The social determinants of HIV among men who have sex with men in Cape Town, South Africa

Master in Public Health (Health Economics)

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SCHAND035

Mini-dissertation

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Declaration

I, *Andrew Scheibe*, hereby declare that the work on which this dissertation is based is my original work (except where acknowledgements indicate otherwise) and that neither the whole work nor any part of it has been, is being, or is to be submitted for another degree in this or any other university.

I empower the university to reproduce for the purpose of research either the whole or any portion of the contents in any manner whatsoever.

Signature: 

Date: 23 January 2014

This work is dedicated to men who have sex with men who have experienced discrimination on the basis of their sexual practices, gender identity and sexuality.

Abstract

Background: Globally, social factors have been shown to contribute to inequities in HIV burden among men who have sex with men (MSM) from different socioeconomic circumstances. In South Africa, different HIV burden has been identified among MSM from different social and demographic contexts. However, evidence on how social factors contribute to differences in the HIV burden among MSM in South Africa is limited. Furthermore, few South African HIV-related MSM-focused policies and services address the social dimensions of HIV. This dissertation broadly aims to: (i) analyse social positions and stratification among MSM in Cape Town; (ii) explore pathways linking social position to HIV among MSM in Cape Town, and (iii) identify policy options to address HIV-related inequities affecting MSM in Cape Town.

Methods: A structured literature review was conducted to identify and analyse literature related to the social determinants of HIV, with specific reference to MSM - globally and in South Africa. Online databases, internet search engines, field expert suggestions and reference lists were used to identify relevant published and grey literature. Frameworks on the social determinants of health were identified for use in the qualitative study that followed. A research protocol was developed and approved by the University of Cape Town's Faculty of Health Sciences Human Research Ethics Committee. Six semi-structured in-depth interviews with MSM community members and MSM experts were conducted. Thereafter, six focus group discussions with MSM community members (n=25) were conducted. The World Health Organisation's Commission on the Social Determinants of Health (CSDH) framework was used to develop questionnaires and select images to explore the pathways linking social factors to HIV and related illness among MSM in Cape Town. All participants provided written informed consent.

Data was recorded, transcribed and analysed using directed content analysis. The research findings were later developed into a manuscript, in line with requirements for publication in a peer-reviewed journal (AIDS and Behavior). Finally, a summary of the study findings and recommendations were developed into a policy brief.

Findings and conclusions: Race and education were directly linked to resources, power and agency. Lower social positions were generally associated with an increased likelihood of exposure to HIV, and an increased likelihood of negative consequences of HIV infection. High-risk anal sex practices were identified among MSM who were excluded from society and who did not have access to MSM-appropriate services and commodities. Social exclusion of MSM increases their likelihood of downward social migration. MSM experience the multiplicative effects of differential risks and consequences related to HIV infection that are associated with social position, racism and homophobia.

Policy recommendations: Addressing racially-based socioeconomic and health inequities in South Africa will be challenging and will require long-term commitment from multiple stakeholders. Furthermore, engagement with community leaders, health workers and law enforcement officers to address the health and social consequences of exclusion could reduce vulnerability to, and consequences of, HIV infection among MSM. Messaging around the risks of unprotected anal sex and the benefits of condom and compatible lubricant use would increase knowledge around safer anal sex practices. The free provision of water-based lubricant and condoms at public health facilities and social spaces would increase access to HIV prevention commodities among MSM in the community.

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Part A: Protocol

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Background

Social determinants of health

Globally, there is increasing attention being placed on the contribution social factors have on health and wellbeing (1). Broader socio-economic and policy environments influence the behaviours of communities, families and individuals and also nurture the environments in which they live. In contexts of hardship, unhealthy communities commonly exist and an individual's battle for survival continues daily (2).

International research has identified an inverse relationship between social position in society (which is intimately related to income and access to resources) and illness. Generally speaking, higher social positioning is associated with improved health - both within and between countries and communities (3).

The pathways along which social factors influence health are both direct and indirect. In many cases, these pathways are complex. Several influences frequently cluster within lower socio-economic contexts, many times interacting with one another (2). Disadvantage accumulates throughout a life course, contributing to the high burden of disease present among individuals lower down in the socio-economic hierarchy (4).

Macro-level policies, economic contexts and societal norms and values influence social stratification, education and subsequent employment opportunities and income.

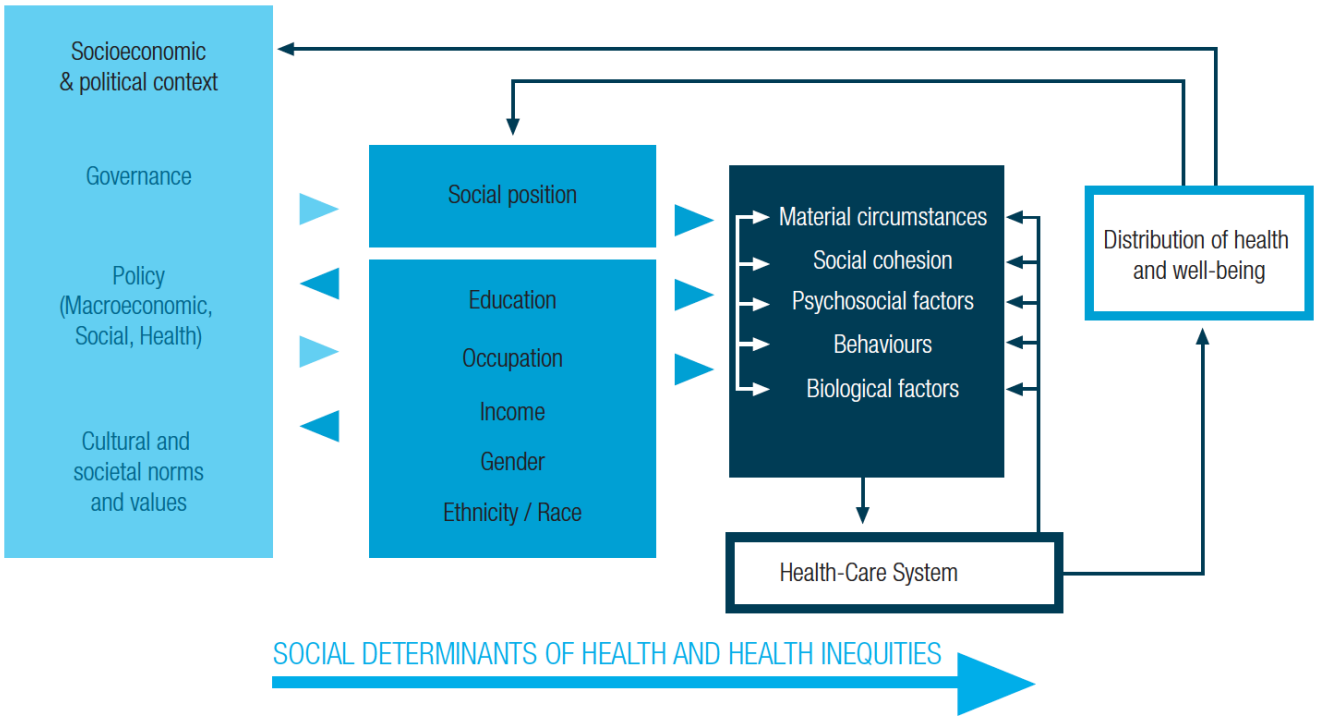
Individual characteristics, living circumstances and the nature of support networks further contribute to health and increase the risk for the development of disease. Furthermore, psychosocial, behavioural and biological factors acting at the level of an individual, contribute to disease (2).

Effective engagement with the health system and access to protective resources can result in improved individual health outcomes and improved community health (4).

Additionally, the forces that contribute to descent down the 'social ladder' often complicate access to health services, resulting in greater health inequity (3). Differential consequences of illness commonly occur. Individuals with fewer resources and power frequently become further impoverished as a result of illness, with consequent further social stratification. People with access to more resources are relatively more resilient to the socioeconomic effects of illness (1,5).

The World Health Organisation's (WHO) Commission on the Social Determinants of Health (CSDH) developed a framework outlining the social influences affecting health and the causal pathways along which social factors contribute to health inequities (see Figure A-1) (6). This framework was developed to enable structured research and discourse around this complex topic, ultimately to identify solutions to address health inequity.

Figure A-1 WHO Commission on Social Determinants of Health Conceptual Framework (6)



HIV among men who have sex with men in Cape Town

In South Africa, evidence highlights disproportionately higher HIV prevalence among men who have sex with men (MSM) compared to the general adult male population (7). HIV prevalence among MSM in Cape Town is estimated at 15%, while among men more generally it is estimated at 3% (8–10). Recent local epidemiological research has identified structural, social, behavioural and individual factors that are associated with HIV infection among MSM (11,12). In response to the high burden of HIV among this population, MSM-focused HIV prevention, treatment, care and support interventions have been implemented in Cape Town (13). However, little data exists on how structural and social factors influence an individual's exposure and vulnerability to HIV infection and its consequences.

Data is particularly limited on how HIV-related exposure, vulnerability and consequences may differ between MSM based on their socioeconomic position.

The United Nations Joint Team on HIV and AIDS (UNAIDS) recommends combination approaches to address the HIV-related needs of MSM (14). As such, a deeper understanding of the social factors, and the way in which they play out and influence the risk for, and consequences of, HIV infection could inform future MSM-focused policy and programming.

Current gaps in knowledge and justification for research

Several MSM related studies have successfully been completed in Cape Town. However, little data exists on the social determinants of HIV among MSM. Research into this area will provide a more holistic understanding of the causative influences and consequences of HIV among MSM from different socioeconomic backgrounds.

Few MSM-focused services provided in Cape Town currently address social factors linked to HIV. The proposed study, to be completed in Cape Town, will build on existing knowledge and the outcomes could inform local policy and programming.

Contribution of this research

The proposed research will build on current understanding of the largely individualistic perspectives of HIV epidemiology among MSM. The research will contribute to our understanding on how the macro level socioeconomic and policy environment influences social stratification, which in turn has an impact on material circumstances and behaviour.

An improved understanding of the interactions between these factors and how they interact and influence health system engagement and the ultimate health outcomes on MSM in Cape Town will be obtained. Recommendations for potential policy interventions to address the identified social determinants will be provided. Issues identified by this exploratory study could be researched further in the future (e.g. through a survey) to obtain findings that are more representative.

Capacity to complete the research

The principal investigator (PI) and affiliated organisations (University of Cape Town, Desmond Tutu HIV Foundation, Karolinska Institute) have the necessary skills, networks and community trust to work with MSM, and to conduct responsible research.

Study objectives

1. Analyse the social positions and stratification of MSM from different communities in Cape Town

2. Explore the pathways, mechanisms and factors linking social position to HIV infection among MSM in Cape Town

   2.1 Explore the social determinants of HIV and related illnesses affecting MSM

   2.2 Analyse the mechanisms by which social determinants of health influence exposure and vulnerability to, and consequences of, HIV infection among MSM

   2.3 Analyse how power imbalances, homophobia and discrimination may influence social exclusion and explore how these factors are linked with HIV

   2.4 Analyse the ways in which the social determinants of health influence MSM health seeking behaviours and health system engagement and how these behaviours and interactions are related to health outcome stratification

3. Identify policy options to address important social determinants of health that would be applicable to MSM in Cape Town

Methodology

This study will employ in-depth interviews and focus group discussions to reach the stated objectives. This study will be conducted in Cape Town. A summary of methods is provided in Table A-1.

In-depth interviews

In-depth interviews (IDI) will be used to develop an initial understanding of the contextual environment in which MSM in Cape Town exist. IDIs will also be used to explore the vulnerabilities, exposures and consequences of illness, particularly HIV, among MSM.

Study Population: Key community stakeholders and individuals experienced in providing services, or support for MSM will be identified to participate in an IDI. Participants may include MSM community leaders (e.g. leaders of grassroots MSM organisations), representatives from health service providers (e.g. ANOVA Health Institute's Health 4 Men Programme) and organisations that work with MSM (e.g. Desmond Tutu HIV Foundation, Triangle Project, Inner Circle, Cape Town Pride Shelter).

Sample size:

Interviews with up to 6 individuals will be conducted, or until saturation is reached.

Inclusion criteria:

An individual will be considered eligible for participation in an IDI if the person consents to participation and fulfils at least one of the following criteria:

- Has provided, or works with/ is affiliated to, an organisation that provides services or support to MSM in greater Cape Town
- Self identifies as being MSM, and possesses a good understanding and knowledge of the local MSM community and relevant issues

Exclusion criteria: An individual who does not provide consent, or meet the eligibility criteria will be excluded from study procedures.

Recruitment:

A list of potential interviewees will be drawn up based on the experience and contacts of the researchers and affiliated organisations. Potential interviewees will be contacted by the PI, either telephonically or by email, and will be provided with a description of the study. The study description will be provided using an information sheet covering: study objectives; reason for the study; study procedures; nature of the study questions; risks and benefits of participation and contact information for the researcher and the ethics committee (see Appendix 1). Potential interviewees will then be invited to participate in the study. An appointment will be made with interested, eligible individuals. Interviewees may also be asked to recommend other potential interviewees who may be able to add valuable insights to this study.

Interview proceedings:

A single semi-structured interview will occur with each interviewee. Contact will be made before the interview (either telephonically, in person, or using electronic media) to confirm the details of the interview. Each interview will last up to one hour. Interviews will occur either at the place of employment of the interviewee, at a site on the University of Cape Town campus, or in another private space. An IDI facilitator's guide will be used to guide the interview.

After the researcher has introduced himself, a description of the study and the interview process will be given. Consent for participation and recording of the interview will be obtained. The interviewee will be given a chance to ask any questions he or she may have, before the interview commences (see Appendix 1).

The interview will enquire about: the interviewee's background and experience in working with MSM; thoughts and opinions on the power MSM have relevant to other actors and how these power dynamics may influence their social position, socio-economic characteristics and material circumstances; behaviours and vulnerability to illness, and the consequences thereof, with a specific focus on HIV (see Appendix 2).

Interviews will be conducted by the PI or where required for language reasons by a research assistant, in the presence of the PI. Proceedings will be voice recorded where permission is granted and accompanied by written notes. Where interviewees are not comfortable discussing in English, a translator, experienced in working with MSM in Cape Town, will be used to translate questions and answers.

Interviewees may be contacted after interviews in order to clarify information provided during interviews or to obtain their opinion and perspectives about the interview analysis and study findings.

Focus group discussions

Focus group discussions (FGDs) will be led by the PI assisted by a research assistant, or led by the research assistant where necessary (for language reasons), supported by the PI. Discussions will be used to explore and analyse the social determinants of health, particularly HIV, among MSM in Cape Town.

Study Population:

MSM from different socioeconomic and demographic backgrounds will be enrolled to participate in FGDs.

Sample size:

Overall, up to 7 FGDs (or fewer if no new information is obtained) will be conducted among participants from different areas of greater Cape Town. Each FGD will be composed of up to 10 MSM of similar socio-economic and demographic characteristics. Individuals with similar backgrounds will be combined in focus groups. Attempts will be made to facilitate focus groups representing various racial, religious and socioeconomic backgrounds. Emphasis will be placed on recruiting MSM from previously disadvantaged communities.

To ensure feasibility of study completion, links with organisations working with MSM (Desmond Tutu HIV Foundation, ANOVA Health Institute, Triangle Project,

The Inner Circle, Cape Town Pride Shelter) will inform sampling locations and methodology.

Inclusion criteria:

An individual will be considered eligible for participation in a FGD if the person:

- was born male
- is 18 years old, or more
- currently lives in greater Cape Town
- reports to have had some form of sexual contact with another man during the last 12 months
- consents to participate

Exclusion criteria:

An individual who does not provide consent, or meet the eligibility criteria will be excluded from study procedures.

Recruitment:

A list of various grass-roots MSM organisations and MSM community contacts will be developed. Contacts will be specifically targeted to represent MSM from different geographic locations, ethnic groups and socioeconomic and health strata. The list of contacts will be obtained from contacts known to the PI and those known to the affiliated research organisation. The research assistant may also provide contacts of potential participants.

The PI and where appropriate, the research assistant, will make contact with the listed individuals either in person, telephonically or via SMS or email. Social network platforms (e.g. Facebook) may be used to recruit participants. The PI has used social media platforms to recruit participants. Such recruitment allows for private messaging and effective communication that does not compromise confidentiality. Details of the study and an invitation to participate in a FGD will be provided. Contact will occur discreetly, and information about the study will be provided in private, or using an electronic format that is acceptable to the participant. Participants will be encouraged to bring an interested eligible peer to the FGD.

Focus group proceedings:

Participants who have shown an interest, and who are eligible, will be invited to participate in a single FGD that will last up to two hours. FGDs will be held either in a private space on the University of Cape Town campus; at a site of the Desmond Tutu HIV Foundation; at another MSM organisation's site, or at a community safe space. Arrangements for FGDs will be made several weeks in advance. Details of planned FGDs (inclusive of date, time, location) will be confirmed with the participants one week and also one day before the scheduled FGD session.

Before the FGD commences, the researcher will introduce himself and the research assistant. Using a standard script, the researcher will inform participants about the study.

The study description will include an overview of the study objectives and reasons for the study; the nature of the discussion; any risks and benefits involved in participation, and the way in which findings will be used. Consent for participation, and permission to record the discussion will be obtained. Participants will be informed that participation is voluntary and that they may stop participation at any time, without any consequence to them. An opportunity to answer questions will be provided before commencing FGD proceedings (see Appendix 3).

Discussions will follow a discussion guide and will explore attitudes, perceptions and experiences of MSM in Cape Town. Topics to be covered include: the social stratification of MSM and what influences may have caused this; how current social position is linked with level of education, employment, income and how these factors have influenced their vulnerability and exposure to, and the consequences of illness, particularly HIV; health seeking practices (health promotive, treatment, chronic care and support services) and how these are shaped by social position, vulnerability and power relations. Experiences of power dynamics between themselves and others actors (sexual partners, family members, community members, employers, health care providers, law enforcement agents) on the basis of being MSM, and how these factors influence social position, inclusion/ exclusion, vulnerability, exposure and health (see Appendix 4). Appropriate images will be used to stimulate discussions (see Appendix 5).

Participants will be asked to complete a demographic and background information sheet, enquiring about demographic and health characteristics and HIV status. No participant identifying details will be placed on the sheet (see Appendix 6).

Discussions will be voice recorded where permission is granted, and will be supported by written notes taken by the researcher and assistant. FGDs will occur in the language in which participants are most comfortable (English, Afrikaans or Xhosa). The research assistant will lead discussions that happen in Xhosa.

Table A-1 Summary of methodology to obtain data for study objectives

Objective	Data needed	Source
1. Analyse the social positions and stratification of MSM from different communities in Cape Town	• Description of social positions of participants (race, religion, education, occupation, income) • Description of MSM community environment (safe spaces, groups, community support) • Data on how these factors are related with different communities	In-depth interviews Demographic questionnaire Focus group discussions
2.1 Explore the social determinants of health affecting MSM	• Explore how socioeconomic position (class, race, education, occupation, income) influence intermediary determinants of health (material circumstances, behaviours, biological factors, psychosocial influences) • Explore social cohesion/ exclusion and social capital among MSM	In-depth interviews Focus group discussions
2.2 Analyse the mechanisms by which social determinants of health influence exposure and vulnerability to, and consequences of, HIV infection among MSM	• Explore how elements in 2.1 are linked to differential vulnerability and exposure to, and consequences of, HIV infection • Include elements relating to specific HIV risk factors (prevention commodities, knowledge, access to health services, substances, risk behaviours, sex work, etc.)	In-depth interviews Focus group discussions
2.3 Analyse how power imbalances, homophobia and discrimination may influence social exclusion and explore how these factors are linked with HIV	• Explore MSM experiences of power, homophobia and discrimination • Explore opinions and beliefs of these experiences and HIV (exposure, infection etc.) • Include discussions around sexual violence & support services (police, justice, health)	In-depth interviews Focus group discussions
2.4 Analyse the ways in which the social determinants of health influence MSM health seeking behaviours and health system engagement and how these behaviours and interactions are related to health outcome stratification	• Explore experiences of health seeking behaviour (promotive, preventative, curative, rehabilitative) - relating to STIs and HIV • Explore how health system experience affected outcomes • Explore social consequences of HIV • Explore social stratification linked with HIV	In-depth interviews Focus group discussions
3. Identify policy options to address important social determinants of health that would be applicable to MSM in Cape Town	• Identify potential policy options to address socioeconomic inequities among MSM in Cape Town.	Triangulation of findings from literature review, interviews and focus group discussions

Timeframe

The proposed study will be completed within 16 months[1] after receipt of ethical approval. Participant recruitment is expected to take 2 weeks; field work 6 weeks; transcription and translation 2 months; and 5 months for data analysis and write up of study findings. Finalisation of other study components (i.e. policy brief) and integration of various elements of the mini-dissertation is expected to take an additional 6 months (see Figure A-2 Study Timeframe).

Figure A-2 Study Timeframe

Year		**2012**				**2013**												**2014**
Month		**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**
Component																		
Ethics submission	Submit UCT HREC	x																
	Ethics approval		x															
Field work	Plan interviews & FGDs		x															
	Pilot tools			x														
	In-depth interviews			x	x													
	Focus group discussions				x													
Analysis	Transcription & translation					x	x											
	Write-up							x	x	x	x	x						
Document integration (review, manuscript, policy brief)	Draft document												x	x	x	x		
	Final document																x	
Submission	Submission																	x

[1] The Masters candidate is in full time employment and will continue to work while completing the Master requirements

Data analysis

Data will be analysed using a directed thematic content analysis approach (15). The WHO CSDH Framework will be used to categorise and analyse data. Data will be reduced into meaning units, which will be coded and classified according to pre-defined sub-categories, categories and overall themes. Data will be analysed for manifest and latent content. Findings will be contrasted in relation to data obtained from different groups, findings of other relevant research and the range of perspectives presented. Thick descriptions and direct quotes will be provided to contextualise the findings and to present data. A wide range of opinions, experiences and views will be provided where relevant. Findings will be reviewed by study co-authors for comment. Comments and inputs will be appraised and appropriate improvements made.

Development of policy recommendations

After the data has been analysed, areas for potential policy intervention will be identified and policy recommendations will be developed.

Risks and Benefits

Risks

This study is assessed as placing participants at low to moderate risk. Risks of study participation are limited, and may include:

i. Inadvertent disclosure as MSM to other participants in a focus group, or the community
ii. Unpleasant, or painful emotional memories, as a result of discussion of experiences and perceptions of homophobia and its affects
iii. Loss of confidentiality due to other FGD members passing on information to others
iv. Interception of interview contact details and study data
v. Association with a research project focusing on issues relating to MSM

The above risks will be minimised by:

i. All research team members will be trained around confidentiality, and on how to limit the risks of unintended disclosure of participants as MSM, not limited to restricting study related discussions to quiet, private settings; obtaining consent from participants regarding appropriate methods of communication, and informing participants about inherent risks of participation
ii. The PI is a medical doctor experienced in working with MSM and would be able to assess risks of severe emotional impact and assist with management if needed

iii. All participants will be reminded of the private, confidential nature of the discussions before FGD commencement

iv. Only the PI will keep the list of interview contacts, which will be stored in a password protected database

v. Access to recordings and transcripts will be limited to the PI, supervisors and research assistant. Focus group participants will also be encouraged to choose a name to be used to further protect their identity. Original voice recordings and transcripts will be destroyed within six months of the publication of findings

vi. Interviews and FGDs will be conducted in discreet settings within the community (e.g. in community spaces which can be booked by many people), or in neutral spaces (e.g. a venue on the University of Cape Town campus)

Benefits

Participants may not benefit directly from participation; however, study findings will be used to develop policy recommendations to enable improved service provision for MSM in Cape Town. Such improvements may benefit them and their peers in the future. It is also hypothesised that through sharing experiences of previous negative experiences the discussion process may contribute to the healing process of participants affected by homophobia. Participants will be reimbursed for travel expenses (maximum R 50) and will be offered refreshments.

Informed Consent

Informed consent will be obtained from all participants in this study before any study procedures are undertaken. Written consent will be obtained from interviewees and FGD participants. Important aspects of the informed consent process (explanation of the study, role of the researchers and research assistant, nature of discussions, possible risks and benefits, time requirements, steps taken to protect participant identity, reimbursements, use of study findings) will be verbally conveyed to participants, as part of the IDI and FGD discussion guides, by the PI or the research assistant. Participants will be informed of their right not to participate or to stop participation at any time, without any negative consequences to them. An opportunity to ask questions will be provided before continuation of study procedures.

Privacy, Confidentiality and Data Management

Privacy

All study participants will be approached about participation in the study in a discreet and private manner, using a form of communication that is agreeable to the participant. All procedures will occur in private, safe spaces. Participants of focus group discussions will be informed that discussions will occur with other people, and of the potential risks associated with participation. Study participant contact details will be kept by the PI in a password-protected database, the code for which only the PI will have. To the greatest extent possible, contact with potential participants will occur through the member of the study team who knows the individual directly.

Organisations that will be approached to assist with recruitment for the study may make contact with potential participants on behalf of the researchers. Potential participants will be able to contact the study team through known contacts using direct email or telephone, on numbers that are only used by the researchers.

Confidentiality and Data management

Data from FGDs and IDIs will be digitally recorded. The researcher and assistant will also take written notes. Confidentiality will be assured through not collecting participant identifiers (names, dates of birth) and not using real names during FGD procedures.

Completed information sheets, IDI and FGD notes and digital recordings will remain in the possession of the PI and locked in a cupboard until data transcription and analysis is complete. Data from the IDIs and FGDs will be transcribed into a word processing document and the digital recordings will be destroyed. IDI will be numbered, and the corresponding transcript will be linked to the number. The investigator will keep a code sheet with a list of interviewees and corresponding codes in a password-protected database. Data from the FGD demographic information sheets will be entered into a password-protected database for analysis. Thereafter voice recordings will be destroyed. Passwords will only be held by the PI. None of the transcripts will be emailed. Where transfer of electronic information is necessary, it will be done using a portable hard drive.

Participants will be informed that all attempts to ensure confidentiality will be made, however a breach in confidentiality is a risk of participation. Participants of focus groups will be told that confidentiality cannot be guaranteed as other group members may disclose what was discussed when they leave the discussion forum. Participants will be informed that where needed the research assistant, or a translator will translate data into English. Participants will be requested not to use names of other people during discussions.

Data Monitoring

Study procedures will be standardised, with scripts developed for relevant study procedures. A research assistant will support the PI in the completion of study activities, and where language barriers exist, will lead the FGDs. The research assistant will be appropriately trained and practice runs will occur before study activities commence to ensure procedures for obtaining information are the same.

Resources

This study is expected to cost R 25 000 (see **Table A-2**). Labour costs are estimated at R9000 (1.5 months for a research assistant, working at 100% full time effort, R 6 000 per month).

Research activities are estimated at R 14 000 (R 3000 for participant transport re-imbursement - R50 x 60 focus group participants; R 10 000 for translation fees; R 1 000 for participant refreshments). Other costs are estimated at R 2 000 (R 800 for research materials, consumables and supplies; R 500 for telecommunications; R 700 for vehicle maintenance and petrol).

Financing for study procedures has been secured from the NRF SARChI research funds of Prof. D McIntyre (main supervisor) in line with the budgetary requirements for study completion.

Table A-2 Study budget

Labour	*Unit cost*	*FTE*	*Quantity*	*Total*
Focus group assistant	6000	1	1.5	9000
sub-total				9000
Research activities				
Participant reimbursements	50		60	3000
Translation costs	5000		2	10000
Participant refreshments	200		5	1000
sub-total				14000
Other				
Materials, consumables, supplies	800		1	800
Telecommunications	500		1	500
Petrol & car maintenance	700		1	700
sub-total				2000
Total cost (ZAR)				25 000

Reimbursement

Focus group participants will be reimbursed with R 50 to cover transport costs and to compensate them for their time. Reimbursement will be provided at the end of the focus group discussion sessions.

Results dissemination

Findings will be submitted as a mini dissertation as part of the PI's Master of Public Health (Health Economics) degree requirements.

Results may be submitted for presentation at scientific conferences and for publication in a peer-reviewed journal. Findings will be disseminated to all study stakeholders and other community groups linked to MSM service provision and support in Cape Town. Policy recommendations and the accompanying policy brief will be disseminated to local and national departments of health, and other stakeholders.

Stakeholder Participation

Apart for the study team (PI, research assistant, supervisors and co-supervisors), stakeholders will include representatives from the Desmond Tutu HIV Foundation, the organisations contacted for IDIs (including ANOVA Health Institute, Inner Circle, Triangle Project) and grassroots MSM groups. Representatives from local and national departments of health, and national organisations working with MSM will provide insight and support into the development and dissemination of the policy brief.

The study team will contribute to the development of the research protocol, and scientific manuscript. Other stakeholders will contribute to study recruitment and results dissemination.

Conflicts of Interest

There are no conflicts of interest for the proposed study.

Authorship

Authorship of relevant abstracts and publications will include the study team (PI as lead author), and where appropriate other individuals who contribute to data analysis and policy brief development.

Ethical and Regulatory Compliance

This study is in accordance with the Declaration of Helsinki (2013); The Department of Health: Ethics in Health Research: Principles Structures and Processes (2004), and Guidelines for Good Clinical Practice in the Conduct of Clinical Trials in Human Participants in South Africa (2006) (16–18).

Validation

The University of Cape Town's School of Public Health and Family Medicine's Research Committee will review the study protocol before it is submitted to the University of Cape Town Health Science Faculty's Human Research Ethics Committee (HREC) for review. Study activities will commence after HREC approval is obtained.

Expected outcomes of research

This study will provide insights into the role of social determinants of HIV among MSM in Cape Town. Results will be disseminated to participants and the community. A scientific paper will be developed and submitted for publication in a peer-reviewed journal. A policy brief will be developed in line with the requirements of the University of Cape Town's Master of Public Health (Health Economics) programme.

Ultimately, the findings could be used to inform the development of policy and practice, which may facilitate addressing some of the social determinants of HIV affecting MSM in Cape Town and other parts of South Africa.

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Part B:

Structured literature review

Background, methods and objectives

This review includes an overview of current literature relating to the social determinants of HIV among men who have sex with men (MSM) in South Africa. This first section covers the review aims, objectives, methodology and limitations.

Aims and objectives of the literature review

The aim of the literature review was to enable an in-depth understanding of current knowledge around the social determinants of HIV among MSM internationally, and more specifically among MSM in South Africa and Cape Town.

The literature review was intended to inform the selection of an appropriate framework for use in the study. The review was also meant to contextualise the HIV epidemic among MSM in Cape Town within the broader HIV epidemic in South Africa. As far as possible, the review aimed to include information on the social determinants of HIV in the South African context, and among MSM in local and other contexts. Gaps in current knowledge around the social determinants of HIV among MSM were also identified during the review process. Studies focusing on the social factors that influence vulnerability, exposure and consequences of HIV were identified, against which the findings of the study could be contrasted.

Specifically, the literature review objectives were to:

1. Identify frameworks on the social determinants of health and select an appropriate framework to apply to HIV and MSM in the South African context.

2. Identify, analyse and interpret evidence on how social factors influence health, and more specifically how social factors influence risk for HIV infection and its consequences.

3. Identify, analyse and interpret literature describing the linkages and pathways between social factors and HIV infection and consequences, particularly in the South African context and among MSM.

4. Identify, review and analyse policy documents, strategic information and programming data on HIV and MSM in South Africa and more specifically in Cape Town.

5. Identify, review and analyse challenges and barriers to improving HIV prevention and treatment efforts among MSM

Literature search strategy

I conducted separate searches for each of the literature review objectives. Online search engines and databases and bibliographic reviews of relevant literature were reviewed to identify literature for inclusion. Furthermore, relevant literature recommended by field experts was appraised. The Web of Social Science, Web of Science, Humanities International Complete and Social Science index on EBSCOhost, Pubmed and Google scholar were used for online searches. Key words used to search online databases included: social determinants of health; social determinants of health framework; HIV and South Africa; social stratification and HIV; men who have sex with men and HIV; HIV prevention and treatment for men who have sex with men in South Africa; MSM programme challenges, and HIV programmes and MSM. Specific Medical Subject Heading (MeSH) terms used in this review included: HIV infection, Social Determinants of Health, South Africa and Homosexuality.

Criteria:

Literature that was less than 15 years old and was relevant to the literature review objectives were included. Data from case discussions, cross sectional surveys, qualitative studies, modelling studies, systematic reviews, opinion pieces and reports were included. The literature needed to relate to the social determinants of health, MSM and HIV to be considered for inclusion in this review. Specific attention was made to include data relevant to MSM and HIV in South Africa. Literature not related to these issues was excluded from this review. Studies focusing on MSM and HIV in South Africa included studies conducted in the Western Cape, KwaZulu-Natal and Gauteng. Literature focusing on the social determinants of HIV among MSM from other contexts, notably the United States, were also included.

The literature review process began in June 2012. Additional documents were reviewed during the process of the research implementation and analysis and continued until December 2013. In total 105 documents were identified, reviewed and included in this review. The researcher developed a data review template. The researcher read the identified literature and extracted data related to the research objectives using the data template. The researcher then integrated the data from various data sources to compile the review that follows.

Working definition of social determinants of health

For the purpose of this review *social determinants of health* was viewed as the social interactions, policies and institutions that affect the structure and functioning of society and ultimately affect the health of populations (1).

Limitations

The review was limited to English publications and therefore not all international data on the social determinants of HIV among MSM were reviewed. The selection of databases and websites was based on available time and resources. This review was not intended to be a full systematic review. Searches of other databases (e.g. EMBASE, CINAHL, POPLINE and PsychINFO) would have increased the comprehensiveness of this review. Data sources were not individually graded according to a quality assessment score or system. Twenty three documents were found to cover policy, strategic information and programming data on HIV and MSM in South Africa; 11documents included HIV and MSM in Cape Town specifically. Twelve documents accessed included information relating to challenges and barriers to improving HIV prevention and treatment efforts among MSM in South Africa.

The Social determinants of Health

This section begins by defining the social determinants of health. Thereafter two frameworks portraying the influences social factors have on health are presented. Concepts related to these frameworks are then explained. The chapter concludes with recommendations from the literature around approaches to broadly address health inequities.

The Social Determinants of Health

The ability for people to reach their full potential, and to attain health, is influenced by a combination of biological, environmental and social factors (1,2). Poorer health outcomes, decreasing access to health services and lower life expectancy are associated with increasing levels of poverty and disadvantage. The phenomenon of poorer health among the poor compared to the wealthy is present between and within countries (3). A gradient of health differences has been identified across the population spectrum, acknowledging the systematic, patterned inequities in health that exists in our society (1). The unequal distribution of income, power, goods and services that result from unfair policies contribute to the evident differences in social and health outcomes of illness (4). In addition, lower levels of education and employment opportunities are found among the poorer members of society (3,5). The pathways that result in health outcomes are complex and individual disease risk factors (as identified by traditional epidemiology) have been shown to cluster around different social positions, and to be associated with the broader social context (e.g. place of residence, work and policy environments) (3). The central role of social position, and how social factors influence health status is fundamental to understanding the social determinants of health (6).

Frameworks for Understanding the Social Determinants of Health

The relationship between social factors and health is complex, having effects on individuals as well as society (5). The pathways along which factors affecting vulnerability to, and consequences of illness follow are closely interlinked with the health of individuals and society (7). Several authors have developed theoretical frameworks to simplify these complex associations and pathways in order to better analyse constituent causes of illness and the mechanisms by which they act. Ultimately, these frameworks are tools to enable improved policy, programmes and health. Two frameworks that could be applied to understanding the social determinants of HIV among MSM in Cape Town are discussed. Initially, the framework developed by Diderichsen and Hallqvist will be reviewed, followed by the World Health Organisation (WHO) Commission on the Social Determinants (CSDH) of Health's Framework.

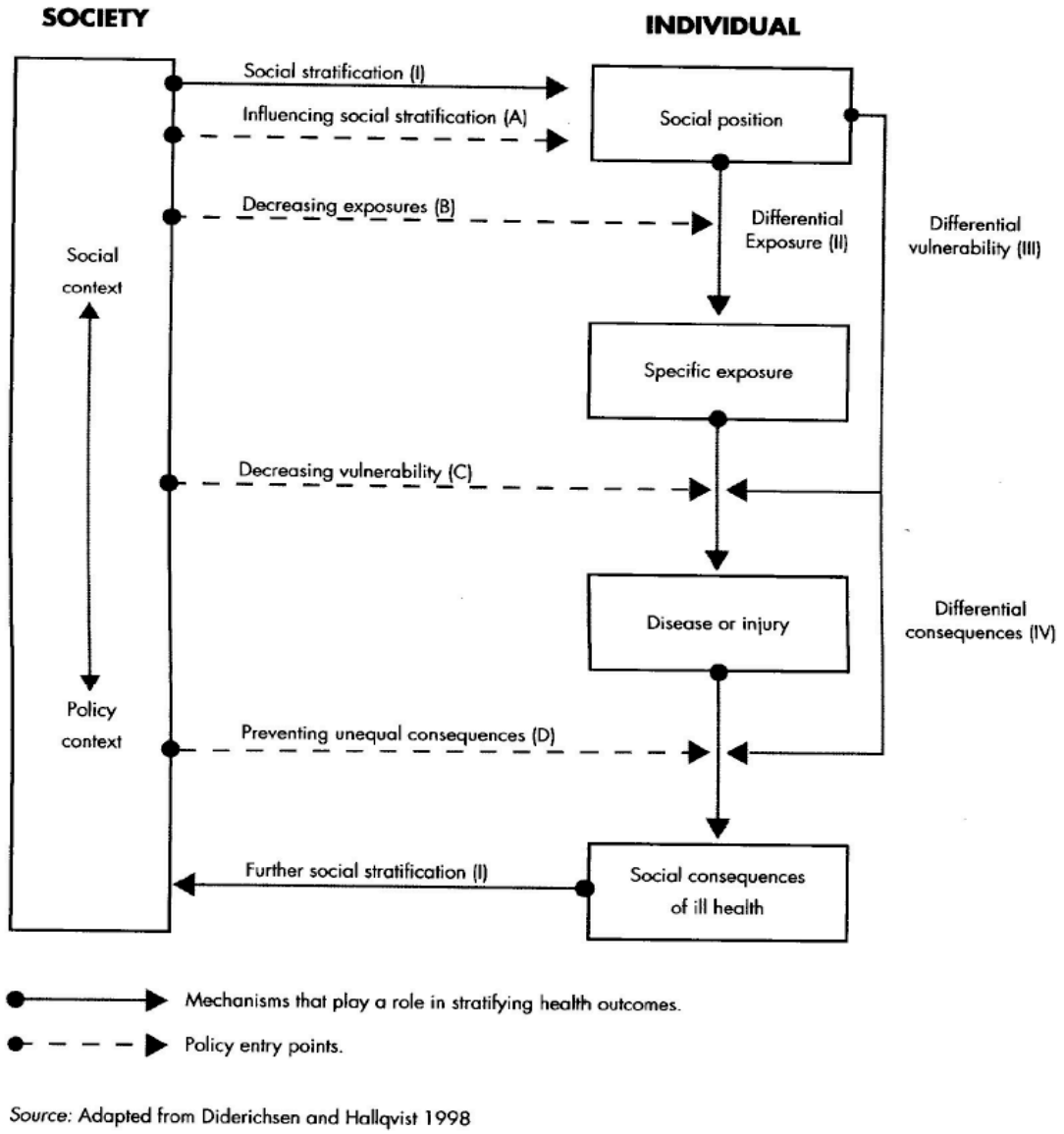
Diderichsen and Hallqvist Framework

Diderichsen and Hallqvist's (1998) framework of the social determinants of health aims to improve the analysis and understanding of the pathways linking social context to health, from societal and individual perspectives (see Figure B-1).

Social context includes the physical, social, cultural and economic elements of the environment that characterise a community or society (8). This framework posits that health is influenced by social position; exposure and vulnerability to a "causative agent" and the consequences of disease (3).

The model identifies four mechanisms (social stratification; differential exposure; differential susceptibility and differential consequences) that link social level factors with resulting health inequities (3). These mechanisms are explained in further detail later on.

Figure B-1 Diderichsen and Hallqvist framework to understand the mechanisms linking social context to health outcomes



Source: Adapted from Diderichsen and Hallqvist 1998

Social stratification is the hierarchy along which individuals and communities are based. There is a distribution of individuals and groups of individuals along a continuum based on income and power. This gradient stretches from the "haves" to the "have-nots" (6). Dimensions that influence social stratification often cluster together (e.g. poverty, female gender, black race and poor education) (3). Wealthy individuals and communities with access to significant financial resources are placed on the top of the hierarchy, and individuals and communities that are impoverished occupy lower positions (9).

Importantly, it is one's position in society relative to others that influences differential exposure to the causes of disease (7, 9). Physical, material and psychosocial risk factors for worse health outcomes have been associated with a decreasing social gradient (9). Individuals who are of a lower social class are likely to have less access to education (or to poorer quality of education), reduced employment opportunities and less income generating potential compared to individuals from higher social classes. Illness has many social consequences, including financial impoverishment, unemployment, disability and stigma. Furthermore, the consequences of illness often lead to further socioeconomic descent (9).

Differential exposure is likely to occur between individuals from different contexts and varying environmental and social conditions (3). For example, individuals living in poor communities with poor sanitation services are more likely to be exposed to diarrhoeal-causing organisms. Many of these exposures continue throughout an individual's life. Ultimately, the accumulated exposures affect that person's health (3). In South Africa, high-risk social environments contribute to exposure. For example, the prevalence of transactional relationships is higher in contexts of high levels of unemployment, and disrupted family structures (10). These informal transactional relationships[1] are often based on the exchange of sex for consumer goods, money, alcohol, drugs or shelter (10,11).

Vulnerability is closely linked to the likelihood of exposure to a disease risk factor. Health damaging exposures are often clustered around lower social positions that are vulnerable for a variety of intersecting factors (e.g. low quality housing, overcrowding, poor sanitation etc.) (5).

[1] For the purposes of this review, sex work focused on sexual interactions with the primary intention of exchanging money for sex.

The likelihood of disease is higher in poor socioeconomic contexts compared to wealthier ones. Vulnerability to disease also has a social dimension.

Vulnerability may be associated with gender, sexuality or other factors that may affect knowledge, income generation and social support. Social factors may be protective against disease or increase vulnerability to disease (3).

People from various socioeconomic contexts experience **differential social and economic consequences** of illness. Households from lower socio-economic positions may be pushed into poverty, or incur catastrophic health expenditure, when household members become ill. The sale of assets, use of loans and using money budgeted for food and education to cover health care costs are common household health care financing strategies. Such financing strategies place significant financial stress on the household, reducing resilience and assets for future use and increasing vulnerability of other household members to illness (e.g. malnutrition among children) or poor childhood development due to early termination of education (5). Illness also affects the social position of the individual, household and community and systematically contributes to further health inequities.

In contexts where health services are not accessible, the likelihood of differential negative consequences of illness on the individual and family are increased. Ultimately, a cycle of worsening health and decreasing social position is established; further increasing vulnerability to exposure and likelihood of disease and disproportionately worse social consequences of ill health (3).

The Diderichsen and Hallqvist framework also identifies **policy entry points** to address health inequities. The framework highlights the importance of interactions between social position, exposure, vulnerability and the consequences of illness. Furthermore, the framework outlines how physical and social settings influence the pathways linking social position to illness (3).

Commission on Social Determinants of Health Conceptual Framework

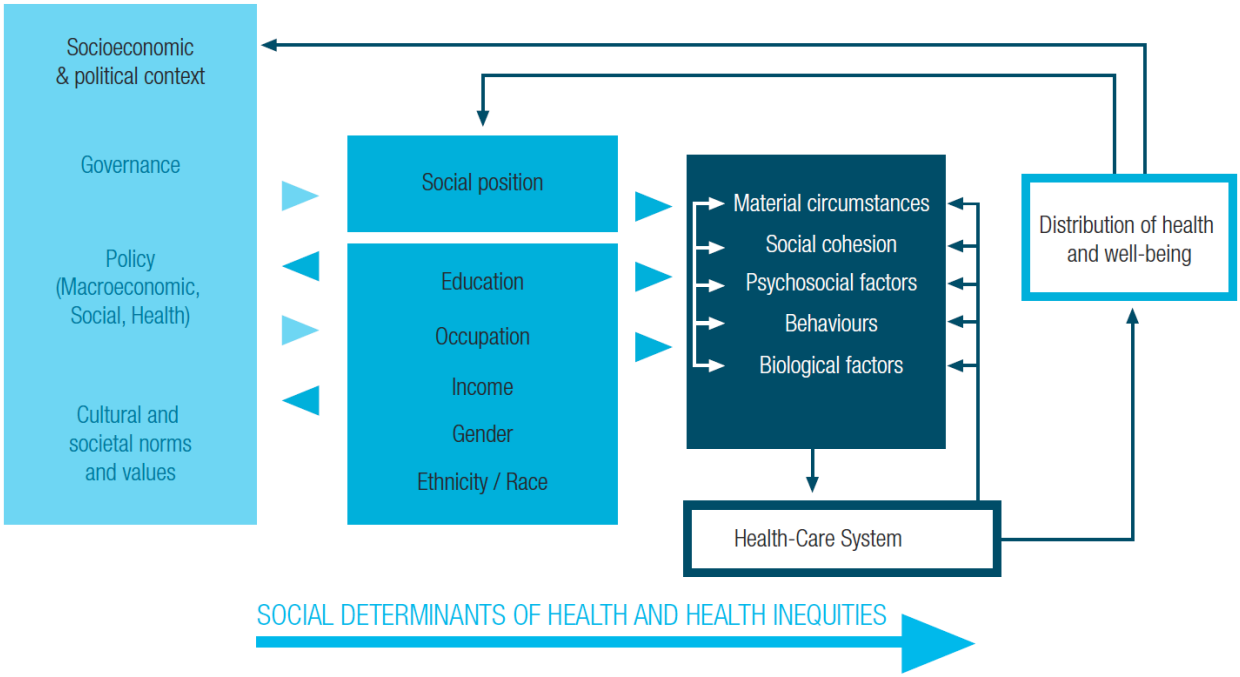
The Commission on the Social Determinants of Health (CSDH) was initiated by the World Health Organisation (WHO) in order to analyse current evidence on options to promote health equity (2). Taking forward the notion that addressing health inequity requires action beyond the immediate causes of disease, the CSDH focuses on macro level structures, social hierarchy and the social influences these factors have on human development and health (5).

The resulting Framework builds on the earlier work done by Diderichsen and Hallqvist (1998) to assess the mechanisms and associations between the social determinants of health and health inequities[2]. The Framework broadly views components of the **socioeconomic and policy context** (governance, policy, societal norms and values), **social position** (education, occupation, income, gender and race), **other factors** (material circumstances, social cohesion, psychosocial factors, behaviours and biological factors) and the **health-care system**. The Framework also outlines how these components and elements are linked.

[2] The WHO CSDH Framework was ultimately selected as the framework that was used in the research component of this dissertation. This framework builds on previous work by leading researchers and reflects a framework that is being used to address global health inequities.

The Framework links the distribution of health and well-being and their subsequent influence on social position and the broader socioeconomic and political context (5)(see Figure B-2).

Figure B-2 The Commission on Social Determinants of Health Conceptual Framework (5)



The CSDH framework places social position as a central part in the distribution of health. Social stratification is viewed as being influenced by the social and policy context. Social position is in turn associated with education, occupation and income generating opportunities. Social position is also viewed as being influenced by gender norms and the social dimensions of race and ethnicity. Additionally, social position and the factors associated with it are seen to influence material circumstances, social cohesion and behaviours. Together, these factors are considered important influences on health system engagement and health outcomes. Health system engagement is also deemed to influence an individual's material circumstances and behaviour. Ultimately, the distribution of health contributes to social stratification and the prevailing socioeconomic and policy context.

Concepts and Elements relating to the Social Determinants of Health

A discussion of the components of the Diderichsen and Hallqvist and the WHO CSDH Frameworks is provided in this sub-section.

Social and policy context

The socioeconomic and policy context in which people live has an influence on their health (12). Health, development and economic policies that are pro-poor may improve the health of the disadvantaged portions of society by increasing efforts to address inequity (13).

Evidence highlights that countries that focus efforts on ensuring rights to employment, education, health and social support have better health outcomes than those which do not, even in the face of differing gross domestic product (2). The influences of globalisation and fluctuations in the global economy also affect national governments, policies and programmes (14). The important role that societal cultures, norms and values play may be health promoting (e.g. where gender equality is promoted) or may negatively affect health (e.g. where women do not receive equal access to education and health care compared to men) (5,15). Society, along with the policies and norms that guide human behaviour, provide the context in which individuals are born, develop and live (3).

Social position

Social contexts, with their intrinsic structure, power relations and stratification contribute to an individual's assigned social position. Race, gender, occupation, religion, culture, behaviours and other factors are associated with unequal resource distribution; with less income and power found among the poor (3).

As a result, the socioeconomic and political context in which people are born, develop and live has an influence on their health (9). Many disease risk factors are associated with particular social characteristics (e.g. higher levels of respiratory illness among people who cannot afford electricity and use wood as fuel for indoor cooking) (16).

Text box B-1 Exposure and disease

Exposure

Exposure to the 'necessary causes' of disease is required for many illnesses to manifest. In the case of infectious diseases, illness cannot result without exposure to the relevant pathogen. For non-communicable diseases, a series of exposures is usually required for disease to occur (17).

Disease or injury

Disease or injury results once conditions of sufficient cause have been met. Among individuals, the likelihood of the development of disease is a combination of exposure to causative agent(s) and vulnerability for disease. People with increased vulnerability are at increased likelihood for the development of disease. The severity of resulting disease, and the biological consequences thereof, are also inherently linked to predisposing factors of vulnerability and exposure (17).

Health service access can augment likelihood of disease or its progression or may prevent disease development, or even mitigate the consequences of infection (3).

Intermediate determinants affecting health

The CSDH framework identifies several determinants that are associated with social position. These determinants include education, occupation, income, gender and race. These factors are also influenced by the socioeconomic and policy context.

Education

Education increases livelihood and employment opportunities and also health outcomes. Achieving universal primary level education is one of the eight United Nations' Millennium Development Goals (18).

School dropout rates are on average three times higher among poorer households compared to wealthier households. Increased household member school attendance has been shown to increase household income and improve health conditions (18).

Occupation

A relationship between illness and employment also exists. The health outcomes of people with chronic illness are worsened by the social and economic effects that exclusion from employment may have on them. For example, people with chronic illnesses are more likely to become unemployed compared to people without such illnesses. Furthermore, unemployment interacts with the effects of ill health, leading to further illness and descent down the social ladder (4).

Income

The economic costs of accessing health services are major barriers to access and contribute to the consequences of illness (5). For example, poorer health outcomes result from delayed treatment and late diagnosis of stroke. Financial barriers to accessing health care often account for delays in health seeking behaviour. In the case of a stroke patient, decreased financial resources limit access to rehabilitation services, contributing to further reduction in functioning and consequences of illness, plus loss of income if the stroke sufferer was a household income earner.

Gender

Gender-based discrimination contributes to disempowerment, particularly among women. Disempowerment is associated with decreased agency to realise health and related services (19).

For example, women living in highly patriarchal societies may be discouraged from accessing antenatal care during pregnancy. Women who do not access antenatal care are more vulnerable to the consequences of the complications of pregnancy compared to women who are screened for common complications (16).

Race

Discriminatory race-based policies, practices and social norms contribute to inequities in health. Opportunities to access education, employment and generate an income are limited for racial groups who are systematically discriminated against. Certain racial groups may cluster around lower socio-economic positions as a result of racist policy and legislation (e.g. Apartheid laws in South Africa) or cultural practices (e.g. the caste system in India) (7).

The social determinants described above in turn influence other social factors, notably material circumstances, social cohesion, psychosocial factors, behaviour and biological factors.

Material circumstances

The environment in which individuals live and work influences their health. Increased exposure to unhealthy environmental factors is associated with living in poor conditions. For example, overcrowding, poor sanitation and poor water quality, are associated with an increased incidence of infectious diseases (e.g. tuberculosis and diarrhoea) and non-communicable diseases (e.g. stress and mental health problems) (13). Access to food also has an impact on health. An adequate quantity of food is required for normal growth (9).

Social cohesion

Social cohesion is defined as the propensity for groups of individuals to have a sense of community. Additionally, social cohesion is characterised by a sense of solidarity, support and belonging. These elements provide support structures and resources for wellbeing. Support from community structures and social relations may decrease vulnerability to disease exposure, facilitate recovery from disease and contain the socioeconomic effects of illness (20). Social capital and exclusion are described in greater detail in text box B-2.

Text box B-2 Social capital and social exclusion

Social capital

Social capital involves the nature and extent of social relationships. It is a mediating link between socioeconomic inequality and health. Social capital is the social infrastructure enabling individuals to access resources - and is increased with increasing membership to larger support structures. Family and social relations that provide support increase feelings of being cared for and bolster self esteem (14).

Social exclusion

This phenomenon prevents full participation of excluded individuals within society (20). The unequal power dynamic within economic, political, social and cultural contexts act at various levels and may lead to social exclusion along with hardship, resentment, discrimination and increased exposure to unhealthy living environments with ultimate increased morbidity and mortality. Exclusion is linked to reduced access to resources, capabilities and the fulfilment of rights.

- Economic aspects relate to employment and livelihood opportunities.
- Social aspects, including access to services (legal, health, social, educational etc.) are negatively affected by damaged social cohesion.
- Cultural aspects include the subordination to norms and behaviours.
- Political aspects include the deprivation of rights.

Excluded people are often deprived of multiple things at the same time (9, 14). Race, class, gender, sexual orientation and income are often the basis for social exclusion (20).

Psychosocial circumstances

Chronic insecurity, anxiety, isolation and disempowerment affect the endocrine, cardiovascular and immune systems, and also mental and physical health (3). The psychological and financial problems resulting from unemployment and the social organisation, relationships and conditions of employment, may contribute to stress or directly expose individuals to disease (21). The use of, and dependence on, substances is a common response to stressors (social and individual) and frequently worsens health (2,6,22). Good mental health, psychological resilience and support structures may assist in maintaining health, despite exposure to ongoing risk factors. Resilience may be weakened by social exclusion and a lack of social cohesion; increasing the likelihood of the manifestation of mental health problems upon exposure to stress (3).

Behaviour

Behaviours may have either protective or negative influences on health. Health protective behaviours are not limited to healthy eating, exercise and the use of condoms. Unhealthy behaviours may influence vulnerability to exposure or increase susceptibility to disease development post exposure. For example, chronic alcohol use may have a detrimental affect on the immune system predisposing chronic alcohol users to deficiency diseases (16). Alcohol may also reduce a person's ability to make informed decisions, e.g. increasing the likelihood of unprotected sex (23).

Biological factors

Pathogenicity and anatomical protection influences health - for example, exposure to the tuberculosis bacteria may not result in tuberculosis in healthy individuals. The risk of HIV infection is greater where an ulcer due to a sexually transmitted infection exits (5).

Early life factors, including foetal growth and childhood development, are influenced by the environment and access to support and services and influence the likelihood of disease manifestation (2).

The health system

The collection of services and actors, whose main purpose is the improvement of health, is referred to as the health system. The WHO health system framework includes six system building blocks (governance, human resources, financing, information systems, medical supplies and medical service provision) that together allow for the provision of accessible, high quality and safe health services. The aim of the health system is to improve the health outcomes of health system users. Health system performance (health promotion, disease prevention, treatment, rehabilitation etc.) influences the biological and social consequences of health and equity in health and wellbeing. Where the building blocks are well established and the performance is tailored to address inequities, meaningful health improvements can be achieved (5).

Consequences of illness and health inequities

Differential consequences

The social, economic and health effects of illness are also systematically and unfairly distributed. Individuals of lower social standing are more likely to experience catastrophic expenditure as a result of illness, and have a limited social safety net to contain the consequences of illness (6). Chronic illness in itself may contribute to social exclusion and poverty. Poorer people are more likely to become ill and to experience greater consequences of illness compared to those higher up on the social gradient (4).

Illness also has an economic impact. Individuals who are ill are likely to experience loss of savings, unemployment, reduced future employment opportunities and stigma compared to people who do not fall ill. The economic effects of illness in turn affect households, communities and society (12). Depletion of resources to manage illness and its effects further increase individual and household vulnerability to other diseases and social issues (3).

The "structural" social determinants of health (socioeconomic context, political context and individual social position), social cohesion and social capital influence the intermediary social determinants of health. These intermediary determinants (material circumstances, behaviours, biological characteristics and psychosocial factors), and the way in which people engage with the health system result in the health and well being of individuals. The differences, power imbalances and inequities of the social determinants of health collectively result in the inequities present in society (6).

Further social stratification

The resulting health and wellbeing of individuals in turn influences their socioeconomic position within society. Since illness affects the household, this also has an effect on the household's social position. Collectively, the variation of health and wellbeing across a society affects the broader socioeconomic and political context. A spiral of worsening social position of individuals, and their households is therefore associated with illness. Furthermore, differential health outcomes, particularly poorer health outcomes, among groups of people may ultimately affect the health and future potential of a nation.

Addressing health inequities

Government, civil society, the private sector and development agencies have a role to play in addressing health inequities. Actions to improve health systems and reduce poverty need to complement interventions to address the underlying social causes of ill health (2). The Diderichsen and CSDH frameworks assist our understanding of the social determinants of health, allowing for the identification of policy entry points. To improve health equity, the CSDH recommends:

(i) Improve living conditions: Life course (pregnancy, early childhood, schooling, employment and retirement) and environmental (built and natural) improvements can reduce health inequities. Ensuring fair employment and safe working conditions along with financial and social security and universal access to health care are needed to address the diseases caused by poor living conditions (5).

(ii) Address inequitable distribution of resources, power and money: Equity in policy, programmes and government sectors along with fair financing, aid, market regulation, progressive taxation, the provision of public goods, gender equity, representation of disadvantaged people in governance structures and redistribution of power are recommended to obtain equity in health (5).

(iii) Measure and understand problems and the impact of action: Demographic and epidemiological surveillance systems to monitor the determinants of health and inequities are recommended to gauge the impact of efforts. In addition, political will and the development of institutional capacity are necessary for effective policy (5).

Shortcomings of the WHO CSDH Framework

The WHO CSDH model, and other frameworks used to understand the social determinants of health have been criticised for not taking into account the agency and action at the individual and community level (23). Individuals and groups of people have agency to act to improve their health. The role that social and political struggles play to bring about change is not fully considered in the CSDH Framework (23).

The HIV epidemic among MSM

This sections starts by defining the term 'men who have sex with men'. Thereafter the global HIV epidemic is briefly described. This is followed by an overview of the HIV epidemic among MSM[3]. The section ends by contextualising the HIV epidemic among MSM in South Africa. The social determinants of HIV are described in the next section.

Text box B-3 Understanding men who have sex with men

Men who have sex with men

The term men who have sex with men (MSM) was developed by epidemiologists to study the distribution and causes of disease among MSM, irrespective of their sexual identity. MSM are defined as people who are born male and have sex with men. This classification does not refer to a particular sexuality or gender identity. Generally speaking MSM includes men who identify as gay, bisexual men and heterosexually identified men who also have male sexual partners (26).

The HIV epidemic in the global context

In 2012, an estimated 35.3 million people (range 32.2 - 38.8) were living with HIV globally. Increased access to HIV prevention, treatment, care and support services has contributed to reducing HIV infections and AIDS-related deaths. Between 2001 and 2012, HIV incidence decreased by a third. Furthermore, the number of AIDS-related deaths declined by 70% over the last seven years (25). In 2012, 9.7 million people were on antiretroviral therapy (ART) (25). However, the HIV epidemic varies between and within regions.

The HIV epidemic in Southern and East Africa is described as 'generalised', in that it predominantly affects members of the general population.

[3] In some circumstances, transgender females are viewed as a sub-group of MSM. However, transgender people have unique needs and issues that are different to other MSM. The unique needs and issues relating to transgender females are not included in this review.

In contrast, the HIV epidemic in North America, Europe and South East Asia, affects predominantly MSM, people who inject drugs (PWID) and sex workers. The HIV epidemic in these contexts is referred to as 'concentrated' (26). Evidence-informed HIV responses are based on the premise that interventions and appropriate programme funding should be based on epidemiological evidence. As such, the overwhelming focus of HIV-related interventions in Southern Africa has been on the heterosexual transmission of HIV. However, recent research has identified concentrated HIV epidemics among MSM in Southern Africa (27).

HIV among MSM

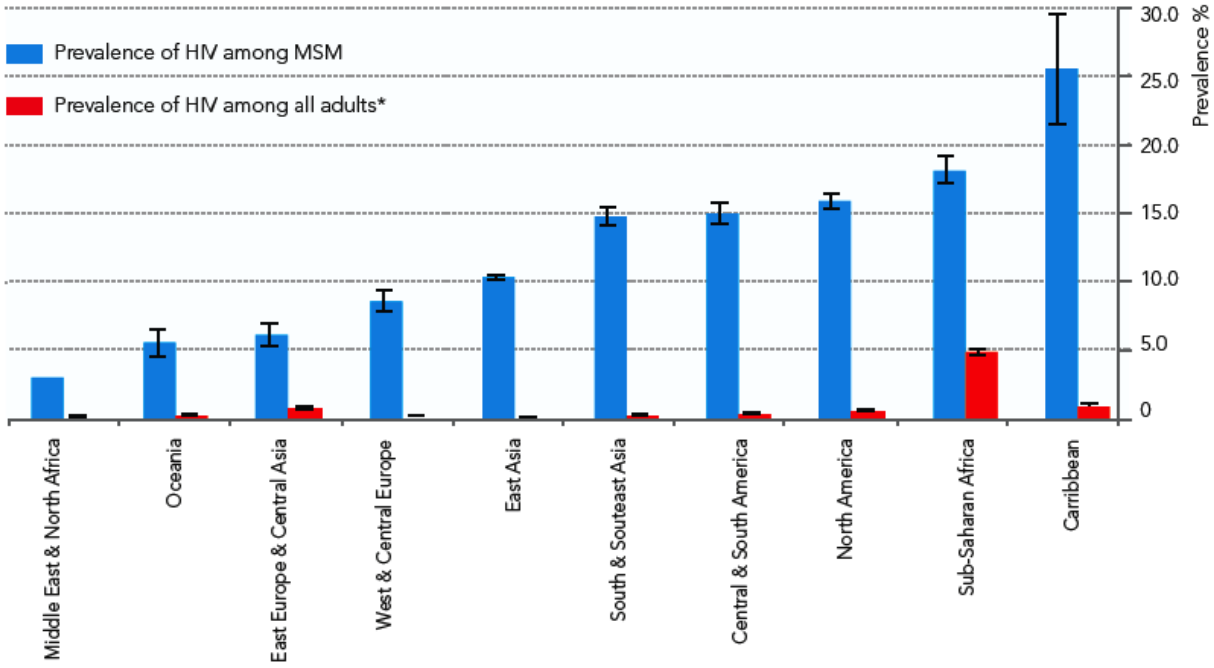
HIV prevalence among MSM has been shown to be stable or even increasing in many world regions (28). Globally, HIV prevalence among MSM is higher than men in general (25). A depiction of HIV prevalence among MSM in several world regions is provided in Figure B-3. In 2012, HIV prevalence among MSM from Southern Africa was estimated to be around 15% (25).

The sexual transmission of HIV through unprotected penile-anal intercourse accounts for the majority of new HIV infections among MSM. Fewer MSM become infected through penile-vaginal intercourse and other sexual practices. MSM who also inject drugs are at risk for HIV through the use of contaminated injecting material (26). The social factors that contribute to vulnerability for HIV infection are described later. Despite the high HIV burden among MSM, less than 10% of MSM worldwide have access to appropriate HIV services (29). Furthermore, many MSM who access services experience negative attitudes and discrimination when they seek health services (28,30).

Negative health seeking experiences contribute to delayed health seeking behaviours and increased likelihood of poorer health outcomes (31).

The need for increased efforts to address the HIV-related needs of MSM was included as a sub-component of the second target[4] included in the 2011 United Nations Political Declaration on HIV and AIDS: Intensifying Our Efforts to Eliminate HIV and AIDS (32).

Figure B-3 HIV prevalence among MSM and all men by region (latest data)(25)



Text box B-4 HIV transmission risk and anal sex

HIV transmission risk and anal sex

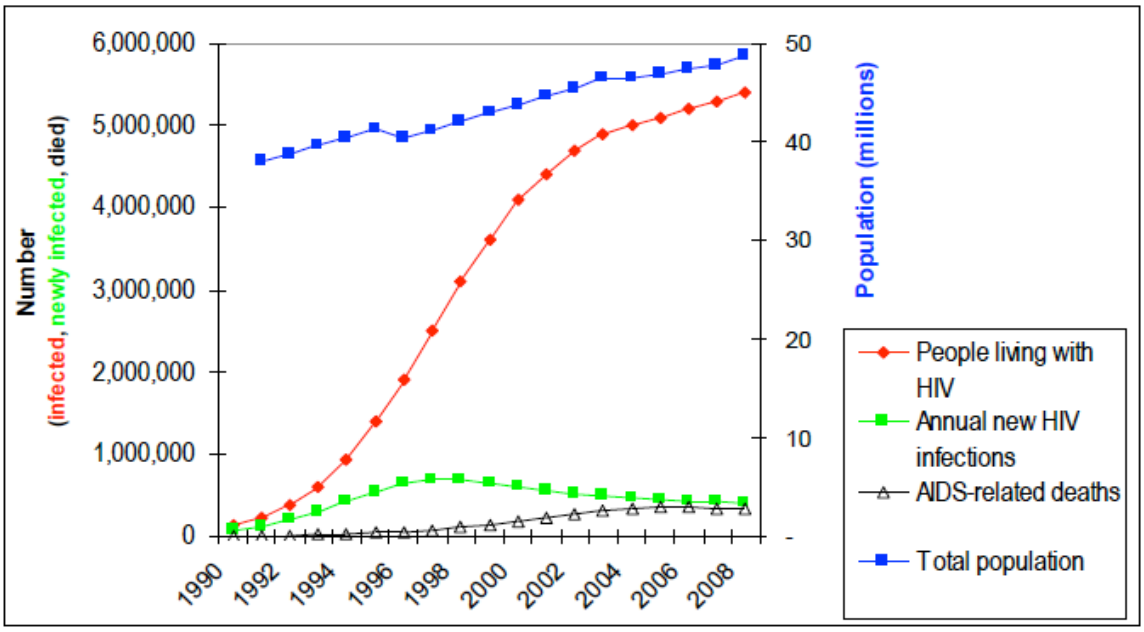
The transmission probability of HIV is up to 10 times higher during unprotected penile-anal sex compared to unprotected penile-vaginal sex. The differences in transmission probabilities relate to anatomical differences in the anal canal and vaginal epithelial lining and presence of naturally occurring lubricant. Among MSM, HIV transmission risk for the receptive partner is about double that of the insertive partner during unprotected anal intercourse. Increased HIV viral load further increases the likelihood of HIV transmission in all modes of transmission (26). The use of condoms and appropriate lubricant can reduce trauma and HIV transmission (67).

[4] The second target of the high level United Nations meeting relates to halving the sexual transmission of HIV by 2015

The South African HIV epidemic

South Africa has the largest number of people living with HIV in the world. In 2013, the HIV prevalence among the South African general adult population (aged 15 - 49 years) was estimated at around 16% (33). An estimated 5.26 million people in South Africa are living with HIV (33). In 2013, HIV prevalence among adult females (15 - 49 years) was estimated at 17.4% (33). In the general adult population (15 - 49 years), HIV incidence appears to be decreasing and is estimated to be 0.9% per annum (33). A graphical representation of the HIV epidemic between 1990 - 2008 is provided in Figure B-4.

Figure B-4 Modelled absolute numbers of people living with HIV, annual new infections, AIDS-related deaths and the total population among adults (15 - 49 years), South Africa (1990-2008)(34)



High levels of unprotected penile-vaginal intercourse; high number of sexual partners; substance use and inadequate use of HIV prevention, treatment, care and support services are the main contributing factors to the HIV burden among the general population (34). A detailed description of these issues is not included in this review. Issues relating to MSM are described below.

HIV among MSM

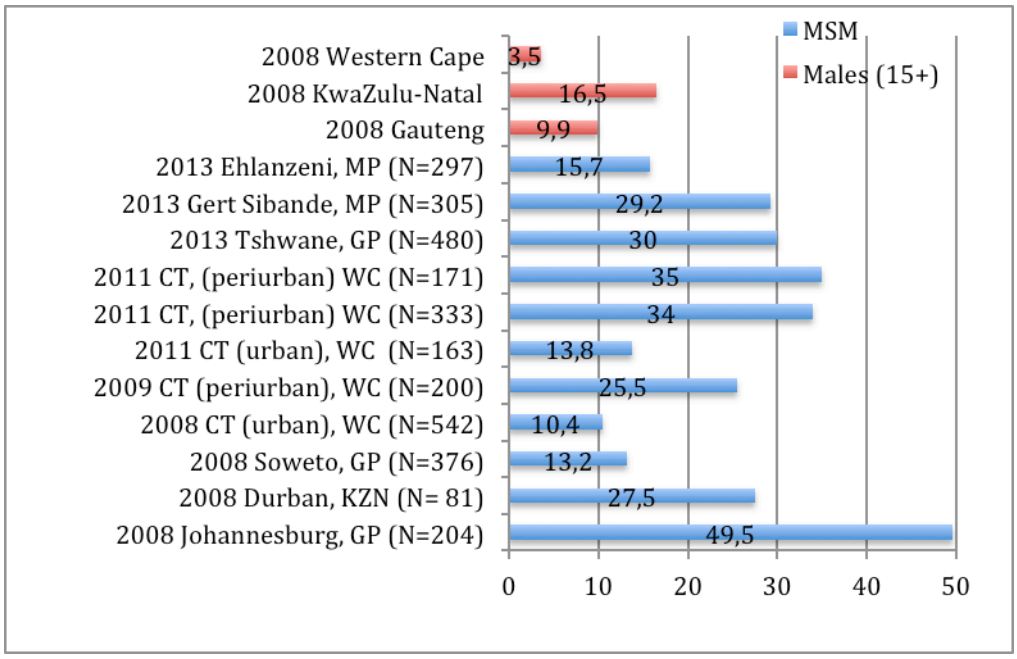
The size of the MSM population cannot be accurately quantified as robust population size estimates for MSM in South Africa do not exist (40).

However, HIV prevalence among MSM in South Africa is disproportionately higher than among men in the general population. Recent studies among South African MSM have shown HIV prevalence to range between 10 – 50% (35–39). HIV prevalence among MSM varies across different geographical areas. The most recently completed MSM surveys found almost a third of MSM from Gert Sibande District (Mpumalanga Province) and Tshwane (Gauteng province) to be living with HIV (29%, n=305 and 30%, n=480 respectively) (personal communication with Profs. Tim Lane and Theo Sandfort during a South African MSM data triangulation meeting, Cape Town, 5 December 2013). Furthermore, HIV prevalence among MSM has been shown to be significantly higher among MSM from peri-urban areas compared to MSM from city centres.

For example, in 2010 and 2011, HIV prevalence among MSM recruited from venues in peri-urban Cape Town (n=200) was almost three times higher than the HIV prevalence among MSM recruited from venues in Cape Town city centre (n= 539) (26% versus 10%, respectively)(36,39). An overview of completed HIV prevalence surveys among MSM is provided in Figure B-5.

In contrast, in 2008 the HIV prevalence among adult males (15 - 49 years) was estimated to be 11% (38).

Figure B – 5 Estimated HIV Prevalence among MSM, surveys (2008 – 2013) [5]



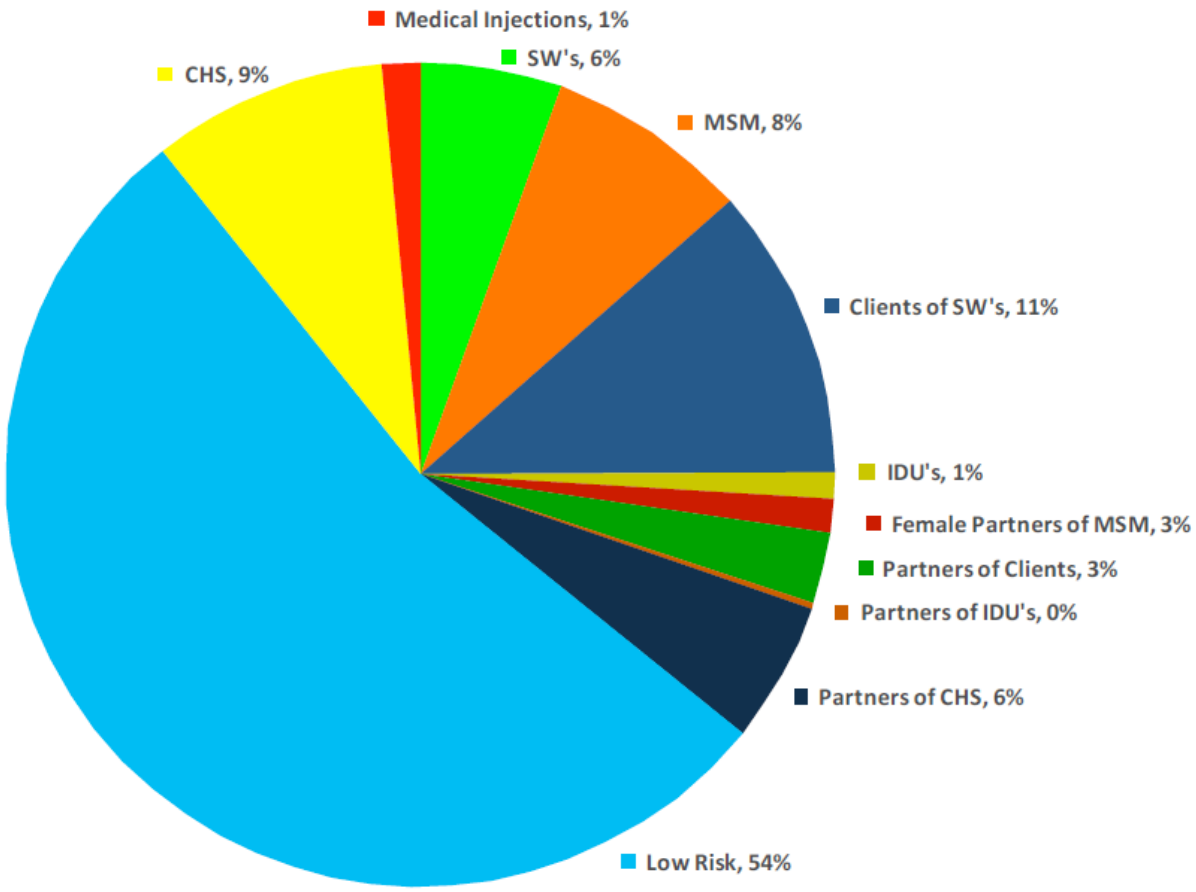
Key:
CT: Cape Town
GP: Gauteng
KZN: KwaZulu-Natal
MP: Mpumalanga
WC: Western Cape

It is estimated that among MSM, annual HIV incidence may be as great as 6% per annum and that 8% of all new HIV infections in South Africa are related to MSM and their sexual partners (38,41). The estimated attributable fraction of new HIV infections among MSM compared to other population groups is shown in Figure B-6.

High levels of unprotected anal intercourse (UAI), substance use, multiple and concurrent partners, low levels of knowledge about HIV as well as limited access to condoms and lubrication have been associated with increased risk of HIV among MSM in South Africa (23,36,42,43). Socioeconomic risk factors that are associated with HIV risk among MSM are described in the next section.

[5] Figure adapted from presentation provided by Prof. Tim Lane at the South Africa MSM data triangulation meeting on 4 December 2013, Cape Town.

Figure B-6 Attributable fraction of HIV infections across risk groups (41)



Key:
CHS: Casual Heterosexual Sex
SWs: Sex Workers
IDU: Injecting Drug Users

Social determinants of HIV among MSM

This section provides a description of the social determinants of HIV among MSM. The section is structured according to the categories of the WHO CSDH framework, which was used in the research component of this dissertation. International and where available South African evidence is provided.

Social and policy context

Legal frameworks and social norms that discriminate against MSM contribute to their vulnerability to HIV (44).

Legal frameworks

Almost 80 countries worldwide criminalise same-sex acts, including many African countries (45). Discriminatory legislation towards same sex practices increase MSM vulnerability to HIV. For example, HIV prevalence among MSM from Caribbean countries that criminalise homosexuality is on average two times higher than the HIV prevalence among MSM from Caribbean counties that do not make homosexual practices illegal (45). Hostile social contexts increase the vulnerability of MSM further.

Religious and cultural norms and values

Religious-based homophobic views have been shown to increase MSM risk for HIV. For example, Natale et al. conducted a qualitative study on the social determinants of HIV among MSM from Denver, Colorado (United States)(n=94). MSM participating in that study whose religious views conflicted with MSM practices were found to be at an increased risk for HIV transmission compared to those whose religious views were not in conflict around same sex practices.

MSM participants who experienced religious-based homophobic views reported more anonymous sexual encounters and higher levels of alcohol and drug use in the context of sexual encounters compared to MSM who did not experience religious-based homophobia. Some MSM from the study felt that the lack of social and legal rights for same sex partnerships in the state of Colorado contributed to frequent changes in sexual partners and associated HIV risks (46). Similarly, many non-gay identifying African-American MSM from Michigan (United States)(n=32) participating in a qualitative study conducted by Lapinski et al. reported that organised religion often perpetuated stigma and discrimination towards MSM by normalising heterosexuality. Instances of out-right discrimination against gay people by religious leaders were reported. On the other hand, some Michigan churches were reported to be accepting of gay people. MSM participants who were part of these churches found them to be sources of support. However, inadvertent disclosure as MSM was highlighted as a risk of "gay-friendly" church membership (47).

Apartheid laws and consequences

Under the Apartheid regime, which ended in 1994, South African society was segregated by race. Under Apartheid, homosexuality was illegal. In 1996, the South African Constitution enshrined freedom from discrimination on the basis of race, gender and sexual orientation (48). In 2005, same sex marriage became recognised. However, despite constitutional protection, homophobia continues (49). Decades of discrimination towards MSM, supported by religious and cultural customs, are responsible for the residual homophobic social norms and values that conflict with the Constitution (50).

Social attitudes towards MSM

Prevailing hetero-normativity and cultural, religious and social discrimination and stigma towards MSM have direct and indirect influences on HIV vulnerability among MSM in South Africa (51).

Homophobic violence towards MSM, including rape, has commonly been reported across South Africa. For example, 16% of MSM interviewed in a cross-sectional survey conducted in Tshwane (n=324) were survivors of sexual violence (52). Sexual violence places MSM at direct risk of HIV transmission. However, sexual assault of MSM is commonly under reported (53).

Social norms and values that are unsupportive of MSM prevent disclosure of relationships with family and community members. Social discrimination towards MSM increases the likelihood of covert sexual practices between men and contributes to high-risk sexual practices - including sexual partner concurrency - increasing the risk of HIV transmission among MSM (45). The likelihood and consequences of HIV infection are modified by engagement with the health system as well social support services. These two elements in the context of MSM in South Africa are described later.

Addressing HIV-related stigma remains a priority in the global HIV response. HIV-related stigma acts as an important barrier to people accessing HIV testing, treatment and care services. Disclosure of HIV status is challenging and not unique to MSM. Disclosing HIV status to family members, loved ones, sexual partners and other key people, can enable psychosocial support for people living with HIV. Psychosocial support can assist with decreasing mental health burden of an HIV diagnosis as well as enable better health outcomes through emotional support (54).

Disclosure of HIV status is also an important element of secondary prevention - i.e. to maximise the health outcomes of individuals living with HIV and to prevent transmission to others (54). However, HIV-related stigma and homophobia in concert significantly contribute to the likelihood of negative consequences of HIV infection.

For example, a cross-sectional survey conducted in Cape Town compared the experiences of stigma and discrimination between HIV infected men (n=330) and HIV infected MSM (n=92). Higher levels of social isolation and discrimination were found among MSM compared to other men, however these differences were not statistically significant (55).

In summary, the social and policy context may increase or decrease vulnerability of MSM to HIV and its consequences. The manner in which these macro-level factors influence MSM is largely dependent on their social position.

Social position

High levels of income and wealth inequities exist in South Africa and are largely racially aligned. Furthermore, gender-based wealth inequities compound existing racial stratification (31).

Several studies have identified higher risk behaviours among people from lower socioeconomic positions compared to people from higher socioeconomic positions (55). The intermediate determinants of health, described below, are believed to account for the general increase in risk for HIV associated with decreasing socioeconomic status. However, this indirect relationship does not appear to be universal.

Fox (2012) describes how increasing wealth may be associated with increased risk for HIV, particularly in contexts of high levels of income inequality. Fox argues that in contexts where relative and absolute poverty coexist (e.g. in Southern Africa) the increased risk for HIV is largely driven by a desire for upward social mobility and the demand for consumer goods. HIV risk is further increased by multiple sexual partnerships, which relatively wealthier people can afford. Transactional sex is also common in contexts where power and resource inequalities exist (56).

In many global contexts MSM communities are often stratified along a social hierarchy that is separate to the social hierarchy of broader society. The MSM social hierarchy is largely linked to wealth, and often aligned with race (57). In the United States, African-American and Latino MSM have relatively higher levels of poverty and experience greater levels of homophobia compared to white MSM (57). Higher levels of knowledge around MSM-specific risks exist among MSM from higher income groups compared to less wealthy MSM. Furthermore, access to appropriate HIV prevention, treatment, care and support services are also significantly better for MSM from higher social groups in the United States compared to less wealthy MSM (57). In South Africa, few MSM studies have compared HIV risk by social position.

As described earlier, higher HIV prevalence has been identified among MSM from peri-urban areas[6] compared to MSM from city centres (36,39).

[6] South African peri-urban areas often are areas of high population density with informal housing and limited services. During Apartheid, peri-urban settlements were racially aligned. Different degrees of infrastracture and financing existed

Studies conducted among MSM from low socioeconomic positions have identified HIV-related knowledge gaps and barriers to accessing HIV-related prevention commodities (e.g. lubrication) and services (e.g. MSM-focused HIV counselling and testing) (31,35).

Intermediate determinants affecting health

In South Africa, increasing education, employment, increasing income and male gender are generally viewed as protective factors against HIV infection and its consequences (34). The socioeconomic phenomena that are linked to race in South Africa influence the effect of other factors. The ways in which these social factors affect MSM are explained in more detail below.

Education, employment and income

Natale (2009) found that economic vulnerability and access to financial resources among MSM in the United States was linked to HIV risk. Instability, unemployment and homelessness were linked to an increasing likelihood of transactional sex. Furthermore, the high cost of condoms and lubricant was found to be a barrier to their use and increased the frequency of unprotected anal sex among MSM (46).

Similarly among MSM in Cape Town, unemployment and poverty has been identified as a driver of exclusion and a factor contributing to transactional sex (31).

for different settlement types. Relatively more funding was made available in coloured peri-urban communities compared to black peri-urban communities.

Gender

In South Africa, gender-based disempowerment has been shown to be associated with challenges around sexual decision-making and condom use (58). Power differences associated with economic and age-disparate relationships are a key driver of HIV transmission in South Africa (34). Gender roles and gender identities have also been highlighted as being important links between power imbalances and associated HIV risk among MSM in South Africa.

In many South African locations, particularly in township[7] areas, identifying as gay is synonymous with adopting a female gender identity and often submissiveness. Such power imbalances have been suggested to limit the ability of "gay" MSM to negotiate safer sex, notably the use of condoms and lubricant (31).

Race

Discrimination on the basis of race or ethnicity persists across the world. Racism acts as an additional burden, contributing to the health differences seen between people of different races and socioeconomic status. Individuals and institutions often discriminate on the basis of race, which adversely affects health and socioeconomic opportunities (59).

Racism within the MSM community has also been identified, and contributes towards HIV vulnerability and risk. Racism towards African-American and Latino MSM in the United States has contributed to their exclusion from broader society and MSM communities.

[7] Peri-urban residential areas that were designated for non-white people during Apartheid.

Racism and the associated discrimination among MSM in the United States contributes to substance use, mental illness and negatively affects open discussions around HIV status with new sexual partners (46,57).

Race remains a significant issue in contemporary South Africa. As described earlier, socioeconomic stratification remains largely aligned to race. This picture is reflected in the MSM community in South Africa. Young, black MSM from peri-urban areas are particularly marginalised, largely due to the consequences of inequities in education and employment opportunities resulting from Apartheid policies (31). In South Africa, race is largely a proxy for inequities in society (38). HIV prevalence among MSM is consistently higher among black than among coloured and white MSM (38).

Race itself is not the cause of these differences, but rather reflects the ongoing inequities in social determinants of health that contribute to differential vulnerability and exposure to HIV among black MSM compared to MSM from other racial groups (36).

Social cohesion

Local evidence shows how social exclusion of MSM contributes to HIV infection. For example, family and community members frequently exclude MSM in South Africa (50). This exclusion has been linked to disempowerment and vulnerability to HIV - directly through violence and indirectly through decreased ability to negotiate condom use or report human rights abuses (31). Generally speaking, in South African contexts increasing social capital is associated with lower HIV burden (34).

However, other contextual factors (e.g. income, race and gender) have been hypothesised to modify the potential protective effect social cohesion and social capital may have on HIV risk (34).

Psychosocial circumstances

Social factors are key contributors to psychological wellbeing. In the South African context, high levels of poverty, crime and HIV exist. MSM experience the effects of these factors and also the consequences of experienced stigma and discrimination on the basis of their sexual practices, sexual orientation, gender identity and race. As such, higher levels of mental health diagnoses have been found among MSM compared to people in the general population (60). Due to prevailing hostile social, cultural and religious norms, a significant number of MSM do not disclose their sexual practices to others.

A similar phenomenon has been described among non-gay identified African-American MSM in the United States (47). Several studies have shown MSM who have experienced stigma and discrimination develop internalised homophobia, and are more likely to have unprotected anal intercourse compared to MSM who do not harbour high levels of internal homophobia (47,61).

Furthermore, homophobic violence frequently occurs in South Africa and negatively affects the mental health and wellbeing of MSM and other lesbian gay bisexual transgender or intersex people. Since April 2010, the murder of at least eight gay men has been recorded in the Gauteng area (62). High prevalence of sexual assault (8 - 16%) has also been reported by MSM participating in several studies (49,50,63).

Internalised stigma and homophobia often translates into negative self-esteem, and contributes to mental illness, including depression and suicide among MSM in South Africa (49).

Psychosocial support for MSM has been shown to enable better access to HIV prevention, treatment, care and support services (64). MSM who do not disclose their sexual practices to others are often isolated with limited psychosocial support. Internationally, improved quality of life and increased levels of income have been recorded among MSM living with HIV who receive adequate psychosocial support compared to MSM without such support (64). Little data exists on the experiences of MSM who are living with HIV in South Africa (40).

Behaviour

Several social factors influence behaviour. Among MSM, many of these social factors are associated with HIV transmission risk. Knowledge, experienced discrimination, substance use, access to financial resources, access to condoms and lubricant and migration have been shown to be important socioeconomic influences that affect sexual behaviour in the general population and among MSM in South Africa (34).

Knowledge

Unprotected anal intercourse and the incorrect use of lubricant have been associated with low levels of safer sex knowledge among MSM in South Africa (31,65). Lower levels of knowledge around sexual transmission risks have been found among MSM who do not access or are not reached by MSM-focused interventions compared to those that have contact with MSM-focused services (65).

Discrimination

Family, community member and health worker discrimination of MSM is a major barrier to accessing sexual and reproductive health services by MSM in South Africa (66,67). Health worker discrimination delays health care seeking practices and increases consequences of illness (31). In the context of HIV, delayed health seeking is associated with an increased likelihood of onward HIV transmission and development of AIDS-related complications, including death (68).

Substance use

Globally, the prevalence of alcohol and drug use among MSM is high. Episodic alcohol and drug use is generally more common than drug dependence. The majority of substance use occurs for recreation, to facilitate sexual encounters and during times of crisis (e.g. dealing with discrimination) (69). Generally speaking, substance use by MSM is socially accepted within the MSM community. Various drug using MSM sub-cultures exist, including MSM who inject methamphetamines (70). Data quality varies, however, alcohol, amyl-nitrates, methamphetamine type stimulants and gamma-butyrolactone are substances that are commonly used in social contexts, and are often linked to high-risk sexual practices - including multiple sexual partners, unprotected anal intercourse and prolonged sex (69). High levels of illegal drug use and high-risk sexual practices have been documented among MSM in South Africa (70,71).

Access to financial resources

Sex work and transactional sex are common in South Africa. Limited livelihood options and desire for consumer goods have been identified as the main reason for transactional sex and sex work in South Africa (11,72,73).

A fifth of all new HIV infections in South Africa are estimated to be attributable to sex work[8]; 6% among sex workers, 11% among the clients of sex workers and 3% among the partners of sex worker clients (41). MSM sex workers are at risk for HIV transmission through sexual practices (number and frequency of sexual acts and use of condoms) and indirectly through other social factors affecting sex workers (e.g. violence, rape, harassment, discrimination and barriers to legal support)(74).

[8] Little data on sex work among MSM exists, and modelling data is largely based on female sex workers.

Data on MSM sex workers is limited, however several local studies have highlighted the high prevalence of transactional sex among MSM (31,35,39,75,76). A cross-sectional survey done by the Population Council among 307 MSM from Tshwane (Gauteng) highlighted that MSM who had sold sex (n=44) were more likely to come from lower socio-economic backgrounds and have higher risk practices compared to MSM who did not sell sex (n=263). MSM who sold sex had unprotected anal intercourse more frequently; had more male sexual partners; reported more STI symptoms and were more likely to have been forced to have sex compared to MSM who had not sold sex (52). Almost half of the MSM participating in a study in Soweto (48%, 175/363) and a tenth of MSM participating in a survey in peri-urban Cape Town (12%, 24/200) reported to have received money, food, alcohol or shelter for anal sex with a man (35,36).

Use of condoms and lubricant

Limited access to appropriate HIV prevention commodities (notably condoms and condom-compatible lubricant) by MSM have been highlighted as contributing to the high prevalence of unprotected sex and the use of incompatible lubricant among MSM in many world regions, including Africa (68). Condoms are widely accessible in South Africa but free lubricant access is limited to the distribution points of civil society organisations that implement MSM programmes (40).

Use of HIV prevention commodities is generally inconsistent, even when they are accessible. Acceptability of condoms and lubricants, as well as negotiation of their use, is influenced by social factors.

As described earlier, power imbalances (e.g. on the basis of economic, gender or age differences) may challenge an individual's ability to negotiate safer sex.

However, findings from the recent survey by Sandfort et al., highlight that this is not always the case[9]. In the study conducted by Sandfort et al., men from race-economic similar and age-race-economic discordant partnerships were more likely to use condoms at last sex compared to other partnership types (familiar and non-regular neighbourhood), which is in conflict to other evidence that suggests that power imbalances increase the likelihood of unprotected sex (77). As such, the use of condoms and lubricant during anal intercourse is complicated and influenced by social factors at the structural, community and individual level.

Migration

Significant internal migration and mobility exists in South Africa (78). The desire to improve socioeconomic circumstances is the major driving force behind migration. Poverty, limited employment opportunities and limited HIV-related services increase likelihood of high-risk sexual practices (e.g. transactional sex) and may delay health care seeking in contexts of migration (78).

MSM refugees may be even more likely to engage in high-risk sexual practices (including transactional sex and substance use) due to additional influences of xenophobia and homophobia in the context of migration (80).

[9] In 2012, Sandfort et al. conducted a cross sectional survey among 300 MSM from greater Tshwane (Gauteng). The researchers analysed HIV risk in relation to the type of sexual partnerships. Half the participants were from peri-urban township areas, and were found to have relatively lower levels of social support and HIV prevention self-efficacy compared to other participating MSM.

Violence

The incidence of violent crime, including rape, in South Africa is one of the highest in the world (79). Rape is directly associated with HIV transmission risk, and violence is indirectly linked to HIV through disempowerment and barriers to accessing services (38).

High levels of violence and rape have been identified as contributing to HIV infection in the South African context (80). In 2008, three percent (50/1 705) of men from KwaZulu-Natal and Eastern Cape who participated in a cross sectional survey of men had been either orally or anally raped by another man. In this study, the likelihood of experiencing sexual victimisation and rape decreased with increasing socioeconomic status. In this sample, the highest HIV prevalence (34.8%) was found among men who had perpetrated oral or anal rape. In multivariate analysis, men who had perpetrated any form of sexual violence on another man were about two times more likely to be HIV infected compared to men who had not perpetrated such violence (53). Similarly, high levels of intimate partner violence within MSM sexual partnerships have been recorded in other parts of South Africa. In 2010, 8% of the 521 MSM who completed an online survey reported experiencing physical intimate partner violence; 4.5% recently experienced intimate partner violence that was sexual in nature. In that study, experiencing and perpetrating intimate partner violence was significantly associated with unprotected anal intercourse (81).

The health system

National prioritisation of HIV interventions for MSM

In the mid 2000s, South African policy makers were reluctant to develop and implement policy on the provision of anti-retroviral therapy (ART) to people living with HIV. High-level government support for AIDS denialists delayed the provision of ART to people living with HIV (82). The first multi-sector national HIV strategy (the HIV & AIDS and STI National Strategic Plan, NSP) was developed in 2006 and was implemented between 2007 - 2011 (83). This initial policy identified the need to increase access to HIV-related services in South Africa.

The NSP enabled the roll-out of ART across the country, contributing to a reduction in new HIV infections and AIDS related deaths in South Africa (84). This policy included the need to address the HIV-related needs of MSM. The NSP 2012 - 2016 defines MSM as a 'key population'[10] in need of focused HIV-prevention efforts (85). In 2012, the National Department of Health in collaboration with the South African National AIDS Council (SANAC) and multi-sector partners developed draft operational guidelines for HIV, STI and TB programmes for Key Populations in South Africa. These draft guidelines include recommendations to enable supportive environments, a package of HIV services and monitoring and evaluation processes for key populations in South Africa. MSM were explicitly included in the draft guidelines (86).

[10] UNAIDS defines key populations as people who are most likely to be exposed to HIV or to transmit it. Engagement with key populations is viewed as a critical element for a successul HIV response.

Financing MSM programmes

In 2010, less than 5% (ZAR 532.63 million) of South Africa's total HIV related spending (ZAR 11 315.71) was spent on MSM, people who inject drugs and sex workers collectively. Even though these population groups are estimated to be linked to 20% of South Africa's annual HIV infections (38,87). Although funding for MSM programming is improving, the investment and attributable fraction mismatch continues (88). Initial funding for MSM programming came from bilateral donors. Support from the United States President's Emergency Fund For AIDS Relief (PEPFAR), through USAID and more recently through the United States Centers for Disease Control and Prevention, has enabled MSM-focused programming in major urban areas in all provinces.

Other funders and developmental partners have supported small-scale HIV prevention programmes focused on MSM in the metropolitan areas of Gauteng, Western Cape and KwaZulu-Natal (40). Additional funding for MSM programmes has recently been secured through the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM). The GFATM funding will enable the provision of MSM-related services at higher education institutions, increase peer-delivered prevention interventions and improve health worker capacity to provide MSM-competent services in the Eastern Cape, Free State, KwaZulu-Natal and Northern Cape Provinces (89).

MSM focused service provision

Non-governmental organisations (NGOs) provide the majority of services to MSM (90). Public funded HIV-prevention activities for key populations have been instituted through the National Department of Health's High Transmission Areas Programme.

In December 2012, this government initiative had resulted in the establishment of 626 sites. However, the current system does not disaggregate service coverage and utilisation by population type and number of MSM reached cannot be quantified (91).

Specialist MSM-focused clinics have been established in Cape Town and other metropolitan areas. Peer-based HIV prevention services are being provided by community based MSM organisations in most provinces. Training initiatives have been implemented to increase the sensitivity of health care workers to the issues affecting MSM. Clinician competency training around MSM-specific health issues have also commenced. However, coverage of these services is limited (40). Additional detail around MSM-focused service provision is provided in Appendix 9.

Addressing the social determinants of HIV among MSM

Increasingly, focus is being placed on developing policy and implementing interventions that increase the impact of the HIV response for MSM. Very little literature exists on how to address the social determinants of HIV among MSM. An overview of strategies and approaches that are pointing towards addressing social determinants of HIV, as outlined in the literature, are provided below. This section is categorised as per the WHO CSDH Framework elements.

Fostering enabling socioeconomic and social environments

Participants of an UNAIDS policy and strategy consultation meeting on MSM (Geneva, 2013) highlighted the need for a robust evidence base to inform policy and programming for MSM. Participants of the meeting also recommended that governments should ensure that the rights of MSM are protected (98).

Furthermore, the group suggested that increased investments in MSM programming, in line with evidence, would be cost-effective and increase the effectiveness of the global HIV response (98).

In the South African context, policy around MSM programming exists, but this is not being effectively implemented (40). Existing financing for MSM-focused programmes needs to be increased if the global commitment on reducing HIV infections among MSM is to be reached. Policy around minimum standards of services for MSM within the public sector, like the Draft Operational Guidelines for HIV, STI and TB Programmes for Key Populations in South Africa, could be used to benchmark health system quality (86). Mechanisms, like the recently formed Hate Crime Task Team, could be used to enable MSM to take legal recourse when their Constitutional Rights are violated (94).

Changes in social and cultural norms have been shown to influence the effectiveness of HIV prevention interventions. In light of this, positive adoption of behaviours that enable the inclusion of MSM would reduce social exclusion and associated vulnerability to HIV infection (99). A summary of information gaps relating to the social determinant of HIV among MSM in South Africa is described later.

Addressing inequalities in socioeconomic circumstances

As outlined earlier, equity in health and wellbeing can be achieved by implementing policies that address systematic discrimination and exclusion of the poor.

National efforts to provide universal access to free HIV prevention, treatment, care and support services in line with the NSP could assist to ensure health for all is realised (85). The planned National Health Insurance programme will provide protection against the economic costs of illness and address health system inequities (100).

Addressing intermediate determinants affecting health

Interventions to address social stratification and associated differences in education, employment and income are essential to improving health. Efforts that focus on the dimensions that are specific to MSM include, addressing discrimination within education, employment, religious, cultural and health care environments. Interventions that promote the inclusion of MSM within the broader community and increase the integration of different sub-groups of MSM could be effective to address vulnerability associated with social isolation.

Strengthening social capital and establishing and nurturing a MSM community could be used to reduce HIV risk behaviours among MSM[11] (101,102). In South Africa, few HIV prevention interventions have imbedded social activities in their programmes. In Cape Town, the Ukwazana Project focused on addressing social

[11] The Mpowerment Project implemented a MSM community based intervention that included outreach, small group establishment and a publicity campaign. The interventions were implemented over eight months in two American communities and resulted in significant decreases in unprotected anal intercourse after the programme was implemented.

factors that contribute to HIV infection among MSM. This project successfully used community-engagement activities as part of broader HIV prevention interventions (103). Similarly, the Desmond Tutu HIV Foundation established grass-roots MSM groups in broader Cape Town. These groups were used as platforms for HIV-related information sharing and through planned community events contributed to increasing MSM visibility and mobilisation. This pilot project evaluation did not detect changes in risk practices, but did identify increased levels of social support, inclusion and self-esteem among participating MSM (65)

Enabling behaviour change

Peer-based outreach interventions that operate within communities can effectively reduce high-risk sexual practices. Increased levels of knowledge around MSM-specific HIV risks can been shared between peers and through the use of interactive engagement during social events and in more formal health provision settings (101). Interventions aimed at the structural and social level are needed to enable MSM to adopt safer behaviours (104).

Strengthening the health system

All health system elements (governance, financing, human resources, medical products, information and service delivery) need to adequately enable access, coverage, quality and safety of health services for MSM (105).

Specifically, policies (e.g. the NSP and the Draft Operational Guidelines for HIV, STI and TB Programmes for Key Populations in South Africa) need to guide MSM programming. Health workers need to be sensitised to the unique needs of MSM and be capacitated to provide appropriate and competent services.

Condoms, lubricant and HIV and sexual reproductive products need to be widely available and accessible in appropriate locations, including social spaces and health facilities.

Research gaps

Data on the nature of the HIV epidemic among MSM in South Africa is emerging. However, most of this data focuses on biomedical and behavioural aspects of HIV among MSM from large urban areas. There is a key gap in understanding the specific pathways linking social (e.g. social norms, social position and exclusion) and other factors (e.g. policy, health system engagement and economic opportunities) to differential vulnerability, exposure and consequences of HIV among MSM in South Africa. Understanding the HIV epidemic among MSM outside metropolitan areas is another research gap. An understanding of the social determinants of HIV among MSM could inform policy and programme development to address differential vulnerability, exposure and consequences of HIV among MSM in South Africa. Research into the prevalence of sexual assault and the barriers and facilitators of accessing services (e.g. post-exposure prophylaxis) is needed to address rape of MSM. Evaluations, including economic evaluations, of MSM programmes would be useful to assess the impact of efforts to date and inform future programmes. Comparisons between combination versus biomedical interventions could also inform policy development. Furthermore, limited data on the experiences, needs and interventions for MSM living with HIV exists.

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Part C:

Journal manuscript

Social Determinants of HIV among Men who have Sex with Men in Cape Town

ABSTRACT [1]

Little is known about how social factors influence vulnerability to, and consequences of, HIV infection among men who have sex with men (MSM) in South Africa. This study aimed to analyse social stratification and its links with HIV among MSM in Cape Town, South Africa. Six interviews and six focus group discussions (n=25) were conducted. Tools were based on the World Health Organisation's Commission on the Social Determinants of Health framework. Directed content analysis was used to analyse data. Race and education were directly linked to social position. MSM from lower social positions were more vulnerable to HIV, and have more negative consequences of HIV infection, compared to wealthier MSM. Engagement with community leaders, health workers and police to promote inclusion could reduce vulnerability of MSM to HIV. Increased access to free, non-discriminatory HIV-related services would reduce inequities in access to HIV services by MSM.

Key words: HIV, social determinants, men who have sex with men, South Africa

[1] This manuscript varies slightly from the AIDS & Behavior journal's instructions for authors. A Spanish translation of the abstract is not provided and the participant table is included in the text (see Appendix 8, AIDS and Behavior instructions for authors).

INTRODUCTION

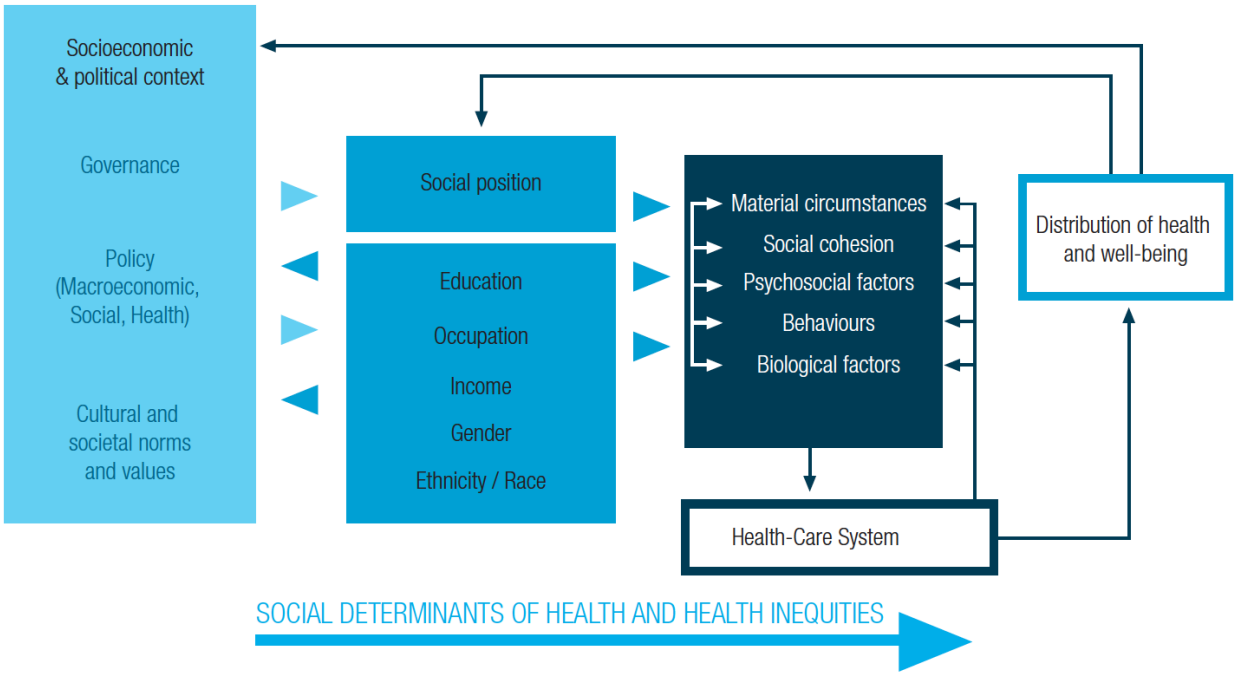
In 2013, approximately 5.26 million South Africans and about 16% of those aged 15 - 49 years were living with HIV (1). South Africa's HIV response has largely focused on addressing the HIV burden among women. Sixteen per cent of adult women (15 years and over) in 2008 were living with HIV, compared to 10% of men of the same age (2). However, among men, HIV prevalence among men who have sex with men (MSM) has been shown to be between 10 - 50% (3–5). Even though MSM only make up a small proportion of people in South Africa, an estimated 8% of all new HIV infections occur among them and their sexual partners (6). HIV prevalence among MSM in Cape Town has been shown to differ geographically. HIV prevalence among MSM from peri-urban areas is up to three times greater than among MSM from Cape Town city centre (3,7,8). Differential burden of HIV by geographical area may be linked to structural and social factors (3). Some MSM-focused services are being provided in Cape Town. A MSM-focused clinic has been established in central Cape Town and two government clinics provide MSM-focused health services through a non-governmental organisation in other areas. Several organisations provide psychosocial support for MSM across the Cape Town metropolitan area. However, few interventions address the social factors that may contribute to the risk of HIV infection and its consequences among MSM.

The complex ways in which social factors influence health is increasingly being recognised (9). Social factors may significantly contribute to the disproportionately high HIV burden found among MSM compared to other men (10).

Interventions to address the social determinants of health among MSM may increase the effectiveness of current biomedical HIV interventions and policy.

The World Health Organisation (WHO) established a Commission on the Social Determinants of Health (CSDH) to spearhead efforts to deepen our understanding of the pathways along which social factors influence health. The CSDH analysed international experience and developed recommendations to address health inequities, from a social perspective. The CSDH developed a conceptual framework outlining the causal pathways linking social factors to health and health inequities (see Figure C-1.) The framework outlines the overarching influences that policy, cultural norms and social values have on social position, education, employment, income, race and gender. In turn, these latter factors influence material circumstances, social cohesion and other bio-psycho-social factors. Engagement with the health system influences health outcomes and the distribution of health and well being at a population level. Health service experiences and outcomes may also influence an individual's material circumstances, social cohesion and other bio-psycho-social factors. Ultimately, the distribution of health and wellbeing impacts social stratification, policy and social norms and values (11).

Figure C-1 The Commission of Social Determinants of Health Conceptual Framework (11)



This study aimed to explore the ways social factors are linked to HIV infection and its consequences among MSM in Cape Town. Specifically, the study objectives were to analyse the social positions and stratification of MSM from different communities in Cape Town and explore the ways in which social position may be linked to HIV. Ultimately, the study was to inform policy options to address social factors increasing the risk of HIV infection and its consequences among MSM in Cape Town.

METHODS

Qualitative methods were used to analyse the social determinants of HIV among MSM in Cape Town. Six semi-structured in-depth interviews (IDIs) with MSM community members and MSM experts were conducted. Thereafter six focus group discussions (FGDs) with a diverse sample of MSM community members were conducted. Research activities occurred in October and November 2012.

Interviewees were purposefully selected to provide differing insights into the local context and issues affecting MSM in Cape Town. Interviewees did not have to be MSM if they had a deep understanding of MSM and the issues affecting them. The study team developed a list of organisations working with MSM, including potential interviewees from these organisations and the MSM community. The lead researcher invited the listed people to participate in an interview. All of the interviewees approached agreed to participate. Interviewees were from diverse socio-demographic backgrounds. The six key informants included: a gay constitutional law expert; two MSM health service programme managers; a MSM psychosocial service provider; a MSM research assistant involved in MSM-focused research and a MSM community member from peri-urban Cape Town. Interviews lasted on average 48 minutes (range 45 – 60 minutes), excluding the time taken to present the study, answer questions and obtain informed consent. The number of interviews was based on available time and resources.

A semi-structured interview format was used to allow for flexibility in discussions while ensuring that key issues were covered. An interview guide was used for the IDIs. The lead researcher facilitated the interviews in English. Interviews were conducted in private spaces at the interviewee's place of work. The interview with the MSM community member took part at the offices of the lead researcher. Interviews explored the interviewer's background and experience and key social determinants of health, as outlined in the CSDH Framework. Interviewee perspectives of how the current socio-economic

context, social norms and the links between these issues affect MSM social position were ascertained.

The material circumstances of MSM, the inclusion of MSM within the community and how these factors may be linked to HIV vulnerability and exposure were discussed. Thoughts on strategies for enabling upward social mobility and potential interventions to reduce HIV-related risks were also talked about. The researcher asked interviewees about their understanding of MSM engagement with the health system and potential links with exposure and vulnerability to, and consequences of, HIV infection. Interviewees were encouraged to provide suggestions of policy options to make the MSM-focused HIV response more effective.

Overall, 25 MSM community members took part in six FGDs. Focus groups were arranged through organisations that work with MSM in greater Cape Town. FGDs took place in private spaces at the premises of the organisation that assisted with participant recruitment. The study team informed the relevant organisations about the objectives of the study, in particular of the FGDs and criteria for participation. Organisation representatives then recruited participants using their existing networks. MSM from different socio-demographic backgrounds were recruited. The research team was not aware of any potential participants who declined to participate. FGDs lasted on average 65 minutes (range 45 – 80 minutes), excluding time taken to present the study, answer questions and obtain informed consent.

Participants were eligible for a FGD is they were 18 years old or more, lived in greater Cape Town, reported to have had some form of sexual contact with another man in the past 12 months.

Focus group participants included black MSM from urban and peri-urban communities, MSM living in a shelter for sexual minority groups, and a group of Moslem MSM. Focus group participants were requested to complete an anonymous demographic form before discussions commenced. Information on participant demographics, family support and self-reported HIV status was collected. The lead researcher, supported by a research assistant, led the focus group discussions. The research assistant facilitated conversations that occurred in isiXhosa (a local language).

The use of enjoyable activities during FGDs, including images, can act as productive supplements to questions and can facilitate engagement with FGD participants (12). Images representing social factors were therefore used to guide the FGDs. Images of black men getting married and a black male adolescent undergoing a traditional initiation ceremony were used to facilitate discussions around the broader socioeconomic and policy context and cultural, religious and social norms and values, as they affect MSM. Images of contrasting living environments - a mansion and high-density informal housing, were used to discuss links between material circumstances and HIV risk among MSM from different social strata in Cape Town. Pictures of a well known MSM-friendly bar in peri-urban Cape Town, a depressed person and a police van were used to guide discussions around socialising, finding sexual partners, substance use, mental health issues and experiences of violence, sexual assault and police

services. Images of medication and medical equipment were developed to discuss health system engagement, however these issues were discussed in relation to other images and were not used.

In-depth interviews and focus group discussions were audio recorded, accompanied by written notes. Interviews and discussions were transcribed word for word, translated where necessary, and entered into a word processor. The lead researcher transcribed all of the interviews and three of the FGDs. The research assistant transcribed the remaining FGDs. The lead researcher conducted the qualitative and quantitative data analysis, in consultation with other members of the study team. Qualitative data was analysed using directed content analysis. Direct content analysis is a technique used to interpret meaning from text using with pre-defined categories for data categorisation (13). A template was developed to analyse data. The template included categories and sub-categories that reflected the social factors included in the CSDH Framework. Data from each interview and discussion was coded into meaning units that were then arranged under pre-defined categories into the template, individually. Data was analysed for manifest and latent meaning, for individual interviews and discussions and between them. Findings were discussed with other members of the study team. Direct quotes were included to highlight participant views and experiences.

Quantitative data from the demographic forms was entered into a spreadsheet and imported into Stata V11 (StataCorp, College Station Texas). Descriptive statistics (inter-quartile range, median, proportions) were calculated for

demographic characteristics of focus group participants (age, race, religion, level of education, employment, income and self-reported HIV status).

No additional experiences or opinions of how social factors influenced the risk of HIV infection and its consequences among MSM from different social positions were raised during the sixth FGD. At this point the researchers determined that saturation on this key issue had been reached (14). No additional FDGs were completed.

Participants provided written informed consent before taking part in the study. Ethical approval was obtained from the University of Cape Town Faculty of Health Sciences' Human Research Ethics Committee. After completion of the study, 20 participants and 10 other stakeholders who assisted with recruitment participated in study finding presentations sessions held March 2014.

RESULTS

After providing a brief profile of focus group participants, we will consider contextual issues of importance in relation to the social determinants of health such as cultural and societal norms and values. The role of social position in relation to health, sexual behaviour, knowledge and HIV vulnerability will then be presented. Thereafter, other behavioural issues linked to HIV risk and interactions with the health system are discussed. Throughout these sections, the inter-relationship between the range of social determinants and HIV vulnerability is drawn out.

Focus group participant profile

The median age of FGD participants was 31 (Inter quartile range (IQR) 25 - 38). The majority were black Africans (n=17, 70%), with 15% (n=4) of participants being white and 15% (n=4) coloured[2]. Just over half were Christian (n=13, 58%), and more than half (n=13, 52%) had received some form of tertiary education. Approximately a third (n=9, 36%) were unemployed and about a quarter (n=6, 24%) were in full time employment. On average, participants had experienced a median of six months (IQR 1 - 12) of unemployment previously. Participant median disposable income was ZAR 1 200 (IQR ZAR700 - ZAR2 800). Over half (n=15, 60%) lived in Cape Town city and suburbs, with the rest of participants living in peri-urban areas, and on average lived with 3 other people in their households. The majority of the participants' families (n=15, 65%) were aware and supportive of them being MSM. A third of participants self-reported to be HIV infected (n=9, 33%). Selected participant social and demographic characteristics are included in **Table** C-1.

[2] Coloured racial group is a heterogeneous ethnic group who possess ancestry from various Khoisan, Bantu, European and Cape Malay populations. During Apartheid, racial segregation affected social and livelihood opportunities for non-white populations (2).

Table C-1 Summary of focus group participant social and demographic characteristics

Group		1	2	3	4	5	6	Total
Number of participants		2	5	4	5	4	5	25
Age	*Median (IQR)*	27 (26-28)	43 (42-66)	33 (30 - 37)	21 (21-30)	24 (22- 26)	33 (30-36)	31 (25-38)
Race	*Black*	2	-	1	5	4	5	17 (70%)
	White	-	1	3	-	-	-	4 (15%)
	Coloured	-	4	-	-	-	-	4 (15%)
Religion	*Christian*	2	-	1	4	3	3	13 (58%)
	Moslem	-	4	-	-	-	-	4 (15%)
	Other/not religious	-	1	2	1	1	2	7 (27%)
Education	*Some high school*	-	2	1	-	1	1	5 (20%)
	Completed high school	-	1	1	2	-	3	7 (28%)
	Some tertiary	2	2	2	3	3	1	13 (52%)
Employment	*Not working*	-	2	-	1	2	4	9 (36%)
	Part-time	-	1	3	4	-	1	10 (40%)
	Full time	2	1	1	-	2	-	6 (24%)
Previous unemployment median months (IQR)		13 (1 - 24)	1 (1-6)	9 (4-14)	13 (9-60)	2 (0-12)	3 (1-6)	6 (1-12)
Disposable Income (ZAR)	*Median monthly (IQR)*	R 4000	R 1350	R 2250	R 2500	R 575	R 0	R 1200 (R700 - R2800)
Community	*Township*	2	-	4	2	2	3	10 (40%)
	Suburb/ city	-	5	-	3	2	2	15 (60%)
	Others in home (median, IQR)	3 (2-4)	2 (2-3)	2 (1-3)	2 (1-3)	5 (4-9)	1 (0-2)	3 (1-6)
Family support	*Supportive*	2	3	2	3	1	4	15 (65%)
	Unsupportive	-	2	1	2	2	1	8 (35%)
HIV status (self report)	*HIV uninfected*	1	4	1	3	2	1	12 (48%)
	HIV infected	-	1	2	1	1	4	9 (33%)
	Unknown/ no answer	1	-	1	1	1	-	4 (16%)

Contextual factors impacting on MSM

A range of factors relating to the religious, cultural and political context within South Africa were report to impact on the lives of MSM, contributing to different levels of vulnerability. These are explored in this section.

Religion

The majority of focus group participants were affiliated with a religion. Christian and Moslem participants reported that these religions were generally hostile towards same sex practices. Several participants from Moslem and Christian faiths reported that interpretations of religious scripts were used to discriminate against MSM and portray sex between men in a very negative light; as a sin or an evil act.

Culture

During in-depth interviews and several focus group discussions, cultural norms and expectations were identified as frequently being hostile towards MSM. Across focus groups, hetero-normative family and community expectations were stated as contributing to internalised stigma among MSM. Many participants thought that stigma made it difficult for many MSM, particularly black Africans from peri-urban contexts, to fully express their sexual preferences and gender identities.

> *"It [cultural norms and values] affects us a lot. Yes, white gay guys get married. In townships we can't, we have these stereotypes and stigma. Yes, I am gay, but you are not accepting yourself. Is this for real? This can mean we do not get married, we meet him, we want to fuck or get fucked by someone."*
>
> *Participant #4, focus group #4.*

Despite the frequently negative influences cultural norms were reported to have on MSM, many study participants had been traditionally circumcised. The majority of black African men who took part in traditional circumcision ceremonies did not feel excluded during the process.

One participant explained how after being circumcised he felt more integrated into his broader community, although the process focused on heterosexual behaviour, with little information around HIV risk protection.

> *"To me, they actually mentioned that I should go and test my BMW [penis], and I told them that I am not going to test it with a woman, I am very sorry (laughs). No, I mean, that is what they expect me to do, even if they weren't direct that they did not like the behaviour [having sex with men], they treated me very well - they never really brought up the issue of me being gay. I guess me going to initiation school and stuff like that is what they want, you need to get out there and get girls, and I was like, you know guys, you cant do that, I am gay. It is hectic (laughs)."*
>
> *Participant #2, focus group #1.*

Religion, culture, family and MSM

In family and community contexts where religious and cultural norms and values were common, many MSM spoke of their experiences of rejection or discrimination. Rejection by family members was commonly reported.

A participant who works as a peer outreach worker for an organisation that works with MSM highlighted his view of the rejection by family members:

"Rejection, by the family, it's the most painful thing. I will sit that time, when I am alone it affects me physically and emotionally. My friends are only here for [a] nice time. When I am sick they will push me away, they would not want me to be a burden. So being rejected is very painful and it affects work - where will you go? If I am not working where will I stay?"

Participant #1, focus group #6.

The support and assistance provided by family in times of stress and crisis seems to be particularly important for many MSM. The above quote suggests that support provided by friends does not seem to serve the same needs, and may be fickle.

In the focus group conducted among mostly Moslem MSM, several participants reported how their families were initially very unsupportive of them being MSM. However, at the time of this study, the majority of participants felt that their families were now more supportive of them being MSM. Family support of MSM, particularly during adolescence was identified as a key factor increasing an individual's resilience to coping with homophobia in their communities. A black participant reported how his family was supportive of him, and because of that he was able to overcome any prejudices other people may have about his sexual practices and orientation. He found that much of his ability to deal with stress and crisis were linked to family support.

"I guess it varies with who in your family is pro-gay or pro-you, then they would support you." *Participant #1, focus group #1.*

A MSM community leader explained in a focus group how family acceptance and support could improve tolerance and inclusion within the broader community.

> *"Family are the biggest thing, if your family understands you better, the community at large, they will try to tolerate you, even if they do not like what you are doing. If the parents are accepting him of who he is, the family gives strength to all."*
>
> *Participant #5, focus group #5*

Policy and governance context

Middle-aged MSM, from all religious and racial backgrounds agreed that the levels of tolerance towards MSM have improved over the last twenty or so years. White and coloured MSM participants, who were generally from higher socioeconomic levels, attributed this progress to the supportive legislative framework. A black African MSM thought that the progress had more to do with democratic transition, and the social mobilisation of the previous generation of MSM.

> *"I do not know the in-depth of the Constitution. I know that gay people are accepted. You know, people first accepted us before the Constitution was changed. Even if it had not changed it would still be the same. You know the learned people were changed by the Constitution, in a normal situation in the community, the Constitution has nothing to do with it."*
>
> *IDI #6, MSM community member*

The majority of MSM community members were aware of the legal protection provided to MSM in South Africa. However, several MSM reported that many policy implementers discriminated against MSM.

> *"The government makes those [protective] rules and then judge us. That is not government. It is the people who work for the government, especially in the township [that discriminate against MSM]"*
>
> *Participant #2, focus group 4.*

The majority of MSM who took part in discussions viewed the police, who should be assuming responsibility for defending constitutional rights, in a negative light. During a focus group discussion a black African MSM reported his lack of confidence in the police. He felt that the police were generally hostile towards MSM:

> *"When a gay person sees police they see an opponent of their lifestyle. They victimise and intimidate gay people. I don't have confidence in the police. The police trust is not there - they have become criminals themselves. I lost a friend who was beaten up by police, and thrown in an open field, it was after a Pride. He was killed by the police - the case [there was] no prosecution. Funny enough the police are hell bent on their anti-gay sentiment, on not accepting us, they still need to be educated on gay rights."*
>
> *Participant #5, focus group 6.*

However, a participant from the focus group among mostly coloured Moslem MSM reported good service and support when he engaged with the police after an incident of theft. This participant is in full time employment and lived in a traditionally coloured suburb.

> *"I had a partner who stole my cell phone, and so I went to the police to lay a charge. I was surprised that I was so supported. He told me no one must be violated. He gave me this list of things and said you are not going to drop this charge. You are going to court because this guy deserves to be made accountable for this. And the guy I was involved with was a straight guy. He was not even a gay guy. I thought the police officer was so supportive." Participant #2, focus group #2*

Consequences of contextual factors for vulnerability, including HIV exposure

Lack of acceptance and tolerance was reported to contribute to negative health and social consequences for MSM. Service providers and several MSM reported negative mental health consequences of experiencing homophobia.

A white MSM knew several people who had committed suicide. He thought that religious efforts to transform them into heterosexuals and the ongoing discrimination they faced contributed to their suicide. A young black MSM thought that homophobia in Cape Town was common and that it contributed to stress, mental illness and to the high levels of substance use among MSM.

One Moslem participant explained how lack of family support had negative mental health consequences for him.

"My family was not accepting of me and my partner. I went through a deep depression."

Participant #1, focus group #2

Family and community rejection at a young age was found to be associated with a high level of vulnerability. Several focus group participants explained how family rejection forced them to leave their homes with neither financial nor emotional support.

One participant described how exclusion contributed to his economic vulnerability and the challenges he faced to negotiate condom use as a result of disempowerment, resulting in him becoming infected with HIV.

"I was chased out of home at 16. I had to stay with a friend. I wanted to study medicine, but I couldn't, I needed to work. When I was 18 I had my own place, I was working, doing a job that I did not like. I ended up being infected by HIV through all that. He said that we were not going to have sex with a condom, and I had to do it, he was doing everything for me, I had to beg him … I was so stupid then because I could not think straight, because I was having problems, I needed a place to stay"

Participant #3, focus group #4.

Cultural influences may also contribute to HIV-related risk, including having multiple sexual partners, unprotected anal sex and inappropriate lubricant use:

> *"We are being discriminated against. It has pushed us to sleep around, you are not comfortable with this partner, you have to find another one. It is lucky for those that manage to 'come out', because they get all the information. Out there, there is a lot of people who doesn't even want to be close to where the people are talking about MSM things - they do the things in their bed, and they do not want to get the information, they do not get that information. In the area where I stay I invited two guys that I knew that that they are MSM, 'after niners' [MSM who are living in the closet]. I tried to invite them to our meeting, they were 'wow - is it like this?' 'Do you use a condom with another man?' [Many of these people] never knew that you could sleep with a man using a condom. Most of the people do not get that information."*
>
> *Participant #1, focus group #4.*

While levels of tolerance, acceptance and inclusion of MSM was thought to have improved, participants felt that MSM remain vulnerable to violence, assault and rape. Incidents of violence and rape were reported commonly in focus groups conducted among black African MSM. The majority of participants told stories of people they know who had been raped. None of the reported rape survivors were known to have received appropriate health services, including post-exposure prophylaxis (PEP).

Participants reported secondary victimisation of male rape survivors by police officials. A MSM researcher reported an incident involving his friend:

> *"... they gang raped him, he went to the nearest police station. Instead of the police officers wanting to know what had happened, people started to laugh at him; shouting at him. "*
>
> *IDI #3, MSM researcher*

The role of social position

The above findings indicate that some of these contextual factors translate into adverse health impacts quite directly (e.g. mental health problems as a result of rejection). However, some of these findings also suggest that the impact of these contextual factors may be influenced by socioeconomic status, i.e. that the contextual factors have different effects on people from different social classes.

The reported distribution of health reflects broader social issues. The historical separation between South Africans as a result of Apartheid Laws was thought to be an underlying cause of many current inequities.

Wealth and being white were reported to provide a degree of protection against several social factors that contribute to vulnerability to HIV.

A constitutional law expert described this:

> *"The fissures, the inequalities between people within the gay community, the inequalities in broader society is really the template against which everything else is playing itself out. The whiter you are, and the richer you are, the easier it is for you to escape the kind of prejudices, marginalisation, exploitation - even violence, that you may otherwise face being MSM. It is not absolute, but there is more or less a progression. [Among poor people] it is far more difficult for people to live their lives [or] reach their full potential, and there is an inter-sectionality of course between race and class, and it is made worse that they are also identified as gay"*
>
> *IDI #1, constitutional law expert.*

In addition to race, employment status and educational achievement were thought to be particularly important elements of social position. Participants reported high levels of unemployment among MSM. Stigma and discrimination towards MSM within the school system was reported to negatively affect school performance, impacting on career opportunities in later life. A black MSM shared his experience:

> *"Gay people, they are failing at school; because every time you go to school people will be laughing at you. They are [always] giving you that attitude, and you can't concentrate. Every time you are thinking, 'hey, those people, why are they doing this to me?' At the end of the day you lose. Then your life is fucked up - because you fail the exam, you are not free.*

But you cannot compare this with a person who is staying here [in a wealthy area] - he is studying in UCT [University of Cape Town] or an expensive school and no one is looking at him. He is driving a car. He is coming home. Here, [in a poor area] he [would have] stress in school, he has stress where he is staying. You can't attend the church - you have stress everywhere."

Participant #3, focus group #5.

Another participant thought that access to education was directly linked to, and allowed for, increased ability to make autonomous, informed choices.

"People from the suburbs have access to this information - electronic media, print media. They are well aware of gay issues. They will be more well informed; in the township, the percentage that are uneducated, they stick to their tradition, if people move away to the suburb they move away from their culture ... they become psychologically advanced and open, less to stereotypes, but people in the township, they still believe that this [MSM practices] should not be happening, no matter what."

Participant #5, focus group #6.

Most participants believed that the exchange of sex for money, goods and other items commonly occurs among unemployed MSM from lower social positions. Sex work was reported to be a livelihood option for many people from poorer socio-economic backgrounds.

"In the shacks, a challenge is the high rate of unemployment among the gay people living there. They are dependant on their family, they have to do sexual favours to have money, the rate of prostitution there [is high]."

Participant #5, focus group 6.

"They would not have money to go to clubs so some of them may have sex for money, which opens them up to risks for HIV"

IDI #2, MSM programme manager

There were also more general reflections on the relevance of social position and associated power. Access to resources, and influence over other people, were found to be protective against HIV in some contexts, and increase risk for HIV infection and transmission in others. Participants reported that increased resources allowed for increased independence and greater agency to make choices. For example, condom usage seemed to usually be decided by the sexual partner with the most influence. Generally, participants felt that increased power was associated with white MSM compared to coloured and black MSM.

"Because, you must know this boy is vulnerable, he can do anything. If the white guy doesn't want to use a condom, they will just accept it the way it is, and they will have sex without a condom, they do not want to lose all that."

IDI #6, MSM community member.

However, increased access to resources was also reported to be positively associated with increased HIV risk. Additional access to resources was reported to allow for increased access to sexual partners, e.g. through the Internet.

Furthermore, access to social justice was reported to be particularly difficult for MSM from lower social positions. People from lower socio-economic classes were overwhelmingly believed to be at a higher risk of experiencing violence and sexual assault compared to people from higher social classes. A black MSM community member who lived in a township area explained how access to social justice was linked to power:

> *"If you have money, and you go to the police, if they know you, they can take a quick care of you, if you are poor - you are like a dog"*
>
> *Participant #3, focus group # 6.*

Social position and sexual behaviour

Social position was found to have a particularly important influence on sexual behaviour. The associations between sexual behaviour and social position that were identified were complex. In some cases higher social position was reported to be linked with increased ability to enjoy sexual freedom. Greater privacy was associated with wealth. Increasing material wealth was frequently highlighted as being directly associated with being able to find sexual partners, choose sex partners and exchange goods for sex. A MSM service provider explains:

> *"... because they have more access to formal clubs, where it's more expensive or more private, they would access that, they would access places on the internet ... and they can pay for [sexual] services"*
>
> *IDI #2, MSM service provider*

However, as indicated above, some MSM from lower social positions were thought to use sex as a means to fulfil basic needs.

> *"In an area like this [poor area], where people live on top of each other, where people are not educated, don't have the money to access things, they can only do the basics like food, water and electricity. I found that people would do anything to get a bit more money and that would include having sex with someone who does have money."*
>
> *Participant #1, focus group #1.*

Sex was also reported to be used as a means for upward social mobility:

> *"A lot of guys who are impoverished, and youth has a very strong valency - but with a great body and a big cock - [one week] he is in the shelter, the next week he is in Clifton [a wealthy beachside suburb]."*
>
> *IDI #5, MSM programme manager*

Sex in exchange for goods and money was commonly reported. In such contexts the partner providing the goods or money for sex was viewed to have the most power and could influence sexual positioning and condom use.

However, a young, white MSM in a focus group felt that individual characteristics, irrespective of social position, were the most important factors determining if people engaged in high-risk sexual practices.

> *"Being poor does influence a person as they grow up. The quality of the person is not influenced by money. I don't think there's a direct relation [that links risk to money]" Participant #4, focus group #3.*

Other factors influencing sexual behaviour: Alcohol and illegal drug use

Focus group participants reported that alcohol and illegal drugs were widely used by MSM. Several participants reported that alcohol was used for enjoyment. Participants also reported that sexual partners were commonly found in places that sold alcohol. Illegal drugs were also reported to be used by MSM, and used in the context of sexual encounters. Crystal methamphetamine and heroin was reported to be smoked by some MSM and to be associated with unprotected sex.

A focus group participant, who reported to be recovering from heroin dependence, highlighted the use of alcohol and drugs in the context of sexual encounters and the potential risks:

> *"Especially when it comes to man on man action. The ghetto is just drugs and booze, and the bottom picture [wealthy area] is also sex, drugs and booze. You see, that's when your inhibitions drop and you just don't give a shit about protecting yourself. You have massive orgies ... I know I've done a lot of shit since then. A lot of heroin was involved, a lot of stupid mistakes."*
>
> *Participant #1, focus group #3.*

Biomedical HIV prevention interventions

Participants reported that condoms were widely available and that access to lubricant seemed to be increasing. The cost of lubricant was mentioned as a barrier to its use. However, it was reported that MSM who are not linked with MSM-focused organisations have poor levels of understanding around HIV risk and may not always use appropriate lubricant.

The fear of knowing one's HIV status was identified as the main barrier to HIV counselling and testing.

> *"People are terrified of going for an HIV test. I shit myself when I have to. Look, I haven't been for an HIV test since World AIDS Day 2006..."*
>
> *Participant #1, focus group #4.*

A programme manager highlighted how many MSM from lower socioeconomic positions are required to manage high levels of stress and that their resilience is tested on a daily basis. He felt that knowing one's HIV status, particularly if HIV infection is confirmed, adds additional stress on already stressed individuals.

> *"Many MSM I work with, who are most of the poorer guys, would rather not know their HIV status. It is just another fucking ball of shit to deal with in a very hostile world..."*
>
> *IDI #5, MSM programme manager*

Sexual positioning (i.e. being the insertive or receptive partner), which has implications for HIV transmission, did not seem to be fixed.

> *"It doesn't differ much - I will go there I will be bottom or a top"*
>
> *Participant #2, focus group #5*

However, some MSM had preferences, with some gay-identifying MSM stating that they preferred to be the "bottoms" (receptive partner).

> *"I think that it is how you feel, I believe that you should be free when you are having sex. For me I am a bottom, at the end of the day he asks me to Mesha Mesha him [penetrate him] - for what? People must play their part - if you are bottom you are bottom, if you are top you are top."*
>
> *Participant # 3, focus group #5.*

Engagement with the health system

Generally speaking, people from lower social positions reported negative experiences of engaging with the health system for sexual health matters.

Many of the reported incidents related to breaches in confidentiality, privacy as well as stigma and discrimination towards MSM.

> *"I was once in a public clinic and that was my last day, I have never been back. It was a female nurse. How can she make like this and she is a female? I had something on my bum and she said - 'what happened?' 'What were you doing?' I told her that I was gay, and she called other nurses - and I was like 'bitch'. I just left, I could not deal with that." Participant #2, focus group #4.*

Another participant shared his experience after having an HIV test:

> *"I have been through a lot. They had to do a conversation, just when I found out I was HIV [infected]. During the counselling they asked me when did I sleep with a girlfriend. I said that I did not have a girlfriend. Then she looked at me shocked, as if what was I trying to say .... and then I said that I had a boyfriend. She asked if I was not a man. I said that I am a man. Then they called another*

one, in front of me, and phoning another one to hear what I had to say, when they found out I was HIV [infected]. They said how can he not be, he is letting everyone fuck him. Health care nurses were having a conversation in front of me, when I needed their help. From then on I said, 'this is the end', then I needed to go pay for a private doctor. I don't mind spending money for good services - I will be helped 100%. I felt that there must be a hole where I could go deep down [into]. I walked out of the clinic, they said that I must come back for a CD4 count. I was not listening to them. They were just mumbling to me. I will never go back to that clinic. For the past 10 years I have been HIV positive, I have been extremely good - I am not on ARVs."

Participant #4, focus group #4.

Once again, the influence of social position was evident. A MSM research counsellor explained in a focus group that medical and psychosocial service options increase as access to resources increase.

"... in a well off area, you can pay your way to a psychologist and get counselling ... when you have money you would not have any problems in calling up a doctor and paying them for what you need."

Participant #2, focus group #1.

Overall, there was a preference for private health services over public health facilities. Views on the provision of MSM-focused public clinics were mixed. Among younger MSM, who were mostly from lower socioeconomic contexts, there appeared to be a preference for separate clinical services for MSM.

However, several older MSM expressed concerns of further discrimination if separate health services were provided for MSM particularly.

DISCUSSION

Social factors and vulnerability to HIV

Study participants highlighted how the social stratification of MSM and the associated social dimensions (notably education, employment, income, material circumstances and security) plays a central role in increasing or decreasing vulnerability to HIV among MSM in Cape Town. Furthermore, most participants thought that social stratification is largely racially aligned.

Generally speaking, participants believed that lower levels of knowledge, higher levels of unemployment, fewer financial resources, poorer material circumstances and higher security concerns had a greater influence on poorer MSM compared to their wealthier counterparts. In many cases, higher HIV risk practices were thought to occur among MSM from poorer circumstances compared to wealthier MSM. Furthermore, social dimensions associated with social position were thought to be linked to HIV risk practices among MSM. Kalichman et al. found similar links between increasing HIV transmission risk and associations and consequences of poverty (e.g. unemployment, poor living conditions) in peri-urban Cape Town communities (15). The authors found risk differences between people from racially distinct communities. Higher risks were identified among people from black peri-urban communities compared to people from coloured peri-urban communities in Cape Town (15).

Although the socioeconomic status of participants from the different communities was similar, participants from the black community lived in less formal housing compared to people from the coloured community (15). In the context of this study among MSM, black MSM had a lower median income compared to other participants and reported to experience high levels of racism.

Homophobia has been shown to have significant negative health effects on MSM, including self-destructive behaviours, like substance use, unsafe sexual practices and self-harm (18). Homosexuality was illegal under South African Apartheid laws. Subsequently freedom from discrimination on the basis of sexual orientation was included in the South African Constitution. However, many of the hetero-normative social norms and values continue, increasing MSM vulnerability to HIV (16).

In a qualitative study conducted among MSM from peri-urban Cape Town, Jobson et al. found that the negation of masculinity and religious conflicts prevented MSM from disclosing their sexual practices to others (17). This study confirmed the findings of earlier researchers showing how the fear of, and experienced homophobia can prevent MSM from disclosing their sexual practices to others.

Many MSM who are living with HIV experience the effects of stigma and discrimination around HIV. In many cases, HIV-related stigma and discrimination is additional to homophobia and racism (20). In this study poorer MSM were found to rely on the support and resources of family and community members. Poorer MSM were found to be vulnerable to the effects of HIV-related stigma.

Social factors that increase vulnerability to HIV are not unique to MSM. However, the multiplicative effects of social stratification, racism, homophobia and HIV-related stigma were found to increase vulnerability to HIV infection and its consequences among MSM.

Behavioural risk factors for HIV

Several social factors were found to influence the prevalence of unprotected anal intercourse, choice of sexual partners and substance use - risk factors that have been found to be significantly associated with HIV in other studies conducted among MSM in South Africa (3,7,21).

The use of condoms and lubricant and access to HIV counselling and testing (HCT) are cornerstones of combination HIV prevention (22). The study found that MSM in contact with MSM-focused interventions or activities appear to be informed about HIV and STI prevention and treatment options.

Many participants reported positive experiences of undergoing traditional circumcision. Male medical circumcision (MMC) is proven to prevent HIV infection among men through heterosexual intercourse, but its effectiveness among MSM has not been shown (23). Many MSM from peri-urban Cape Town communities have female sexual partners (7,24). MMC may therefore be a valuable HIV prevention intervention among MSM who also have female partners. However, increasing the acceptability of MMC over traditional circumcision among these men and their communities may be challenging.

Violence and rape

MSM from lower social circumstances appear to be at high risk for HIV infection through rape as well as the inaccessibility of PEP and unsupportive police services.

Engagement with the health system

Participants thought that health care options increased with increasing financial resources. MSM from higher social positions were thought to have increased access to HIV prevention commodities and be more likely to test for HIV. Limited access to HIV prevention commodities and HIV testing were reported by black MSM in particular. This finding supports those of a study conducted by Sandfort et al. (2008), where black MSM were found to be less likely to have tested for HIV compared to MSM from other racial groups (26).

MSM experience of the public health system was generally negative. Many participants preferred to pay for private services as a result of unsatisfactory service in public health facilities. MSM participants in other South African studies have reported similar experiences of stigma and discrimination by public sector health workers (19, 27). Jobson et al. found that MSM from poorer Cape Town communities delayed health care seeking practices at public health facilities as a result of experienced discrimination (17).

The South African Constitution is intended to guarantee freedom from discrimination on any grounds, including gender, race and sexual orientation. The Constitution also includes the right to access health services.

However, MSM from lower social classes, particularly black MSM, do not seem to be empowered to realise their Constitutional rights. When MSM access health services, many experience discrimination by health care workers and do not return (17,19 ,27).

Policy options

This study highlights the complex causal pathways leading to HIV infection and related health outcomes among MSM in Cape Town. Additionally, it shows how various factors, like personal characteristics, may alter the effects that social position and power may have on the risk associated with HIV infection. In light of this, no single policy change is likely to result in a reduction in HIV infections and HIV-related morbidity and mortality among MSM. A combination approach is more likely to have an impact on reducing HIV risks.

Social stratification appears to be an important overriding influence. Addressing social inequities is likely to decrease risks of exposure; vulnerability and unequal consequences of disease (28). However, addressing the long lasting consequences of Apartheid cannot be solved within a short time period. Multi-sectoral strategies to address social inequities could be considered as part of a long-term solution.

Decreasing vulnerability and exposure

Efforts to promote social inclusion of MSM could reduce the HIV-related vulnerability they face. Engagement with community leaders, including religious leaders, around the harms of social exclusion, and the related health and social consequence thereof could improve social cohesion and build resilience against HIV infection and improve health outcomes among people living with HIV.

Messaging around the HIV infection risk associated with unprotected anal sex and the benefits of water-based lubricant and condoms for anal sex would benefit MSM and heterosexuals who practice anal sex. Free provision of water-based lubricant at health facilities and other social spaces (including bars and clubs), would increase access to an essential HIV prevention commodity.

The implementation of existing PEP policy and improved referral systems between police services and health facilities is needed.

Sensitising health care workers and police around the issues affecting MSM, particularly violence and rape, could improve the health outcomes of rape survivors.

Policies to enable MSM to be self-efficacious, promote health-enhancing practices and to generate an income are needed. Policies aimed to deepen MSM's understanding of their rights and on how to access health, social and justice services could enhance their agency to make healthy choices.

Increased access to psychosocial and drug treatment services for MSM would lessen the morbidity and mortality associated with untreated substance dependency and other mental health conditions.

Preventing unequal consequences of disease

Policies to make health and law enforcement environments safer and accessible to MSM are needed. As mentioned earlier, service provider sensitisation training and procedures to manage service providers who discriminate against clients could assist in eliminating discrimination from these environments.

Limitations

This study had a small sample size and consisted largely of MSM who had disclosed their sexual practices to others. The first FGD was used to assess the usefulness of images for the FGDs and had two participants, but both participants shared detailed experiences and opinions on most of the aspects that the focus groups were intended to explore. Although saturation was reached after the sixth FGD, additional insights could have been obtained by interviewing other sub-groups of MSM. Quantitative methods could be used to further research identified issues to obtain representative findings.

The majority of participants were recruited through organisations providing services to MSM, and as a result participant perspectives may differ from MSM who are not linked to MSM service organisations. The use of images to initiate discussion in the FGDs worked well to stimulate discussion, particularly around participant opinions and experiences of how social and cultural factors influence them as MSM. The interpretation of the study findings could have been influenced by the experiences and opinions of the lead researcher.

The lead researcher is a white, gay-identified South Africa male with eight years of experience of working with MSM in Cape Town. The lead researcher is a medical doctor and has received additional training in qualitative research methodology. The lead researcher has conducted several interviews and facilitated several focus group discussions with MSM and key informants in previous studies. The lead researcher's training is largely biomedical in nature and he supports health interventions that aim to address health inequities, particularly for marginalised people. This position may have contributed to information bias during the interview process and data analysis, with preference for data that emphasized inequalities and their consequences and the role that biomedical interventions have within the HIV response.

CONCLUSION

Complex multidirectional relationships between the social determinants of health and HIV exist. Overwhelmingly, racially aligned social stratification continues to have a great influence on the distribution of HIV-related illnesses among MSM in Cape Town. Among MSM, discriminatory cultural, religious and societal norms compound their experience of the Apartheid legacy. High levels of violence, rape, mental illness, substance use and delayed treatment seeking are consequences of a hostile social environment. Furthermore, few MSM seem to be empowered to realise their Constitutional rights and to access appropriate services - culminating in a high HIV burden. Interventions that address individual and community social factors could effectively reduce vulnerability, exposure and consequences of HIV among MSM in Cape Town.

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Part D:
Policy brief

Social determinants of HIV among men who have sex with men in Cape Town, South Africa

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Author:
Andrew Scheibe completed the research upon which this brief is based as part of Master in Public Health (Health Economic) degree requirements.

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HEU Policy Briefs present summarised research findings and key policy recommendations on important health care policy issues in Sub-Saharan Africa.

Key Points

- In South Africa, many men who have sex with men (MSM) are socially excluded; increasing their risk of HIV infection and related consequences.
- Programmes that build the social capital of MSM to improve their socio-economic position will reduce the vulnerability of MSM to HIV infection and its consequences.
- Increased knowledge around anal sex and the widespread provision of free condoms and lubricant will reduce exposure to HIV among MSM.
- Efforts to increase social cohesion and acceptance of MSM will reduce barriers to accessing health and support services by MSM.

Introduction

Approximately eight per cent of all new HIV infections in South Africa occur among men who have sex with men (MSM) (1). Unprotected sex, multiple sexual partners, substance use, limited access to condoms and lubricant, limited appropriate HIV-related services and discrimination contribute to the high HIV burden among MSM (2). The Government has committed to addressing the health system inequities that have contributed to the disproportionate number of HIV infections among MSM compared to the general population (3).

In Cape Town, HIV prevalence among MSM is 10-50% (4–6). MSM from peri-urban Cape Town are three times more likely to be HIV infected compared to MSM from the city centre (5). Social factors are the main contributors to differences in HIV burden in various contexts (5). Since 2010, civil society organisations and government have been providing health and psychosocial support services to MSM in Cape Town. However, few interventions address the underlying social factors contributing to differential risk and consequences of HIV infection, limiting the effectiveness of these efforts.

Social determinants of health

Health is influenced by a combination of biological, environmental and social factors (7). Systematic inequities, largely influenced by the socioeconomic and political context, contribute to an individual's and group's position in the social hierarchy.

Social position, and the factors affecting social stratification, contribute to differential vulnerability, exposure and consequences of illness (8). Generally speaking, people with lower social position are more likely to be exposed to disease risk factors, are more vulnerable to the effects of exposure, and experience greater consequences of illness compared to people from higher social positions (7).

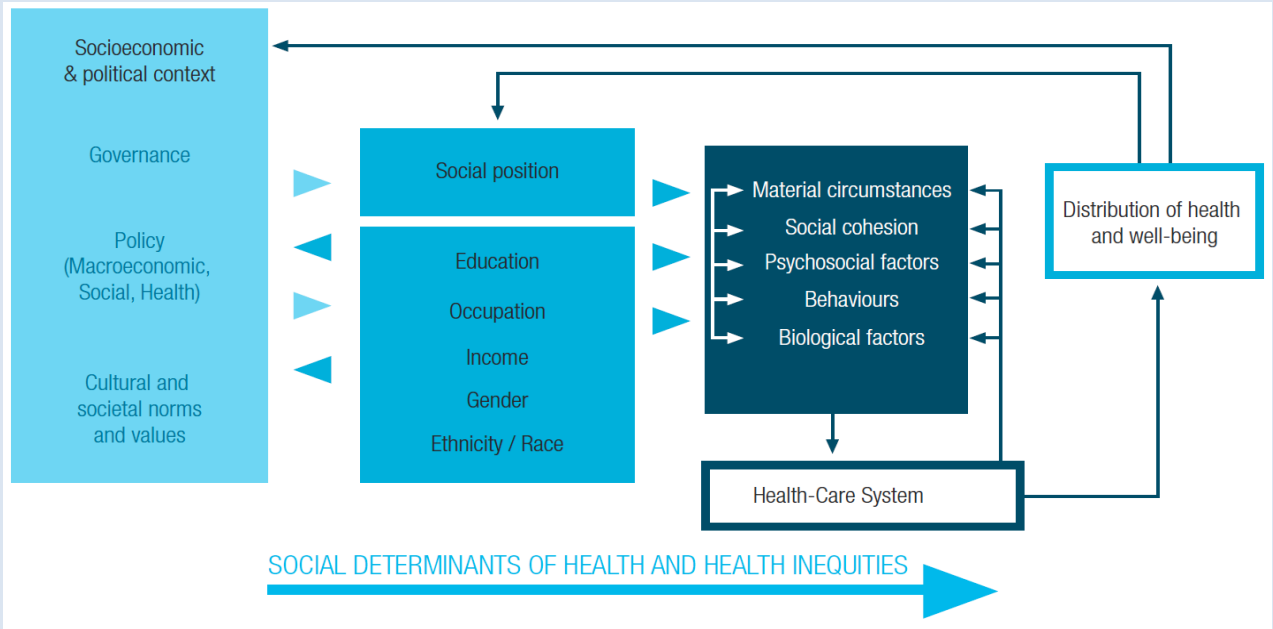
Poorer health outcomes, decreasing access to health services and lower life expectancy are found among people from lower socio-economic circumstances compared to their wealthier counterparts (9). Differences in education, employment, income, material circumstances, behaviours and psychosocial conditions due to social stratification result in differential exposure and vulnerability to disease. Differences in access to health promotive, preventive and treatment services contribute to the consequences of illness and further stratification (9).

The World Health Organisation established a Commission on the Social Determinants of Health (CSDH) in response to the limited emphasis placed on the social determinants of health in health policy and programming. The Commission analysed existing evidence, developed a Framework for understanding the social determinants of health, and developed recommendations to address key social factors linked to health inequities (see Box 1).

Box D-1: Commission on the Social Determinants of Health Framework

The World Health Organisation Commission on the Social Determinants of Health Framework takes socioeconomic and policy context, social position, psycho-social factors and health system engagement into account to explain health inequities (8)

Figure D-1: Commission on the Social Determinants of Health Framework



Methods

A qualitative study was implemented to assess the social determinants of HIV among MSM in Cape Town. The study design was based on the WHO CSDH's Framework. Six interviews with MSM and MSM experts and six focus group discussions with a diverse sample of MSM were conducted in October and November 2012. The University of Cape Town Faculty of Health Sciences' Human Research Ethics Committee approved this study.

Participants

Twenty-five MSM took part in focus groups. The majority (70%) of participants were black African MSM in their mid-twenties. Over half (52%) of the participants had some tertiary education and about a quarter (24%) were in full-time employment. Less than half (40%) lived in Cape Town peri-urban "township" areas. The majority (65%) of the participants' families were supportive of their sexuality. A third (33%) self reported to be living with HIV.

Key findings

Policy

In South Africa, current social inequities are largely the result of Apartheid. MSM experience a range of effects influenced by racially based social stratification.

Many MSM are vulnerable to HIV infection and the negative consequences of HIV. MSM from lower social positions are particularly vulnerable to these effects. An interviewee described this:

"The whiter you are, and the richer you are, the easier it is for you to escape the prejudices, marginalisation and exploitation that you may otherwise face being MSM. It is not absolute, but there is more or less a progression." Interview, constitutional law expert, Cape Town.

Religion, culture, family and MSM

Many MSM participants experienced rejection and social exclusion due to religious, cultural and social influences. Most participants believed that individuals from higher social positions are usually more protected from the effects of social exclusion, as their financial resources enable independence. Participants felt that exclusion, particularly among MSM from lower social positions, contributes to isolation and increases the likelihood of further downward social migration.

Furthermore, participants explained how exclusion creates economic and social barriers to accessing HIV-related services and support. Exclusion was believed to contribute to mental illness and limit access to support structures. Ultimately, exclusion increases vulnerability to HIV infection through disempowerment.

A MSM peer outreach worker described the effects family rejection had on him:

"I was chased out of home at 16. I had to go stay with a friend. I wanted to study medicine, but I couldn't, I needed to work. When I was 18 I had my own place, I was working, doing a job that I did not like. I ended up being infected by HIV through all that. He said that we were not going to have sex with a condom, and so I had to do it, he was doing everything for me, I had to beg him … I was so stupid then because I could not think straight, because I was having problems, I needed a place to stay" Focus group participant, peri-urban Cape Town.

Mental health

Stigma and discrimination based on sexuality was found to contribute to low self-esteem, depression and suicide among MSM participants. Poverty-related stressors were found to compound these negative psychosocial effects.

Socioeconomic status and HIV risk

Participants believed that sex is commonly exchanged for money and goods and is often used for upward social mobility among MSM. However, resource accessibility and inaccessibility were thought to be associated with increased HIV risk. Participants felt that MSM from higher social positions may use their economic power to pressurise sexual partners into having unprotected anal sex. While participants also believed that MSM from lower social positions may be more likely to engage in transactional sex. However, some participants noted that MSM with financial resources may also have increased access to sexual contacts via the internet and in other social contexts, like bars and clubs; increasing opportunities for HIV exposure or transmission.

Alcohol and illegal drug use

Most participants believed that alcohol and illegal drugs (including amphetamine type stimulants, cannabis and heroin) were commonly used by MSM in various social and sexual contexts. Participants stated that some MSM use alcohol and drugs for enjoyment or to facilitate sexual encounters, and others use them as coping mechanisms for managing the effects of stigma, discrimination and homophobia. Participants believed that unprotected anal sex was influenced alcohol and drug use, across social strata.

Several participants believed that MSM from lower social positions were more likely to obtain alcohol and drugs in exchange for sex compared to MSM from higher social positions.

Violence and rape

Participants felt that tolerance towards MSM in Cape Town had improved, but that MSM remained more vulnerable to violence, including rape, compared to other men in the community. MSM from lower social positions reported more experiences of violence and rape compared to MSM with more financial resources. MSM with more money were reported to have better security and be less vulnerable to violence and rape. Few MSM rape survivors were known to have received appropriate health services, including post-exposure prophylaxis (PEP). MSM from higher social positions were thought to have better access to a wider range of psychosocial and support services compared to poorer MSM. Poorer MSM were believed to have less agency to realise their rights to access appropriate services in response to violence, and experienced poor service delivery, compared to wealthier MSM. A participant described secondary victimisation of a MSM rape survivor from a low social position:

"They gang raped him. He went to the nearest police station. [But] the police officers started to laugh at him." Interviewee, MSM researcher, Cape Town.

HIV prevention commodities and services

MSM from lower social positions were believed to have less access to condoms and lubricant compared to MSM from higher social positions, as free lubricant was reported as not being widely available. Poorer MSM felt that they had fewer health seeking options compared to MSM who could pay for health services from a provider of their choice. MSM participants reported several experiences of being discriminated against for being MSM. MSM from peri-urban areas were concerned that their sexual practices would not be kept private and confidential. These experiences and concerns were found to deter people from accessing public services in the communities where they lived; delaying treatment. Many participants through that MSM from higher social positions usually lived nearer to the city centre and could more easily access 'MSM-friendly' services, compared to MSM from lower social positions living in peri-urban areas.

Poorer MSM were found to prioritise other social and wellbeing concerns (including shelter, food and entertainment) above HIV.

MSM from higher social positions were reported to have access to a wider range of support structures compared to poorer MSM. A strong support network was viewed as important for the health and wellbeing of MSM living with HIV. However, the fear of knowing one's HIV status was reported to be a barrier to accessing HIV counselling and testing among the majority of MSM, across the spectrum of social positions.

Limitations

Only a small number of MSM participated in this study and the application of the findings to other MSM or other contexts may be limited. MSM who have not disclosed their sexuality to others or without links to MSM-focused organisations, may face different risks.

Conclusions

- South Africa's social hierarchy remains largely aligned to race.
- Lower social positions are generally associated with an increased likelihood of exposure to HIV, and an increased likelihood of negative consequences of HIV infection.
- Social exclusion of MSM increases their likelihood of downward social migration
- MSM experience the multiplicative effects of differential risks and consequences related to HIV infection that are associated with social position.

Policy recommendations

- Addressing racially-based socioeconomic and health inequities in South Africa will be challenging and will require a long-term commitment from multiple stakeholders.
- Engagement with community leaders, health workers and law enforcement officers to address the health and social consequences of exclusion would reduce vulnerability to, and consequences of, HIV infection among MSM.
- Messaging around the risks of unprotected anal sex and the benefits of condom and compatible lubricant use would increase knowledge around safer anal sex practices.
- The free provision of water-based lubricant and condoms at public health facilities and social spaces would increase access to HIV prevention commodities among MSM in the community.
- The implementation of existing sexual assault and post-exposure prophylaxis policy and sensitive referral of rape survivors between justice and health services would mitigate the effects of rape.

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Part E: Appendices

Appendix 1: In-Depth Interview: Informed Consent Information & Invitation to Participate

Thank you for considering to take part in this study.

The study will be led by Andrew Scheibe, a medical doctor, experienced in working with the men who have sex with men (MSM) community as part of his requirements to complete a Masters Degree in Public Health at the University of Cape Town.

This study will include interviews with MSM experts and focus group discussions with MSM from different backgrounds.

You are being invited to participate in an interview because of your role, knowledge and / or experience of the MSM community in Cape Town.

Why is this study being done?

HIV infections continue to occur among MSM in Cape Town. Social factors (e.g. education, housing, employment) may be contributing to the high number of HIV infections occurring among MSM, and create barriers to service access. A better understanding of these social factors and the way they interact with each other may allow for the development of effective solutions to tackle this problem.

What does this study aim to do?

- Look at the different social positions of MSM from different parts of Cape Town and assess the ways social position and social factors (like education and employment) may be linked to HIV
- The findings will be used to develop suggestions for government to address the social factors found to be important to prevent and manage HIV among MSM

Who can take part?

To take part in an in-depth interview you need to have provided services or support to MSM in greater Cape Town, or self-identify as MSM, and possesses a good understanding and knowledge of the local MSM community and relevant issues.

What will taking part involve?

An hour-long interview

What will happen in the interview?

You will be asked to give permission for the discussion to be recorded and for the researcher to take notes during the discussion. The interviewer will ask questions about your experience in working with or supporting MSM, as well as your thoughts and opinions on the effects of the socioeconomic and policy context; social stratification; material circumstances and behaviours of MSM (and the interactions between them) on how MSM engage with the health system and ultimately the health outcomes they may have. The main health outcome of interest will be HIV. Suggestions of how to tackle the underlying social factors will also be sought.

Recordings will be typed into a word processing document without personal identifiers. Thereafter the recording will be destroyed.

You will also be invited to comment on the analysis of the interview and of the study more broadly.

You are free to not participate at all or to stop participating at any time, without any problems for you.

What are the risks of taking part?

- Some topics under discussion may cause emotional responses
- There is a small chance that the information given here may be obtained by other people, but this is unlikely, and the researcher will do his best to prevent this from happening

What are the benefits of taking part?

- There may be no direct benefits to you for taking part in this study
- The study findings will be used to develop policy recommendation to improve the social determinants of HIV among MSM in Cape Town

Any questions?

If you have any questions about the study, ask the researcher.

You can also contact the researcher (Dr. Andrew Scheibe) at this number: 021 433 2141

If you have any questions or comments about the ethical conduct of this study, you may contact the University of Cape Town Health Science Faculty Human Research Ethics Committee (Prof. M Blockman) at this number: 021 406 6338

Consent to participate: In-depth Interview

I have read and understand the reasons for this study and what participation will include. I understand the risks and benefits of taking part and I have been given the opportunity to ask any question I have.

I hereby give consent to participating in this study

Signed _____

Date_____

Appendix 2: In-Depth Interview Facilitator's Guide

Discussion / Interview Guide

Use these questions to guide the discussion. Let the discussion take its own course, unless it strays too far off topic. Try to cover all of the questions below.

1. Background of interviewee

- *Can you tell me a little about yourself – where you are from, what your experience in working with MSM is, or as a gay person or MSM (as relevant)*

2. Socioeconomic and policy context

- *What are your thoughts on how South Africa's socioeconomic situation influences the social position of MSM - particularly those from historically disadvantaged groups?*
- *How do you think South African cultural and social norms and values influence the social positioning of MSM?*

3. Social position

- *In what ways are education, occupation and income among MSM influenced by their social position?*
- *How do you think these factors influence the "stratification" of MSM on the social ladder?*
- *What role do gender norms and race play in terms of affecting the social position of MSM in society?*
- *How may the identified issues be different for MSM compared to other members of society?*

4. Material circumstances, social cohesion and psychosocial, behavioural and biological factors

- *In what ways do the social positions of MSM influence their material circumstances?*
- *How does this affect their vulnerability to, or exposure to, HIV?*
- *How would you describe the cohesion of the MSM community, and MSM individuals within the larger community?*
- *In what ways does social cohesion or exclusion affect the vulnerability and/ or exposure of MSM to HIV?*
- *How would the practice of transactional sex, or sex be influenced by social position, material circumstances, social cohesion and psychosocial factors?*

5. Engagement with, and experiences of, the health system

- *What are MSM experiences of engaging with the health system (health promotion, prevention, treatment, care and support services)*
- *How may these experiences be influenced by their social position and the resulting differential vulnerability/ exposure they may face?*
- *How does health system engagement in turn influence the material circumstances, social cohesion and behaviours of MSM?*

6. Distribution of health and well-being

- *In what ways do health seeking practices influence HIV testing, retention in care, adherence to ART and disclosure of HIV status among MSM?*
- *How do health outcomes among MSM, particularly HIV, influence their social position and the broader socioeconomic and policy context?*

7. Power

- *What degree of power do MSM have in relation to other members of their family or members of their community?*
- *How do differences in power influence differential vulnerability, exposure and consequence of HIV among MSM?*
- *How do you think violence targeted at MSM is related to the broader socio-economic and cultural context; social positioning; material circumstances and behaviours, and interactions with the health system?*

8. Policy entry points

- *What policy options may be feasible to implement that may influence social stratification?*
- *... and to decrease differential exposure to HIV among MSM?*
- *... and to decrease differential vulnerability to HIV among MSM?*
- *... and to prevent unequal consequences of HIV infection among MSM?*

Closing

Thank interviewee, and advise him/ her that the research team will be in contact with a summary of the findings from the interview to get their input on what was discussed.

Appendix 3: Focus Group Discussion: Informed Consent Information & Invitation to Participate

Thank you for thinking about taking part in this study.

The study will be led by Dr. Andrew Scheibe, a medical doctor, experienced in working with the men who have sex with men (MSM) community as part of his requirements to complete a Masters Degree in Public Health at the University of Cape Town.

This study will include interviews with community members and focus groups of gay men and other MSM from different backgrounds in Cape Town. You are being invited to participate in this study because it may be interesting for you, and you may meet the requirements to take part.

Why is this study being done?

HIV infections continue to occur among MSM in Cape Town. Social factors (e.g. education, living environment and unemployment) may be contributing to the high number of HIV infections among MSM, and may affect their use of health services. A better understanding of these social factors and the way they interact with each other could help us develop better ways to prevent HIV infections among MSM.

What does this study aim to do?

- This study will explore the ways social position ("class") and social factors (like education and employment) may influence behaviour and the sense of community among MSM
- The study findings will be used to develop suggestions to address the social factors found to be important in placing people at risk for HIV.

Who can take part?

To take part in a focus group discussion you need to have been born male, be over 18 years old and have had some form of sexual contact with another man in the last 12 months.

What will taking part involve?

A group discussion will last for about 1 to 1.5 hours

What will happen in the group discussion?

You will be asked to fill out a form with some of your background information. You will also be asked to write down your HIV status. You may choose to not complete any of the questions on the form. No names, addresses or dates of birth will be recorded. All information collected will be handled with care, confidentiality and respect.

You will be asked to give permission for the discussion to be voice-recorded. The researcher and research assistant will take notes during the discussion. Once this has been done, the discussion leader will start the discussion by asking a few questions, show pictures and guide the discussion.

How will my information be kept confidential?

People taking part in the discussion should feel free to say anything. It is important that participants respect the opinions and comments of others. It is important that none of what is said in the discussion is shared with other people.

The recording will be translated into English if needed. Recordings will be typed into a computer without names. The recording will then be destroyed. No names will be used when the information is put onto a computer or studied.

You may choose to not take part at all or you may stop participating at any time, without any problems for you.

What are the risks of taking part?

- What is mentioned in the discussion may be mentioned outside by others.
- Some topics under discussion may cause emotional responses.
- There is a small chance that the information given here may be obtained by other people, but this is unlikely. The researchers will do their best to prevent this from happening.

What are the benefits of taking part?

- There may not be any direct benefit to you for taking part.
- These discussions may help some people share their feelings, and get support of others.
- The study findings will be used to improve the health and other service provision in South Africa.
- Participants will be given R50 to cover their transport and will be given refreshments.

Any questions?

If you have any questions about the study, you can ask the researcher. You can also contact the researcher (Dr. Andrew Scheibe) at this number: 021 433 2141

If you have any questions or comments about the ethical conduct of this study, you may contact the University of Cape Town Health Science Faculty Human Research Ethics Committee (Prof. M Blockman) at this number: 021 406 6338

Consent to participate: Focus group discussion

I have read and understand the reason for the study and what participation will include. I understand the risks and benefits of taking part and I have been given the opportunity to ask any questions I have. I hereby give consent to participating in this study.

Signed _____

Date_____

Appendix 4: Focus Group Discussion Facilitator's Guide

Discussion / Interview Guide

Use these questions to guide the discussion. Let the discussion take its own course, unless it strays too far off topic. Try to cover all of the questions below.

1. Background of participants

- *We would like to get to know a little about the different people taking part in this discussion. Please fill out the form. NO NAMES to be written on the form! Do not show others your responses.*

2. Socioeconomic and policy context

- *Show images of the below items and request input from the group on how these things may have affected, or may be affected by, current laws, programmes and cultural norms and values for MSM. For each one ask how the social position (education, occupation, income, race, family situation) of MSM may be affected by these factors*

    - The South African Constitution
    - Picture of gays getting married
    - Picture of Xhosa boys ready for initiation/ circumcision

3. Social position

- *Show images below, and state that in each house a gay man/ MSM lives - in very different "social positions"/ "classes". And that these houses and the men living in them are from South Africa.*

    - An informal settlement
    - A wealthy neighbourhood near the sea
- *Ask the participants if they think there are any differences between the men who may live in these different houses, and what causes the differences and how each man's life may be different from each other*

- *If no mention of power is made, ask if the power between these men is different*

4. Material circumstances, social cohesion and psychosocial, behavioural and biological factors

- *Show images of the below items and request input from the group on how these things may be linked with social position ("class"), and how this social position may influence material circumstances; sense of community/ exclusion; psychosocial factors; behaviours and biological factors*

    - Alcohol & a party
    - Condoms
    - The police
    - A gay pride event

- Image of someone who is depressed

[note: prompt around who these factors may be linked to differential exposure, vulnerability and consequences if not expressed by participants]

5. Engagement with, and experiences of, the health system

- *Request thoughts from the group on how it is for MSM/ gay men to engage with the health system (getting condoms & lubrication, getting treated for a medical condition)*
- *Request thoughts on getting tested for HIV, HIV disclosure, taking ART as a gay man/ MSM*
- *Ask if there are ways that a gay man's/ MSM experience of getting health services may affect his behaviour, social cohesion/ exclusion, mental health, and if so, how*
- *Enquire about how use and experiences of using health facilities may be different for MSM from different social groups (link back to pictures from # 3)*

6. Distribution of health and well-being

- *Stimulate discussion on how treatment from a health facility/ clinic (specifically for HIV) may have an influence on ill health*

7. Experiences of homophobia

- *If time allows and if discussions of homophobia have not occurred, enquire about homophobia and refer to recent murder of gay men.*
- *Stimulate discussion around what may have been the root cause for these murders, how this may be linked to other hate crimes targeting the Lesbian Gay Bisexual Transgender and Intersex Community.*
- *Explore how the socioeconomic context; social position; material circumstances; social cohesion; psychosocial factors; behaviours and engagement with the health system may be linked to similar hate crimes, and what effects these may have*

Thank participants for their time

Appendix 5: Images used in Focus Group Discussions

Socialising networks

Daily circumstances

Appendix 6: Focus Group Discussion Demographic Information Sheet

Focus group no: _____ Date: _____

Please DO NOT PUT YOUR NAME on this form. *Fill in your answers below*

1	**How old are you**	_____ (years)			
2	**What religion do you belong to**	Christian	Moslem	Other (Specify) _____	Not religious
3	**What level of education do you have**	Primary school	High school	Matric	University/ college
4	**Are you working at the moment?**	Full time work	Part time work	Odd jobs	Not working
5	**How much money do you have per month to spend on yourself?**	R _____			
6	**Do you give most of the money to support the family?**	Yes	No		
7	**After your schooling (or attending university/ college) what is the longest time you have not had work for?**	_____ (months)	I have always had work	I have never worked	
8	**Where do you live (suburb or area)**	_____			
9	**How many people live in your home with you?**	_____			
10	**Who do you live with?**	Parents/ other family	Sexual partner	Friends	Alone
11	**How many of these people are working?**	_____			
12	**Are any of the people who live with you living with HIV?**	Yes	No		
13	**Do the people you live with know you have sex with men?**	Yes	No		
14	**Do you think that your family members are supportive of this?**	Yes	No		
15	**Do you know what your HIV status is?**	Yes	No		
16	**If so, circle your status**	HIV positive	HIV negative		

Appendix 7: Ethics approval letter

UNIVERSITY OF CAPE TOWN

Faculty of Health Sciences
Human Research Ethics Committee
Room E52-24 Groote Schuur Hospital Old Main Building
Observatory 7925
Telephone [021] 406 6338 • **Facsimile** [021] 406 6411
e-mail: lamees.emjedi@uct.ac.za

16 October 2012

HREC REF: 460/2012

Dr A Scheibe
C/o Prof D McIntyre
Health Economics Unit
Public Health & Family Medicine

Dear Dr Scheibe

PROJECT TITLE: THE SOCIAL DETERMINANTS OF HIV AMONG MEN WHO HAVE SEX WITH MEN IN CAPE TOWN

Thank you for your response to the matters raised by the Faculty of Health Sciences Human Research Ethics Committee dated 15 October 2012.

It is a pleasure to inform you that the Ethics Committee has **formally approved** the above-mentioned study.

Approval is granted until 31 October 2013.

Please submit to the HREC a Progress Report Form if the study continues beyond the approval period. Please submit a Closure Report Form on completion of the study. (Forms can be found on our website: http://www.health.uct.ac.za/research/humanethics/forms/

Please note that the ongoing ethical conduct of the study remains the responsibility of the principal investigator.

Please quote the REC. REF in all your correspondence.

Yours sincerely

PROFESSOR MARC BLOCKMAN
CHAIRPERSON, FHS human research ethics committee

Federal Wide Assurance Number: FWA00001637.
Institutional Review Board (IRB) number: IRB00001938

This serves to confirm that the University of Cape Town Research Ethics Committee complies to the Ethics Standards for Clinical Research with a new drug in patients, based on the Medical Research Council (MRC-SA), Food and Drug Administration (FDA-USA), International Convention on Harmonisation Good Clinical Practice (ICH GCP) and Declaration of Helsinki guidelines.

The Research Ethics Committee granting this approval is in compliance with the ICH Harmonised Tripartite Guidelines E6: Note for Guidance on Good Clinical Practice (CPMP/ICH/135/95) and FDA Code Federal Regulation Part 50, 56 and 312.

460/2012: 16/10/2012: approval

Appendix 8: Journal instructions for authors

Springer www.springer.com

Public Health | AIDS and Behavior - ind. option to publish open access

AIDS and Behavior

Editor: S.C. Kalichman

ISSN: 1090-7165 (print version)
ISSN: 1573-3254 (electronic version)

Journal no. 10461

Instructions for Authors

Instructions for Authors

AIDS and Behavior

Manuscript Submission

Seth C. Kalichman, Ph.D.

Center for HIV Prevention & Intervention

2006 Hillside Road, Unit 1248

University of Connecticut

Storrs, CT 06269

Email: aidsandbehavior@yahoo.com

Submission is a representation that the manuscript has not been published previously and is not currently under consideration for publication elsewhere. A statement

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AIDS and Behavior now offers the opportunity to publish abstracts for articles in English and Spanish. Although not required, I am hoping that you will take advantage of this chance to broaden access of your work. If you would like to include your Abstract in Spanish, please be sure that your Abstract is in the proper format and finalized. Be sure to remove all subheadings from the Abstract so that it reads as a continuous narrative of no more than 150 words in English. Then translate your final Abstract into Spanish. Upload the English version in the Editorial Manager System step for Abstracts and include both the English and Spanish versions in your Manuscript file that you upload into the system. The two abstracts should be placed together, first the English followed by the Spanish on a separate pages. Label the Spanish

version "Resumen".

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- A title page is to be provided and should include the title of the article, authors name (no degrees), authors affiliation, and suggested running head. The affiliation should comprise the department, institution (usually university or company), city, and state (or nation) and should be typed as a footnote to the authors name. The suggested running

  head should be less than 80 characters (including spaces) and should comprise the article title or an abbreviated version thereof. For office purposes, the title page should include the complete mailing address, telephone number, fax number, and email address of the one author designated to review proofs.
- With the exception of Brief Reports and Behavioral Surveillance Reports, initial submissions to AIDS and Behavior do not have word or page limits. Briefer and more succinct papers tend to review better and papers may be reduced in length as part of the review process. However, the length of the original submission is left to author discretion.
- An abstract is to be provided, preferably no longer than 150 words.
- A list of 4-5 key words is to be provided directly below the abstract. Key words should express the precise content of the manuscript, as they are used for indexing purposes.
- All sections should carry headings (such as INTRODUCTION, METHODS, RESULTS, DISCUSSION, CONCLUSIONS, etc.), typed flush left. All acknowledgments (including those for grant and financial support) should be typed in one paragraph (so−headed) on a separate page, that directly precedes the References section.
- Illustrations (photographs, drawings, diagrams, and charts) are to be numbered in one consecutive series of Arabic numerals. The captions for illustrations should be typed on a separate sheet of paper. All illustrations must be complete and final, i.e., camera-ready. Photographs should be large, glossy prints, showing high contrast. Drawings should be high quality laser prints or should be prepared with india ink. Either the original drawings or good−quality photographic prints are acceptable. Artwork for each figure should be provided on a separate sheet of paper. Identify figures on the back with authors name and number of the illustration. Electronic artwork submitted on disk should be in the TIFF or EPS format (1200 dpi for line and 300 dpi for halftones and grayscale art). Color art should be in the CYMK color space. Artwork should be on a separate disk from the text, and hard copy must accompany the disk.
- Tables should be numbered (with Roman numerals) and referred to by number in the text. Each table should be typed on a separate sheet of paper. Center the title above the table, and type explanatory footnotes (indicated by superscript lowercase letters) below the table.
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1) McKirnan DJ, Vanable PA, Ostrow DG, Hope B. Expectancies of sexual "escape" and sexual risk among drug and alcohol-involved gay and bisexual men. J Subst Abuse. 2001;13(1-2):137-54.

2) van der Straten A, Cheng H, Moore, J et al. The use of the diaphragm instead of condoms in a phase III diaphragm trial. AIDS Behav. 2009; 13(3):564-72.

3) Eaton LA, Kalichman SC. Changes in transmission risk behaviors across stages of HIV disease among people living with HIV. J Assoc Nurses AIDS Care. 2009 Jan-Feb;20(1):39-49.

4) Bangsberg D, Hecht F, Charlebois E, Chesney M, Moss A. Comparing objectives measures of adherence to HIV antiretroviral therapy: electronic medication monitors and unannounced pill counts. AIDS Behav 2001, 5:275–281.

5) Richman D, Bozzette S, Morton S, et al. The prevalence of antiretroviral drug resistance in the US. Interscience Conference on Antimicrobial Agents and Chemotherapy. Chicago, 2001 [abstract LB-17].

6) Hirsch MS, D’Aquila RT, Kaplan JC. Antiretroviral therapy. In: DeVita VT, Hellman S, Rosenberg SA, eds. AIDS: Biology, Diagnosis, Treatment and Prevention. 4th ed. Philadelphia, PA: Lippincott-Raven; 1997.

7) Ray SC. Simplot for Windows, version 2.5. Available at: http.//www.med.jhu.edu/deptmed/sray/download/. Accessed November 7, 2001.

Verify that every instance of a number in text corresponds to the numbered reference.

Footnotes should be avoided. When their use is absolutely necessary, footnotes should be numbered consecutively using Arabic numerals and should be typed at the bottom of the page to which they refer. Place a line above the footnote, so that it is set off from the text. Use the appropriate superscript numeral for citation in the text.

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Appendix 9: Overview of MSM programming in South Africa

MSM-focused health services

MSM-focused clinical services are provided at specialist MSM clinics in Cape Town, Johannesburg and Soweto, through the ANOVA Health Institute's Health 4 Men Programme. Services include HIV counselling and testing, HIV treatment, care and support and STI and TB related services. Specialist mental health and drug treatment services are also available (92). ICAP Mailman School of Public Health at Columbia University (ICAP) has established a MSM-focused clinic at the Durban Gay and Lesbian Centre (93). OUT Wellbeing and The Triangle Project are the most established MSM service providers. OUT has been providing comprehensive services to MSM in Pretoria and the Triangle Project for MSM and LGBTI people in Cape Town for almost 20 years. Current services include onsite HIV counselling and testing, HIV care and support (94)(95).

Outreach services for MSM

The Health 4 Men programme and ICAP support peer based MSM service provision in eight provinces (Eastern Cape, Free State, KwaZulu-Natal, Gauteng, Limpopo, Mpumalanga, Northern Cape and Western Cape). These services are focused on HIV prevention messaging and the provision of condoms and lubricant, HIV testing and referral to HIV services. More recently, grassroots LGBTI organisations have been established across the country and provide peer-based HIV prevention services and linkage to services [1] (93).

[1] Grassroots organisations working with MSM not mentioned in the text: KwaZulu-Natal: the Durban Lesbian and Gay Community and Health Centre; Gay and Lesbian Network. Eastern Cape: Eastern Cape Gay and Lesbian Association; Masumpume. Free State: Rainbow Seeds Free State; National LGBTI campaign; South African Gay & Lesbian Alliance

Health Worker Sensitisation

Health care worker sensitisation training has been implemented by several organisations (including the ANOVA Health Institute, the Desmond Tutu HIV Foundation, ICAP, NACOSA and OUT) to address health worker attitudes towards MSM. Sensitisation training aims to address stigma and discrimination by health workers towards MSM, thus fostering enabling environments for health care access (92,96,97).

Clinician competency training

Organisations providing sensitisation training have also partnered with the national and provincial departments of health to provide MSM competency training for clinicians. Clinical competency training aims to ensure evidence-based, appropriate care is provided to MSM who access health care services (92,96).

Against Defamation. Gauteng: GALA. Limpopo: Limpopo LGBTI. Northern Cape: LEGBO; Masibonane Men's Organisation. North West: Gay Umbrella. Western Cape: The Triangle Project; The Inner Circle.