precedent has been set. Mr. Troupe questioned whether pharmaceutical companies are seeking excessive profits in the developing world. Ms. Greenberger commented that at pricing, compliance, and patent issues make compulsory licensing a complicated issue "it's not just about profits. Dr. Bruce Weniger said he was surprised at the U.S. Government's aggressiveness in pursuing punitive action (e.g., withdrawing tariff preferences) against South Africa before any licensing had actually occurred. Dr. Hitt noted that generic AZT is available in Canada and costs about 40 percent less than what it costs in the United States. Mr. Anderson noted that this was a parallel trade issue, not a compulsory licensing issue. Dr. Hitt requested that someone on the International Subcommittee draft an executive summary on compulsory licensing as the discussion progresses. Mr. Anderson said most national organizations are really struggling to develop a position on compulsory licensing. UNAIDS is currently working on a position statement, and it would be instructive to look at that statement when it is released. Ms. Thurman said she recently met with Peter Piot of UNAIDS and representatives of the Vice President's office, the Department of Commerce, and the U.S. Trade Representative's office to discuss the Administration's policy on compulsory licensing. The group drafted an initial set of talking points, but a complete policy statement is still being debated. Health and Appropriations Subcommittee Ms. Aragon reported that the subcommittee discussed the FY 2000 appropriations process and the budget caps issue that Mr. Mendelson addressed in his presentation to the full Council. She noted that this is a serious situation for both the Labor HHS bill and the VA HUD bill. She said House Speaker Dennis Hastert has been talking about transferring some Department of Defense money to HHS. She urged Council members not to be deceived by this move, as the amount of the transfer would be insignificant in comparison to the cuts taken to meet the budget caps. This move could end up undermining the AIDS community's advocacy efforts. It is important that advocates make AIDS a squeaky wheel and convey the message that the budget caps are not acceptable. The subcommittee would like an update from the Administration in October on how the \$156 million from the CBC is being spent. The CBC is leading an effort to add \$180 million in new funding for HIV/AIDS to the FY 2000 appropriations bill. This funding request would probably include Latinos and other communities of color in addition to the African American community. Ms. Aragon asked that the Appropriations Subcommittee, the Racial and Ethnic Populations Subcommittee, and the International Subcommittee meetings not overlap during the October Council meeting. Mr. Troupe suggested that money lost through the budget caps might be replaced through funding from the National Conference of State Legislatures (NCSL) and the National Black Caucus of State Legislatures (NBCSL). He stressed that the AIDS community needs to start looking at the States for funding rather than depending on the Federal Government. Ms. Aragon agreed that the States are important partners, but emphasized that the magnitude of cuts that could occur if the FY 2000 budget caps are sustained would far exceed the capacity of State or local entities, and that critical services could be lost. Health and Services Subcommittee The subcommittee organized Monday's access to care panel presentation. Ms. Aragon said the subcommittee would follow up with the three presenters regarding development of a broad plan to address access to care. In addition, the subcommittee heard a presentation from Nan Roman and Randy Russell of the National AIDS Housing Coalition, which, along with NORA, is requesting a \$60 million increase for the Housing Opportunities for Persons with AIDS (HOPWA) program in FY 2000. They discussed the critical role of housing in stabilizing those with HIV and in facilitating access to care. For this reason, the subcommittee will continue to monitor HIV housing issues. The subcommittee also discussed Ryan White reauthorization. Members would like

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===== ATTACHMENT 2 =====

ATT CREATION TIME/DATE: 0 00:00:00.00

TEXT:

Unable to convert ARMS_EXT:[ATTACH.D19]ARMS21302882W.236 to ASCII,
The following is a HEX DUMP:

===== END ATTACHMENT 2 =====

Clinton Presidential Records Automated Records Management System [EMAIL]

This is not a presidential record. This is used as an administrative marker by the William J. Clinton Presidential Library Staff.

Hex Dump file is not in a recognizable format, has been incorrectly decoded or is damaged.

File Name: p_u2882027_opd_html_2.tnf

Attachment Number: [ATTACH.D19]ARMS21302882W.236

RECORD TYPE: PRESIDENTIAL (NOTES MAIL)

CREATOR: Marisa B. Van Saanen (CN=Marisa B. Van Saanen/OU=OPD/O=EOP [OPD])

CREATION DATE/TIME:17-AUG-1999 11:28:12.00

SUBJECT: FW: updated PACHA minutes

TO: Elizabeth Baylor (CN=Elizabeth Baylor/OU=OPD/O=EOP@EOP [OPD])

READ:UNKNOWN

TEXT:

hey kiddo--will you take a look at these before printing and see if in fact the version that the interns corrected had regina's corrections in it (i am sending you the copy with regina's corrections incorporated). if not, will you look these over so when you tell andrea the comments she is not having to "correct" things that she already corrected. and then will you call her again (but not leave a message if she is not there) and ask her the protocol for getting are changes made. thanks a billion. will call later.

tpr. marisa

----- Forwarded by Marisa B. Van Saanen/OPD/EOP on
08/17/99 11:24 AM -----

Daniel C. Montoya

08/17/99 10:13:27 AM

Record Type: Record

To: Marisa B. Van Saanen/OPD/EOP@EOP

cc:

Subject: FW: updated PACHA minutes

Were these incorporated into the minutes?

dcm

----- Forwarded by Daniel C. Montoya/OPD/EOP on 08/17/99
10:13 AM -----

"Hall, Andrea" <AHall@s-3.com>

07/28/99 11:08:03 AM

Record Type: Record

To: Daniel C. Montoya/OPD/EOP

cc:

Subject: FW: updated PACHA minutes

Daniel,

Attached are the June 1999 PACHA full council minutes with R. Aragon's comments/changes.

Please let me know if there are any more changes or if the minutes can be made final.

Thanks,
Andrea

> -----Original Message-----

> From: Ross, Julia
> Sent: Wednesday, July 28, 1999 10:56 AM
> To: Hall, Andrea
> Subject: updated PACHA minutes

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===== ATTACHMENT 1 =====
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ne M. Cooper Rabbi Joseph A. Edelheit Robert Fogel Debra Fraser Howze Kathleen Gerus Phyllis G reenberger Nilsa Gutierrez, M.D., M.P.H. B. Thomas Henderson Michael T. Isbell, J.D. Rona ld Johnson Alexandra Mary Levine, M.D. Steve Lew Miguel Milanés, M.P.A. Helen H. Miramontes, R.N. Michael Rankin, M.D. H. Alexander Robinson, M.B.A. Debbie Runions Sean Sasser Benjamin Schatz, J.D. Denise Stokes Charles Quincy Troupe Bruce Weniger, M.D.

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' #3 5(#(#X[5)\$3 h+&5 Monday, June 7, 1999 Morning General Council Session b CDr. R. Scott Hitt, Chair, opened the Thirteenth Meeting of the Presidential Advisory Council on HIV/AIDS (PACHA) at 8:30 a.m. He immediately introduced Sandra Thurman, Director of the Office of National AIDS Policy (ONAP), as she had to leave the Council meeting early to attend the White House Conference on Mental Health. Sandra Thurman, Director, ONAP, and Todd Summers, Deputy Director, ONAP Update on ONAP Activities "r > Vaccine Research Center (VRC): Ms. Thurman began by announcing the dedication of the 6 Dale and Betty Bumpers Vaccine Research Center at the National Institutes of Health (NIH) on Wednesday, June 9. She said President Clinton was scheduled to participate in the ceremony, and noted that Dr. Harold Varmus and Dr. Anthony Fauci would give presentations on the state of vaccine research. Jeffords Kennedy Bill: Ms. Thurman said the Jeffords Kennedy bill looked like ago, and that 8" a vote was pending. The bill ended up at \$300 million. She said ONAP was pleased with the efforts of Senators Jeffords and Kennedy, and called the legislation a nose under the tent of Medicaid expansion. Medicaid: Ms. Thurman said there had been some progress on the Medicaid front: Maine has as (#x, submitted and Massachusetts is preparing to submit a waiver, and the Florida and Georgia waivers are still developing. The Department of Health and Human Services (HHS) is providing technical assistance to any State interested in a waiver. Congressional Black Caucus (CBC): ONAP has been working with the CBC to begin a *h%6 dialogue on serving communities of color. Around of meetings is scheduled to begin this week. +&8 U.S. Conference of Mayors: During the weekend of June 12-13, ONAP will meet with the U.S. Conference of Mayors to discuss urban issues and HIV/AIDS. Twenty-one AIDS Coordinators will attend the meeting, and Ryan White reauthorization will be among the topics addressed. Centers for Disease Control and Prevention (CDC): Mr. Summers reported that several >

Council members participated in a May meeting in Atlanta on the Know Your Status campaign, and noted that Dr. Helene Gayle of the CDC would be giving the Council an update during the current Council meeting. The CDC's prevention planning process is underway to assess the agency's priorities for HIV prevention funding. Mr. Summers said ONAP encouraged CDC, and CDC agreed, to include community group participation in that assessment. A working group of CDC's Community Advisory Board will look at priorities drafted by CDC, and will analyze what the agency is doing with the \$640 million allocation. There has been considerable discussion of this issue at CDC, the Office of Management and Budget (OMB), and on Capitol Hill. ONAP's hope is that the process will lead to development of an overarching plan for reducing HIV infections. Mr. Summers said he did not know the status of the Health Care Worker Guidelines. Regarding the Surveillance Guidelines, he said CDC had hired Larry Gostin of Georgetown University Law School to work on proposed privacy and confidentiality standards. HHS was not satisfied with those standards, so it is currently redrafting and strengthening them. ONAP expects to get a report from HHS on the status of the guidelines soon. ONAP wants to make sure that the confidentiality standards are as strong as the other sections of the draft guidelines. On the full-time equivalent (FTE) issue, Mr. Summers said CDC is in the process of redoing its budget process to clarify where the agency's money is going and how it is being used, particularly with respect to administrative areas. African/African American Summit: Ms. Thurman reported that the expanded Presidential z+&8 Memo on the state of the epidemic in Africa is still being drafted. ONAP is still getting input from members of the delegation to Africa, but she expects the memo will be released shortly. ONAP staff recently attended the African/African American Summit in Ghana. Reveren

d Sullivan, a civil rights leader, founded the trade conference 10 years ago, and 5,000 people attended the event this year. This was the first time HIV/AIDS was on the conference agenda. ONAP was excited to participate in the event because ongoing leadership on HIV/AIDS is needed in the religious community and in the African American community. Several Heads of State from Africa participated. Alexander Robinson, who attended the event, said there was significant discussion of the impact of HIV on economic development in Africa. He said the conference had made an impact on African American leaders, including Jesse Jackson and the Editor of Essence magazine, who he heard the message about AIDS in Africa and AIDS among African Americans in a new way. Ms. Thurman said Jesse Jackson gave a 5-minute speech on AIDS in Africa before the African American delegation departed from Andrews Air Force Base. She said this was significant because it was a high-profile corporate and political group. Secretary of Labor Alexis Herman also included HIV/AIDS in her speeches for the first time, reflecting a multisectoral approach to the issue within Government. Ms. Thurman said Reverend Sullivan would be arriving in Washington on Tuesday, June 8, to meet with President Clinton for a post-Summit debriefing. Ms. Thurman said she would attend that meeting as well. State Department, USAID, and Other Agencies: Ms. Thurman said ONAP has been working with Frank Lloyd, Under Secretary for Global Affairs at the Department of State, to reenergize the State Department's response to the epidemic. ONAP hopes for some movement from within the Department now that Mr. Lloyd is in place. Ms. Thurman said she is pleased that the Departments of Commerce and Labor are showing more leadership on HIV/AIDS; both are participating in the White House Working Group on the expanded Presidential Memo. She added that the issue of compulsory licensing continues to percolate, and she looks forward to a dialogue with the Council on this very complex issue. Mr. Summers said the State Department recently released a compendium of U.S. Government programs involved in international AIDS efforts. In conjunction with the release of that document, the Departments sent cables to Heads of Missions directing them to engage their counterparts on the issue of HIV/AIDS, with corresponding talking points. The Department is also reaching out to its efforts in Washington. Mr. Summers recently attended a meeting with 11 or 12 Ambassadors to the United States, Mr. Lloyd, and other representatives from the Department of State and the U.S. Agency for International Development (USAID) to elevate HIV/AIDS as a foreign policy issue. Ms. Thurman stressed that the Administration's HIV/AIDS work on the international front in no way detracts from its work on the domestic front, but that a global perspective is needed. Sperm Donation: Mr. Summers said the Food and Drug Administration (FDA) had spoken too soon on sperm donation regulations. The White House and HHS still need to be briefed on the issue. ONAP is expecting a briefing from Kevin Thurman in the next 2 weeks. Whatever the FDA's policy is, it will be closely scrutinized. 302Bs: Mr. Summers said there is a battle underway on Capitol Hill regarding 302Bs, which are the allocations given by the Appropriations Committee to each of the subcommittees. The allotments that were handed out corresponded to budget caps established in the past and do not correspond to the income currently flowing into the Government. Mr. Summers said the budget cuts that would be required to maintain the established caps would be draconian. The Labor and HHS cuts would be approximately \$101.2 billion. This could come out of programs like Ryan White, HIV prevention, and research. Needle Exchange: Ms. Thurman reported that bills have been introduced in both the House and Senate to ban indirect funding of any program supporting needle exchange. ONAP is organizing a meeting of private funders to facilitate the dissemination of information on needle exchange through private channels. The meeting is planned for fall. Mr. Summers added that HHS is currently drafting a street-level guide on the science of needle exchange. Questions and Comments: (x) Responding to a question from Regina Aragon, Ms. Thurman said she did not know whether the President would veto any freestanding legislation banning indirect or direct funding of needle exchange programs, but she committed to speaking to the President about it. Ms. Aragon said final HIV surveillance guidelines issued by CDC later this year should be free of bias. She stated that the Council hopes that ONAP will continue monitoring this issue to ensure that the final draft does not continue to be biased against non-name-based reporting systems and that the presentation of the scientific evidence on the deterrent effect of names reporting be presented fairly. Robert Fogel asked about the status of the President's understanding of the need for greater funding on

global health issues. Ms. Thurman said the President certainly understands the need for greater funding, and that Administration officials at the highest levels are paying attention to it. She said she should have an idea on appropriations for global health in the next week. Benjamin Schatz asked for an update on the Health Care Worker Guidelines. Dr. Eva Seiler of CDC reported that the guidelines are still at CDC. Dr. Jeffrey Koplan read the draft guidelines (#4) and felt more work needed to be done. He was concerned that there were not enough patient protections, so the guidelines are now being repackaged. Ms. Thurman volunteered to call both t+&8 Kevin Thurman and Dr. Koplan to inquire about a timetable for release of the guidelines. Dr. R. Scott Hitt t PACHA Interim Activities & 11 Dr. Hitt reported on three major activities since the last PACHA meeting. Meeting with Kevin Thurman: The Executive Committee met with Mr. Thurman April 27, ^ during which Committee members focused on several recurring issues. Access to Care: Dr. Hitt emphasized to Mr. Thurman that the Council wants to see a big plan. A

one or two pager from HHS outlining a policy on access to care would indicate some leadership on the issue. Know Your Status Campaign: Dr. Hitt said the Committee made it clear that a big, bold initiative b is needed, including CDC as well as the White House and ONAP. If CDC continues to lead on this, the campaign may get lost in the bureaucracy. Leadership from above is needed. Needle Exchange: Dr. Hitt emphasized that new, updated science needs to be disseminated to \$ health experts and legislators across the country. He noted that the opposition has been active in getting its message out, whereas HHS has been silent. A more public role on the part of HHS would have an impact. Surveillance Guidance: The language has not been finalized yet. The Executive Committee is \$. encouraging HHS to state that unique identifiers are as good as names reporting. From the Council's viewpoint, either one would be satisfactory. This is currently a hot issue in California, where a names reporting bill was recently scuttled, and a unique identifier bill is pending. Office of Minority Health (OMH): The Committee urged the Administration to do whatever it t+&8 can to ensure that the \$8 million in OMH funding that was left out of the FY 1999 appropriations bill be restored so that the planned programming can begin. Health Care Worker Guidelines: Mr. Thurman did not know the status of these. & HHS Regional Meetings: These ended in early June. The Council wants a report on any action taken as a result of these meetings. Mr. Thurman said HHS wants to revamp how they look at AIDS within the Department. Overall, Dr. Hitt said the meeting with Mr. Thurman was hard edged. The Executive Committee conveyed the feeling that there is a lack of leadership at HHS. Issues are not moving. The next PACHA Executive Committee meeting with Mr. Thurman is scheduled for July 13. HHS Secretary Donna Shalala has committed to attend the October Council meeting. Mr. Summers emphasized that the meeting with Mr. Thurman did have an impact. Following the meeting, Mr. Thurman expressed some frustration to several HHS colleagues that the issues identified by the Council were not moving fast enough. Dr. Hitt also said he met with the National Organizations Responding to AIDS (NORA) Executive Committee to discuss coordinating timing and strategies on many of the same issues. NORA is focusing on Ryan White reauthorization. Dr. Hitt asked NORA to keep the Council informed on their activities regarding Ryan White. Letter on Omnibus Appropriations Bill: The Council sent a letter to the President discussing ~\$. the potential negative impact of the bill on publicly funded HIV/AIDS research. Letter on the Early Treatment of HIV Act of 1999: The Council also sent a letter asking the (#4 President to support the intent of this legislation. t+&8 Questions and Comments: Mr. Summers noted that Dr. Paul Gais would be starting June 14 as the NIH agency representative at ONAP and would be acting in this role for the next 6 months. Mr. Summers and Daniel Montoya noted that Dr. Gary Nabel of the NIH VRC was unable to attend the current Council meeting due to planning for the VRC dedication, but is interested in attending the October meeting. Dr. Hitt directed Mr. Montoya to set up a conference call time to meet with Dr. Nabel. Dr. Hitt stressed that Council members need to be educated on the compulsory licensing issue, which the International Subcommittee is taking up in its meeting. He said it is important that members not let a few individuals on the Council sway their opinion on the issue, because it is so complex. He added that the Council needs to address it, though it has not been a priority issue to date. Dr. Hitt said the Council should also consider whether it wants to issue a progress report this fall. He would like input from subcommittee chair

son what such a report should look like, whom it should address, and what message it should convey. Mr. Anderson asked Mr. Summers if Ms. Thurman could present a statement from the Council on global health appropriations during her meeting with the President and Reverend Sullivan on June 8. Mr. Summers responded that this would violate White House protocol, but that perhaps Ms. Thurman could mention the Council's position. Afternoon General Council Session %010

Access to Care Panel Presentation DE Dr. Hitt introduced the panel of three Government representatives. Ms. Aragon and Thomas *V%6 Henderson served as cofacilitators of the panel. Ms. Aragon, representing the Services h+&8 Subcommittee, began by providing some background on the issue of access to care. She noted that 2 years ago, HHS issued national Guidelines for the Treatment of HIV Disease. These guidelines were hailed by AIDS advocates as a much needed national standard of care. Access to care is one of the Council's six priorities, and Council members have discussed the issue with the President and with Mr. Thurmon many occasions. The Services Subcommittee has identified a number of key issues related to access to care. 1. The critical role of supportive services. Addressing medical care is not enough. Supportive ^ serv ices that facilitate access to care must also be considered. 2. Appropriations. Congressional spending caps threaten access to care.

3. Disparate outcomes across racial and ethnic groups. HIV related health outcomes continue to H vary by race and ethnicity. Eliminating these disparities must remain a priority for the Council and the Administration. 4. Medicaid. The Subcommittee has looked at eligibility criteria. The requirement that someone must be every sick and disabled before qualifying for Medicaid directly contradicts the treatment guidelines, which encourage early access to care. On Medicaid reform, the Jeffords Kennedy bill includes demonstration projects that could help address access to care, and the Pelosi Torricelli legislation would allow States to expand Medicaid. Ms. Aragon said the purpose of the panel discussion was to address an overarching plan to ensure access to the Public Health Service standard of care. What is the baseline for ensuring access to care? What is the plan to reach populations that do not currently have access to care? Daniel Mendelson, Office of Management and Budget (#4 M Mr. Mendelson began his presentation by describing several concerns he has as the congressional h+&8 appropriations process moves forward. Regarding the 302B allocations, he noted that the level of funding in the current House Labor HHS bill is down about 18 percent from last year, while the funding level in the Senate appropriations bill is down about 13 percent from last year. The 18 percent decrease on the House side would translate into a cut in Ryan White funding of about \$254 million. HHS has calculated that this would result in a loss of services to 69,000 people. Mr. Mendelson called this a crisis situation, and encouraged the Council to get the message out to the American people. CDC's reduction is about \$118 million for HIV prevention. Mr. Mendelson said there is a problem within CDC, part of which is perception. The perception problem is that some of the money that should be going into HIV prevention on accounts can't be found. What happens is that there are some line items within CDC where it is very clear that the money is going into HIV prevention, and there are other line items where an allocation methodology is applied. In the latter case, some fraction of the activities of local public health officials is attributable to HIV prevention. The CDC has initiated a process to assess this. Mr. Mendelson encouraged the Council to let CDC know that this is a priority. He said the Council needs to make sure that CDC programs have the same political cachet as Ryan White programs. Representatives Coburn, Bliley, and Arme have sent a letter to the General Accounting Office (GAO) requesting a full audit of Federal HIV/AIDS programs. This could appear as a appropriations rider and could compromise funding streams and public perception of how money is being spent. Mr. Mendelson mentioned a second potential appropriations rider issue regarding needle exchange. This year's rider would take the position that funds are fungible, prohibiting any recipient of Federal funding from running a needle exchange program. It would deny money to virtually all needle exchange programs currently operating. OMB will oppose this effort, using three arguments. The first is a States rights position, e.g., telling States how to spend their money is wrong. The Administration will try to get States to oppose the rider. Second, OMB will h+&8 point out that the rider would result in a degradation of services. CDC will identify which services will be disrupted. Finally, OMB will emphasize that a broader ba

nis directly at odds with the scientific evidence. Regarding the Jeffords-Kennedy bill, Mr. Mendelson said OMB is pleased that the demonstration projects will remain intact. It is critical that the bill be brought to the Senate floor. The demonstration projects will be flexible enough to accommodate waivers for States like Maine. Eric Goosby, M.D., Health Resources and Services Administration. Dr. Goosby stated that bringing HIV-positive populations without access to care into a continuum of care has been a leading priority for HHS over the last 2 years and will continue to be a priority over the next 3 years. The Health Resources and Services Administration (HRSA) and CDC are the lead agencies in this effort. HRSA has taken on a motto of "100 percent access and zero percent disparity." There is an ongoing effort to look at the linkages between existing lines of treatment "such as STD clinics, family planning clinics, community health centers, and migrant farm worker health clinics" as reservoirs for patients who need to be identified and brought into the AIDS care delivery system. HRSA is working with the Health Care Financing Administration (HCFA) to develop innovative relationships with State and local health care providers to help people without sources of payment. The data coming out of the recent Chicago and Geneva meetings, and from Johns Hopkins University, indicate that this will be a cost-effective approach in the long run. Dr. Goosby added that HRSA is trying to delineate the factors that contribute to the disparities in longevity, entry into care, development of opportunistic infections, stage of care upon entry into the medical delivery system, and mortality data among minority populations in the United States. Mike Hash, Health Care Financing Administration. Mr. Hash said HCFA's strategic plan for AIDS has focused on three areas: coordination of services, access to quality care services, and access to care itself. With respect to coordination of services, HCFA has established a working group with HRSA to address ways to maximize coordination between the provision of funds through the Ryan White Act and through Medicaid and Medicare. Last November, HCFA sent a letter to State Medicaid directors urging them to make coordination of service delivery programs a high priority. Accompanying the letter were two publications: one addressing coordination between Medicaid and Title II of the Ryan White Act, and one addressing coordination between State AIDS and Medicaid. In addition, a survey of State Medicaid Directors is being conducted by the AIDS Treatment Network with support from the Henry Kaiser Family Foundation. The survey addresses State Medicaid coverage and eligibility policies as they relate to persons with HIV, e.g., prescription drug coverage, viral load testing, and new models of service delivery. All but four States have completed the survey to date. HCFA is in the process of analyzing the results. On quality of care, HCFA is taking steps to maximize adherence to standards of care. A working group at HHS is looking at ways to operationalize the NIH Treatment Guidelines within Federal and State health care delivery programs. The group has taken steps to disseminate the guidelines: the adult guidelines were published in the Annals of Medicine, and the pediatric guidelines were published in the Morbidity and Mortality Weekly Report. Both sets of guidelines were also sent out with the State Medicaid Director letter. Last September, HCFA published a notice of proposed rulemaking implementing certain provisions of the Balanced Budget Act of 1997 with respect to Medicaid and managed care. In that regulation, HCFA solicited comments on the best strategy for ensuring the highest standards for private managed care plans that wish to contract with States to provide services to Medicaid-eligible persons. HCFA is also participating in a maternal and child health program with State public health departments to develop an appropriate initiative to inform HIV-positive pregnant women and new mothers of infants at risk for HIV of the significance of starting therapy early. Regarding access to care, HCFA, OMB, and HHS have been working with Maine to flesh out a proposal for an 1115 waiver. The Maine proposal was submitted last November, and Federal meetings with representatives from Maine are continuing. Outside of 1115 waivers, 16 States now have specially targeted home and community-based service waivers. Questions and Comments: Mr. Henderson asked the panel to comment on Federal development of a broad plan to ensure 100 percent access to quality care across populations. How do the pieces fit together? What is the timeframe? Dr. Goosby acknowledged the difficulty in reaching populations that are becoming increasingly disenfranchised from the mainstream medical delivery system. But he said HRSA is looking at a 3-year timeframe in which the agency would start to see decreasing numbers of people out of care, decreasing numbers of seroconversions, e

The idea is to create across the three agencies "HRSA, CDC, and the Substance Abuse and Mental Health Services Administration (SAMHSA)" an expectation of service integration and program coordination, combining treatment and prevention services. He said HRSA needs to start tasking grantees to view their role as a net of care, so that cooperative relationships are part of the Federal expectation. This would be implemented in the form of guidance, expectation, and technical assistance delivered by the Federal Government.

Dr. Goosby said there has been an acceptance of this vision at the leadership level in all three agencies, but there are some big holes in the reimbursement arena as well as a lack of infrastructure. Some rural and urban areas may prove problematic. This year, there will be three urban demonstration projects coordinated by CDC to integrate services across funding lines. These demonstration should serve as models. There is also an effort underway to integrate across HIV, STD, and TB programs at the local level. This initiative will begin in 20 cities in FY 1999. Mr. Henderson asked Dr. Goosby to quantify the universe of those without access to care. Dr. Goosby said HRSA believes there are about 300,000 HIV positive persons out of care and uninsured. These individuals live predominantly in urban settings, and more than 50 percent are members of minority groups. Pockets in the Native American community, and in San Juan and the Virgin Islands, also pose each challenge in terms of access to care. Mr. Mendelson noted that it is extremely difficult to redirect streams of Federal funding, and trying to do so may threaten one's base of support. He also said the Government's inability to address access to care for HIV positive persons has resulted from the fragmentation of the public health delivery system. The Administration did try to address this with a \$1 billion, 5-year initiative in this year's budget. Mr. Mendelson told the Council that OMB is very open to making changes in the appropriations process and in the President's budget request next year. Terje Anderson commented that he would like to see concrete numbers put forward as part of a broad plan on access to care. Dr. Goosby agreed that high-risk populations in each city need to be concretely identified, along with their geographical locations and behavioral patterns. Once these numbers are derived, the ways in which prevention services interface with each population must be addressed. He said HRSA has attempted to move the dialogue in that direction, but it has been difficult. The Federal Government is used to thinking in terms of States and cities, not specific populations.

Mr. Henderson stressed that the 300,000 figure needs to be broken down into segments for which strategies to improve access can be implemented. Dr. Stephen Abel asked Dr. Goosby what methodologies are available through Ryan White to carry out quality assessments, and if such assessments could be mandated into HRSA's programs. Dr. Goosby responded that few methodologies are available. HRSA understands this need and in the last year has shifted its focus for technical assistance onto quality assurance. The agency recently hired Dr. Michael Johnson to develop a quality assurance capability at HRSA that will encompass technical assistance and the AIDS educational training centers. The agency has reorganized its resources to make quality assurance a real priority. Dr. Goosby also noted that the tight administrative caps in Ryan White make it difficult to place a large expectation on grantees to develop a quality assurance capability. The HCUS study pointed out the ease of deficiency. Mr. Mendelson said it is very difficult to keep outcomes measures current, particularly when treatment is evolving as rapidly as it is for HIV/AIDS. Therefore, he is concerned about tying specific outcomes measures to money. It could have unanticipated consequences. Mr. Hash added that HCFA is working to find ways to hold integrated health care plans accountable for meeting appropriate standards and to demonstrate performance improvement annually. Ms. Stokes questioned the Government's ability to go beyond outcomes measures to define quality care, assessing factors such as patients' ability to get appointments with their local Ryan White-funded physician. Dr. Goosby said it would be difficult to get to that level of intimacy with a grantee and suggested that the appropriate Federal role in a situation where inpatient care is being provided with good outcomes measures should be discussed.

Returning to the issue of Ryan White administrative caps, Ms. Aragon said it is important for HRSA to be able to keep and use the 1 percent technical assistance and evaluation that is available through the Ryan White Care Act, rather than have these funds distributed to other HHS programs. This would allow HRSA to provide more robust technical assistance and evaluation. Mr. Summer added that perhaps funds could be obtained through channels that are not designated as HIV or

AIDS specific, such as the Minority Health Professions Act. Mr. Robinson emphasized the need for Federal agencies to specifically address the lack of infrastructure in racial and ethnic minority communities. Where the infrastructure exists, HIV/AIDS dollars either are not available or have not been distributed. Rabbi Joseph Edelheit asked the panel if the estimated 69,000 persons drop in the number of HIV positive individuals served as a result of the House budget cut is included in the 300,000 figure of HIV individuals currently out of care. The panel agreed that the 69,000 figure is probably not included in the 300,000 total. Rabbi Edelheit also asked Dr. Goosby to explain HRSAs and CDC's timidity on the Know Your Status campaign in light of HRSAs goal to identify all seropositive individuals. Dr. Goosby responded that the two efforts are relinked and that both agencies hope they will complement each other. Mr. Robinson added that it is critical to normalize the idea of being tested. Dr. Hitt said he thinks the 300,000 out of care number is an under estimate, considering that there are about 900,000 HIV positive individuals in the United States, and it is estimated that a third don't know their status. Mr. Fogel asked the panel to explain why various HIV/AIDS initiatives are moving so slowly through the Federal process. Referring specifically to 1115 waivers, Mr. Hash noted that HCFA takes care to consider what kinds of precedents it might be setting and what kinds of unintended consequences might occur as a result of the agency's decision on waivers. The agency must contend with a variety of statutory restrictions, and budgetary and programmatic concerns, to preserve Medicaid as an entitlement program. Mr. Summers noted that, in the case of 1115 waivers, and specifically the Maine waiver, the process is a dialogue with the State involved, so delays are incurred on the part of both Federal and State negotiators. Lynne Cooper commented that the lack of supportive services is often the biggest obstacle to access to care. Mr. Anderson told the panel that a sense of urgency needs to be instilled in the Administration regarding making life saving treatments available to HIV positive individuals. Barbara Aranda Naranjo stressed the need for the Administration to expand access to care for the 300,000 individuals living with HIV who are out of care. She noted that these individuals are doing not have the resources to come to Washington to advocate for themselves, so, it is important for the Council to advocate for them. Bringing the discussion to conclusion, Ms. Aragon said one of the most important things mentioned by the panel was the figure of 300,000 out of care individuals. She said this figure should serve as a starting point to establish a plan to broaden access to care, and requested that panel members convey the Council's request for a comprehensive plan to Secretary Shalala. Mr. Mendelson noted that many people in the Administration had worked hard to push the Jeffords Kennedy bill through, and that the legislation, if passed, would address some of the Council's fundamental concerns. Dr. Hitt summed up by saying that leadership and coordination are clearly lacking in each of the agencies represented on the panel. Here he iterated the need for a one page memo from each agency outlining the obstacles to improving access to care and setting forth an overall plan and a proactive approach. Tuesday, June 8

Afternoon General Council Session L Public Comment Wayne Turner, ACTUP, Washington, DC Mr. Turner discussed AIDS accountability and the need to strengthen community oversight of Federal AIDS funding. He told the Council about a trial underway in Puerto Rico, where eight people have been charged with embezzling \$2.2 million in Federal AIDS funds. Six of the eight have pleaded guilty, and the Governor of Puerto Rico is implicated in receiving \$250,000 in AIDS funds for his 1992 political campaign. Activists are holding daily vigils outside the courthouse to bring attention to the fact that when AIDS money is stolen, people die. Mr. Turner said the minority leader of the Puerto Rico State Legislature wrote a letter to Secretary Shalala in 1993 outlining irregularities and conflict of interest violations concerning AIDS funds. He posed the question: If HRSA had carried out its oversight function in 1993, how many people might still be alive? He said the situation in Puerto Rico is not an isolated one. Council members need to examine ways to strengthen oversight so that this does not keep happening. ACTUP, the AIDS Accountability Project, and others have called for a GAO performance audit on AIDS funding. He noted that it was Republican Representatives Coburn, Bliley, and Armey who wrote a letter to GAO requesting an audit. Mr. Turner offered two proposals: The GAO audit must be carried out, and conflict of interest rules must be enforced. In Washington, DC, for

example, only 4 of 60 planning council members are not drawing salaries and are not board members for organizations receiving Federal AIDS money. The planning councils are built in structure for community oversight, and membership requirements need to be adjusted to ensure there is no conflict of interest. Comments: L Helen Miramontes commented that said the Council should exercise caution in supporting the audit. Mr. Robinson said the Council had been engaged with local agencies to support them in their oversight activities, but the Council could play a greater role in this area. Mr. Anderson noted that the HRSA AIDS Advisory Committee met in May to draft a series of recommendations regarding the reauthorization of the Ryan White Act. One of the recommendations stated that at least 51 percent of the membership of any planning body should be free of any conflict of interest as defined in the law. Debra Fraser Howze urged the Council to be cautious about supporting the performance audit. She noted that, historically, every time a large amount of funding is directed to communities of color, a call for an audit follows. She said the AIDS community should wait to see how things play out in Puerto Rico before laying blame. Dr. Aranda Naranjo and Helen Miramontes also questioned the intent of those behind the audit request. Charles Troupe stressed that the issue of misappropriation of funds is indeed a partisan one, and that the AIDS community should not look to Republicans for sympathy and support.

Subcommittee Reports %0!0. Research Subcommittee (#4 Dr. Levine first reminded Mr. Montoya to schedule a conference call with Chris Collins. She noted that Representative Pelosi has sponsored a bill, H.R. 1274, to give a 30 percent tax credit to corporations or individuals doing vaccine research for any disease that kills more than one million people worldwide per year. The credit would not apply to those doing research under any Government grant or contract. The subcommittee will seek more information on the bill and will report back to the Council in October. The subcommittee expects to speak to Dr. Nabel via conference call regarding the vaccine research effort at NIH. She said Michael Isbell reported on recent activities of the International AIDS Vaccine Initiative (IAVI). IAVI is focused on moving quickly, trying innovative approaches, and working with underdeveloped nations. The organization is developing international partnerships. One partnership, linking Oxford University in England with the University of Nairobi in Kenya, is focusing on a DNA viral approach to a vaccine. This initiative is expected to move into clinical trials later this year. A second partnership is using Venezuelan equine encephalitis as a vector for testing a vaccine. This initiative joins Venezuela and South Africa and is expected to move into clinical trials in early 2000. IAVI also received a \$25 million donation from Bill Gates, which will be distributed in sums of \$5 million a year. The subcommittee anticipates a conference call with IAVI over the summer to offer the Council assistance. Dr. Judith Auerbach of the Office of AIDS Research at NIH also spoke to the subcommittee about behavioral interventions. The NIH budget for behavioral and social science research increased by 21 percent this year; the only other increase that was comparable was for vaccines, which rose by 31 percent. The money being spent this year for behavioral interventions research is \$213 million, while the vaccine funding level is \$148 million "a figure that is still very low. NIH is looking at settings as they relate to minority populations, gender, and drug use, and is doing very applied, focused, intervention-based research. The subcommittee asked Dr. Auerbach to provide a complete listing of research projects in this area. Dr. Levine noted that Dr. Neal Nathanson should be commended for moving quickly in this direction. NIH's funding priorities in this area are on primary prevention, secondary prevention, and methods. The subcommittee expressed a concern that there is a disconnect between NIH and CDC that impedes the translation of research into actual interventions. Dr. Helene Gayle of CDC agreed that this is a problem and that an administrative mechanism is needed. The subcommittee also stressed that all of the players need to be communicating all of the time. Dr. Gayle said she would take these concerns back to CDC. If nothing happens by the next Council meeting, the subcommittee will make a formal recommendation regarding these issues. The subcommittee scheduled three conference calls for July 21, August 18, and September 15 or 16, all at 10:00 a.m. One call will be with Dr. Nabel, one will be with IAVI, and one will be related to the Pelosi bill. Dr. Hitt asked if there had been any opposition to the Pelosi bill. None of the Council members had heard of any opposition. He also asked about coordination on the vaccine effort. Dr. Levine said the Council should wait to be briefed by Dr. Nabel at the next meeting. Ms. Miramontes

ntesnotedthattheAIDSVaccineAdvocacyCoalition(AVAC)hadjustreleasedareportcalled EightYearsandCountingonthevaccineeffort.ShecalledAVACandrequestedenoughcopiesfor eachCouncilmember. PreventionSubcommittee %0!0 Mr.Robinsonreportedthatthesubcommittee discussed CDC efforts related to prevention. First, a CDC Advisory Committee working group is carrying out an inventory of CDC's AIDS specific programs and examining their priorities. Dr. Gaylesaid this process should be completed by July or August, and a report will be issued. The subcommittee expressed some skepticism about the value of this process, but decided there are some benefits, such as broader access to information. Dr. Gaylesaid she would update the subcommittee once the process is completed. Since the process is an internal one, the subcommittee is concerned about the objectivity of any resulting recommendations. Mr. Robinson noted that the GAO audit will occur simultaneously, and this has sparked a commitment among some to implement significant changes in CDC's approach. Second, the subcommittee received an update on the Know Your Status campaign. Members were impressed that the CDC has worked to build a week of activities around National Testing Day. However, the cross agency leadership needed to bring a national focus to this campaign is not evident. Therefore, the subcommittee has committed to biweekly meetings with representatives from HHS, CDC, and ONAP to gauge their progress on the campaign, and to coordinate access to and use of resources and contacts. The subcommittee also suggested that a CDC coordinator for the campaign be placed at ONAP. After some discussion, it was decided that Dr. Hitt would send a memo to Mr. Thurman prior to the July 13 meeting recommending placement of an FTE coordinator by CDC at ONAP. Ms. Thurman said Dr. Gayle had been trying to recruit someone to take the position but had not been successful. Dr. Hitt said he would call Dr. Gayle to reinforce the message that the FTE is a priority for the Council. At Dr. Hitt's suggestion, it was decided that Mr. Anderson would send out a general broadcast fax or email to all Council members following each biweekly meeting on the Know Your Status campaign to update everyone on campaign activities. The subcommittee also discussed the Health Care Worker Guidelines. Dr. Gaylesaid that CDC's review of the guidelines should be complete within a week to 10 days, and the document would then be forwarded to HHS. Dr. Hitt suggested including a request for a timeline on the guidelines in the memo to Mr. Thurman. Mr. Montoya reminded all subcommittee chairs that they should submit in writing any items to be included in the memo to Mr. Thurman prior to the July 13 meeting. Finally, Mr. Robinson mentioned that the update on the 1996 youth report [is this from CDC?] is underway, and is expected to be released by World AIDS Day. The subcommittee also recommended that Dr. Koplan be invited to the October meeting when Secretary Shalala is present. Dr. Hitt suggested that the Council's Executive Committee try to schedule a preliminary meeting with the Secretary and Mr. Thurman before the October meeting. Racial and Ethnic Populations Subcommittee b Dr. Nilsa Gutierrez said the subcommittee decided to organize a presentation to the full Council on the character of the epidemic in Latino communities, to be given at the October meeting. An outline of the presentation was distributed to each Council member. The presentation will address issues: a general overview of Latino subpopulations; the health status of the Latino population; HIV infection trends and problems of underreporting; the particularities of the health care infrastructure in Latino populations; the impact of substance abuse and use in the spread of HIV infection; and the case of the Virgin Islands, where the Government is facing bankruptcy and a rapid degradation of services is occurring. The presentation will take 90 minutes. How the epidemic has affected the gay Latino community, women, and inmates will also be addressed. Dr. Hitt said the presentation was a good idea, but that the Executive Committee needs to think logistics and scheduling for the October meeting in order to fit everything in. Ms. Aragon suggested that Latino community leaders be invited to the October meeting for the presentation and a followup meeting. Dr. Gutierrez said the subcommittee had also decided to begin to include the Latino perspectives of nongovernmental organizations, immigration coalitions, and public interest attorneys in subcommittee meetings. Aspects of the epidemic in Mexico and Puerto Rico will also be discussed in future subcommittee meetings. Mr. Montoya said he needed to clear logistics for the Latino presentation with the subcommittee. Steve Lew added that the subcommittee would also like to schedule a discussion of Asian and Pacific Islander (API) populations at a future Council meeting. Charles Blackwell noted that the President's

tsigned an executive order on API health care issues, and that the issue might be appropriate for the December Council meeting. He added that the Council may need to revisit a discussion on Native American populations, and that an interim meeting of the subcommittee might be needed. Mr. Montoya said the Council should push forth the new Presidential Committee on API to schedule a presentation on HIV/AIDS to highlight not just the health issues related to HIV, but education and labor issues as well. International Subcommittee !

* Mr. Anderson reported on several presentations before the subcommittee on the compulsory licensing issue, including those from the Pharmaceutical Research and Manufacturers of America (PhRMA), Medecins Sans Frontieres, the World Bank, the Joint United Nations Programme on HIV/AIDS (UNAIDS), the Health Gap Coalition, and consumer advocates. Mr. Anderson said the ways in which U.S. copyright, patent, and trade policies affect compulsory licensing are not easily understood, and the subcommittee is struggling to understand all of the h+&8 issues implications. The subcommittee would like to focus on two tasks: (1) a further examination of current and future U.S. policy on compulsory licensing, which would involve hearing from U.S. Government agencies, and (2) a fact finding of perspectives from the developing world. A conference call or interim subcommittee meeting with several U.S. Government representatives is tentatively planned for this summer. Mr. Anderson also emphasized that the U.S. Government's response to HIV/AIDS on a global scale needs to be considered as part of the discussion on compulsory licensing. Mr. Anderson said he would distribute copies of the written statements submitted by those presenting before the subcommittee. Mr. Montoya indicated his staff member would be writing a summary of the subcommittee session on compulsory licensing. Mr. Anderson said the subcommittee should be able to make a presentation on compulsory licensing to the full Council by the December meeting. Mr. Montoya said his office would be sending out a lot of information on compulsory licensing, and stressed that each Council member has a responsibility to read the information because the issue is so complex. Mr. Anderson noted that the Council needs to determine what parallel exists with regard to compulsory licensing for other drugs and diseases. Dr. Hitt mentioned that The Village Voice had published an article about Vice President Gore !

* position on compulsory licensing in South Africa. Ms. Thurman said her office had drafted talking points in response to the article. She said the Vice President had not sided with the pharmaceutical industry per se, but had advocated strong patent protection and finding a balance between providing incentives for drug development and protecting profits. Mr. Anderson clarified that South Africa is not currently using compulsory licensing, but a law is on the books that would allow it. There is concern in the U.S. trade community about the h+&8 potential impact of this law. Ms. Thurman noted that there have been times when the United States and other countries have used compulsory licensing, so the Administration is gathering information and determining what precedent has been set. Mr. Troupe questioned whether pharmaceutical companies are seeking excessive profits in the developing world. Ms. Greenberger commented that pricing, compliance, and patent issues make compulsory licensing a complicated issue "it's not just about profits. Dr. Bruce Weniger said he was surprised at the U.S. Government's aggressiveness in pursuing punitive action (e.g., withdrawing tariff preferences) against South Africa before any licensing had actually occurred. Dr. Hitt noted that generic AZT is available in Canada and costs about 40 percent less than what it costs in the United States. Mr. Anderson noted that this was a parallel trade issue, not a compulsory licensing issue. Dr. Hitt requested that someone on the International Subcommittee draft an executive summary on compulsory licensing as the discussion progresses. Mr. Anderson said most national organizations are really struggling to develop a position on compulsory licensing. UNAIDS is currently working on a position statement, and it would be instructive to look at that statement when it is released. Ms. Thurman said she recently met with Peter Piot of UNAIDS and representatives of the Vice President's office, the Department of Commerce, and the U.S. Trade Representative's office to discuss the Administration's policy on compulsory licensing. The group drafted an initial set of talking points, but a complete policy statement is still being debated. h+&8 Appropriations Subcommittee Ms. Aragon reported that the subcommittee discussed the FY 2000 appropriations process and the budget caps issue that Mr. Mendelson addressed in his presentation.

onto the full Council. She noted that this is a serious situation for both the Labor HHS bill and the VA HUD bill. She said House Speaker Dennis Hastert has been talking about transferring some Department of Defense money to HHS. She urged Council members not to be deceived by this move, as the amount of the transfer would be insignificant in comparison to the cut stake to meet the budget caps. This move could end up undermining the AIDS community advocacy efforts. It is important that advocates make AIDS a squeaky wheel and convey the message that the budget caps are not acceptable. The subcommittee would like an update from the Administration in October on how the \$156 million from the CBC is being spent. The CBC is leading an effort to add \$180 million in new funding for HIV/AIDS to the FY2000 appropriations bill. This funding request would probably include Latinos and other communities of color in addition to the African American community. Ms. Aragon asked that the Appropriations Subcommittee, the Racial and Ethnic Populations Subcommittee, and the International Subcommittee meetings not overlap during the October Council meeting. Mr. Troupes suggested that money lost through the budget caps might be replaced through funding from the National Conference of State Legislatures (NCSL) and the National Black Caucus of State Legislatures (NBCSL). He stressed that the AIDS community needs to start looking at the States for funding rather than depending on the Federal Government. Ms. Aragon agreed that the States are important partners, but emphasized that the magnitude of cuts that could occur if the FY2000 budget caps are sustained would far exceed the capacity of State or local entities, and that critical services could be lost.

h+&8 Services Subcommittee

The subcommittee organized Monday's access to care panel presentation. Ms. Aragon said the subcommittee would follow up with the three presenters regarding development of a broad plan to address access to care. In addition, the subcommittee heard a presentation from Nan Roman and Randy Russello of the National AIDS Housing Coalition, which, along with NORA, is requesting a \$60 million increase for the Housing Opportunities for Persons with AIDS (HOPWA) program in FY2000. They discussed the critical role of housing in stabilizing those with HIV and facilitating access to care. For this reason, the subcommittee will continue to monitor HIV housing issues. The subcommittee also discussed Ryan White reauthorization. Members would like to invite community advocates to provide an informational update on the reauthorization process during the October meeting. Finally, Ms. Aragon said the subcommittee had scheduled its next four or five conference calls.

Other Business

F& Mr. Montoya reminded Council members that the next meeting will be held October 4 and 5, 1999. The Executive Committee will hold its first conference call on June 23 at 10:00 a.m. Eastern time. All subcommittee chairs must submit their conference call schedule to Mr. Montoya. Travel reimbursements must be sent in as soon as possible. For the June 23 conference call, it is important that all subcommittee chairs submit to Mr. Montoya their agenda items for the July 13 meeting with Mr. Thurman, requests for interim Council activity before the October meeting, and requests for Council agenda time at the October h+&8 meeting. Dr. Hitt reiterated that, in his memo to Mr. Thurman, he would mention the FTE for the Know Your Status campaign and a timetable for the Health Care Worker Guidelines. Regarding Council member terms, Dr. Hitt said the vetting process for new members would take a couple of months. Seventeen member terms will end in July, five additional member terms will expire by December, and only two members have expressed a desire to rotate off the Council. It is Dr. Hitt's understanding that vacancies will be filled by random selection. He expects a fair turnover between now and December. The meeting was adjourned at 4:15 p.m.

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<H5>Rachel King, UNAIDS, Geneva, Switzerland, June, 1999<!--SELECTION--><!--/SELECTION--></H5>

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(PDF format - 438,020 bytes/ 60 pages)</P>

<H3>TABLE OF CONTENTS</H3>

<DL>

<DD>

<DD>Abbreviations

<DD>

<DD>Introduction

<DD>

<DD>I. Theories and models of behavioural change

<DL>

<DD>(A) Focus on individuals

<DD>(B) Social theories and models

<DD>(C) Structural and environmental

<DD>(D) Constructs alone and transtheoretical models

</DL>

<DD>

<DD>II. Key approaches to behavioural change for HIV

<DL>

<DD>(A) Approaches aimed aimed at individual level behavioural change

<DL>

<DD>Information, education and communication

<DD>Testing and counselling

<DD>Conclusion

</DL>

<DD>(B) Community-level interventions

<DL>

<DD>Social influence and social network interventions

<DD>Outreach interventions

<DD>School-based interventions

<DD>Condom promotion and social marketing

<DD>Community organizing, empowerment and participatory action research

<DD>Policy level interventions

<DD>Conclusion
</DL>
</DL>
<DD>
<DD>III. Examples of the impact of
theory-driven interventions
<DL>
<DD>(A) Women
<DL>
<DD>Sex workers
<DD>Conclusion
</DL>
<DD>(B) Men
<DL>
<DD>Men having sex with men (MSM)
<DD>Heterosexual men
<DD>Conclusion
</DL>
<DD>(C) Youth
<DL>
<DD>Conclusion
</DL>
<DD>(D) Injecting drug users
<DL>
<DD>Conclusions
</DL>
</DL>
<DD>
<DD>IV. Challenges
<DL>
<DD>(A) Design/context issues
<DD>(B) Gender
<DD>(C) Changing epidemic
<DD>(D) Null findings
</DL>
<DD>
<DD>V. Conclusions
<DL>
<DD>
</DL>
<DD>References
<DD>
<DD>Tables
</DL>

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<DL>
<DD>Table 1: Overview of most frequently
used theories of human behaviour
<DD>Table 2: Models as theories tested
through research or reviews
<DD>Table 3: Models and theories used
to guide interventions
</DL>

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<DD>Table 4: Summary of theories and models by population group

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<H3>ABBREVIATIONS</H3>

<DL>

<DD>ARRM AIDS risk reduction model

<DD>CT Counselling and testing for HIV

<DD>HBM Health belief model

<DD>IDU Injecting drug user

<DD>ILOM Indigenous leader outreach model

<DD>MSM Men who have sex with men

<DD>PAR Participatory action research

<DD>RCT Randomized controlled trial

<DD>SCT Social cognitive theory

<DD>STD Sexually transmitted disease(s)

<DD>SW Sex worker(s)

<DD>TASO The AIDS Support Organization, Uganda

<DD>THE Tools for health and empowerment

<DD>UAI Unprotected anal intercourse

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<H3> </H3>

<H3>INTRODUCTION</H3>

<P>Today, in 1999, interventions to stem the spread of HIV throughout the world are as varied as the contexts in which we find them.

Not only is the HIV epidemic dynamic in terms of treatment options, prevention strategies and disease progression, but sexual behaviour, which remains the primary target of AIDS prevention efforts worldwide, is widely diverse and deeply embedded in individual desires, social and cultural relationships, and environmental and economic processes. This makes prevention of HIV, which could be an essentially simple task, enormously complex involving a multiplicity of dimensions.</P>

<P>Either implicitly or explicitly nearly all prevention interventions are based on theory. Most rely on the assumption that giving correct information about transmission and prevention will lead to behavioural change. Yet research has proven numerous times that education alone is not sufficient to induce behavioural change among most individuals. Thus, second generation interventions were developed based on individual psychosocial and cognitive approaches that educate individuals in practical skills to reduce their risk for HIV infection (Kalichman, 1997). More recently, social researchers have come to realize that because complex health behaviours such as sex take place in context, socio-cultural factors surrounding

the individual must be considered in designing prevention interventions. Finally, beyond the individual and his or her immediate social relationships lie the larger issues of structural and environmental determinants that also play a significant role in sexual behaviour (Sweat, 1995).

The aim of this project was to associate outcomes of behavioural interventions around the world with the different models and theories on which they were based. There is however a dearth of information on tests of the relevance of behavioural change models in differing contexts, especially in non-industrialized countries and in regions at later stages of the epidemic. Most intervention reports, whether in peer-reviewed journals or conference abstracts, often do not explicitly state the theoretical framework of the project. And in many cases, there was no explicit intent to base interventions on behavioural change models as a great number of them have been propelled by the urgency to do anything to slow the epidemic, particularly in resource-poor settings. The primary intention of this review was to look as broadly as possible at all interventions in order to identify what has worked in the enormous variety of situations addressed. However, this would have implied analysing retroactively all prevention programmes to define their theoretical foundations, which was not feasible within the scope, time and resources of this project.

This review thus focused primarily on the following types of reports:

- sexual behavioural change interventions for HIV explicitly mentioning their theoretical approach
- studies testing theoretical models of behavioural change
- and reviews on impact of behavioural changes interventions.

Additional examples of developing countries projects were used to balance the observations and conclusions drawn from the above sources in order to compensate for the lack of tested models in these countries.

Most of the studies cited in this report include control or comparison situations and behavioural outcomes. Reports that included only knowledge and attitudes outcomes were excluded. Also included were some interventions that used constructs from a variety of theories attempting to incorporate social, environmental and cognitive elements, or used constructs alone without testing theories as a whole. Unfortunately, it was difficult to identify interventions based both on a transtheoretical approach and strong evaluation components.

Finally, this review was organized into four sections, including:

- a brief overview of theoretical models of behavioural change

- a review of key approaches used to stem sexual transmission of HIV
- a summary of successful interventions targeting specific populations at risk
- and a discussion of remaining challenges.

<H3> </H3>

<H3>CHAPTER I: THEORIES AND MODELS OF BEHAVIOURAL CHANGE</H3>

<P>This chapter is broken into 4 sections that cover the most frequently used theories and models of behavioural change from varied perspectives (see Table 1). It begins with theories that focus on the individual's psychological process, such as attitudes and beliefs, then goes into theories emphasizing social relationships, and ends with structural factors in explaining human behaviour. This separation is artificial as there is inevitable overlap in categories. It might therefore be useful, as well, to see the theories as a continuum of models moving from the strictly individually-centere d to the macro-level of structural and environmentally focused.</P>

<H4>(A) FOCUS ON INDIVIDUALS</H4>

<P>As HIV transmission is propelled by behavioural factors, theories about how individuals change their behaviour have provided the foundation for most HIV prevention efforts worldwide. These theories have been generally created using cognitive-attitudinal and affective-motivatio nal constructs (Kalichman, 1998). Nearly all the psychosocial theories originated in the West but have been used for AIDS internationally with mixed results. Only one of the psychosocial models discussed below, the AIDS risk reduction model, was developed specifically for AIDS.</P>

<P>Psychosocial models of behavioural risk can be categorized into 3 major groups: those predicting risk behaviour, those predicting behavioural change and those predicting maintenance of safe behaviour. Models of individual behavioural change generally focus on stages that individuals pass through while trying to change behaviour. These theories and models generally do not consider the interaction of social, cultural and environmental issues as independent of individual factors (Auerbach, 1994). Although each theory is built on different assumptions they all state that behavioural changes occur by altering potential risk-producing situations and social relationships, risk perceptions, attitudes, self- efficacy beliefs, intentions and outcome expectations (Kalichman, 1997). Central to HIV prevention interventions based on psychological- behavioural theory is the practice of targeted risk-reduction skills. These skills are generally passed on to individuals in a process consisting of instruction, modeling, practice and feedback (Kalichman, 1997). The psychological theories and models that have been most instrumental

in the design and development of HIV prevention interventions are briefly described below.</P>

<H4>Health belief model</H4>

<P>The Health belief model, developed in the 1950s, holds that health behaviour is a function of individual's socio-demographic characteristics, knowledge and attitudes. According to this model, a person must hold the following beliefs in order to be able to change behaviour:</P>

perceived susceptibility to a particular health problem (" am I at risk for HIV?")

perceived seriousness of the condition (" how serious is AIDS; how hard would my life be if I got it?")

belief in effectiveness of the new behaviour (" condoms are effective against HIV transmission")

cues to action (" witnessing the death or illness of a close friend or relative due to AIDS")

perceived benefits of preventive action (" if I start using condoms, I can avoid HIV infection")

barriers to taking action (" I don't like using condoms").

<P>In this model, promoting action to change behaviour includes changing individual personal beliefs. Individuals weigh the benefits against the perceived costs and barriers to change. For change to occur, benefits must outweigh costs. With respect to HIV, interventions often target perception of risk, beliefs in severity of AIDS (" there is no cure"), beliefs in effectiveness of condom use and benefits of condom use or delaying onset of sexual relations.</P>

<H4>Social cognitive (or learning) theory</H4>

<P>The premise of the social cognitive or social learning theory (SCT) states that new behaviours are learned either by modeling the behaviour of others or by direct experience. Social learning theory focuses on the important roles played by vicarious, symbolic, and self-regulatory processes in psychological functioning and looks at human behaviour as a continuous interaction between cognitive, behavioural and environmental determinants (Bandura, 1977). Central tenets of the social cognitive theory are:</P>

self-efficacy - the belief in the ability to implement the necessary behaviour (" I know I can insist on condom use with my partner")

outcome expectancies - beliefs about outcomes such as the belief that using condoms correctly will prevent HIV infection.

<P>Programmes built on SCT integrate information and attitudinal change to enhance motivation and reinforcement of risk reduction

skills and self-efficacy. Specifically, activities focus on the experience people have in talking to their partners about sex and condom use, the positive and negative beliefs about adopting condom use, and the types of environmental barriers to risk reduction. A meta-analysis of HIV risk-reduction interventions that used SCT in controlled experimental trials found that 12 published interventions with mostly uninfected individuals all obtained positive changes in risk behaviour, with a medium effect size meeting or exceeding effects of other theory-based behavioural change interventions (Greenberg, 1996).

Theory of reasoned action

The theory of reasoned action, advanced in the mid-1960s by Fishbein and Ajzen, is based on the assumptions that human beings are usually quite rational and make systematic use of the information available to them. People consider the implications of their actions in a given context at a given time before they decide to engage or not engage in a given behaviour, and that most actions of social relevance are under volitional control (Ajzen, 1980). The theory of reasoned action is conceptually similar to the health belief model but adds the construct of behavioural intention as a determinant of health behaviour. Both theories focus on perceived susceptibility, perceived benefits and constraints to changing behaviour. The theory of reasoned action specifically focuses on the role of personal intention in determining whether a behaviour will occur. A person's intention is a function of 2 basic determinants:

- attitude (toward the behaviour), and
- 'subjective norms', i.e. social influence.

'Normative' beliefs play a central role in the theory, and generally focus on what an individual believes other people, especially influential people, would expect him/her to do.

For example, for a person to start using condoms, his/her attitude might be "having sex with condoms is just as good as having sex without condoms" and subjective norms (or the normative belief) could be "most of my peers are using condoms, they would expect me to do so as well". Interventions using this theory to guide activities focus on attitudes about risk-reduction, response to social norms, and intentions to change risky behaviours.

Stages of change model

This model, developed early in the 1990s specifically for smoking cessation by Prochaska, DiClemente and colleagues, posits 6 stages that individuals or groups pass through when changing behaviour: pre-contemplation, contemplation, preparation, action, maintenance and relapse. With respect to condom use, the stages could be described as:

- has not considered using condoms (pre-contemplation)
- recognizes the need to use condoms (contemplation)
- thinking about using condoms in the next months (preparation)
- using condoms consistently for less than 6 months (action)
- using condoms consistently for 6 months or more (maintenance)
- slipping-up with respect to condom use (relapse)

<P>In order for an intervention to be successful it must target the appropriate stage of the individual or group. For example, awareness raising between stage one and two. Groups and individuals pass through all stages, but do not necessarily move in a linear fashion (Prochaska, 1992). As with previous theories, the stages of change model emphasizes the importance of cognitive processes and uses Bandura's concept of self-efficacy. Movement between stages depends on cognitive-behavioural processes.</P>

<P>Among others (see Table 3), the CDC has used the Stages of Change model in its AIDS Community Demonstration Projects for marginal populations in the US and in a research project aiming to change women's sexual behaviour with their main partners (Galavotti 1998).</P>

<H4>AIDS risk reduction model</H4>

<P>The AIDS risk reduction model, developed in 1990 (Catania et al), uses constructs from the health belief model, the social cognitive theory and the diffusion of innovation theory (a social model described below), to describe the process individuals (or groups) pass through while changing behaviour regarding HIV risk. The model identifies 3 stages involved in reducing risk for HIV transmission, including:</P>

- behaviour labelling
- commitment to change
- taking action.

<P>In the first stage, knowledge about HIV transmission, perceived HIV susceptibility, as well as aversive emotions influence how people perceive AIDS. The commitment stage is shaped by four factors: perceptions of enjoyment, self-efficacy, social norms and aversive emotions. Again, in the last stage, aversive emotions, sexual communication, help-seeking behaviour and social factors affect people's decision-making process (Catania, 1990).</P>

<P>Programmes that use the AIDS risk reduction model focus on:</P>

- clients' risk assessment
- influencing the decision to reduce risk through perceptions of enjoyment or self-efficacy

- clients' support to enact the change (access to condoms, social support).

<H4>Conclusion</H4>

<P>These psychosocial theories and constructs were very useful early in the epidemic to identify individual behaviours associated with higher rates of HIV transmission. They continue to provide important guidance to interventions in formulating design and evaluation with diverse populations in a wide variety of settings. Theories also help in understanding study results. It is important, however, to pay particular attention to these theories across cultures and genders as nearly all the individually based theories were developed in the West with little focus on the role of gender. Although numerous studies have proven the usefulness of these theories, it has become increasingly evident that alone they do not entirely explain why some populations have higher HIV prevalence than others nor the complex interactions between contextual factors and individual behaviour.</P>

<H4>(B) SOCIAL THEORIES AND MODELS</H4>

<P>Overemphasis on individual behavioural change with a focus on the cognitive level has undermined the overall research capacity to understand the complexity of HIV transmission and control. Focus only on the individual psychological process ignores the interactive relationship of behaviour in its social, cultural, and economic dimension thereby missing the possibility to fully understand crucial determinants of behaviour. Aggleton (1996) points out that, in many cases, motivations for sex are complicated, unclear and may not be thought through in advance.</P>

<P>Societal norms, religious criteria, and gender-power relations infuse meaning into behaviour, enabling positive or negative changes. A main difference between individual and social models is that the latter aim at changes at the community level. Sociological theories assert that society is broken up into smaller subcultures and it is the members of one's immediate surroundings, the peer group that some-one most identifies with, that has the most significant influence on an individual's behaviour. According to this perspective, effective prevention efforts, especially in vulnerable communities that do not have the larger societal support, will depend on the development of strategies that can enlist community mobilization to modify the norms of this peer network to support positive changes in behaviour (Kelly, 1995). A greater interest in the context surrounding individual behaviour led to increased numbers of interventions guided by the following theories and models.</P>

<H4>Diffusion of innovation theory</H4>

<P>The diffusion of innovation theory (Rogers, 1983) describes the process of how an idea is disseminated throughout a community. According to the theory, there are four essential elements: the

innovation, its communication, the social system and time. People's exposure to a new idea, which takes place within a social network or through the media, will determine the rate at which various people adopt a new behaviour. The theory posits that people are most likely to adopt new behaviours based on favorable evaluations of the idea communicated to them by other members whom they respect (Kegeles, 1996). Kelly explains that when the diffusion theory is applied to HIV risk reduction, normative and risk behavioural changes can be initiated when enough key opinion leaders adopt and endorse behavioural changes, influence others to do the same and eventually diffuse the new norm widely within peer networks. When beneficial prevention beliefs are instilled and widely held within one's immediate social network, individuals' behaviour is more likely to be consistent with the perceived social norms (Kelly, 1995).

Interventions using this theory generally investigate the best method to disperse messages within a community and who are the leaders able to act as role models to change community norms.

Social influence or social inoculation model

This educational model is based on the concept that young people engage in behaviours including early sexual activity partly because of general societal influences, but more specifically from their peers (Howard 1990). The model suggests exposing young people to social pressures while teaching them to examine and develop skills to deal with these pressures. The model often relies on role models such as teenagers slightly older than programme participants to present factual information, identify pressures, role-play responses to pressures, teach assertiveness skills and discuss problem situations (Howard, 1990). Social influence model has been used to reduce smoking among young people as well.

Social network theory

The Social Network Theory looks at social behaviour not as an individual phenomenon but through relationships, and appreciates that HIV risk behaviour, unlike many other health behaviours, directly involves 2 people (Morris, 1997). With respect to sexual relationships, social networks focus on both the impact of selective mixing (ie how different people choose who they mix with), and the variations in partnership patterns (length of partnership and overlap). Although the intricacies of relations and communication within the couple, the smallest unit of the social network, is critical to the understanding of HIV transmission in this model, the scope and character of one's broader social network, those who serve as reference people, and who sanction behaviour, are key to comprehending individual risk behaviour (Auerbach, 1994). In other words, social norms are best understood at the level of social networks.

One application of the Sexual Network Theory for HIV prevention is the concept of 'bridge populations' that form a link between

high and low prevalence groups (Morris, 1997). In Thailand, men who have both commercial and non-commercial sex partners form an important bridge population, which was an integral aspect of the spread of HIV in Thailand. Programmes using this theory to guide them would investigate:

the composition of important social networks in a community

the attitudes of the social networks towards safer sex

whether the social network provides the necessary support to change behaviour

whether particular people within the social network are at particularly high risk and may put many others at risk.

<P>Although few network-based interventions have been tried, the concept has proven complementary to individual-based theories for the design of prevention programmes by focusing on the partnership as well as the larger social group. Analysis of network mixing provides the means to see efficiency of transmission and effective points of intervention.</P>

<H4>Theory of gender and power</H4>

<P>Unlike the psychosocial theories which are essentially gender-blind, the theory of gender and power is a social structural theory addressing the wider social and environmental issues surrounding women, such as distribution of power and authority, affective influences, and gender-specific norms within heterosexual relationships (Connell, 1987). Using this theory to guide intervention development with women in heterosexual relationships can help investigate how a woman's commitment to a relationship and lack of power can influence her risk reduction choices (DiClemente, 1995).</P>

<P>Programmes using the theory of gender and power would assess the impact of structurally determined gender differences on interpersonal sexual relationships (perceptions of socially prescribed gender relations).</P>

<H4>Conclusion</H4>

<P>Social theories and models see individual behaviours embedded in their social and cultural context. Instead of focusing on psycho-logical processes as the basis for sexual behaviour, it tends to be social norms, relationships and gender imbalances that create the meaning and determinants of behaviour and behavioural change. These theories dictate that efforts to effect change at the community level will have the most significant impact on individuals who are contemplating changes and on those who have made changes but need support to sustain those changes. Social theories have been increasingly used with populations especially vulnerable to effects of partners and peers. These theories and models have been developed in the West and few examples have tested their relevance in developing countries.</P>

<H4>(C) STRUCTURAL AND ENVIRONMENTAL</H4>

<P>Determinants of sexual behaviour can be seen as a function not only of individual and social but of structural and environmental factors as well (Caraël, 1997, Sweat, 1995, Tawil, 1995). These factors include civil and organizational elements as well as policy and economic issues.</P>

<H4>Theory for individual and social change or empowerment model</H4>

<P>This theory asserts that social change happens through dialogue to build up a critical perception of the social, cultural, political and economic forces that structure reality and by taking action against forces that are oppressive (Parker, 1996). In other words, empowerment should increase problem solving in a participatory fashion, and should enable participants to understand the personal, social, economic and political forces in their lives in order to take action to improve their situations (Israel, 1994). Werner (1997) states that, "empowerment is the process by which disadvantaged people work together to take control of the factors that determine their health and their lives". For this to happen he explains that feelings of powerlessness, which can come from lack of skills and confidence, have to be cast off. Although empowerment can only come from the group itself, enabling empowerment is possible by facilitating its determinants. The common struggle against gender or ethnic oppression, economic exploitation, political repression or foreign intervention is what builds necessary confidence (Werner, 1997).</P>

<P>A distinction is made between personal, organizational and community empowerment. Personal empowerment has to do with the psychological processes and is similar to self-efficacy and self esteem. Organizational empowerment encompasses both the processes that enable individuals to increase their control within the organization and the organization to influence policies and decisions in the community. An empowered community uses the skills and resources of individuals and organizations to meet respective needs (Israel, 1994).</P>

<P>Interventions using empowerment approaches must consider key concepts such as beliefs and practices that are linked to interpersonal, organizational and community change. Intervention activities can address issues at the community and organizational level such as central needs the community identifies, and any history community organizing among community members. The theory would prescribe including participants in the planning and implementation of activities.</P>

<H4>Social ecological model for health promotion</H4>

<P>According to this model, patterned behaviour is the outcome of interest and behaviour is viewed as being determined by the following:</P>

intrapersonal factors - characteristics of the individual such as knowledge, attitudes, behaviour, self-concept, skills

interpersonal processes and primary groups formal and informal social network and social support systems, including the family, work group and friendships

institutional factors - social institutions with organizational characteristics and formal and informal rules and regulations for operation

community factors - relationships among organizations, institutions and informal networks within defined boundaries

public policy - local, state and national laws and policies (McLeroy, 1988).

<P>Intervention strategies range from skills development at the intra-personal level to mass media and regulatory changes at other levels (Laver, 1998). The theory acknowledges the importance of the interplay between the individual and the environment, and considers multi-level influences on unhealthy behaviour (Choi, 1998). In this manner, the importance of the individual is de-emphasized in the process of behavioural change.</P>

<H4>Socioeconomic factors</H4>

<P>Several studies have shown that economic factors have a strong influence on individual sexual behaviour, mostly through poverty and underemployment. Cross-nationally, countries with the lowest standards of living are also the ones with the highest HIV incidence (Sweat, 1995; Tawil, 1995). Within both rich and poor countries, poverty is associated with HIV, and HIV intensifies poverty (Sweat, 1995).</P>

<P>The proposed mechanisms for this relationship are: non-cohabitation between young married couples which can arise from critical economic situations forcing urban migration, seasonal work and truck driving, sex work, civil disturbances and war. Civil disturbance and war lead to displaced and refugee populations who not only lose their social and familial support systems but become highly vulnerable to HIV owing to intense social and economic strain in a alien culture (Caraël, 1997). In such situations, HIV concerns take a very low priority in a risk hierarchy, and any previous or planned efforts for the control of HIV transmission are disrupted, if not destroyed.</P>

<H4>Conclusion</H4>

<P>Community level theories, models or factors see human behaviour as a function not only of the individual or his or her immediate social relationships, but as depending on the community, organization and the political and economic environment as well. They are multidimensional with an emphasis on linking the individual to the surrounding larger environmental systems. Interventions using this approach, thus, target organizations, communities and policy.</P>

<H4>(D) CONSTRUCTS ALONE AND TRANSTHEORETICAL MODELS</H4>

<H4>Perception of risk construct</H4>

<P>As behavioural interventions are designed to reduce higher risk behaviours, perception of risk is a construct in most individual psychosocial behavioural models and some interventions use the construct without applying any of the models in their entirety. Increasing perception of risk has been shown numerous times to increase HIV protective behaviour (Stevens, 1998). Yet most behavioural models measure risk as individually determined which might not be relevant in many contexts. Not surprisingly, many women often perceive themselves at risk not because of their own behaviour, but because of the past or current, perceived or real behaviour of their sexual partner. In addition, perception of risk as a predictor of future behavioural change has further complexities in circumstances where individuals report high perception of risk and high self-reported behavioural change. This situation may demonstrate limited realistic further behavioural change options, or feelings of fatalism.</P>

<H4>Sexual communication</H4>

<P>Sexual communication has been noted in various situations to be predictive of condom use. Among incarcerated Latino adolescents with high numbers of sexual partners in the USA, it was reported that youth who communicated with their sex partners about each others' sexual history were significantly more likely to use condoms (Rickman, 1994). In central Africa condom use was more likely if women reported discussion with their sexual partner about STDs or condoms (van der Straten, 1995). Sexual communication has also been reported as a means to self-efficacy among heterosexuals in Holland (Buunk, 1998).</P>

<H3> </H3>

<H3>CHAPTER II: KEY APPROACHES TO BEHAVIOURAL CHANGE FOR HIV</H3>

<P>Early in the AIDS epidemic, results of population survey research alerted public health officials of the diversity of sexual behaviours and of the need to act quickly. The first interventions as well as the first applications of theories were propelled by the urgency to do anything to slow the alarming crisis at hand. Through popular public health channels, information was disseminated to populations at risk.</P>

<P>Today, many of the interventions for the prevention of HIV transmission, rather than using one of the behavioural theories in its entirety, have developed programmes based on one or many constructs often depending on the socio-cultural, political, or economic situation and on the stage of the epidemic. Drawing on

various models and modifying them to suit the population and context has been critical to implementation of prevention projects, especially in international settings, as nearly all theories were developed in the West. These transtheoretical approaches are guided by critical constructs such as risk perception, social norms and sexual communication to form the basis of interventions worldwide. This section looks principally at the most common approaches used to influence HIV risk reduction. Although these approaches are not consistently or directly derived from behavioural change theories or models, they draw on the multiple constructs mentioned above.

The section is split between individual and community-level interventions, where the approach is described and then specific examples of its use are reviewed. See Table 2 for a summary of models and theories tested by research or reviews.

(A) APPROACHES AIMED AT INDIVIDUAL LEVEL BEHAVIOURAL CHANGEM

Information, education and communication

Mass and small group education

As information was initially, for many, thought to be the key to behavioural change, HIV prevention programmes began with a focus on increasing awareness about the modes of transmission and prevention (Cohen, 1992). Mass education for HIV prevention can take many forms but is often seen as a key component of a comprehensive AIDS prevention programme (Holtgrave, 1997). Mass media, for example, are directed to the general public and aim at teaching people essential facts, promoting healthy behaviour, quieting anxiety about casual transmission and preventing discrimination.

An analysis of the messages adopted by the information and education programmes of national AIDS control programmes of 38 different countries found that over 90% focused on correcting misperceptions about AIDS. About 80% provided information about personal risk assessment (Cohen, 1992). In many countries, mass education provided the first step to national AIDS control programmes. Many mass education efforts successfully raised AIDS awareness by informing individuals of the risks of HIV infection, and in some cases education-based programmes were sufficient to change high risk behaviours, increase condom sales, and reduce new HIV infections (Kalichman, 1997). The channels that national AIDS control programmes have used for mass education include targeted media, printed media and electronic media (Cohen, 1992).

A review of 49 studies covering 18 countries to identify empirical outcomes or evaluate impact of HIV-related mass-media campaigns in 1996 concluded that most campaigns aiming at "individual-level goals of knowledge, attitude or behavioural changes were generally successful at achieving these goals" (Holtgrave, 1997). However, behavioural endpoints of the projects reviewed were not mentioned. In addition, as the author himself pointed out, a substantial

number of the project reports reviewed lacked methodological details; they were reported in conference abstracts. It is therefore difficult to conclude on the relative meaning of the term "successful", particularly in relation to behavioural out-comes. Small-group AIDS education is taking place all over the world, advancing general knowledge of HIV in numerous communities. Small-group AIDS prevention programmes can be seen as having 3 main components:</P>

content

context

strategies (Kalichman, 1998).

<P>Content includes goals, objectives, and activities. The main content areas in most small-group intervention activities include: basic education about AIDS, sensitization to one's personal risks for HIV, instruction in individual actions that can reduce one's risk and exploring new ways to communication with sex partners. Entire interventions or research questions are built on any one of these content areas.</P>

<P>The second component in small group HIV prevention is the context. The different aspects of the intervention should be designed to fit the cultural, gender and developmental issues of participants. For example, one investigator felt concerns of stigma and sexual identity were paramount to African American gay men and dedicated an entire session of this small-group intervention to concentrate on those issues (Kalichman, 1998).</P>

<P>The third component, strategy, is the process itself, where emphasis is placed on how the interventions are implemented between participants and group leader. Key elements to consider include how to foster trust, build group cohesiveness, encourage motivation and mutual support among participants and between participants and the facilitator (Kalichman, 1998).</P>

<P>Although evaluations of small-group interventions have focused on content and facilitation skills, all three components have been found to be critical to the success of this approach. The literature reports strong evidence for the beneficial effects of small-group HIV prevention from randomized controlled trials of theory- based skills-building programmes (see chapter III for impact of theory based interventions). Several independent reviews of the literature as a whole found that small group HIV risk-reduction interventions result in meaningful changes in HIV risk behaviour (Kalichman, 1998).</P>

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One innovative approach targeting hard-to-reach populations in the USA with information and counselling was a multiple session intervention designed to be delivered over the telephone. One

reason for this method was to reach populations that do not want to meet a health care provider face-to-face. In an evaluation of the study, the researcher found significant effects of their telephone-based counselling including a decrease in unprotected intercourse from 47% to 26% of the men who completed the programme (Roffman, 1997). Another study in Uganda looking at gender differences and perception of risk noted that participation in small-group AIDS education was associated with some protective behaviours for women with evidence of a dose response effect. The author suggests that these AIDS education events may also provide a socially sanctioned opportunity for peer group interaction for women (Bunnell, 1996).

Especially in the USA, small-group AIDS prevention efforts have evolved since the beginning of the epidemic from providing basic information in community groups and sensitizing people to personal risk sensitization. Subsequently, interventions began instructing people on condom use skills, eroticizing safer sex, and building safer sex communication skills. Through interventions encompassing these elements, many people have reduced high-risk sexual behaviour, but not everyone is sensitive to small group behavioural interventions. For example, small-group projects targeting heterosexual men for HIV prevention have not shown significant intervention effects. Longer-term behavioural changes require ongoing support and modifications in the larger social environment within which these behaviours take place.

Peer education

Peer education is one approach to small-group HIV prevention usually aimed at individual behaviour. The peer health educator approach recruits leaders in communities at risk to be implementers of the education programme to their peers (Sepulveda, 1992). Selection of peer educators is a key to the success of a programme and often involves:

- acceptance by other members of the group
- being an opinion leader, thus well respected in the group
- willingness to be trained
- committed to the goals of the programme

Many interventions combine peer education with other approaches such as the use of social networks, condom social marketing (Roy, 1998) and outreach (Seema, 1998 & Boontan, 1998) as these approaches can be complementary. Outreach work using peers has resulted in increased participation of targeted community members as well as increased diversity of participants (Broadhead, 1998).

The benefits of working with peers rather than with 'experts'

from outside the social network are many depending upon the group at risk. Wingood noted that peer educators may be a more credible source of information for women, may communicate in a more understandable language, and may serve as positive role models (Wingood, 1996). Other studies have suggested that when the group at risk is very different culturally from the majority, peers know the cultural risks and most appropriate and realistic risk-reduction strategies from experience.

The peer educator approach has been used in as diverse populations as: dock workers in Nigeria (Ogundare 1998), Arabian prisoners in Italy (Vacondio, 1998), street youth in Thailand (Boontan, 1998), in-school youth in Armenia (Ter-Hoyakimyan, 1998) secondary school students in Argentina (Bianco, 1998), taxi drivers in Cameroon (Moughutou, 1998), low- and middle-class general population in Zambia (Kathuria, 1998), factory workers in Zimbabwe (Katzenstein, 1998), sex workers in India (Seema, 1998, Roy, 1998), drug users in USA (Broadhead, 1998) and traditional healers in South Africa (Green, 1994), among many, many others.

In these various situations, peer educators performed differing tasks ranging from development and distribution of IEC materials including video clips and pamphlets, as well as condom discussion and distribution to conversations with peers on diverse topics such as empowerment, health and human rights, and basic AIDS information.

Surprisingly, all of the above studies, even though many were not randomly controlled, indicated positive results. But here again, many of these reports were conference abstracts lacking methodological details. Nevertheless, they show the astonishing diversity of populations and contexts with which peer education is being practised throughout the world.

In one study that randomized 40 factories in Zimbabwe into counselling and testing with or without peer education, results reported a 34% lower HIV incidence in peer education than in control group (Katzenstein, 1998). In Zambia, authors noted dramatic declines in syphilis seropositivity in 3 test vs. 3 control sites (by 77%, 47% and 58%) after a 3-year peer education programme that reached 417,000 men and 385,000 women (Kathuria, 1998).

Two studies analysed cost-effectiveness of peer education interventions among IDUs in the USA and factory workers in Zimbabwe. In Zimbabwe costs compared favorably to other HIV prevention programmes (Katzenstein, 1998), and the US researchers found that the peer-driven intervention cost one thirtieth as much as the traditional (external) intervention (Broadhead, 1998).

As any other approach however, peer education has its limits.

For example, in Brazil, participants of a target group became health agents and lost their solidarity and support within the group, which is a key element to successful peer education (Leite, 1998). Another example comes from a convenience sample analysis of several peer education programmes across the USA that found a structural tendency for peer education programmes to employ low-income people and treat peer educators as the most marginal sector of the organization's staff (Maskovsky, 1998).

Testing and counselling

In increasing numbers people in industrialized countries are receiving their HIV test results as therapeutic options become available to more people. Research has shown many reasons developing nations should make voluntary testing and counselling (VTC) accessible to their populations (UNAIDS, 1998). Early detection of the virus enables referral for clinical care and psychosocial support. Ethically people have a right to know their serostatus in order to protect themselves and others. And knowing their own serostatus and the options can motivate people to change higher risk behaviours (De Zoysa, 1995). In addition, De Zoysa notes that HIV testing and counselling may have an important social impact through people knowing their serostatus sharing it with others and laying the groundwork for changes in social norms about HIV and AIDS. A positive HIV result has also encouraged some people to give personal testimonies in community fora, a consequence that can have a powerful effect on individual attitudes, behaviours and social norms. In cultural contexts where fertility is highly valued, testing and counselling provides an important behavioural-change alternative to consistent condom use.

The theoretical foundation on which interventions providing testing and counselling are built principally involves the stages of change model (De Zoysa, 1995). HIV testing and counselling may promote progression across the continuum of the stages of change. For example, in rural southwestern Uganda, a setting with high HIV prevalence, the majority of respondents in a research study reported that they had already made behavioural changes because of AIDS, but making further changes to protect themselves was contingent on knowing their HIV serostatus (Bunnell, 1996). It has thus been suggested that counselling promotes risk reduction through increasing perception of risk, self-efficacy and personal skills, and through reinforcing social norms or responsibility (De Zoysa, 1995).

In 1991, in an extensive review of 50 testing and counselling studies in Africa, Australia, Europe and North America, Higgins et al found substantial risk reduction only among heterosexual couples with one infected partner. In other groups (homosexual men, injecting drug users, women) risk reduction was not significantly associated with counselling and testing (Higgins, 1991).

An updated review of 35 studies conducted by Wolitski et al. in 1997 found similar results to those of Higgins et al for some

population groups. The clearest evidence for positive behavioural effects of HIV VTC has been heterosexual sero-discordant couples where HIV counselling and testing was a significant motivating factor to risk reduction. Studies of MSM have also indicated significant risk reduction but it was not clearly related to their testing for HIV. Yet a UNAIDS report notes that among a sample of HIV-infected homosexual men in Norway the number of sex partners decreased from an average of 4.3 a year before to 1.6 after counselling and testing (UNAIDS, 1998). In HIV serodiscordant couples a consistent reduction in sexual risk practices followed HIV testing and counselling. Similarly, in most injecting drug users studies, counselling and testing proved to be beneficial in reducing dangerous sexual practices (Wolitski, 1997). Across populations, individuals who learn they are HIV positive have been found to be more likely to change behaviour than those who learn they are HIV negative. More recently a randomized controlled trial in 3 developing countries (Kenya, Tanzania and Trinidad and Tobago) showed that couples receiving counselling and testing reduced unprotected intercourse among their spouses, especially among serodiscordant and seropositive concordant couples (Coates, 1998a). However, results specifically found that VTC produced significant changes in reducing high-risk sexual practices with non-primary partners (Coates, 1998).

In the USA, a randomized controlled trial evaluating HIV post-test prevention counselling was conducted in 5 STD clinics comparing 3 arms: (1) HIV education including 2 sessions with brief HIV/STD messages, (2) HIV prevention counselling, 2 sessions aimed at increasing risk perception, (3) enhanced counselling, 4 sessions based on theoretical constructs of behavioural change; self efficacy and perceived norms, over a 12-month period. They found marked changes in condom use with both main and other partners across arms of the study (Kamb, 1996). After 12 months, there were 19% fewer new STD cases in the brief counselling group, and 22% fewer in the enhanced counselling group, compared with the group that had received only educational messages (Kamb, 1998). These findings support other studies showing benefits of client centered counselling combined with HIV test results.

Other, non-randomized studies in Rwanda, Uganda, Kenya and Zaire reported VTC to be a motivating factor especially for couples to change behaviour (Allen, 1992; Campbell, 1997; Choi, 1994; Alwano-Edyegu, 1996). The AIDS Support Organization (TASO) provides counselling and support services to a variety of clients with AIDS in urban and rural Uganda. In an overall evaluation of TASO, it was noted that 90% of all clients had revealed their HIV status to somebody following TASO services. In contrast, a study in the Gambia showed no effect of individual post-test counselling on condom use among prostitutes who already had high rates of condom use before the intervention (Pickering, 1993).

Wolitski sums up by noting that "there is no question that HIV VTC can and does motivate behavioural change in some individuals", but also that VTC alone does not always lead to changes and does not have the same effect in all populations

and in different situations (Wolitski, 1997). As with most other approaches, the stage of the epidemic and surrounding contextual factors will contribute to the outcome of the intervention. In addition, the quality of the counselling provided is a key variable in predicting the impact of the intervention.</P>

<H4>Conclusion</H4>

<P>After years of experience with HIV prevention and the variety of interventions aimed at individual behavioural change tested in diverse situations, certain characteristics of successful programmes point to key elements of approaches to behavioural change programmes. These elements include: increasing participants ability to communicate effectively about sex; helping participants increase their condom use skills; personalizing risk, achieving participants perception of risk avoidance as an accepted social norm, providing reinforcement and support for sustaining risk reduction. For individual level interventions to be successful, context specific information and skills are critical.</P>

<H4>(B) COMMUNITY-LEVEL INTERVENTIONS</H4>

<P>Community-level approaches grew out of the realization that, despite the considerable risk reduction through individual-level behavioural change approaches, different approaches were needed as well. Social epidemiology, pointing to differences in prevalence among different social categories within a given risk category in a community suggested intervening along these lines (Friedman, 1997). The programmes in this section encompass the most widely publicized approaches to community level HIV prevention including: interventions based on social influence and social networks, outreach programmes, school-based programmes, condom promotion and social marketing, community organizing and empowerment and policy level interventions. Each of these types of interventions either try to reduce individual vulnerability to or transmissibility of HIV, change community norms, limit dispersal of high seroprevalence networks or change community organizational structures making them less dangerous (Friedman, 1997). Changing community cultures or community norms provides motivation and reinforcement for individual HIV risk reduction. Many of the following programmes use ideas from the theory of reasoned action, the diffusion of innovations model and the theory of social influence to mobilize peer pressure or to ostracize individuals who continue high-risk practices. Policy level changes such as closing of bathhouses and enforcing condom use in brothels also account for significant impact in community risk practices.</P>

<H4>Social influence and social network interventions</H4>

<P>Based on the theories of social influence, diffusion of innovation, reasoned action and social cognitive theory, these interventions use peers and social networks to disseminate information. Social influence interventions identify key persons in communities who

are capable of influencing others. The social cognitive theory posits that trusted role models are an important factor in the environment and the environment has a reciprocal relationship both with behaviour and the individual. In the theory of reasoned action, perceptions of social norms have a critical influence on behaviour. Social norms created by opinion leaders will ideally have a strong effect on behaviour. Diffusion of innovation theory asserts that changing behaviour will more likely happen if the new behaviour is compatible with accepted social norms of a specific social network, is simple to do, and has observable outcomes (Kalichman, 1998). One's social network can be a source of emotional and instrumental support and a reference that establishes social norms.</P>

<P>Research implemented using peer educators to influence social networks in gay communities showed significant self-reported changes in safer sex practices after intervention (Auerbach, 1994). Encouraging results in changing social norms and safer sex behaviour have also been noted in a number of community-level social influence interventions in the USA. One programme implemented among men frequenting gay bars in three Southern cities began by identifying and recruiting opinion leaders. Project staff then trained leaders in risk-reduction, and the final stage involved opinion leaders in disseminating prevention messages to friends and other members of their social networks (Kalichman 1998, Kelly, 1992). In a later study using the same methods, researchers used a randomized experimental design with four test and four control cities and showed a decrease in population-level rates of risk behaviour after one year (Kelly, 1997).</P>

<P>The Mpowerment project was similar to the above studies but focused on young gay men in a midsize urban community in the USA, and included in the intervention package a publicity campaign and small group sessions concentrating on individual behavioural change (Kegeles, 1996). In the test city, there was a 26% reduction in unprotected anal intercourse compared to 3% in the control city. A follow-up study examined the effectiveness of the different programme components (small groups, social events, and outreach) on post-intervention sexual risk-taking. The small groups had a large effect size, but reached substantially fewer men than social events and outreach. Although not as powerful, the social events and outreach were critical to the effectiveness of the programme as sources of recruitment to the small groups and as a means of reaching men not interested in attending small groups. Authors concluded that the effectiveness of programme components were not independent; the synergy created by the whole programme makes the net effect of the intervention activities greater than the sum of its parts (Kegeles, 1998a).</P>

<P>Sikkema et al. tested a comparable approach with women living in urban, low-income housing developments. The intervention included outreach, small groups and community activities to encourage social norms supportive of safer-sex as well as reduction of individual high-risk behaviour (Kalichman, 1998). Women who were identified as opinion leaders participated in a 4-session skills-building

intervention centered on HIV prevention knowledge and behaviour. These women recruited other women who participated in the same intervention and the cycle continued until about half the women in the housing development were reached. At the same time, social norm-changing events were being implemented. Results of this randomized controlled trial found that condom use reported by women in the intervention site increased from 29% at baseline to 41% at 3-month follow-up (Kalichman, 1998).

The National AIDS Demonstration Research Projects implemented in more than 60 sites in the USA to evaluate strategies among IDUs, combined research methodologies but focused on the social networks of IDUs as the primary target group. The Indigenous Leader Outreach Intervention Model which combines medical epidemiology and community ethnography guided the project. Former IDUs were employed as outreach workers whose job was to identify and access the social network, document the norms, values and situational factors relating to risk practices. Former IDUs were also responsible for delivering the HIV prevention services. After a four-year intervention, incidence of HIV decreased from 8.4 to 2.4 per 100 person years. Sex risk practices decreased less dramatically than drug risk, but went from 71% to 45% (Wiebel, 1996). The same model was tested among sex workers in Indonesia with encouraging results (Gordon, 1998).

Interpreting these results for social influence interventions indicates that multi-component, individual and community level that combine cognitive-behavioural and norm-changing activities can result in positive changes for MSM and heterosexual women. Despite the fact that all published reports described here were based on interventions in the USA, since they are based on conversations with peers one could assume that they would be ideal for other populations (even non-literate) as well.

[Outreach interventions](#)

Outreach interventions are conceptualized in a similar manner to social influence interventions in that they use individuals to pass on information within social networks, however the influential person may or may not be from the targeted community. The outreach worker enters the social system to instigate behavioural change as an individual change agent. Targeted communities are often hard-to-reach groups such as drug users, sex partners of drug users, sex workers as well as isolated rural populations. The aims of outreach have often been harm reduction strategies such as providing condoms to sex workers, but not necessarily addressing sex work itself.

Three large-scale research trials in the USA examined the effects of outreach delivered primarily to injecting drug users. The National AIDS Demonstration Research Projects targeted over 36,000 out-of-treatment injecting drug users. Results indicated that sexual practices were much more difficult to change than sharing of drug using equipment. The projects did show reductions in sex risk

practices, but less dramatically than for drug risk practices (Wiebel, 1996).

A second initiative entitled the AIDS Evaluation of Street Outreach Projects supported by the CDC was conducted in six US cities, and showed promising outcomes as well as being cost-effective. Again, this project found drug using behaviour easier to change than sexual behaviour. A third outreach project (AIDS Community Demonstration Projects) was implemented in five US cities and had multiple target groups including: IDUs and their partners, MSM, female sex workers, street youth and men who have sex with men but do not identify as gay. The health belief model, social cognitive theory, the theory of reasoned action and the transtheoretical stages of change model guided the outreach intervention. Following formative research, volunteer outreach workers implemented the intervention, by disseminating innovative, carefully designed materials and messages. The evaluation indicated that the communities moved across the continuum of stages of change following the intervention. A dose-response effect was noted according to exposure to the intervention materials (Guenther-Grey, 1996, Kalichman, 1998).

Interventions using outreach as a strategy have been carefully tested in the USA among diverse populations and have shown encouraging results. This approach lends itself as well to hard-to-reach populations and has been used in many parts of the world though randomized controlled trials have not been reported outside the USA.

School-based interventions

By the early 1990s, school-based programmes for HIV education existed in about three quarters of industrialized countries and 60% of developing countries according to a survey of 38 countries (Cohen, 1992). Besides interventions that simply provide basic AIDS information in the classroom, multi-dimensional school-based programmes generally include classroom skills-building sessions, school-wide peer-led activities, and social norm changing programmes. Promotion of condom use was the theme most frequently adopted in programmes for youth in and out of school (Cohen, 1992). An extensive review of school-based interventions revealed that no comprehensive school-based HIV-prevention interventions evaluated showed signs of promoting sexual acting out or hastening the onset of sexual intercourse (UNAIDS, 1997). It was found that effective interventions had a number of characteristics in common:

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- accurate information was provided about the risks involved in unprotected sex, enabling informed behavioural decision making
- programmes included skills building sessions enhancing self-efficacy for safer-sex negotiating practices
- components were often based on social cognitive theory including modeling of safer behaviours (Kirby, 1994)
- activities were conducted in small groups or had a minimum of 14 hours of contact
- opportunities for youth to personalize information were provided

- social pressures to engage in sex were addressed with strategies for resisting peer pressure
 - reinforced supportive group norms and appropriate individual values for engaging in safer behaviour were emphasized
 - extensive training was provided for teachers and/or peers who were to implement the training.
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<P>The element distinguishing school-based programmes from other interventions for youth was the supportive structural aspect played by schools and teachers, and the interaction between school, parents, students and community (Peersman, 1998, Kalichman, 1998).</P>

<H4>Condom promotion and social marketing</H4>

<P>It has now been proven numerous times that correct use of condoms is an effective method of preventing HIV transmission. Yet, countless research studies have identified obstacles to their use in settings throughout the world, including inaccessibility and partner communication among other factors.</P>

<P>Most initial HIV prevention programmes included condom promotion and free distribution as part of a comprehensive HIV prevention package. Free distribution was essentially aimed at introducing condoms where they were not previously available or distributing them to destitute populations at high risk such as sex workers and refugees. Although this approach accomplished its intended out-come of making condoms accessible without delay to large populations, the lack of sustainability and reliability of free condom distribution programmes commanded the introduction of condom social marketing strategies especially aimed at certain populations.</P>

<P>Condom social marketing, which may well be the most developed of public health communication approaches, aims to remove the barriers to condom use by using commercial marketing techniques such as advertising and packaging to make the product accessible, affordable and attractive to all types of people. The theories underlying social marketing programmes derive from many different disciplines including operant conditioning and social cognitive theories as well as economic and marketing principles. Social marketing has been termed a 'strategic planning' approach based on the theoretical 'principal of exchange' which explains that people will only change their behaviour to something less pleasant (like condom use) if they perceive an adequate benefit (Kennedy, personal communication). Social marketing techniques highlight the importance of adapting the campaign to suit the characteristics of the population group being targeted. It dedicates sufficient time to formative research, which necessitates asking the consumer always and often about his or her point of view. Modifying products requires a good understanding of the culture of the target group. Availing condoms at non-traditional outlets such as truck stops, bars, and hotels is integral to social marketing success. Flooding these non-traditional outlets with condoms aims not only to increase availability but also to increase social acceptability (World

Bank, 1997).

Results of these programmes have shown dramatic increases in condom sales in countries, such as Côte d'Ivoire, Uganda, and Malaysia where condoms were practically unavailable before social marketing campaigns (World Bank, 1997). After a 3-year peer-led condom promotion programme among sex workers in West Bengal, India, found that condom use rates rose from 3% to 81%, a social marketing campaign was launched. Six months into the project using peer education and community participation, free distribution of condoms had decreased by 50% and the same amount of condoms had been sold (Banerjee, 1998). Social marketing programmes have also been developed in Mexico, Dominican Republic, Canada, Brazil, Vietnam, Pakistan, Zambia, Botswana, Cameroon, South Africa and Haiti for HIV prevention (Holtgrave, 1997, PSI, 1998). Evaluations have shown success in increasing condom use especially among adolescents in Zambia and among married women in small urban areas in Pakistan (PSI, 1998).

Besides condom promotion, social marketing techniques have also been effective for other HIV prevention strategies such as promotion of testing and counselling for adolescents in the USA (Futerman, 1998), and the recruitment of research participants in Puerto Rico (Torres-Burges, 1998).

[Community organizing, empowerment and participatory action research](#)

Empowerment approaches are built on the premise that positive public health impact is fostered by recognizing the relationship between social structure and health, and by recognizing that lasting change is a process that initiates from within a community. Empowerment in connection with HIV in the USA has its historical roots in public health and community psychology (Becker, 1998). From the field of education, Wallerstein defined empowerment as:

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"Empowerment education, as developed from Paulo Freire's writings, involves people in group efforts to identify their problems, to critically assess social and historical roots of problems, to envision a healthier society, and to develop strategies to overcome obstacles in achieving their goals. Through community participation, people develop new beliefs in their ability to influence their personal and social spheres. An empowering health education effort therefore involves much more than improving self-esteem, self-efficacy or other health behaviours that are independent from environmental or community change; the targets are individual, group and structural change. Empowerment embodies a broad process that encompasses prevention as well as other goals of community connectedness, self-development, improved quality of life, and social justice." (Wallerstein, 1988)

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Becker suggests a definition of an empowerment intervention

as follows:

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<P><I>"A community empowerment intervention seeks to effect community-wide change in health-related behaviours by organizing communities to define their health problems, to identify the determinants of those problems and to engage in effective individual and collective action to change those determinants." (Becker, 1998).</I></P>

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<P>Empowerment approaches assume that health behaviours are not completely under volitional control of individuals, thus are not entirely isolated events, but embedded within social, cultural and economic surroundings.</P>

<P>The impact of society's defined gender roles on protective health behaviour of women highlights the importance of empowerment approaches, especially for HIV-vulnerable women. Becker describes ideally what the components of an intervention based on community empowerment for women would look like. The intervention would address the cultural environment by recognizing gender roles that define women as subordinate to men; the physical environment by including access to appropriate services and materials such as battered women's shelters and both male and female condoms; the structural environment such as opportunities for women to change their economic status; and the policy/ legal environment such as businesses providing paid leave for community service and child care (Becker, 1998).</P>

<P>Community participation at all levels of implementation is an integral aspect of community empowerment approaches. Interventions include community organizing, and participatory action research (PAR) into their programmes (Israel, 1994, Hiebert, 1998). A strength of PAR resides in the ability of participants in conjunction with committed and creative professionals to adapt methods and content to diverse contexts. The positive out-comes of PAR arise from its collaborative, trust-building capacity, with direct community input that responds to emerging changes in social, political and economic situations (Stevens, 1998). These interventions seek to support communities to be self-determining in their ability to integrate HIV programmes into existing community structures by assessing their own needs and priorities, defining, implementing and evaluating their own work ^{1} .</P>

<P>Empowerment approaches have been used for AIDS risk reduction through numerous different strategies and in countless different settings and contexts. The literature describes empowerment interventions directed at women, young gay men, youth, people with HIV and AIDS as well as many other communities at risk.</P>

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A CDC-funded intervention developed for young, pregnant women from low income communities in the USA, randomly assigned women to one of three arms (four sessions AIDS prevention, 4 sessions health promotion, control). The HIV prevention arm focused on enhancing women's skills in negotiating condom use with their partners using role-play and rehearsal, among other methods. Consistent with empowerment ideals, the content included other health matters in addition to HIV prevention and activities were developed to encourage a feeling of 'communal mindedness' in the group. The idea was to promote mutual support in the process of behavioural change. Results indicated that women in the HIV prevention group showed greater changes in intention and practice of safer sexual behaviours than women in other groups (Becker, 1998). Comments by authors of the report concluded that women in the HIV prevention group gained a sense of perceived control over their lives.</TD>

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<P>An intervention using PAR among lesbian women highlighted the power of community ownership of the project and its continuity over time that provided a space for engagement and commitment where women focused on community mores, values, and social expectations about sexual relating, drug use and HIV. The feeling of solidarity with peer educators enabled women to reduce risk behaviours (Stevens, 1998).</P>

<P>Empowerment can have far-reaching positive health and welfare benefits. Schuler et al. describes the impact of involving women in credit programmes on contraceptive use. She found that, in Bangladesh, rural credit programmes for women can play an important role in changing fertility norms and accelerating contraceptive use by strengthening women's economic positions and fostering women's empowerment (Schuler, 1994).</P>

<P>Other empowerment interventions for sex workers include a project in Zambia, where women fish traders who often experience sexual exploitation have been supported in forming economic cooperatives as a way of protecting themselves against HIV. A second example is a programme in India where women have been taught how to collectively save sufficient savings to pay bonds binding them to sex work (Aggleton, 1998, Tawil, 1995).</P>

<P>Importantly, Becker reminds us that empowerment approaches do not strive to substitute for individual psychosocial interventions, but to 'widen the lens to include person-in-environment' approaches. She notes that there is increased commitment to community participation, but that there remains a difficultly surmountable gap between empowerment rhetoric and practice. For that gap to be bridged, one key element is progress in operationalizing new concepts and constructs, and testing hypothesized relationships between, for example, community participation and community capacity to effectively

address health issues (Becker, 1998). Although tools for measurement of single and multi-level (from personal to community level) empowerment have been developed and tested, they have not yet been used on a wide scale (Israel, 1994).

Policy level interventions

Policy level interventions are 'enabling' approaches that attempt to remove structural barriers at a larger level. Many believe that AIDS interventions are moving from solely investigating individual approaches to multidimensional models of community mobilization, empowerment and structural policy level interventions (Becker 1998, Parker 1996).

The earliest and some of the most effective efforts of community level change for HIV have resulted from social action. ACTUP, formed in 1987 in New York, is responsible for many successful policy initiatives for people living with HIV and AIDS as well as advocating for everyone's responsibility to practise safer sex.

Another widely recognized policy level intervention is the 100% Condom Programme in Thailand that mandated condom use in brothels and during other commercial sex encounters. Components of the programme included a requirement that sex workers use condoms with all clients, that condom use be monitored, that brothel owners and managers assist in promoting condom use with uncooperative clients and that there should be sanctions against brothel owners for non-compliance (Aggleton, 1996). The programme showed a dramatic increase in self-reported condom use during commercial sex acts (14% to 90%), a decline in reported STD attendees in government clinics, and a decline of HIV positive army conscripts (Friedman, 1997). Success of the programme has been attributed to the fact that it was based on harm reduction in a population at very high risk. It did not try to eliminate the brothels but attempted to reduce HIV transmission within them, and it used national policy which ensured a broad and lasting effort (Friedman, 1997).

Conclusion

HIV prevention at the community level is an integral component to check further spread of HIV. By working with communities, in contrast to individuals, one is focusing on changing policy, social structures, social norms and cultural practices that surround individual risk behaviours. Community level changes working at the level of changing subcultures have potential to effect long-term maintenance of changed behaviours, by changing the environment surrounding individuals to support safer behaviours. At the same time, many of these approaches highlight the importance of participatory methods to include and empower individuals. It is important to note that many of the interventions mentioned above may have initially focused on one level (such as policy, or empowering individuals), but as the programmes developed they generally include more target levels including changing local cultures and subcultures (Friedman,

1997). Programmes discussed here have been the most widely publicized approaches to community level HIV prevention yet many more innovative projects exist worldwide.

Finally, development of methods for implementation and evaluation of community-level programmes has not been operationalized on a broad spectrum. Assessing effectiveness of these programmes introduces a number of challenging issues such as measuring community level changes using the community as the level of analysis rather than the individual. Additionally, identifying elements of the intervention to measure, thus defining new community level indicators and obtaining large enough sample sizes to detect significance add new challenges to community level evaluation. This makes design of such programmes and the ability to carry them out possibly more complex than individual-based programmes.

CHAPTER III: EXAMPLES OF THE IMPACT OF THEORY-DRIVEN INTERVENTIONS

Theoretic models that have proven useful in explaining and predicting changes in HIV-related sexual behaviour provide guidance in the design and implementation of prevention programmes (Wingood, 1996). Reviews of theory-driven interventions have noted that these interventions emphasize both intrapersonal and interpersonal factors, provide skills training, try to modify social norms and are thus more effective at reducing risk behaviour among participants (DiClemente, 1995). (See Table 3.)

This section summarizes positive outcomes of theory-based interventions by specific population groups, including women, men, and youth. Although injecting drug users fit into any of the above categories, we have placed them in their own group as interventions target them specifically.

(A) WOMEN

A review of 51 reports through 1997 on studies worldwide noted the lack of interventions identifying the mechanisms of preventive effects and theoretical frameworks upon which interventions are built (Ickovics, 1998). This review found differences in effectiveness between target populations and between different types of interventions. Interventions targeting sex workers were the most likely to find increased condom use, decreased incidence of STDs, and reduction in unprotected intercourse (9 out of 10 studies). Effectiveness for other groups at risk was more varied: 13 out of 18 studies of African-American or Latino descent women were effective, as were 3 out of 10 studies for IDUs, 1 out of 3 for partners of IDUs, 2 out of 3 for STD clinic patients, 4 out of 7 for US college students, and 6 out of 14 studies for mixed gender community groups (Ickovics, 1998).

Ickovics et al. identified seven types of interventions tried

among women globally: small group, community-wide, media, HIV counselling and testing, individual counselling, classroom education and laboratory experiment. Community-wide (12 out of 14) and small group interventions (13 out of 19) were more likely to show significant results. Interestingly, Ickovics' review noted that higher intensity (5 or more sessions) were less effective than low-intensity small-group programmes for women. Authors suggested this may reflect the more resistant population targeted. Several international programmes incorporated peerled diffusion of innovations approaches and all reported statistically significant increases in condom use (6 studies out of 6). According to this review, less effective interventions for women overall were individual counselling (0 out of 4) and HIV testing and counselling (3 out of 6) as primary prevention. Testing and counselling and individual counselling, however, have shown effectiveness as secondary prevention with serodiscordant couples (Ickovics, 1998).

A review of randomized controlled trials in the USA conducted by Wingood and DiClemente found that all effective interventions for women had a number of identifiable characteristics. In contrast to the review by Ickovics, the four studies mentioned were guided by the social cognitive theory (a theory based on the individual, taking into account environmental and behavioural factors, which places a strong emphasis on self-efficacy) provided skills in condom use and sexual communication and emphasized support for continued maintenance of safer sexual behaviour. In addition, all effective interventions were peer-led and addressed gender-related influences such as gender-based power imbalances within the relationship (Wingood, 1996).

Generally, successful skills training interventions for women consider cultural factors and attempt to personalize messages (Kalichman, 1997). Targeting women in the USA, and adolescents in the USA and Holland with behavioural skills enhancement programmes have produced positive effects (Kalichman, 1997). Studies among women in the USA have generally included four to five sessions and demonstrated positive outcomes with medium- sized effects. Condom use has increased up to double the rate at baseline. Specific components of behavioural skills enhancement that have been tested comprised of: risk education and sensitization, condom use and safer sex skills training, and sexual communication skills training (Kalichman, 1998). Kalichman notes that behavioural skills enhancement training has not been tested experimentally outside the USA, so it is unclear to what extent it would benefit women in other countries.

An intervention among women in a New York City housing project was based on the diffusion of innovation theory in combination with community mobilization. Women were recruited, organized and trained to help develop role model stories for the project newsletters. These women were also expected to initiate discussions with their peers regarding HIV prevention. Information was diffused rapidly and seemed to promote discussion and condom use among the housing project women. Reported condom use of female sex partners within the housing project for IDUs rose from 15% to 45% (Friedman, 1997).

<P>The theory of gender and power provided a model for the design of a successful gender-appropriate social skills intervention for African American women in San Francisco. The intervention addressed how to successfully negotiate safer sex and improve partner norms favorable to consistent condom use in comparison to a control group that received similar training in a delayed fashion. The results showed significantly greater consistent condom use, greater sexual self-control, greater sexual assertiveness, and increased partners' adoption of norms supporting consistent condom use in the intervention group (DiClemente, 1995).</P>

<P>The stages of change model was used to guide a 6-month longitudinal study among women in drug treatment, housing shelters, and hospital clinics in the USA, and showed that women exposed to individual stage-tailored counselling were twice as likely to report consistent condom use with main partner 'at last sex contact' as women receiving free on-site reproductive health counselling and services (Galavotti 1998). The stage-based counselling also proved useful at preventing relapse from consistent use further along in the process of change. One study assessed the AIDS Risk Reduction Model (ARRM) with HIV-positive, largely disadvantaged, women in the USA and found that 6 variables representing the four important constructs of the model were associated with consistent condom use (Kline, 1994). The strongest predictor of condom use was perceived self-efficacy in influencing the partner's sexual behaviour, yet no significant relationship between condom use and general self-efficacy was detected. The two other partner-related variables associated with condom use were his seronegativity and his not wanting more children. The respondents' reproductive intentions were not significantly associated with condom use. The three variables that were negatively related to condom use were: having a conflictual relationship with primary partner, believing that condoms reduce sexual pleasure; and the use of drugs or alcohol in the previous four weeks.</P>

<P>With regards to the health belief model, among heterosexual adults in Holland barriers to condom use, such as reduced pleasure of sex, were predictive but cues to action were not related to condom use intentions (Buunk, 1998). The perception that most others in the reference group would engage in condom use with new sexual partners was an important predictor of condom use intentions and emphasizes the importance of the social environment with respect to AIDS protective behaviour.</P>

<P>Again internationally, an intervention guided by the social cognitive theory and community health promotion implemented in North-eastern Thailand targeting village women was evaluated using surveys, focus group discussions and village meetings. Elicitation research identified the importance of including entire villages in the intervention rather than women alone. The evaluation found that eight of the nine outcome goals were achieved with significant increases in married women taking the initiative in reducing the risk posed to them by the sexual activities of their husbands (Elkins, 1997). Specific measures taken by women included negotiating

condom use with their husbands, and telling their husbands not to visit prostitutes. Men surveyed, however, did not change their condom use behaviour (Elkins, 1997).

One of the rare studies designed to identify the independent effects of intervention components on behavioural outcomes was conducted among African American women from an inner city US community. Women were randomly assigned to one of the following: (1) sexual communication skills training, (2) self-management skills training, (3) combination of sexual communication and self-management skills training, (4) HIV education and risk sensitization.
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[Sex workers](#)

Among the numerous studies involving sex workers, only two will be highlighted here. A year-long intervention targeting sex workers, brothel owners and clients in Thailand used multiple small group sessions with peer educators who were experienced women and were called 'superstars'. The 'model brothel' aspect of the programme worked with owners to enforce mandatory condom use by sex workers, and clients were educated to use condoms. Volunteers were trained to pose as clients to test sex workers' condom negotiation skills. Results indicated that sex workers increased their refusal of sex without a condom rate from 42% before the intervention to 92% following the programme. The authors concluded that this multifaceted approach specifically focusing in sex workers, and acknowledging the importance of working with clients and owners was critical to their success (Visrutaratna, 1995).

A second study that mentioned the theoretical background and its usefulness for sex workers noted the utility of health belief model and social cognitive theory. One study guided by these two models worked with four groups of female sex workers in Indonesia and found that both increases in knowledge and condom use were significantly related to the number of intervention sessions the women attended (Ford, 1998). Results reflected the different social context of sexual behaviour of the four groups of sex workers

and indicated that the four groups of women had different levels of knowledge about AIDS, different socioeconomic levels, different numbers of clients and different self-efficacy. Beliefs about the benefits of condoms were highly predictive of condom use in 3 of the 4 groups. In the group with lower knowledge about AIDS, perceived susceptibility to other STDs, rather than HIV, was related to condom use. Self-efficacy was highly predictive of condom use in 3 out of 4 of the groups of sex workers. In the fourth group self-efficacy was already high as this group of sex workers do not rely on pimps and contact clients independently. Authors highlight that sex work is a complex business that includes multiple sub-populations and distinct settings (Ford, 1998). These diverse realities must be considered in intervention design and implementation.

<H4>Conclusion</H4>

<P>Interventions targeting women have lagged behind those of men historically. Women were left out of prevention efforts early in the AIDS epidemic especially in Europe and the US. Today, considering gender, relationship and contextual issues as central to decisions regarding sexual behaviour were universally important for the success of the interventions discussed above. Thus using gender-driven theory across cultures might prove useful as sexual encounters in some situations can be imposed and gender roles as well as cultural values and norms sometimes define, or at the least, influence sexual behaviour (Amaro, 1995). One international review found that peer-led community interventions guided by the diffusion of innovation theory were more successful overall than individual level interventions. Skills training especially in condom use and sexual communication, and perception of risk were important variables among women in US studies. As with other populations, interventions facilitated by peers were often more successful than those using a facilitator from outside the target group as peers can often target more appropriate, context specific methods for risk reduction.

<P>Only one study, guided by the AIDS risk reduction model, reviewed here looked specifically at HIV-infected women and found that factors related to her sexual partner were more influential than many personal variables.

<P>Interventions with female sex workers often used the health belief model and the social cognitive theory with significant results in diverse settings worldwide. Successful programmes often realized the importance of including brothel owners and clients in their activities, thus considering the wider environmental factors associated with the behavioural practices involved. The sex worker study conducted in Indonesia highlighted the importance of considering diversity among what is often generically termed a 'sex worker' population. By using a theory driven intervention, investigators were able to identify critical differences in predictive constructs between different sex worker groups.

<H4>(B) MEN</H4>

<H4>Men having sex with men (MSM)</H4>

<P>A recent review of interventions with gay men found that studies generally fall into 3 types: individually based, small-group and community- level (Kegeles, 1998). At the individual level, the review noted one unique study that randomly assigned men to one of 3 groups: (1) standard group that analysed HIV-prevention posters, (2) self-justification group that was asked to recall, as vividly as possible, an occasion where they had unsafe sex and then justify according to a pre-determined scale, and (3) control group received no intervention. After 2 months, the self-justification group was significantly less likely to report unsafe sex than the other 2 groups (Gold, 1995).</P>

<P>One randomized controlled HIV-prevention study in the USA using the small-group approach, used a 12-week intervention with 3 booster sessions among 104 men randomized to either receive, (1) the HIV risk-reduction intervention or (2) a waiting list control group. The four main areas covered in the intervention were HIV risk education, behavioural skills training, sexual assertiveness training and lifestyle changes for relapse prevention. The intervention group showed significant reductions in rates of unprotected anal intercourse and increased rates of condom use immediately after the intervention, but 40% relapsed 16 months later (Kelly, 1991). Similar intervention components were tested among ethnic minority men and were found effective in reducing numbers of partners and rates of unprotected intercourse, with the strongest effects among Chinese and Filipino-American men (Choi, 1996).</P>

<P>In a third study using group intervention approach among African American men, components included: (1) discussions on being Black and gay or bisexual, building social support, and large-group discussion of AIDS misperceptions among Black men, (2) enhancing positive feelings about safer sex, practice of condom application skills, developing plans to use condoms, and (3) dealing with issues of partner resistance, analysing one's own hurdles to staying safer, problem-solving safer-sex alternatives, role play exercises, maintenance of safer sex, and establishing social norms for safer sex. Participants were randomly assigned to either a single session, a triple session or a wait-list control group. Results indicated that men in the triple-session intervention group significantly reduced unprotected anal intercourse after 12 months of follow-up (Peterson, 1996).</P>

<P>Controlled studies with men who have sex with men (MSM) have indicated several characteristics that have enabled men to change behaviour and maintain safer sex:</P>

eroticizing safer sex materials

brief training on establishing and maintaining safer sex relationships

how to negotiate safer sex

- training on how to reduce stress
- intensive group counselling (Auerbach, 1994)

<P>Behavioural skills-enhancement interventions targeting MSM in diverse cultural settings have consistently demonstrated increased condom use during anal intercourse, with the greatest changes occurring with non-primary partners (Kalichman, 1997).</P>

<P>The diffusion theory has been shown to be effective in changing sexual behaviour of men who have sex with men of different studies in the USA (Kelly, 1991, 1992, Kegeles, 1996). The model was tested in 3 small southern cities and results indicated systematic reduction in the population's high-risk behaviour with 15% to 29% reductions from baseline levels (Kelly, 1992). Kegeles et al. used the diffusion theory to design an intervention to address determinants of high risk sex in young gay men in the USA. The authors identified natural channels of communication to highlight sexual risk behaviour among the concerns of young gay men and to find alcohol and drug-free alternative environments for them (Coates, 1996). While comparison communities made no significant changes, intervention communities showed significant changes in unprotected anal intercourse with primary and non-primary partners (Kegeles 1996).</P>

<H4>Heterosexual men</H4>

<P>Within specific populations such as STD clinic attendees, self-efficacy was used to predict risk reduction in two different studies in the USA. Unfortunately, there is a dearth of information on behavioural interventions tested among heterosexual men. Kalichman notes that the behavioural interventions that have been tested in randomized controlled trials have not been effective in reducing high-risk sexual behaviour (Kalichman, 1997). In one randomized controlled trial conducted among inner-city African American men a cognitive-behavioural skills-building intervention was compared with an AIDS educational intervention. No significant differences between groups was noted for AIDS related knowledge, intention to use condoms or condom use. Yet, there were some important lessons learned from this study. Greater importance should be placed on relevant issues for the specific population. In a population with multiple competing risk practices, a social service programme that can provide AIDS education along with drug treatment and job services may be more effective. The other two issues raised by this study were: the format of small group discussions was not well received by all men in the study and that cognitive-behavioural skills training programmes for HIV risk reduction should not be assumed to fit all vulnerable populations (Kalichman, 1997). Possible reasons suggested by Kalichman were that heterosexual men may lack a sense of vulnerability for HIV as they were not identified as engaging in high-risk behaviours for HIV as portrayed early in the epidemic in the USA (Kalichman, 1998).</P>

<H4>Conclusion</H4>

<P>The first decade of interventions with MSM noted substantial risk reduction with behavioural theory driven interventions including identifiable characteristics such as eroticizing safe sex, and improving sexual communication. Kalichman noted that we should not be too optimistic as applying aging results to a dynamic epidemic may not continue to give intended results (Kalichman, 1998). Our responses should be evolving as fast as the epidemic changes. More recently innovative programmes have started aiming at the community level rather than the individual. Interventions based on the diffusion of innovations theory have shown community level change with gay men in the USA. Most studies highlight that safer sex is easier with one's non-primary partner than with one's primary partner.</P>

<P>Choi points out the limited utility in strictly individually-based theories for specific groups at risk such as Asian-Pacific Islander men who have strong cultural demands and community stigma against homosexuality. Without considering these powerful contextual influences on behaviour, interventions cannot expect significant results. Peterson describes how issues of being an African American MSM were directly addressed in their intervention along with social support and condom skills. As with other population groups, the intervention must be tailored to suit its population group, that is the group itself should be able to express its needs and priorities for the programme to be successful.</P>

<P>Despite the impressive results with gay men in diverse settings, there are few positive findings with heterosexual men in the industrialized world. As this group was not seen as vulnerable early in the epidemic, interventions concentrated on MSM and IDU populations. STD patients, however have been targeted with mixed results. Two studies in the USA, guided by the social cognitive theory found increased condom use and one in the UK found no effect on behaviour. In developing countries, approaches such as testing and counselling have proven successful at motivating behavioural change among heterosexual men. Specific population groups, such as farm workers in Zimbabwe were targeted with an intervention guided by the social ecological model for health promotion.</P>

<H4>(C) YOUTH</H4>

<P>Globally, most young people have begun sexual intercourse by the age of 18 or 19 and at least half by the age of 16 (UNAIDS, 1998). In the USA about half of all adolescents are estimated to be sexually active and this percentage increases to over 80% in some minority groups (Reitman, 1996). Young people between the ages of 15 and 24 make up the majority of new HIV infections. Most of them live in the developing world, but industrialized countries also face severe problems. USAID has estimated that by the year 2010 there will be a total of 41 million orphans who have lost their mother or both parents due to HIV/AIDS worldwide (UNAIDS, 1998a).</P>

<P>Intervention research with young people shows that the success

of the approach depends heavily on the youth's level of sexual experience. Intensive sex education among youth that have never had sex has been effective in delaying onset of intercourse among high school students.</P>

<P>A comprehensive international review of 110 outcome evaluations with youth (Peersman, 1998) found that effective programmes:</P>

focused on understanding social and/or media influences on sexual behaviour to be able to strengthen group norms against unprotected sex

listened to what young people think and believe to ensure acceptable and appropriate programmes

included modeling and practice of communication or negotiation skills

integrated pregnancy and STD prevention with HIV programmes

focused especially on disadvantaged youth, providing access to resources and/or services to address their basic needs (health care, legal aid).

<P>This review also suggested that, although a clear pattern and full understanding are lacking, social learning theories have a greater potential than other theoretical frameworks in changing youth behaviour. Other cross-sectional surveys found that the theory of reasoned action and the health belief model as well as the social learning theory can help understand behaviour of young people. All successful, theory-based interventions have included skills training in addition to information and motivational components for young people (Reitman, 1996).</P>

<P>Howard and McCabe showed success of the social influence theory using slightly older teenagers in the US to identify peer and social pressures that encourage negative health behaviours, to present factual information, teach assertiveness and discuss problem situations. Evaluation results of the programme that included 536 students from a low-income population in Atlanta showed that among students who had not had sexual intercourse, those who participated in the programme were significantly more likely to continue to postpone sexual activity through the end of the ninth grade than were similar students who did not participate (Howard, 1990). A second carefully implemented intervention guided by social influence theory among US middle school students resulted in null findings. The authors note inadequate community and family-level intervention, possible dilution of the messages and perhaps over saturation of students with the programme's health messages by the 8 th grade (Moberg, 1998).</P>

<P>In addition one study assessing the use of the health belief model to predict condom use among university students in Nigeria found that the major health belief model variables, including perceived benefits of condom use, perceived barriers to condom use and cues to action, together with AIDS knowledge and male

gender, significantly predicted condom use (Edem, 1998).

Reitman et al. suggest that behavioural constructs need to target specific behaviours. Their study, guided by the health belief model and the theory of reasoned action, among African American adolescents found that addressing condom use, reduction of the number of partners, or the frequency of sexual intercourse all related to different risk reduction strategies. The adolescents' positive attitude toward condoms emerged as the single strongest correlate of actual condom use. Although multiple-session interventions have shown effectiveness, one project targeting African American adolescents demonstrated that a single-session workshop focusing on cognitive behavioural skills training produced significant increases in HIV-related knowledge, reductions in risk promoting beliefs, and lower frequencies of high-risk sexual behaviours (Jemmott, 1992).

One of the few studies that tested theoretical constructs in a manner that could delineate mediators of change was a single-session intervention among US college students to promote STD prevention. Researchers used regression analyses to show that changes in perceived benefits of condom use, acceptance of sexuality, sexual control, attitudes toward condoms, and self-efficacy for condom use were linked to behavioural intentions to use condoms. The authors concluded that the mechanisms for change in their intervention were affective attitudes toward condoms and condom users, as well as self-efficacy for condom use (Kalichman, 1998).

Conclusion

Together, the results of these studies suggest that constructs subsumed in behavioural theory have greatly enhanced our understanding of risk behaviour among youth in varied settings and situations. The social influences theory was also useful in one study but a second study using the same theory showed null findings. Skills training, attitudes, norms and self-efficacy have all proven effective in predicting behavioural change among young people. In intervention research, these constructs have also been useful in mediating actual risk behaviours. Results have shown that young people who have already initiated sexual relations must be treated very differently than those who have not, and that interventions have to as well target specific behaviours rather than risk reduction in general. Although we noted one study in Nigeria, most theory-based research and intervention has been conducted in the USA. Without further research, these results may be difficult to apply in settings outside the USA. Reitman correctly concludes that condom use is a behaviour that might be especially sensitive to situational or contextual variations especially among diverse populations such as the youth.

(D) INJECTING DRUG USERS

Drug addiction is a major risk factor for HIV infection in about 80 countries worldwide (Gibson, 1998). Behaviours associated

with drug use that are risk factors for HIV transmission are sharing of drug injection equipment and unprotected sex with an infected partner. As this report is focusing on sexual transmission, the sharing of drug injection equipment will not be discussed.

In a recent review of 19 interventions primarily in the USA targeting injecting drug users (IDU), authors found that interventions comprised of:

- individual counselling
- HIV testing and counselling
- group interventions
- street outreach
- social interventions (Gibson, 1998).

In controlled studies, greater impact on behaviour was shown through intense and sustained interventions compared with their comparison conditions. In addition, participants in successful interventions appeared to be more stable and better motivated than their counterparts who were a more heterogeneous group at different stages of behavioural change. The latter finding suggests that future interventions should target subgroups according to risk (Gibson, 1998). As substantial to dramatic behavioural change resulted from both test and comparison groups in many studies, authors concluded that participating in evaluation research may itself have been a valuable intervention and the impact of behavioural assessments was deemed partially responsible for this finding. One recommendation of this review was to consider a social change approach to HIV prevention in IDUs in order to influence social norms towards safer behaviour.

Globally, it has been noted that IDUs need specific information targeting both the individual needs of the IDUs and the social/cultural context of injecting drug use (Case, 1992). The support of specific health and social services is critical, for if an IDU has been motivated by a prevention message to seek treatment or use condoms, the service must be more readily available than drugs. Among 16 countries surveyed in 1992, the success in reaching IDUs varied widely with France reaching less than 5% of that population and Sweden and Australia reporting over 90% of IDU population reached. The gaps identified in IDU prevention programmes centre around not addressing the social construction of addiction including poverty and social inequities that are strong predictors of HIV infection. If programmes only focus on harm reduction without approaching the larger issues, success will remain limited (Case, 1992).

A recent study in Puerto Rico randomly assigned 1004 IDUs to one of two interventions, either a NIDA-developed standard intervention
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or the standard plus an enhanced intervention. The enhanced intervention consisted in a client-centred approach focusing on the individual's perception of risk, continuous risk evaluation and motivation to change as well as environmental resources (such as availability of condoms and access to services). The stages of change model guided the intervention and was used to track individual's passage through a behavioural change process. Participants of the enhanced intervention were found twice as likely as participants in the control group to use condoms during vaginal sex and 11 times as likely to use condoms during anal sex regardless of HIV serostatus. Increase in condom use was more pronounced among HIV and other STD-positive subjects, and with casual more than steady partners (Robles, 1998).

Conclusions

In contrast to what was commonly thought about IDU populations, reviews have noted substantial risk reduction among drug users especially as a result of sustained interventions. Reports on drug users generally emphasize drug use risk rather than sexual risk, but those reports that consider both have noted that sexual risk reduction is much more difficult to achieve than drug use risk. However, a review in 1998 stated that nearly all studies that assessed sexual practices found significant reductions in the number of sexual partners reported by subjects and/or increased use of condoms (Gibson, 1998). Numerous studies have identified drug and alcohol intoxication as associated with high risk sexual behaviour, thus highlighting the importance of understanding and addressing the social construction of drug use. The stages of change model has been useful at guiding interventions with drug users. As with all of the above population groups, IDUs as well are an extremely diverse community, that should be seen and addressed in its complexity. Thus, interventions should target sub-groups and consider the social construction of addiction to be effective.

Table 4 summarizes the theories and models that have been applied to different population groups.

CHAPTER IV: CHALLENGES

(A) DESIGN/CONTEXT ISSUES

<H4>Design</H4>

<P>Interventions based on theory have a better chance of success and theory can make it easier to understand why an intervention was or was not successful. Despite their contributions to the understanding of the psychological processes individuals go through while attempting to change behaviour, the limitations of the psychological theories of behavioural change have been well described in the literature (Auerbach 1994). Most of these models are based on behaviours that are under intentional and volitional control, ignoring the fact that sexual behaviour involves two people, is often impulsive and is influenced by sociocultural, contextual as well as personal and subconscious factors that may be difficult to influence. Numerous studies have identified alcohol and drug intoxication as influencing sexual behaviour highlighting the importance of understanding the social context around sexual behaviour.</P>

<P>In a comprehensive review of behavioural interventions for HIV/AIDS prevention, Oakley et al. found that the most popular type of intervention was giving information. The review looked at 68 separate outcome evaluations among young people and adults, and suggests that sound and effective interventions are most likely to be skills-based interventions provided by peers or clinical psychologists in community settings using interviews or role plays and targeting behaviour or combined behaviour and knowledge outcomes (Oakley, 1995).</P>

<P>The range of study designs is important to note. Randomized controlled trials were not considered exclusively for this report, as these conditions are almost inevitably only found in the industrialized world. In order for this report to consider countries with the highest prevalence, the least amount of resources and some of the most innovative responses the criteria remained broad. The range of outcome measures encountered in doing a review such as this one, makes 'success' difficult to define. Many interventions oriented by theory rely on reported changes in behaviour as their behavioural outcome measure. Some however were satisfied with 'intentions' to change as intentions often predict behaviour. Others use markers such as changes in rates of STD infection, or HIV infection. All of these outcomes were treated as valid in this report, but were noted for the reader to distinguish the differences.</P>

<P>One of the greatest limitations of interventions and studies assessing these interventions was short follow-up time. Lack of follow-up time can undermine an intervention by not allowing positive feedback, not waiting for possible changes in social and cultural norms, and not taking maintenance of behavioural change into consideration.</P>

<H4>Targeting</H4>

<P>There has been much discussion around the issue of targeting AIDS interventions. From an epidemiological perspective it has

been argued that to have an impact on the sexual transmission of HIV, interventions need to reach those most at risk of acquiring or transmitting the infection especially early in the epidemic (Sepulveda, 1992). In information and education campaigns, many suggest that messages are more effective when they can be directed toward a specific target population as the language and approach ought to fit specific needs and solutions appropriate for different communities (Cohen, 1992). Recent simulation studies have also argued that targeting interventions to priority groups would be an efficient and effective approach for HIV prevention in developing countries (Morris, 1997). For example, when addressing specific groups such as youth, it has been shown that interventions must look at those who have initiated sex as a different group from those who have not, to be effective. The danger arises, when the epidemic spreads into the general population, targeting most at risk populations is no longer sufficient to reduce transmission. Another concern with regards to targeting to reduce transmission is how to define the target group, by occupation, age group, geography (Morris, 1997). Identifying populations at risk and targeting too quickly can miss important vulnerable groups, such as male sex workers in Asia (Ford, 1995). Targeting populations that are more vulnerable should not be seen as singling them out and therefore increasing stigma. Working with priority groups is still important at any stage of the epidemic, but should be combined with other activities to reach a broader population equally at risk.

Targeting according to risk of transmission is one aspect, but a second issue is how much of the limited resources to place on primary prevention and how much on secondary prevention. Some studies address specifically targeting prevention efforts at already infected individuals.

(B) GENDER

A significant number of studies have shown that gender influences HIV risk behaviour (Auerbach, 1994, Amaro, 1995). As Ulin (1992) notes when referring specifically to women who are poor and dependent on their male sexual partners, reducing the risk of HIV transmission often means changing the balance of power in the relationship and could mean failure in their roles as women which are inextricably linked to their fertility. Many women are torn between the value of motherhood and the risk of HIV for either them or their child. The fear of their partner's violence has also been shown to predict whether women use condoms (Gomez, 1993). In Uganda, stark gender differences were shown in perceptions of risk, women being more likely to perceive risk than men (Bunnell, 1996). The sexual double standard that sanctions many partners for men while restricting female sexuality has engendered confusing HIV prevention messages, such as reducing numbers of partners where this may not be protective. Data globally affirm that, not only are many women monogamous already, but it is unsafe for them to assume they are safe in their monogamous situation (Heise, 1995). Especially in high prevalence communities rates of discordance among married couples can be between 15% and 20% (Allen, 1992, Serwadda, 1995). Amaro notes

that there is a growing body of knowledge that HIV among women has to be seen within the larger context (Amaro, 1995). She suggests strategies such as participatory education that stress longer-term goals assessing root causes of gender differences including disempowerment and poverty (Amaro, 1995). Wingood suggests a transition that will use gender-specific theories for research and programme development for women and HIV (Wingood, 1995). The same arguments apply with regards to sex workers in particular. de Zalduando emphasizes that the women within the broad category of sex workers represent an exceedingly diverse group with varied life histories and conditions. Without considering the actual situations within which these women live and work, it is impossible to envisage the services or supports needed by this vast range of range people. She advocates the use of ethnographic methods to understand key norms, sexual situations and interactions from the women's point of view (de Zalduando, 1990).

(C) CHANGING EPIDEMIC

As the HIV epidemic and the responses to the HIV epidemic evolve, people's experience accumulates predicting the need to update theoretical models and response. Since the development of anti-retroviral therapies, some studies have assessed preventive behaviour in relation to attitudes regarding combination therapies (Remien, 1998). In Uganda, where the epidemic has matured relative to many communities in the world, the need to incorporate temporal dimensions into measurements of sexual behaviour and perceived risk is clear (Bunnell, 1996). The impact of an epidemic where over 50% of the population in a community knows more than 30 people who have died of the disease is profound. Measuring perceived risk should delineate risk due to past and present behaviour as interventions must target these risks differently. In a more mature epidemic Bunnell suggests "a theoretical framework which recognizes that perceptions of risk and sexual behaviour are not always individually determined, that gender and context are critical determinants of individual control over behaviour, that fear plays different roles at different stages of an epidemic and that lay communities can understand and utilize risk information" (Bunnell, 1996).

(D) NULL FINDINGS

Few studies report on null findings but those that do are critical to complement our under-standing of the relationships between context, population group, approach, intervention and theoretical background. In some populations behavioural skills training has failed to produce significant differences compared to control conditions. For example, non-impact has been shown with inner city African American men and STD clinic patients in the USA (Branson, 1996). Other reports of null findings include a randomized controlled trial among STD patients in the UK. The intervention was guided by the social cognitive theory and results indicated little difference in self reported behavioural change. It is suggested that community as well as individual interventions should address the environment in which risk behaviours take place (James, 1996, 1998). Two interventions

that showed little effect were among youth. One was a brief programme based on constructs from the SCT and the theory of reasoned action. Authors suggested a longer intervention that addresses the multiple problems of this group that was drawn from a detention center and STD clinic (Gillmore, 1997). The second was based on the theory of social influence among middle-school students. Authors noted that inadequate community and family-level interventions, possible dilution of messages and over saturation of students with health messages by the 8th grade may have been responsible for the lack of positive results (Moberg, 1998).

<H3> </H3>

<H3>CHAPTER V: CONCLUSIONS</H3>

<P>Safer sexual behaviour remains the single most effective method of preventing HIV infection. Although tremendous challenges still plague public health and the social sciences globally regarding AIDS prevention, much has been learned as well. It has become clear that effective HIV risk reduction interventions extend beyond basic information giving and help: sensitize people to personal risk, improve couples sexual communication, increase individual's condom use skills, the perception of lower risk practices as an accepted social norm, and help people receive support and reinforcement for their efforts at changing (Kelly, 1995). These principles form the foundation of successful HIV prevention strategies, but differences in individual, social, cultural and economic conditions dictate different design and implementation of programmes. Even if the principles underlying programmes are the same, tailoring to specific groups in specific settings will make programmes look very different (Kelly, 1998). Not only should programmes be modified to fit certain cultural settings, but within cultural groups individuals may be at very different stages of readiness to change and successful interventions should take individual differences into consideration as well.</P>

<P>Changes in behaviour, such as dramatic increase in condom use, in very diverse population groups have taken place and some conclusions can be drawn. As Ulin suggests, when interventions have enabled the participants themselves to take part in mobilizing and setting goals themselves, efforts have been highly successful (Ulin, 1992). Highlights have included the normative changes gay men in many US cities and sex workers in Thailand have made within their communities.</P>

<P>Another important point stressed by this broad overview of approaches to behavioural change is the need to see different levels HIV prevention initiatives as complementary. Individual approaches have shown impact, but to stem transmission on a larger scale for longer term maintenance of changed behaviour, community and structural level programmes are a critical complement. These approaches, despite showing great potential, have not yet been operationalized on a large scale. At this stage programmes should emphasize trans-theoretical approaches that combine individual level constructs with community- level projects that focus on

subcultural norm changing. Community organizing can have the powerful affect of imparting a unified sense of purpose and new beliefs in the possibility of change (Stevens, 1998).

An important element highlighted by a review by Oakley and Darrow was that the quality of evaluations was highly variable and often inadequate, which makes it difficult to conclude generalizable lessons about what works where from the heterogeneous literature. On the positive side, it is now possible to report that prospective experimental studies and long term follow-up in many different settings are feasible (Oakley, 1998).

Despite the many advances in the field and many changes in behaviour observed, populations at highest risk have not received their share of the attention and resources allocated to AIDS interventions globally. The countries with the highest prevalences of HIV are those with the least resources and strained medical and social support systems. These countries with rapidly changing epidemics do not have the means alone to develop randomized controlled trials to test behavioural interventions, yet they are the communities needing the interventions the most urgently. Most theory-driven intervention research has been conducted in industrialized countries with very different epidemics to those in developing countries. It is therefore critical to test models and approaches across cultural, economic and social situations.

Following the findings of the importance of social norms and sexual communication for various groups including youth, MSM and heterosexuals, authors recommend community level interventions aiming at strengthening the perception that others also practice safe sex (Buunk, 1998). Gender and power imbalances were also noted in many studies pointing to the necessity to build gender constructs into theories, models and interventions (Buunk, 1998).

Recommendations for interventions aimed at women include greater emphasis on gender-related influences of behaviour. Studies in the USA and in Africa emphasize that self-protection, especially for vulnerable women may be affected by abusive partners, economic factors, and norms within sexual relationships (Wingood 1996, Bunnell, 1996, van der Straten, 1998). These recommendations apply to many different situations. In both West and Central Africa it has been noted that the ability to discuss sex and contraception with sexual partners as well as the imbalance of gender relations have a potentially significant impact on the capacity to enact changes in sexual behaviour (Edem, 1998, van der Straten, 1995). As Bunnell states, sharp differences in perceptions of risk between males and females in Uganda reflect underlying differences in societal power- the case in multiple settings around the world. To address women's needs for HIV prevention especially in developing countries, the development of female-controlled methods needs greater emphasis as well as a wider approach to HIV prevention that considers the social position of women.

In an epidemic where changes are occurring rapidly at the level

of the virus, treatment context and within populations at risk multidimensional interventions based on theories and models which address individual as well as contextual and sociocultural variables such as gender, class and ethnicity, and their influence on sexual behaviour are urgently needed.</P>

<H3>END NOTE</H3>

<P>1 See Israel et al., 1994 or IUCN, 1997 for complete definitions and examples of participatory action research.</P>

<H5>back to text</H5>

<H3>REFERENCES</H3>

<P>Aggleton P. Global priorities for HIV/AIDS intervention research. International Journal of STD & AIDS 1996; 7 (suppl 2): 1316.</P>

<P>Ajzen I, Fishbein M. Understanding attitudes and predicting social behavior. PrenticeHall, Inc., Englewood Cliffs, New Jersey 07632, 1980.</P>

<P>Alary M, Vincelette J, Dufour A, Otis j, Remis RS, Masse B, Lavoie R, LeClerc R, Parent R, Turmel B. Omega Study Group, Omega Cohort. Determinants of changes in patterns of unprotected anal intercourse (UAI) among men having affective and sexual relations with men (MASM) in Montreal. 12 th International Conference on AIDS. Geneva 1998 [14204].</P>

<P>Allen S, Tice J, van de Perre P, Serufulira A, Hudes E, Nsengumuremyi F, Bogaerts J, Lindan C, Hulley S. Effect of serotesting with counselling on condom use and seroconversion among HIV discordant couples in Africa. BMJ1992, vol 304: 1605-9.</P>

<P>Allen S, Serufulira A, Bogaerts J, van de Perre P, Nsengumuremyi F, Lindan C, Caraël M, Wolf W, Coates T, Hulley S. Confidential HIV testing and condom promotion in Africa. Impact on HIV and gonorrhea rates. JAMA1992, 268: 3338-3343.</P>

<P>Alwano-Edyegu, M, Gumisiriza E, Campbell C, Moore M, Marum E, Kaleeba N. HIV counselling and testing: Resolved that government/public resources for HIV prevention in the developing world should not be directed toward the provision of HIV counselling and testing services. 11 th International Conference on AIDS Vancouver 1996 [We.15].</P>

<P>Amaro H. Love, sex and power: considering women's realities in HIV prevention. American psychologist 1995, 50 (6): 437-447.</P>

<P>Ankrah M. AIDS: Methodological problems in studying its prevention and spread. Soc. Sci. Med. 1989, 29 (3): 265-276.</P>

<P>Asamoah-Adu A, Weir S, Pappoe M, Kanlisi N, Neequaye A, Lamptey P. Evaluation of a targeted AIDS prevention intervention to increase

condom use among prostitutes in Ghana. AIDS 1994, 8: 239- 246.</P>

<P>Asiimwe - Okiror G, Opio A, Musinguzi J, Madraa E, Tembo G, Caraël M. Change in sexual behaviour and decline in HIV infection among young pregnant women in urban Uganda. AIDS 1997, 11: 1757-1763.</P>

<P>Auerbach J, Wypijewska C, Brodil K. AIDS and Behavior: An Integrated Approach. National Academy Press, 1994; 2101 Constitution Ave. NW 20418.</P>

<P>Bandura A. Social learning theory. Prentice-Hall, Inc., Englewood Cliffs, New Jersey 07632, 1977.</P>

<P>Banerjee B, Jana S, Banerjee A, Mukherjee S. Social marketing of condoms at redlight areas (RLAs) through community participation and peer promotion. 12 th International Conference on AIDS. Geneva 1998 [33426].</P>

<P>Barton T, Borrini-Feyerabend G, de Sherbinin A, Warren P. Our people, our resources. IUCN, Gland, Switzerland and Cambridge, UK.</P>

<P>Becker C, Guenther-Grey C, Raj A. Community empowerment paradigm drift and the primary prevention of HIV/AIDS. Soc Sci Med 1998, 46 (7): 831-842.</P>

<P>Bianco M, Bianco M, pagani L. Evaluation of an intervention in training adolescents as peer educators in Argentina. 12 th International Conference on AIDS Geneva 1998 [33539].</P>

<P>Bootan A. Strong youth, strong barriers to HIV. 12 th International Conference on AIDS Geneva 1998 [33561].</P>

<P>Branson B, Rnsom R, Peterman T, Zaidi A. Randomized controlled trial of intensive group counseling to reduce risk behaviors in high-risk STD clinic patients. 11 th International Conference on AIDS. Vancouver 1996 [Mo.D.1753].</P>

<P>Broadhead R, Heckathorn D, Madray H, Mills R, Hughes J. The impact results of a peer-driven intervention to combat HIV among drug injectors. 12 th International Conference on AIDS Geneva 1998 [33335].</P>

<P>Bunnell, R. Promoting or paralyzing behavior change: understanding gender and high levels of perceived risk of HIV infection in Southwestern Uganda. 1996 Doctoral Thesis; Harvard School of Public Health, Boston, Massachusetts.</P>

<P>Buunk B, Bakker A, Siero F, Eijnden R, Yzer M. Predictors of AIDS-preventive behavioral intentions among adult heterosexuals at risk for HIV-infection: extending current models and measures. AIDS Education and Prevention 1998, 10 (2): 149- 172.</P>

<P>Campbell C, Marum E, Alwano-Edyegu M, Dillon B, Moore M, Gumisiriza E. The role of HIV counseling and testing in the developing world. AIDS Education and Prevention 1997, 9 (Suppl B): 92- 104.</P>

<P>Caraël M, Buvé, A, Awusabbo-Asare, K. The making of HIV epidemics: what are the driving forces? AIDS 1997, 11 (suppl B): S23-S31.</P>

<P>Case P. Injection drug use, in AIDS in the World: A global report 1992. Edited by Mann, J, Tarantola D, Netter T. Harvard College: 406-420.</P>

<P>Catania J, Kegeles S, Coates T. Towards an understanding of risk behavior: an AIDS Risk Reduction Model (ARRM). Health Education Quarterly 1990 17 (1): 53-72.</P>

<P>Chan R, Wong M, Lee J, Koh D, wong C. A behavioural intervention programmeme to increase condom use among sex workers in Singapore. 11 th International Conference on AIDS Vancouver 1996 [Mo.D 1747].</P>

<P>Choi K, Yep G, Kumekawa E. HIV prevention among Asian and Pacific Islander American men who have sex with men: a critical review of theoretical models and directions of future research. AIDS Education and Prevention 1998, 10 (Suppl A) (1): 19-30.</P>

<P>Choi K, Lew S, Vittinghoff E, Catania J, Barrett D, Coates T. The efficacy of brief group counseling in HIV-reduction among homosexual Asian and Pacific Islander men. AIDS 1996, 10: 81-87.</P>

<P>Choi K, Coates T. Prevention of HIV infection. AIDS 1994, 8: 1371-1389.</P>

<P>Coates T, Sangiwa G, Balmer D, Gregorich S, Kamenga C. Voluntary HIV counselling and testing (VCT) reduces risk behavior in developing countries: Results from the voluntary counselling and testing study. 12 th International Conference on AIDS. Geneva 1998 [133/33269].</P>

<P>Coates T, Sangiwa G, Balmer D, Furlonge C, Kamenga C, Gregorich S. Serodiscordant married couples undergoing couples counseling and testing reduce risk behavior with each other but not with extra-marital partners. 12 th International Conference on AIDS. Geneva 1998 [33268].</P>

<P>Coates T, Chesney M, Folkman S, Hulley S, Haynes-Sanstad K, Lurie P, Marin B, Roos L, Bunnitt V, Du Wors R. Designing behavioural and social science to impact practice and policy in HIV prevention and care. International Journal of STD & AIDS 1996; 7 (Suppl. 2): 2-12.</P>

<P>Cohen M. Prevention in AIDS in the World: A global report 1992. Edited by Mann, J, Tarantola D, Netter T. Harvard College.</P>

<P>Connell R. Gender and Power. Stanford, CA; Stanford University Press; 1987.</P>

<P>De Zalduando B. Prostitution viewed cross- culturally: toward recontextualizing commercial sex work for improved AIDS Intervention research. Anthropologists at work on AIDS; American Anthropological Association Task Force on AIDS 1990.</P>

<P>De Zoysa I, Sweat M, Denison J. Faithful but fearful: reducing HIV transmission in stable relationships. AIDS 1996, 10 (suppl A): S197-S203.</P>

<P>De Zoysa I, Phillips K, Kamenga M, O'Reilly K, Sweat M, White R, Grinstead O, Coates T. Role of HIV counseling and testing in changing risk behavior in developing countries. AIDS 1995, 9 (suppl A): S95-S101.</P>

<P>DiClemente R, Wingood G. A randomized controlled trial of an HIV sexual risk-reduction intervention for young African-American Women. JAMA 1995 vol 274 (16): 1271-1276.</P>

<P>Edem C, Harvey S. Use of health belief model to predict condom use among university students in Nigeria. In Progress in Preventing AIDS? Dogma, Dissent and Innovation. Global Perspectives 1998. Edited by Buchanan D, Cernada G. Baywood Publishing Company Inc. Amityville, NY.</P>

<P>Elkins D, Maticka-Tyndale E, Kuyyakonond T, Miller P, Haswell-Elkins M. Toward reducing the spread of HIV in Northeastern Thai villages: evaluation of a village-based intervention. AIDS Education and Prevention, 1997, 9 (1): 49-69.</P>

<P>Farmer, P. Inequalities as cofactors for HIV transmission and for poor AIDS outcomes. 11 th International Conference on AIDS Vancouver 1996 [Tu.D.581].</P>

<P>Fishbein M, Hohnson W. The AIDS community demonstration projects (ACDP): a successful multi-site community-level behavioral intervention. 11 th International Conference on AIDS Vancouver 1996 [Mo.D.580].</P>

<P>Fishbein M, Middlestadt S. Using the theory of reasoned action as a framework for understanding and changing AIDS related behaviors. In Wasserheit JN (ed) Primary Prevention of AIDS: Psychological Approaches 1989.</P>

<P>Ford K, Wirawan D, Fajans P. Factors related to condom use among four groups of female sex workers in Bali, Indonesia. AIDS Education and Prevention 1998, 10 (1): 34-45.</P>

<P>Ford K, Wirawan D, Fajans P, Meliawan P, MacDonald K, Thorpe L. Behavioral interventions for reduction of sexually transmitted disease/HIV transmission among female commercial sex workers and clients in Bali, Indonesia. AIDS 1996, 10: 213-222.</P>

<P>Ford K, Wirawan D, Fajans P, Thorpe L. AIDS knowledge, risk behaviors, and factors related to condom use among male commercial

sex workers and male tourist clients in Bali, Indonesia. AIDS 1995, 9: 751-759.</P>

<P>Fox L, Bailey P, Clarke-Martinez K, Coello M, Ordonez F, Barahona F. Condom use among high-risk women in Honduras: evaluation of an AIDS prevention programme. AIDS Education and Prevention 1993, 5 (1): 1-10.</P>

<P>Friedman S, O'Reilly K. Sociocultural interventions at the community level. AIDS 1997, 11 (suppl A): S201-S208.</P>

<P>Futterman D, Jean-Louis S, Hoffman N, Chabon B. promoting HIV counseling and testing to adolescents: contributions of social marketing. 12 th International Conference on AIDS Geneva 1998 [33434].</P>

<P>Galavotti C, Gielen A, Armstrong K, Cabral R, Fogarty L, Cohen A, Milstein B. The effect of a theory- based HIV prevention intervention on condom use with main partners in samples of US women. 12 th International Conference on AIDS. Geneva 1998 [14274].</P>

<P>Giami A, Dowsett G. Social research on sexuality: contextual and interpersonal approaches. AIDS 1996, 10 (suppl A): S191-S196.</P>

<P>Gibson D, McCusker J, Chesney. Effectiveness of psychosocial interventions in preventing HIV risk behaviour in injecting drug users. AIDS 1998, 12: 919-929.</P>

<P>Giffin F. Beyond empowerment: heterosexualities and the prevention of AIDS. Soc Sci Med 1998, 46 (2): 151-156.</P>

<P>Gillmore M, Morrison D, Richey C, Balassone M, Gutierrez L, Farris M. Effects of a skill-based intervention to encourage condom use among high risk heterosexually active adolescents. AIDS Education and Prevention 1997, 9 (suppl A): 22-43.</P>

<P>Godin G, Savard J, Kok G, Forin C, Foyer R. HIV Seropositive gay men: understanding adoption of safe sexual practices. AIDS Education and Prevention 1996, 8 (6): 529-545.</P>

<P>Gold R, Rosenthal D. Preventing unprotected anal intercourse in gay men: a comparison of two intervention techniques. International Journal of STD & AIDS 1995, 6: 89-94.</P>

<P>Gordon J. The indigenous leader outreach model reaching out to sex workers in Indonesia. Research for sex work 1998, June. Den Haag offset, The Netherlands: 4-5.</P>

<P>Greenberg, J in AIDS Education: Interventions in Multicultural settings. Edited by Schenker I, Saber-Friedman G, Sy F. 1996. Plenum Press, NY 233 Spring St. New York, NY 10013.</P>

<P>Gregson S, Zhuwau T, Anderson R, Chandiwana, S. Is there evidence

for behaviour change in response to AIDS in rural Zimbabwe? .
Soc Sci Med 1998, 46 (3): 321-330.</P>

<P>Guenther-Grey C, Noroian D, Fonseka J, Higgins D. Developing community networks to deliver HIV prevention interventions. Public Health Rep 1996, 111 Suppl 1: 41-9.</P>

<P>Heaney C, Israel B. Social networks and social support. In: Glantz, Lewis and Rimer 1997. Health behavior and health education: Theory, research and practice. San Francisco, Jossey-bass (second edition).</P>

<P>Heise L, Elias C. Transforming AIDS prevention to meet women's needs: a focus on developing countries. Soc Sci Med 1995, 40 (7): 931-943.</P>

<P>Henry K. HIV/AIDS Policy in Kenya: Part I - Building a national response to the epidemic. NCIH Global AIDS Newsletter no. 50: 8-9.</P>

<P>Higgins D, Galavotti C, O'Reilly K, Schnell D, Moore M, Rugg D, Johnson R. Evidence for the effects of HIV antibody counseling and testing on risk behaviors. JAMA 1991, 266 (17): 2419-2428.</P>

<P>Holtgrave D. Public health communication strategies for HIV prevention: past and emerging roles. AIDS 1997, 11 (suppl A): S183-S190.</P>

<P>Howard M, McCabe J. Helping teenagers postpone sexual involvement. Family Planning Perspectives 1990, 22 (1): 21-26.</P>

<P>Ickovics J, Yoshikawa H. Preventive interventions to reduce heterosexual HIV risk for women: current perspectives, future directions. AIDS 1998, 12 (suppl A): S197-S208.</P>

<P>Israel B, Checkoway B, Schulz A, Zimmerman. Health Education and community empowerment: conceptualizing and measuring perceptions of individual, organizational and community control. Health Educational Quarterly 1994. 21 (2): 149-170.</P>

<P>James N, Gillies P, Bignell C. Evaluation of a randomized controlled trial of HIV and sexually transmitted disease prevention in a genitourinary medicine clinic setting. AIDS 1998, 12: 1235-1242.</P>

<P>James N, Gillies P, Bignell C. A randomised controlled trial of an intervention to reduce risk behaviour among STD clinic attenders. 11 th International Conference on AIDS Vancouver 1996 [Mo.D. 1752].</P>

<P>Jemmott JB, Jemmott LS, Fong GT. Reductions in HIV risk-associated sexual behaviors among black male adolescents: effects of an AIDS prevention intervention [published erratum appears in Am J Public Health 1992 May; 82 (5): 684]. Am J Public Health 1992 Mar; 82 (3): 372-377].</P>

<P>Jemmott JB, Jemmott LS, Hacker CI. Predicting intentions to

use condoms among African-American adolescents: the theory of planned behavior as a model of HIV risk-associated behavior. *Ethn Dis* 1992, 2(4): 371-380.</P>

<P>Kagimu M, Marum E, Wabire-Mangen F, Nakanjo N, Walakira Y, Hogle J. Evaluation of the effectiveness of AIDS health education interventions in the Muslim community in Uganda. *AIDS Education and Prevention* 1998, 10 (3): 215-228.</P>

<P>Kalichman S. Preventing AIDS: a sourcebook for behavioral interventions. 1998 Lawrence Erlbaum Associates Inc. Publishers. 10 Industrial Ave. Mahwah, NJ 07430.</P>

<P>Kalichman S, Hospers H. Efficacy of behavioral-skills enhancement HIV risk-reduction interventions in community settings. *AIDS* 1997, 11 (suppl A): S191-S199.</P>

<P>Kalichman S, Rompa D, Coley B. Lack of positive outcomes from a cognitive-behavioral HIV and AIDS prevention intervention for innercity men: lessons from a controlled pilot study. *AIDS Education and Prevention* 1997, 9 (4): 299-313.</P>

<P>Kamb M, Kassler W, Peterman T, Zenilman J, Bolan G, Rogers J, Rhodes F,. Costs of preventing HIV via counseling: results from a randomized controlled trial (Project Respect): 12 th International Conference on AIDS Geneva 1998 [33263].</P>

<P>Kamb M, Douglas J, Rhodes F, Bolan G, Zenilman J, Iatesta M, Peterman T, Graziano S, Killean W, Fishbein M. A Multi-Center, randomized controlled trial evaluating HIV prevention counseling (Project Respect): Preliminary results. 11 th International Conference on AIDS Vancouver 1996 [Th.C.4380].</P>

<P>Kathuria R, Chirenda P, Sabatier R, Dube N. Peer education to reduce STI/HIV transmission in Lusaka, Zambia. 12 th International Conference on AIDS Geneva 1998 [33524].</P>

<P>Katzenstein D, McFarland W, Mbizvo M, Latif A, Machezano R, Parsonnet J, Bassett, M. Peer education among factory workers in Zimbabwe; providing a sustainable HIV prevention intervention. 12 th International Conference on AIDS Geneva 1998 [33514].</P>

<P>Kegeles S, Hart G. Recent HIV-prevention interventions for gay men: individual, small-group and community-based studies. *AIDS* 1998, 12 (suppl A): S209-S215.</P>

<P>Kegeles S, Hays R, Waldo C, Pollack L. The whole is greater than the sum of its parts: An analysis of the intervention components of an HIV prevention program for young gay men. 12 th International Conference on AIDS Geneva 1998 [43283].</P>

<P>Kegeles S, Hays R, Coates T. The Mpowerment Project: a community-level HIV prevention intervention for young gay men. *Am J Public Health* 1996 Vol 86 (8): 1129-1136.</P>

<P>Kegeles S, Hays R, Pollack L, Coates T. Community mobilization reduces HIV risk among young gay men: a two community study. 11 th International Conference on AIDS Vancouver 1996 [Mo.D.581].</P>

<P>Kelly J, Murphy D, Sikkema K, McAuliffe T, Roffman R, Solomon L, Winett R, Kalichman S. Randomised, controlled, community-level HIV prevention intervention for sexual-risk behaviour among homosexual men in US cities. Lancet, 1997, 350 :1500-1505</P>

<P>Kelly J, Kalichman S, Rompa D. Outcomes of a Randomised, intervention trial to promote consistent HIV risk reduction behaviour change maintenance in an ethnically diverse cohort of gay and bisexual men. 11 th International Conference on AIDS Vancouver 1996 [We.C. 3497].</P>

<P>Kelly J. Changing HIV risk behavior: practical strategies 1995. The Guilford Press, 72 Spring street, New York, NY 10012.</P>

<P>Kelly J, Lawrence J, Stevenson Y, Hauth A, Kalichman S, Diaz Y, Brasfield T, Koob J, Morgan M. Community AIDS/HIV risk reduction: the effects of endorsements by popular people in three cities. Am J Public Health 1992, vol 82 (11): 1483-1489.</P>

<P>Kelly J, Kalichman S, Kauth M, Kilgore H, Hood H, Campos P, Rao S, Brasfield T, St Lawrence J. Situational factors associated with AIDS risk behavior lapses and coping strategies used by gay men who successfully avoid lapses. Am J Public Health 1991, 81, 1335-1338.</P>

<P>King R, Homsy J. Involving traditional healers in AIDS education and counselling in sub-Saharan Africa: a review. AIDS 1997, 11 (suppl A): S217- S225.</P>

<P>King R, Estey J, Allen S, Kegeles S, Wolf W, Valentine C, Serufilira A. A family planning intervention to reduce vertical transmission of HIV in Rwanda. AIDS 1995, 9 (suppl): S45-S51.</P>

<P>Kirby D, Short L, Collins J, Rugg D, Kolbe L, Howard M, Miller B, Sonenstein F, Zabin L. School-Based programs to reduce sexual risk behaviors: a review of effectiveness. Public Health Reports 1994, 109, 3: 339-360.</P>

<P>Kline A, Vanlandingham M. HIV-infected women and sexual risk reduction: the relevance of existing models of behavior change. AIDS Education and Prevention 1994, 6 (5): 390-402.</P>

<P>Laver S, Van Den Borne B, Kok G. Using theory to design an intervention for HIV/AIDS prevention for farm workers in rural Zimbabwe. In Progress in Preventing AIDS? Dogma, Dissent and Innovation. Global Perspectives 1988. Edited by Buchanan D, Cernada G. Baywood Publishing Company Inc. Amityville, NY.</P>

<P>Lawrence J, Jefferson K, Banks P, Cline T, Alleyne E, Brasfield

T. Cognitive-Behavioral group intervention to assist substance-dependent adolescents in lowering HIV infection risk. AIDS Education and Prevention 1994, 6 (5): 425-435.</P>

<P>Leite G, Cesar F. The continuity of peer education in Brazil. Research for sex work 1998: 10.</P>

<P>Levine, WC, Higuera G, Revollo R, Vega J, Aliaga A, Tinajeros F, Garnica M, Lewis J, Ugarteche J, Kaune V, Estenssoro M, Wright-Deaguerol, Pareja R, Negron E, Posner J, Ransom R, Melgar M, Kuritsky J. Rapid decline in sexually transmitted disease prevalence among brothel-based sex workers in La Paz Bolivia: The experience of Proyecto Contra SIDA, 1992-1995. 11 th</P>

<P>International Conference on AIDS Vancouver 1996 [Mo.C.441].</P>

<P>Levy S, Phillips K, Rasher S, Schaffer T. Measuring behavior change among clients of community-based organizations delivering prevention interventions in a large, urban setting. 12 th International Conference on AIDS Geneva 1998 [14285].</P>

<P>Lurie P, Fernandes M, Hughes V, Arevalo E, Hudes E, Reingold A, Hearst N, Instituto Adolfo Lutz study Group. Socioeconomic status and the risk of HIV-1, syphilis and hepatitis B infection among sex workers in São Paulo State, Brazil. AIDS 1995, 9 (suppl. 1): S31-S37.</P>

<P>Lurie, P, Lowe, R, Hintzen P. The impact of international monetary fund and World Bank policies on HIV transmission in developing countries. 10 th International Conference on AIDS Yokohama 1994 [PD0380].</P>

<P>Maskovsky J, Davis J, Harley A, Shull J. The contradictions of peer education as employment for poor people with HIV//AIDS. 12 th International Conference on AIDS Geneva 1998 [33523].</P>

<P>McLeroy K, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. Health Ed Quarterly 1988, 15(4): 351-377.</P>

<P>Moberg D, Piper D. The healthy for life project: sexual risk behavior outcomes. AIDS Education and Prevention, 1998, 10 (2): 128-148. Morris M. Sexual networks and HIV. AIDS 1997, 11 (suppl. A): S209-S216 .</P>

<P>Moughutou P. Education of road haulers and taxi drivers of Kumba town on STD/AIDS prevention: pilot project. 12 th International Conference on AIDS Geneva 1998 [33557].</P>

<P>Nemoto T, Aoki B, Huang K, Ching A. Drug use and HIV risk behaviors among Asians in San Francisco. 12 th International Conference on AIDS Geneva 1998 [14222].</P>

<P>Newcomb M, Stacy A, Ames S. Implicit sexual cognition and activation

in HIV risk: predictors of sexual and drug abuse behaviors. 12
th International Conference on AIDS Geneva 1998 [24152].</P>

<P>Oakley A, Darrow W. Social, cultural and political aspects.
AIDS 1998, 12 (suppl. A): S189-S190 .</P>

<P>Oakley A, Fullerton D, Holland J. Behavioural interventions
for HIV/AIDS prevention. AIDS 1995, 9: 479-486 .</P>

<P>Ogundare D. Evaluation of a workplace pilot behavioural intervention
project among dock-workers in the two sea-ports in Lagos, Nigeria.
12 th International Conference on AIDS Geneva 1998 [14369].</P>

<P>Oldenburg B, Hardcastle D, Kok G. Diffusion of innovations.
In: Glantz, Lewis and Rimer 1997. Health behavior and health education:
Theory, research and practice. San Francisco, Jossey-bass (second
edition).</P>

<P>O'Leary A. The NIMH multisite HIV prevention trial: Social
cognitive mediators of behavioral intervention effects on HIV/STD
risk. 12 th International Conference on AIDS Geneva 1998 [14279].</P>

<P>O'Leary A, Goodhart F, Jemmott LS, Boccher-Lattimore D. Predictors
of safer sex on the college campus: a social cognitive theory
analysis. J Am Coll Health 1992, 40(6): 254-263.</P>

<P>Opare B, Tirtoree L, Bayor S. Strategy to attitudinal change
in CSW, Wa, Ghana. 10 th International Conference on AIDS Yokohama
1994 [PD0455].</P>

<P>Opio,A, Musinguzi J, Asiimwe-Okiror G, Byabamazima C, Turyaguma,
Madraa E. Sexual behavior change due to HIV/AIDS: Results from
population based surveys conducted in five districts of Uganda.
11 th International Conference on AIDS Vancouver 1996 [LBD 6069].</P>

<P>Otto-Salaj L, Kelly J, Hoffmann R, Stevenson L. Outcome of
a cognitive-behavioral HIV prevention intervention tailored to
the needs of seriously mentally ill adults. 12 th International
Conference on AIDS Geneva 1998 [14279].</P>

<P>Parker R. Empowerment, community mobilization and social change
in the face of HIV/AIDS. AIDS 1996, 10 (suppl. 3): S27-S31.</P>

<P>Peersman G, Levy J. Focus and effectiveness of HIV-prevention
efforts for young people. AIDS 1998, 12 (suppl. A): S191-S196.</P>

<P>Pickering H, Quigley M, Pépin J, Todd J, Wilkins A.
The effects of post-test counselling on condom use among prostitutes
in The Gambia. AIDS 1993, 7: 271-273.</P>

<P>Prochaska J, Redding c, Harlow L, Rossi J, Velicer W. The transtheoretical
model of change an HIV prevention: a review. Health Ed Quarterly
1994 Vol. 21 (4): 471-486.</P>

<P>Prochaska J, Di Clemente C. Stages of change in the modification of problem behaviors. Progress in Behavior Modification. Eds. Michel Hersen, Ridhard Eisler and Peter Miller P. Sycamore, IL; Sycamore Publishing Company, 1992: 28.</P>

<P>PSI. Annotated catalogue of recent social marketing research and evaluation 1998. PSI 1120 19 th St NW Suite 600 Washington DC 20036.</P>

<P>Ré M, Pagani L, Bianco M. Assessing workshops on sexuality with Argentinian youth. AIDS/STD health promotion exchange 1996, 3: 13-15.</P>

<P>Reitman D, St. Lawrence J, Jefferson K, Alleyne E, Brasfield T, Shirley A. Predictors of African American Adolescents condom use and HIV risk behavior. AIDS Education and Prevention, 1996, 8 (6): 499-515.</P>

<P>Remien R, Wagner G, Carballo-Diéguéz A, Dolezal C. HAART, Attitudes, and risk behavior among serodiscordant male couples. 12 th International Conference on AIDS Geneva 1998 [14136].</P>

<P>Robles R, Marrero C, Matos, T, Colon H, Finlinson H, Reyes J, Sahai H. Factors associated with changes in sex behaviour among drug users in Puerto Rico. AIDS Care 1998, 10 (3): 329-338.</P>

<P>Roffman R, Stephens R, Curtin L, Gordon J, Craver J, Stern M, Beadnell B, Downey L. Relapse prevention as an interventive model for HIV risk reduction in gay and bisexual men. AIDS Education and Prevention 1998, 10 (1): 1-18.</P>

<P>Rogers EM. Diffusion of Innovations. Third Edition. New York, NY: The Free Press; 1983. Rotheram-Borus. Seropositive youth make positive changes. 12 th International Conference on AIDS Geneva 1998 [32426].</P>

<P>Roy A. Behaviour change among sex workers and clients can be best brought about by peer educators. 12 th International Conference on AIDS Geneva 1998 [33540].</P>

<P>Roy I. Role of peer educators in social marketing of male condoms to flat based sex workers (women) and rickshaw pullers of central Calcutta. 12 th International Conference on AIDS Geneva 1998 [33441].</P>

<P>Schuler S, Hashemi S. Credit programs, women's empowerment, and contraceptive use in rural Bangladesh. Studies in family planning, 1994, 25 (2): 65-76.</P>

<P>Seema S. Prevention and control of STD/HIV transmission through peer educators amongst CSW. 12 th International Conference on AIDS Geneva 1998 [33552].</P>

<P>Sepulveda J, Fineberg H, Mann J. AIDS: prevention through education: a world view. New York, Oxford University Press 1992 200 Madison

Ave. New York, NY 10016.</P>

<P>Serwadda D, Gray R, Wawer M, Stallings R, Sewankamba N, Kone-Lule J, Lainjo B, Kelly R. The social dynamics of HIV transmission as reflected through discordant couples in rural Uganda. AIDS 1995, 9: 745-750.</P>

<P>Stevens P, Hall J. Participatory action research for sustaining individual and community change: a model of HIV prevention education. AIDS Education and Prevention, 1998, 10 (5): 387-402.</P>

<P>Svenson G, Johnsson K, Hanson B. Increased consistent condom use among students in a prevention study based on community organisation and action and the use of peer educators. 11 th International Conference on AIDS Vancouver 1996 [Mo.D.582].</P>

<P>Sweat, M, Denison J. Reducing HIV incidence in developing countries with structural and environmental interventions. AIDS 1995, 9 (suppl. A): S251-S257.</P>

<P>TASO Uganda: The inside story, participatory evaluation of HIV/AIDS counselling, medical and social services, 1993-1994. TASO, WHO.</P>

<P>Tawil O, Verster A, O'Reilly K. Enabling approaches for HIV/AIDS prevention: can we modify the environment and minimize the risk? AIDS 1995, 9: 1299-1306.</P>

<P>Ter-Hoyakimyan A. Sargsyan D, Topchyan S, Zohrabyan L, Ghoukasyan G. Peculiarities of anti-AIDS program aimed at teenagers in Armenia. 12 th International Conference on AIDS Geneva 1998 [33554].</P>

<P>Torres-Burgos N, Serrano-Garcia I, Galarza M, Henandez R. Social marketing principles applied to the recruitment of research participants: the university of Puerto Rico experience. 12 th International Conference on AIDS Geneva 1998 [33435].</P>

<P>Ulin P. African women and AIDS: negotiating behavioral change. Soc. Sci. Med. 1992, 34 (1): 63- 73.</P>

<P>UNAIDS. Epidemics and behaviours: a review of changes in sexual behaviour in Uganda in the early 1990s. UNAIDS Best Practice Collection. Geneva: UNAIDS; 1997</P>

<P>UNAIDS/WHO. Report on the global HIV/AIDS epidemic June 1998, Joint United Nations Programme on HIV/AIDS; World Health Organization 1998. UNAIDS/98.10 - WHO/EMC/VIR/98.2 - WHO/ASD/98.2.</P>

<P>Vacondio P, Guaraldi G, Siciliano S, De Donatis D. Prevention of HIV transmission among Arabian prisoners of northern Italy using peer education methods: a video clip and a calendar. 12 th International Conference on AIDS Geneva 1998 [33560].</P>

<P>Valdiserri R. HIV counseling and testing: its evolving role

in HIV prevention. AIDS Education and Prevention 1997, 9 (suppl B): 2-13.</P>

<P>Van der Straten A, King R, Grinstead O, Vittinghoff E, Serufilira A Allen S. Sexual coercion, physical violence and HIV infection among women in steady relationships in Kigali, Rwanda. AIDS and Behavior, vol 2 (1), 1998.</P>

<P>Van der Straten A, King R, Grinstead O, Serufilira A Allen S. Couple communication, sexual coercion and HIV risk reduction in Kigali, Rwanda. AIDS 1995, 9: 935-944.</P>

<P>Visrutaratna S, Lindan C, Sirhorachai A, Mandel J. 'Superstar' and 'model brothel': developing and evaluating a condom promotion program for sex establishments in Chiang Mai, Thailand. AIDS 1995, 9 (suppl 1): S69-S75.</P>

<P>Wallerstein N, Bernstein E. Empowerment education: Freire's ideas adapted to health education. Health Education Quarterly 1988, 15 (4): 379-394.</P>

<P>Walter H, Vaughan R. AIDS risk reduction among a multiethnic sample of urban high school students. JAMA 1993 Vol 270 (6): 725-730.</P>

<P>Werner D, Sanders D, Weston J, Babb S, Rodriguez B. Questioning the Solution: the politics of primary health care and child survival with an in-depth critique of oral rehydration therapy. Healthwrights 1997. 964 Hamilton Ave. Palo Alto CA 94301.</P>

<P>Wiebel W, Jimenez A, Johnson W, Ouellet L, Jovanovic B, Lampinen T, Murray J, O'Brien M. Risk behavior and HIV seroincidence among out-of-treatment injection drug users: a four-year prospective study. Journal of acquired immune deficiency syndromes and human retrovirology 1996. 12:282-289.</P>

<P>Wingood G, DiClemente R. HIV sexual risk reduction interventions for women: a review. Am J Prev. Med. 1996; 12 (3): 209-217.</P>

<P>Wingood G, DiClemente R. The role of gender relations in HIV prevention research for women. Am J Public Health 1995, 85 (4): 592.</P>

<P>Wolffers I. About peer education. Research for sex work 1998: 3.</P>

<P>Wolitski R, MacGowan R, Higgins D, Jorgensen C. The effects of HIV counseling and testing on risk-related practices and help-seeking behavior. AIDS Education and Prevention 1997, 9 (suppl B): 52-67. World Bank. Confronting AIDS: public priorities in a global epidemic. Oxford University Press, 200 Madison Ave, New York, NY 10016; 1997.</P>

<H3>TABLES</H3>

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  <DD><A HREF="#anchor204471">Table 1: Overview of most frequently
  used theories of human behaviour</A>
  <DD><A HREF="#anchor361734">Table 2: Models as theories tested
  through research or reviews</A>
  <DD><A HREF="#anchor714765">Table 3: Models and theories used
  to guide interventions</A>
  <DD><A HREF="#anchor839307">Table 4: Summary of theories and
  models by population group</A>
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<P><B> </B><A NAME="anchor204471"></A><B>Table 1: Overview
of most frequently used theories of human behaviour</B></P>

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    <TD>
      Level</TD>
    <TD>
      Theory or Model</TD>
    <TD>
      Behavioral Determinants</TD>
    <TD>
      Examples of Programme Applicaiton</TD>
  </TR>
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      <B><FONT SIZE="-1" FACE="Arial, Helvetica">Individual <BR>
      Level</FONT></B></TD>
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      <B><FONT SIZE="-1" FACE="Arial, Helvetica">Health Belief Model</FONT></B></
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      <P><FONT SIZE="-2" FACE="Arial, Helvetica">Perceived susceptibility</FONT><
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  <P><FONT SIZE="-2" FACE="Arial, Helvetica">Perceived severity</FONT></P>

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  <P><FONT SIZE="-2" FACE="Arial, Helvetica">Perceived benefits
  & barriers</FONT></P>

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  <P><FONT SIZE="-2" FACE="Arial, Helvetica">Cues to action</FONT></TD>
  <TD WIDTH="290" HEIGHT="23" VALIGN="TOP">
    <P><FONT SIZE="-2" FACE="Arial, Helvetica">Increase level of
    risk perception</FONT></P>

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  <P><FONT SIZE="-2" FACE="Arial, Helvetica">Influence beliefs
  of severity</FONT></P>

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  <P><FONT SIZE="-2" FACE="Arial, Helvetica">Assess and influence

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beliefs about benefits/ barriers of changing behaviour
--

Theory of Reasoned Action Attitudes Subjective norms Behavioral intentions

Social Cognitive Theory Social Learning Theory Outcome expectancies Self- efficacy Sexual communication, need for social support to reinforce behaviour change Modeling of safer behaviours
--

Stages of Change

<P>Precontemplative</P>

<P>Contemplative</P>

<P>Preparation</P>

<P>Action</P>

<P>Maintenance</TD>

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<P>Assess and influence
outcome expectations and norms, perceived risk</P>

<P>Assess and influence
self- efficacy, intention</P>

<P>Assess and influence
self- efficacy, intentions and outcome expectations</P>

<P>Assess and influence
outcome expectations and norms</P>

<P>Assess and influence
norms, self- efficacy</TD>

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AIDS Risk Reduction

Model</TD>

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<P>Labelling</P>

<P>Commitment</P>

<P>Enactment & maintenance</FON

T></TD>

<TD WIDTH="290" HEIGHT="23" VALIGN="TOP">

<P>Assess and influence
risk perception, aversive emotions and knowledge</P>

<P>Assess & influence
perceptions of enjoyment, self- efficacy & risk reduction</P>

<P>Assess and influence
communication, informal networking, formal help- seeking</TD>

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Social and community
level</TD>

<TD WIDTH="184" HEIGHT="23" VALIGN="TOP" ALIGN="CENTER" BGCOLOR="#d7d7d7"> Diffusion of Innovation</TD>
<TD WIDTH="222" HEIGHT="23" VALIGN="TOP"> <P>Change agent</P> <P>Communication channels</P>
> <P>Context</TD> <TD WIDTH="289" HEIGHT="23" VALIGN="TOP"> <P>Who are the influential people in the community</P> <P>Most effective means to spread information including community leaders</P> <P>Assess type of social networks in community</TD>
</TR> <TR> <TD WIDTH="102" HEIGHT="23" VALIGN="TOP"> </TD> <TD WIDTH="184" HEIGHT="23" VALIGN="TOP" ALIGN="CENTER" BGCOLOR="#d7d7d7"> Social Influences</TD>
> <TD WIDTH="222" HEIGHT="23" VALIGN="TOP"> <P>Context of social interactions</P> <P>Social norms</P> <P>Social rewards & punishments</TD> <TD WIDTH="289" HEIGHT="23" VALIGN="TOP"> <P>Equip young people with social skills including peer pressure resistance skills</P> <P>Assess and influence social norms</TD>
</TR> <TR> <TD WIDTH="102" HEIGHT="23" VALIGN="TOP"> </TD> <TD WIDTH="184" HEIGHT="23" VALIGN="TOP" ALIGN="CENTER" BGCOLOR="#d7d7d7"> Social Network Theory</TD>
<TD WIDTH="222" HEIGHT="23" VALIGN="TOP"> <P>Social networks</P> <P>Social support</TD>

<TD WIDTH="289" HEIGHT="23" VALIGN="TOP">
<P>Assess composition
of social network</P>

<P>Assess, build up social
support</TD>

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Theory of Gender &
Power</TD>

<TD WIDTH="222" HEIGHT="23" VALIGN="TOP">

Social sexual norms &
power dynamics</TD>

<TD WIDTH="289" HEIGHT="23" VALIGN="TOP">

Address social structure
of gender relation</TD>

</TR>

<TR>

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Empowerment</TD>

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<P>Community organization</P>

>

<P>Community building</TD>

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<P>Assess community priorities</FON
T></P>

<P>Assess key activities
of the community and facilitate alliance building</TD>

</TR>

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Social Ecological
Model

for Health Promotion</TD>

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<P>Intra-personal (knowledge,
attitudes, perceptions of risk)</P>

<P>Social, organizational,
cultural

(social networks)</P>

<P>Political factors
(regulation)</TD>

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<P>Increase in knowledge,
skills development, influence</P>

<P>Community organizing,
mass media</P>

<P>Advocacy</TD>

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Socioeconomic &
Environmental Factors</TD>

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<P>Policy</P>

<P>Resources; Living
conditions</P>

<P>Access to prevention</TD>

<TD WIDTH="289" HEIGHT="23" VALIGN="TOP">

<P>Advocacy; Community
organizing</P>

<P>Social services</P>

<P>Increasing access
to prevention (condoms)</TD>

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<P>Table 2: Models as theories tested
through research or reviews</P>

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Author, Year</TH>

<TH VALIGN="TOP" WIDTH="150">

Model/ Theory/ Construct</TH>

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Target group (n), country</TH>

H>

<TH VALIGN="TOP" WIDTH="150">

Research Methodology</TH>

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| Results</TH> |
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| <TD VALIGN="TOP" WIDTH="50">'Results reflect |
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social context of sexual behaviour'. Where knowledge of HIV is low, susceptibility to STDs and pregnancy related to condom use. Self- efficacy and belief that condoms can increase pleasure were related to condom use. In a more independent group self- efficacy not related, but susceptibility to HIV related to condom use. In higher priced group, condom use related to beliefs about AIDS prevention and pleasure as well as self- efficacy.
Buunk, 1998 Health belief model, Protection Motivation Theory, Anticipated regret, Social norms Heterosexual men and women at risk (711), Holland Heterosexual adult females and males interviewed for predictors of intention to use condoms with new partners A limited number of well described variables can explain variance in intention to use condoms: self efficacy, anticipated regret and descriptive social norms (belief that most others in the reference group would use condoms with new sexual partners)
Reitman, 1996 Health belief model, Theory of reasoned action, Social cognitive theory African- American youth (312), USA Interviews Adolescent's positive attitude toward condoms was strongest correlate of condom use, and lower self- efficacy was most strongly related to high- risk sexual practices.
O'Leary, 1992 Social cognitive theory

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<FONT SIZE="-1" FACE="Arial, Helvetica">College students, USA
(923)</FONT></TD>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Survey on 4 college campuses</FONT>
</TD>
<TD VALIGN="TOP" WIDTH="300">
<FONT SIZE="-1" FACE="Arial, Helvetica">Stronger perceptions
of self- efficacy to engage in safer behavior, expecting fewer
negative outcomes of condom use, and less frequency of sex in
conjunction with alcohol or other drug use significantly predicted
safer sexual behaviour.</FONT></TD>
</TR>
<TR>
<TD VALIGN="TOP" WIDTH="50">
<FONT SIZE="-1" FACE="Arial, Helvetica">Nemoto, 1998</FONT></TD>
<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">
<P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Social
cognitive theory Self-efficacy</FONT></TH>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Asian community (254),
USA</FONT></TD>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Interviews of Chinese,
Filipino, and Vietnamese adults identified in needle exchange,
jail, night clubs, and bars</FONT></TD>
<TD VALIGN="TOP" WIDTH="300">
<FONT SIZE="-1" FACE="Arial, Helvetica">Self-efficacy to practice
safer sex was significantly associated with condom use in past
6 months. Cultural ideas such as shame and fatalism influenced
condom use and self- efficacy.</FONT></TD>
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<TR>
<TD VALIGN="TOP" WIDTH="50">
<FONT SIZE="-1" FACE="Arial, Helvetica">Alary, 1998</FONT></TD>
<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">
<P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Theory
of reasoned action, Theory of planned behavior, Social learning
theory</FONT></TH>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Seronegative MSM (2000),
Canada</FONT></TD>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Interviews and self-administered
questionnaire every 6 months</FONT></TD>
<TD VALIGN="TOP" WIDTH="300">
<FONT SIZE="-1" FACE="Arial, Helvetica">Psychosocial variables
associated with incident high risk sex were lower perceived behavioural
control and perception of higher risk linked other sexual practices</FONT><
/TD>
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<TR>
<TD VALIGN="TOP" WIDTH="50">
<FONT SIZE="-1" FACE="Arial, Helvetica">Rotheram- Borus, 1998</FONT></TD>

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Cognitive-behavioral Youth, USA Review of cognitive-behavioral interventions for seropositive youth Significant reductions in risk behavioral with cognitive-behavioural interventions.	Gregson, 1998
Knowledge; Perception of risk Women (1294), Zimbabwe Women of childbearing age were interviewed Effective behavioural change associated with greater knowledge, experience and personal risk perception, but obstructed by low female autonomy, marital status economic status, alcohol consumption, labor migration.	

Newcomb, 1998 Implicit cognition Men and women (579), USA Participants completed a confidential questionnaire on a variety of health behaviors and predictors. Memory association variable predicted unprotected sex, but poly- drug use was the strongest and most consistent predictor of the sexual behaviours.	
PSI, 1998	

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<P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Condom
social marketing</FONT><FONT SIZE="+2" FACE="Arial, Helvetica"><A
HREF="#anchor467142">*</A></FONT></TH>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Women & men (806),
Zambia</FONT></TD>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Comparison of survey
in 1990 with survey in 1996.</FONT></TD>
<TD VALIGN="TOP" WIDTH="300">
<FONT SIZE="-1" FACE="Arial, Helvetica">Findings suggest that
condom marketing, promotion and distribution activities have
been responsible for an increase in the use of condoms in Lusaka.</FONT></T
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<TR>
<TD VALIGN="TOP" WIDTH="50">
<FONT SIZE="-1" FACE="Arial, Helvetica">Levy, 1998</FONT></TD>
<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">
<P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Perceived
self- efficacy, Perceived community norms Behavioral intention
towards safer sex</FONT></TH>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Prevention agencies for
under-served populations (youth, IDU), USA</FONT></TD>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Evaluation survey.</FONT></TD>
<TD VALIGN="TOP" WIDTH="300">
<FONT SIZE="-1" FACE="Arial, Helvetica">Increase in the number
of people who hang out with others who use condoms (community
norms) Increase in number of people who used condoms the last
time they had sex (behaviour) Increase in number of people who
feel confident that they can tell their sex partners that they
want to use a condom (self- efficacy)</FONT></TD>
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<TR>
<TD VALIGN="TOP" WIDTH="50">
<FONT SIZE="-1" FACE="Arial, Helvetica">Godin, 1996</FONT></TD>
<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">
<P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Theory
of planned behavior</FONT></TH>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Seropositive gay men
(96), Canada</FONT></TD>
<TD VALIGN="TOP" WIDTH="150">
<FONT SIZE="-1" FACE="Arial, Helvetica">Cohort study, 6 month
follow- up visits. Face to face interviews.</FONT></TD>
<TD VALIGN="TOP" WIDTH="300">
<FONT SIZE="-1" FACE="Arial, Helvetica">The best predictor of
intention to use condoms (and of reported condom use) and of
having sex without anal intercourse was perceived behavioural
control.</FONT></TD>
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<TD VALIGN="TOP" WIDTH="50">	Jemmott, 1992</TD>
<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">	<P ALIGN=LEFT>Theory of planned behavior</TH>
<TD VALIGN="TOP" WIDTH="150">	Adolescents (179), USA</TD>
<TD VALIGN="TOP" WIDTH="150">	Confidential self- administered questionnaire.</TD>
<TD VALIGN="TOP" WIDTH="300">	Attitudes and subjective norms predicted intentions to use condoms and perceived behavioural control significantly added to the correlation.</TD>

<TD VALIGN="TOP" WIDTH="50">	Lurie, 1995</TD>
<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">	<P ALIGN=LEFT>Socio-economic factors</TH>
<TD VALIGN="TOP" WIDTH="150">	Sex workers (600), Brazil</TD>

<TD VALIGN="TOP" WIDTH="150">	Cross sectional study of prevalence of antibodies to HIV, syphilis, hepatitis B, behavioral factors and socio- economic factors.</TD>
<TD VALIGN="TOP" WIDTH="300">	Compared to those with a higher socioeconomic status (SES), sex workers with a lower SES worked longer hours and had more clients. Sex workers with lower SES were more likely than those with higher SES to be infected with HIV, syphilis and hepatitis B.</TD>

<TD VALIGN="TOP" WIDTH="50">	Kline, 1994</TD>
<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">	<P ALIGN=LEFT>AIDS risk reduction model</TH>
<TD VALIGN="TOP" WIDTH="150">	HIV- infected women (215), USA</TD>
<TD VALIGN="TOP" WIDTH="150">	HIV infected women from New Jersey medical and social service agencies interviewed.</TD>
<TD VALIGN="TOP" WIDTH="300">	<P>Factors influencing condom use:</P>

	High perceived self-
------	--

efficacy to influence partner
Partner HIV- negative

Partner doesn't
want more children

<P>Negatively influencing
condom use:</P>

Conflicts with partner

Use of drugs and/or
alcohol
Belief condoms reduce
sexual pleasure

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<TD VALIGN="TOP" WIDTH="50">

Rickman, 1994</TD>

<TH VALIGN="TOP" WIDTH="150" ALIGN="LEFT">

<P ALIGN="LEFT">Sexual
communication</TH>

<TD VALIGN="TOP" WIDTH="150">

Incarcerated Latino adolescents
(2132), USA</TD>

<TD VALIGN="TOP" WIDTH="150">

Sexually active adolescents
detained in Los Angeles county juvenile hall were interviewed
regarding their sexual communication history and condom use.</TD>

<TD VALIGN="TOP" WIDTH="300">

High numbers of lifetime
sexual partners, low rates of condom use. Respondents who communicated
with their sex partners about each others' sexual history
were significantly more likely to use condoms.</TD>

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</TABLE></P>

<P>*Theories behind social marketing
come from many different backgrounds including the commercial
marketing, '4 Ps' (making the Product appealing, the
Price acceptable, the Placement convenience adn the Promotion
tailored to a particular audience), operant conditioning and social
cognitive theories.</P>

<P> </P>

<P>Table 3: Models and theories
used to guide interventions</P>

<P><TABLE BORDER="1" CELLSPACING="0" CELLPADDING="10" WIDTH="800">

Author, Year* Target group (n), country Model/Theory/ Construct	Research Methodology	Results
Women		
DiClemente 1995 African American women (128), USA SCT & Theory of Gender and Power Community based intervention includ- ing 5, 2 hour group sessions led by peer educator focusing on gender and ethnic pride, knowledge, skills & norms Increased consistent condom use, greater sexual communication & increased partners' adoption of norms supporting condom use.		
King, 1995 Women (586), Rwanda Structural		
Participants were provided with family planning services and methods Access to and information about hormonal contraceptives increased use & reduced attrition among both HIV+ and HIV-women in the study.		

Elkins, 1997 Village women (600) & men (479), Thailand SCT and community health promotion Intervention was village based including training, motivational audio-drama, posters and village meetings. Evaluation consisted of: KAP surveys, focus group discussions and village meetings. Eight of the nine outcome goals were achieved with married women taking initiative in reducing risk posed to them by the sex activities of their husbands.
Galavotti, 1998 1289 at risk & 322 HIV-positive women USA Stages of change Behavior change counselling intervention delivered by trained peer para-professional counselors based on stage-tailored individual counselling sessions. Women exposed twice as likely to report condom use with main partner at last sex and always use of condoms
Stevens, 1998 Lesbian and bisexual women (3665) PAR & Peer education Collective consciousness-raising qualitative field interviewing & individualized HIV-prevention education in an intense 2 year intervention Outcomes suggest that the project supported changes to reduce risk, assisted participants

in the realm of partner negotiations, and began to change community conventions about sexual expectations and practices.

Sex Workers

Fox, 1993

Female sex workers (134), Honduras

NS-information and accessibility of condoms

SWs attending STD clinics given weekly talks and free condoms

Statistically significant increase in mean condom use from 64% to 70% of client contacts.

Recommend targeting clients.

Asamoah-Adu, 1994

Female sex workers (107), Ghana

peer education & condom promotion

SW followed over 4 year study. Intervention included peer education and condom promotion.

Reported condom use increased dramatically in first 6 months. Relapse occurred after 3 years.

Recommend targeting clients.

Opare, 1994

Female sex workers (30), Ghana

NS –audiovisual

aids to influence attitudes & behaviors

<TD VALIGN="TOP" WIDTH="152"> Education conducted through SW opinion leaders; video, discussion and condom demonstration conducted.</TD>	<TD VALIGN="TOP" WIDTH="244"> Condom use rose from 10% to 100 % as sex workers identified very high perception of risk.</TD>
</TR>	
<TD VALIGN="TOP" WIDTH="109"> Visrutaratna , 1995</TD>	<TD VALIGN="TOP" WIDTH="145"> Female sex workers (500) broth- el owners & clients, Thailand</TD>
<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT"> <P ALIGN=LEFT>Perception of risk, condom negotiation, policy</TH>	<TD VALIGN="TOP" WIDTH="152"> A year-long intervention. Small group sessions with SW & peer educators. Brothels required condom use through owners & education of clients. Specially trained volunteers posed as clients to test SW negotiation skills.</TD>
TD>	
<TD VALIGN="TOP" WIDTH="244"> Sex workers increased their refusal of sex without a condom from 42% to 92% following the programme.</TD>	</TR>
<TD VALIGN="TOP" WIDTH="109"> Williams, 1995</TD>	<TD VALIGN="TOP" WIDTH="145"> Female sex workers Nigeria</TD>
TD>	
<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT"> <P ALIGN=LEFT>NS -health education, condom pro- motion & STD services</TH>	<TD VALIGN="TOP" WIDTH="152"> Health education using film, peer educators distribute educational materials, condom promotion with free distribution and later cost recovery & compre- hensive, client oriented STD services.</TD>
<TD VALIGN="TOP" WIDTH="244"> Sex workers and clients knowledge about AIDS and STDs increased. Condom use among sex workers and clients increased between baseline and follow-up.</TD>	</TR>
<TD VALIGN="TOP" WIDTH="109"> Chan, 1996</TD>	<TD VALIGN="TOP" WIDTH="145"> Female sex workers, Singapore

(128)	Behavioral (sexual communication)	Condom negotiation, support from peers and brothel owners and health staff.	Significant improvement in negotiation skill, in always refusing sex without a con-dom and significant decrease in gonorrhea rates in intervention vs. control group
	Ford, 1996		
	Female sex workers (300) & clients (300), Indonesia		
	Health belief model & Social cognitive theory		
	3 session series to: increase knowledge, perceived susceptibility and skills related to condom use and partner negotiation among SW. Increase knowledge among clients and pimps using outreach workers.		
	Knowledge and condom use increased significantly between baseline and follow-up for both SW (from 18-75%) and (29-62%) and clients of SW in both intervention sites.		
	Basu, 1998		
	Female sex workers India		
	PAR— though not stated explicitly		
	Involving sex workers in research		
	Accurate sensitive data collected Rapport-building activity		
	Kelly, 1998		
	Female sex workers Viet		

Nam			
though not stated explicitly		Involving sex workers in research	Regardless of method used, must involve participants in research
Gordon, 1998		Female sex workers Indonesia (500)	
ILOM model		Works on changing norms; sharing behavioral values	Mobilizes the community and changes culture

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<TD VALIGN="TOP" WIDTH="109">

Jemmott, 1992</TD>

<TD VALIGN="TOP" WIDTH="145">

African American adolescents,
(109), USA</TD>

<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">

<P ALIGN=LEFT>Social
Cognitive Theory</TH>

<TD VALIGN="TOP" WIDTH="152">

Intervention included
a pre and a post-test + factual information, outcome expectancies
about condom use and self-efficacy training.</TD>

<TD VALIGN="TOP" WIDTH="244">

Participation in the
programme was associated with increased AIDS knowledge and intentions
and self- efficacy to use condoms.</TD>

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<TD VALIGN="TOP" WIDTH="109">

Walter, 1993</TD>

<TD VALIGN="TOP" WIDTH="145">

Youth (72% Black or Hispanic)
(1316), USA</TD>

<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">

<P ALIGN=LEFT>Health
belief model, Social cog- nitive theory, and a model of Social
influence</TH>

<TD VALIGN="TOP" WIDTH="152">

School based, teacher
delivered 6-session intervention.</TD>

<TD VALIGN="TOP" WIDTH="244">

Significant effects in
intervention vs. control group in: knowledge, beliefs, self-efficacy,
and risk behavior scores (no. partners, consistency of condom
use, high risk partners, diagnosis of other STD)</TD>

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<TD VALIGN="TOP" WIDTH="109">

Ré, 1996, 1998</TD>

<TD VALIGN="TOP" WIDTH="145">

Youth (389), Argentina</TD>

<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">

<P ALIGN=LEFT>NS –
participatory methods</TH>

<TD VALIGN="TOP" WIDTH="152">

Peer education workshops
and com- munity project</TD>

<TD VALIGN="TOP" WIDTH="244">

Peer educators were positive
role models and were able to translate messages as ‘peer

gender specialists'; adolescents had low risk perception overall.

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<TD VALIGN="TOP" WIDTH="109">

Gillmore, 1997</TD>

<TD VALIGN="TOP" WIDTH="145">

Youth in detention and at STD clinic (396), USA</TD>

<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">

<P ALIGN=LEFT>Social cognitive theory & Theory of reasoned action</TH>

<TD VALIGN="TOP" WIDTH="152">

Testing of 3 behavioral interventions:</TD> comic book videotape group skills training that

emphasizes negotiating skills for condom use

<TD VALIGN="TOP" WIDTH="244">

Few differences among conditions; skill based intervention not sufficient to induce consistent condom use in heterosexually active high risk adolescents.

Authors suggest longer intervention addressing multiple problems.</T

D>

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<TD VALIGN="TOP" WIDTH="109">

Moberg, 1998</TD>

<TD VALIGN="TOP" WIDTH="145">

Youth (2483), USA</TD>

<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">

<P ALIGN=LEFT>Social influence</TH>

<TD VALIGN="TOP" WIDTH="152">

Middle school students assigned to either of 3 conditions using blocked randomization: age appropriate, intensive and control</TD>

<TD VALIGN="TOP" WIDTH="244">

Null findings despite careful implementation of school-based component. Authors note, inadequate community and family-level interventions, possible dilution of message, & over saturation of students with health messages by 8 th grade.</TD>

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<TD VALIGN="TOP" WIDTH="109">

Kelly, 1992</TD>

<TD VALIGN="TOP" WIDTH="145">

MSM USA</TD>

<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">

<P ALIGN=LEFT>Diffusion theory</TH>

<TD VALIGN="TOP" WIDTH="152">

Sequential stepwise lagged design, in 3 cities, opinion leaders were contracted to have conversations with peers to endorse actively and visibly the

importance and acceptability of behavioral change as well as to convey strategies for change implementation.

Intervention produced systematic reductions of 15% to 29% from baseline in the population's
--

high-risk behaviour with same pattern of effects sequentially replicated in all 3 cities.

Kegeles, 1996
Young MSM (300), USA
Diffusion theory Implemented in 2 small communities with 1 control group, used natural channels of communication to create alcohol and drug-free alternatives and to place HIV risk among the concerns of young gay men.
Significant (27%) reductions in proportions of young gay men engaging in unprotected anal intercourse with all men, but higher among secondary partners than boyfriends.

Kelly, 1996
MSM (1/ 3 ethnic minority) (429), USA
Cognitive-behavioral

+ maintenance

Participants were randomly assigned to one of 4 1-day interventions: cognitive-behavioural risk reduction & relapse prevention, cognitive-behavioural risk reduction & personal relationships or the same 2 with 3 months of follow-up telephone and group boosters.
Greatest reduction and greatest maintenance of risk behaviour change among men in cognitive-behavioural group with discussion and problem-solving about personal relationship issues.

Injecting Drug Users

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  <TD VALIGN="TOP" WIDTH="109">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Lawrence 1994</FONT></TD>
  <TD VALIGN="TOP" WIDTH="145">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Drug-dependent youth
    (19), USA</FONT></TD>
  <TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">
    <P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Cognitive-behavioral<
/FONT></TH>
  <TD VALIGN="TOP" WIDTH="152">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Substance dependent adolescents
    in residential treatment received a 5 session HIV risk reduction
    intervention that provided HIV education, social competency skills
    and problem solving training.</FONT></TD>
  <TD VALIGN="TOP" WIDTH="244">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Subjects showed increased
    knowledge about AIDS, better attitudes about prevention, greater
    internal and lower external locus of control scores, increased
    self-efficacy, and higher perception of vulnerability.</FONT></TD>
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<TR>
  <TD VALIGN="TOP" WIDTH="109">
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  <TD VALIGN="TOP" WIDTH="145">
    <FONT SIZE="-1" FACE="Arial, Helvetica">IDU (641), USA</FONT></TD>
  <TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">
    <P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">ILOM model</FONT></TH>
  >
  <TD VALIGN="TOP" WIDTH="152">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Ex-addicts deliver HIV-prevention
    services targeting IDU social networks in community settings</FONT></TD>
  <TD VALIGN="TOP" WIDTH="244">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Observed incidence of
    HIV infection decreased from 8.4 to 2.4 per 100 person years.
    Sex risk behaviour decreased but much less dramatically than
    drug risk behavior.</FONT></TD>
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<TR>
  <TD VALIGN="TOP" WIDTH="109">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Fishbein, 1996</FONT></TD>
  <TD VALIGN="TOP" WIDTH="145">
    <FONT SIZE="-1" FACE="Arial, Helvetica">IDUs, female sex partners
    of IDU, SW, MSM who don't gay identify USA</FONT></TD>
  <TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT">
    <P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Stages
    of change</FONT></TH>
  <TD VALIGN="TOP" WIDTH="152">
    <FONT SIZE="-1" FACE="Arial, Helvetica">Small media intervention
    materials were developed for each specific population focusing
    on key theoretical behaviour change variables as well as condoms.</FONT></T
D>
  <TD WIDTH="244" VALIGN="TOP">

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Significant interactions indicating greater increases in intervention than comparison areas were found with respect to condom use with non-main partners, and similar but non-significant effect with respect to condom use with main partners.																									
<table border="1"> <tr> <td> Robles, 1998 </td> <td> Drug users (80% male) (1004), Puerto Rico </td> </tr> <tr> <td> Stages of change ere considered. </td> <td> Enhanced intervention took place outside of office, included 8, 45 minute sessions using 'motivational interviewing' drawing on individual's perception of risk, motivation to change, continuous risk evaluation, negotiation and communication skills, Community and environmental resources w </td> </tr> <tr> <td> Use of condoms during vaginal sex increased from 26.4% to 36.9%. Significant predictors of condom use: HIV-positive, STD diagnosis, and participation in enhanced program. Effect stronger with non-primary partners. </td> <td></td> </tr> </table>	Robles, 1998	Drug users (80% male) (1004), Puerto Rico	Stages of change ere considered.	Enhanced intervention took place outside of office, included 8, 45 minute sessions using 'motivational interviewing' drawing on individual's perception of risk, motivation to change, continuous risk evaluation, negotiation and communication skills, Community and environmental resources w	Use of condoms during vaginal sex increased from 26.4% to 36.9%. Significant predictors of condom use: HIV-positive, STD diagnosis, and participation in enhanced program. Effect stronger with non-primary partners.																				
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Kamb, 1996, 1998 Heterosexual STD patients (4328), USA SCT+ Theory of reasoned action self-efficacy and perceived norms RCT – of 3 strategies: (1) educational messages, (2) brief counselling, (3) enhanced counselling (greater number of counselling sessions) with steps toward risk reduction beliefs, attitudes and behavioural intentions, skills training to increase self-efficacy Decrease in rates of STDs in: brief counselling (19%), enhanced counselling (22%) vs. information only	O’Leary, 1998 STD & health agency patients, USA (3706) Social cognitive theory 7 SCT interventions (1) randomized same-sex groups including information video with question and answer period, or (2) informational comparison condition. Elements of SCT (self-efficacy, condom use skills, expectations of partner reaction) were significantly different between intervention and control group.
Minority Groups	
Wallerstein 1988 Hispanic, Native American, Anglo, USA Empowerment	

Visits to hospital and detention center, peer education strategies & training, social learning, resistance to peer pressure, life skills competencies and decision- making about alternative choices, analysis of media that influ- ence consumption.</TD>	Statistically significant self reported perception of riskiness of drinking, driving and drug use</TD>
</TR>	
<TD VALIGN="TOP" WIDTH="109"> Kalichman, 1997</TD>	<TD VALIGN="TOP" WIDTH="145"> Inner-city African American het- erosexual men (81)</TD>
<TD VALIGN="TOP" WIDTH="147"> Theory of Reasoned Action</T	
D>	
<TD VALIGN="TOP" WIDTH="152"> RCT of a 4 session cognitive behav- ioral skills training intervention in com-parison with an HIV education control condition.</TD>	<TD VALIGN="TOP" WIDTH="244"> Both interventions significantly increased AIDS-related knowledge, intentions to change HIV risk behaviors, and reduced unprotected vaginal intercourse. There were no significant differences between groups on any of the measures at post-intervention or follow-up assessments.</TD>
</TR>	
<TH COLSPAN="5" ALIGN="LEFT" BGCOLOR="#b1c4ef" VALIGN="TOP"> <P ALIGN=LEFT>Others</P></TH>	
</TR>	
<TD VALIGN="TOP" WIDTH="109"> Svenson, 1996</TD>	<TD VALIGN="TOP" WIDTH="145"> University students (37,000), Sweden</TD>
<TH VALIGN="TOP" WIDTH="147" ALIGN="LEFT"> <P ALIGN=LEFT>Diffusion theory, community organization</P></TH>	<TD VALIGN="TOP" WIDTH="152"> HIV-STD prevention approach based on community organization and action, target group empowerment and use of opinion leaders as peer educators</TD>
<TD VALIGN="TOP" WIDTH="244"> Consistent condom use with new sex partners was significantly higher among project-contacted students than controls, perceived safer sex social norms.</TD>	
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Otto-Salaj, 1998	Seriously mentally ill patients (89 men & 103 women), USA
Cognitive-behavioral (self-efficacy, personal risk assessment)	Random assignment to one of 2, 7 session, skills building (assertiveness, negotiation to resist coercion to engage in high-risk behaviour and to initiate communication with partners about condom use or other safer sex practices), self-management of risk behaviours, reinforcement of safer behaviour
Compared to comparison group, participants in HIV risk-reduction intervention reported increases in both frequency and percent of condom use in vaginal intercourse occasions, self-esteem, positive condom attitudes and risk reduction behavioural intentions. Risk reduction higher in females than males.	

Hiebert, 1998	Canada
Participatory action research	Participants defining needs and figuring out how to meet those needs
Participants took control of project	

Henry, 1998	Community leaders and governmental officials, Kenya
Structural changes	Government + religion + business; making changes at the policy level
Government's first comprehensive national policy on HIV/ AIDS in 1997 through years	

of research, dialogue and consensus-building.</TD>
</TR>
</TABLE>

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<P>Abbreviations</P>

-
 - <DL>
 - <DD>* = indicates year of publication
 - <DD>NS = theory not stated in the report
 - <DD>RCT = randomized control trial
 - <DD>SCT = social cognitive theory
 - <DD>
- </DL>

<P>Table 4: Summary of Theories and Models by Population Group</P>

<P><TABLE BORDER="1" CELSPACING="0" CELLPADDING="10" WIDTH="700"><TR><TH VALIGN="TOP" WIDTH="100"><I>Population Group</I></TH><TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef"><I>Theory/Model</I></TH><TH VALIGN="TOP" WIDTH="400"><I>Comments</I></TH></TR><TR><TH VALIGN="TOP" WIDTH="100" ALIGN="LEFT"><P ALIGN=LEFT>Heterosexual Women</TH><TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef">Social Cognitive Theory (SCT)</TH><TD VALIGN="TOP" WIDTH="400">Psychological theories such as SCT provided guidance to interventions (especially in the USA), suggesting skills training and strategies to modify perceived peer or partner normative beliefs about risk- taking. Skills training included talking with partners about sex and condom use and practicing condom use skills.</TD></TR><TR><TH WIDTH="100" VALIGN="TOP" ALIGN="LEFT"></TH><TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef">Theory of Gender and Power</TH><TD VALIGN="TOP" WIDTH="400">Among African American women in the USA, this model helped guide an intervention based on improving partner norms and increasing sexual communication
--

[illegible]

	This model emphasizing changing cultural norms and mobilizing the community, was used in Indonesia.
	Diffusion of Innovations
	This model was used effectively in community interventions with women internationally
	Homosexual Men
	AIDS Risk Reduction Model
	This model was useful in guiding an intervention among African American men to address self-identity, social support, sexual communication and behavioural commitment.
	Diffusion Theory
	The diffusion theory has been useful in guiding effective interventions with gay men in the USA in a few different studies.
	HBM, SCT & Theory of reasoned
	A combined behavioral model was used with Asian and Pacific Islander men in the USA and found greater than 50% Action (TRA) combined reduction in unprotected anal intercourse in Chinese and Filipino men.


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<FONT SIZE="-1" FACE="Arial, Helvetica">TRA & SCT combined</FONT></TH>

<TD VALIGN="TOP" WIDTH="400">
<FONT SIZE="-1" FACE="Arial, Helvetica">Using constructs from
both models, perceived behavioral control was most predictive
for gay men in Montreal.</FONT></TD>
</TR>
<TR>
<TH WIDTH="100" VALIGN="TOP" ALIGN="LEFT">
<P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Heterosexual
Men</FONT></TH>
<TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef">
<FONT SIZE="-1" FACE="Arial, Helvetica">Social Cognitive Theory</FONT></TH>

<TD VALIGN="TOP" WIDTH="400">
<FONT SIZE="-1" FACE="Arial, Helvetica">Elements such as self-
efficacy, and condom use skills improved following an intervention.</FONT><
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<TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef">
<FONT SIZE="-1" FACE="Arial, Helvetica">SCT & TRA combined</FONT></TH>

<TD VALIGN="TOP" WIDTH="400">
<FONT SIZE="-1" FACE="Arial, Helvetica">Self- efficacy &
perceived norms were useful to predict decreases in STDs among
men STD clinic attendees</FONT></TD>
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<TH WIDTH="100" VALIGN="TOP" ALIGN="LEFT">
<P ALIGN=LEFT><FONT SIZE="-1" FACE="Arial, Helvetica">Youth</FONT></TH>
<TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef">
<FONT SIZE="-1" FACE="Arial, Helvetica">Social Cognitive Theory</FONT></TH>

<TD VALIGN="TOP" WIDTH="400">
<FONT SIZE="-1" FACE="Arial, Helvetica">Interventions guided
by SCT have increased self- efficacy and increased condom use
in diverse youth populations in the USA</FONT></TD>
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<TH WIDTH="100" VALIGN="TOP" ALIGN="LEFT"></TH>
<TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef">
<FONT SIZE="-1" FACE="Arial, Helvetica">Health Belief Model</FONT></TH>
<TD VALIGN="TOP" WIDTH="400">
<FONT SIZE="-1" FACE="Arial, Helvetica">Perceived benefits to
condoms, perceived barriers and cues to action were predictive
of condom use among university students in Nigeria</FONT></TD>
</TR>
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<TH WIDTH="100" VALIGN="TOP" ALIGN="LEFT"></TH>
<TH VALIGN="TOP" WIDTH="200" BGCOLOR="#b1c4ef">
<FONT SIZE="-1" FACE="Arial, Helvetica">HBM & TRA combined</FONT></TH>

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[Statistics](#)

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===== END ATTACHMENT 1 =====