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HIV, AIDS prevention and class and socio-economic related factors of risk of HIV infection

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**HIV/AIDS prevention
and 'class' and socio-economic
related factors of risk of HIV infection**

von

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mit einem Vorwort von Rolf Rosenbrock

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Abstract

Trotz einer Vielzahl präventiver Bemühungen ereignen sich nach wie vor HIV-Infektionen. Nachdem sich die Epidemie ursprünglich hauptsächlich unter schwulen Männern der Mittelschichten ausgebreitet hatte, erstreckt sie sich zunehmend auch auf Menschen aus unteren Sozialschichten. Infolge dessen tragen derzeit Menschen mit niedrigem Sozialstatus ein höheres Risiko im Hinblick auf die HIV-Infektion. Zudem verfügen sie im Falle einer Infektion über geringere Möglichkeiten der Belastungs- bzw. der Krankheitsbewältigung.

Die Gruppe der schwulen Männer entwickelte von Beginn an kollektive Antworten auf die Bedrohung durch HIV und begrenzte auf diese Weise erfolgreich die Anzahl von HIV-Infektionen in ihren Reihen. Menschen mit niedrigem sozialen Status scheinen dabei von Präventionsbotschaften weniger erreicht zu werden, sei es weil diese Botschaften an ihnen vorbeigehen, sei es, weil die Botschaften für sie weniger verständlich übermittelt wurden oder sie es, weil diese nicht hinreichend auf den sozialen und kulturellen Kontext dieser Gruppen bezogen sind. Möglicherweise haben Präventionsprogramme sozio-ökonomische und schichtenspezifische Unterschiede sowie ihre Implikationen in Hinblick auf HIV/Aids nicht hinreichend berücksichtigt.

Der vorliegende Literaturbericht gibt einen Überblick über Befunde zu schichtspezifischen Unterschieden und Faktoren in ihrem Verhältnis zur HIV-Infektion. Es werden Gründe herausgearbeitet, die das erhöhte Risiko einer HIV-Infektion bei Menschen aus unteren Sozialschichten sowie den begrenzten Erfolg von Präventionskampagnen in diesen Bevölkerungsgruppen erklären können. Außerdem werden Interventionsstrategien vorgestellt, mit denen die sozial bedingten Unterschiede des Risikos einer HIV-Infektion überwunden werden könnten.

Der Bericht benennt Wissenlücken in Hinblick auf Faktoren, die die unterschiedliche Vulnerabilität unterschiedlicher Bevölkerungsgruppen im Hinblick auf die HIV-Infektion erklären können. Benötigt werden mehr sorgfältig begleitete und evaluierte Interventionen, die auf die Verbesserung von Lebens- und Arbeitsbedingungen benachteiligter Gruppen abzielen, um ihre Vulnerabilität gegenüber Erkrankungen allgemein und speziell der HIV-Infektionen senken. Gleichzeitig sollten beim Entwurf und der Weiterentwicklung von Präventionsbotschaften der Wissensstand und die Lebensbedingungen von Menschen in unteren Sozialschichten stärker berücksichtigt werden. Auch fehlt es an Wissen über Zusammenhänge zwischen sozio-ökonomischem Status einerseits sowie der Lebensqualität und Lebenserwartung nach einer HIV-Infektion andererseits. Einstellungen zum HIV-Antikörpertest, Zugang und Qualität der Krankenversorgung könnten im erheblichen Umfang durch sozio-ökonomische Unterschiede beeinflusst sein. Dies beleuchtet noch einmal die besondere Bedeutung verbesserter Primär-Prävention für untere Sozialschichten.

Danksagung

Ich bedanke mich bei all jenen, insbesondere bei Angela Burnett, Reinhold Gruen, Rainer Herrn, Rolf Rosenbrock und Ben Webb, die mich durch wertvolle Hinweise zur Gliederung, zum Inhalt und zur Begrifflichkeit früherer Fassungen dieses Papiers unterstützt haben.

Abstract

Despite a multitude of prevention activities people continue to be infected by HIV. The epidemic which initially emerged among middle class gay men seems to have shifted toward working class people. Subsequently, people with lower socio-economic background seem to be more at risk of HIV infection and to have fewer possibilities to cope with the risk of HIV infection.

The gay community quickly developed a collective response to the threat of HIV and successfully limited the infection with HIV among its members. People with lower socio-economic background seem to have been reached less by prevention messages, either because these messages might not have been accessible to them or they have not been well understood or not related to the social and cultural context of these population groups. Prevention programmes might not have taken into account possible class and socio-economic differences and their implications on HIV/AIDS.

This literature review provides an overview on what is known about class and socio-economic factors and their influence on HIV infection. It explores reasons why prevention intervention have had limited success and identifies factors which increase the risk of HIV infection. It also presents intervention strategies to overcome social inequalities in relation to HIV infection.

The report concludes that more information is needed on the factors which make people vulnerable to infection with HIV. More evidence-based interventions need to be developed and implemented to improve the living and working conditions of disadvantaged people in order to decrease their vulnerability to HIV infection and illness in general. At the same time, prevention messages need to be designed and adapted to the knowledge level and culture of people in working class settings. It is further recommended to look more in detail at the effect of socio-economic status in quality of life and life expectancy once a person is infected with HIV. Attitudes towards testing, access to health care and quality of health care may be strongly influenced by socio-economic differences, which highlights the importance of improved prevention interventions.

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0. Preface

by Rolf Rosenbrock

When public and political attention began to home in on the Aids epidemic in the early to mid-eighties and the paths of HIV transmission appeared, for the most part, to have been cleared up, the important thing was to decide what model should be used to organize the prevention of HIV infections. There are, in principle, two alternative possibilities. The “classical strategy for handling epidemics” based on the “old public health” paradigm (also called the search strategy or control and containment approach) looks for answers to the main question: how do we determine all the sources of infection as fast as possible, and how do we close them down? It contrasts with the relatively new health-sciences approach based on the logic of “new public health” (also called the learning strategy or inclusion and cooperation approach) that is guided by the main question: how do we organize population-wide social learning processes in as fast and time-stable a way as possible, processes in which individuals, groups, institutions and the whole of society adjust to life with the virus with maximum minimization of risk while avoiding exclusion and discrimination?

Civil-rights arguments and considerations about the effectiveness of prevention were crucial to the decision that was reached in nearly every country of the world, programmatically at least, in favor of new public health, the learning strategy – after national debates that were conducted with different degrees of harshness and controversy. It necessitated the development and implementation of social innovation: self-organized systems of incentives aiming at a group-related establishment and strengthening of social norms conducive to risk-avoidance and solidarity were to be created and stabilized by constant public education about the risks and the ways to avoid them – with priority utilization of personal communication and consultation. In this model the importance of the medical system and of repressive tools designed for coercive use took a backseat to respect for and support of the target groups’ life styles and milieus. That is why in most countries organizations of the groups mainly affected were also given a prominent role in the conception and implementation of primary prevention.

Above all, however, the basic health-policy decision implied the necessity to organize publicly communicated learning processes in order to influence peoples’ behavior in areas involving taboos and feelings of shame. This task was tackled in numerous countries in often surprisingly creative fashion with effective cooperation between the concerned parties’ organizations, social scientists and state agencies. Numerous models of behavioral prevention were developed, these models being differentiated according to paths of transmission and thereby oriented to the three most important target groups in epidemiological terms (gay men, intravenous drug users, the heterosexual population). Those models often transcended merely behavioral

approaches by taking into account relevant factors of the social environment of these groups.

In the course of this development the concepts changed and became more refined: the original focus on risk groups shifted to risk situations. Different mixtures of motives were discovered behind the situations in which risks are encountered. This was accompanied by problems involving intent as well as the conditions that inhibit or are conducive to the formation of such intent in terms of individual and social psychology. Phases of life (e.g. youth), power structures (e.g. between men and women), elementary mental states (e.g. being in love), elements of life styles (e.g. scenes, meeting places), orientation of the relations involved (e.g. matrimonial, romantic, prostitution-like, hedonistic), types of social embeddedness (e.g. sexual networks), coping resources (e.g. self efficacy), types of risk perception (e.g. danger vs. risk) commodity-type relationships (prostitution), sequestration experiences (e.g. stigma management), etc. were, in view of their significance and ability to be manipulated for preventive purposes, included in the scientific investigation and sometimes also used for the implementation thereof.

Great scientific and practical attention was also given to the channels and forms of the message imparted by the media. Only some of this knowledge may have gone into practical intervention, but it would still seem plausible to attribute a notable portion of the indisputable preventive success to this constant refinement and the interventions based thereon.

Surprisingly, refinement of the target-group concept and consideration of psychosocial factors influencing behaviour, were not matched by any similar development in regard to the social differences within the target groups. The fact, for instance, that gays and junkies are also found throughout every social class (however that may be defined) was given far less attention. And, as is usually the case when no thought is given to socially related differences in the conditions underlying peoples' lives and the resulting differences in their perception and actions, the concepts and methods of Aids prevention were often infiltrated, without any questions being asked, by the conceptions of mankind, forms of communication, styles of congregation, value systems, ideals of beauty, etc. of those who produced the respective campaigns and messages. As a result, Aids prevention in industrialized countries often turned into an event sponsored by members of the middle classes for members of the middle classes. Socially related inequalities of health-specific opportunities were formulated and dealt with in some countries (primarily the USA and, in part, in Great Britain as well) mainly as problems of ethnic groups, but, above all in terms of a global relationship, as inequality between the south and north, and much less so as a challenge to rich and industrialized countries.

This approach is running up against its limits as new HIV infections increasingly occur with disproportionate frequency in the lower social classes of developed industrial societies as well. Aids is therefore taking the path of all contagious diseases. It can be seen that orientation to the groups affected will have to be supplemented with the intersecting criterion of different social classes.

That confronts science, practice and politics with challenges that may appear unfamiliar in respect to HIV/Aids but which, in fact, represent the link-up of Aids prevention with the public health agenda. The reduction of socially related inequality in health opportunities has always held a prominent position there. And for good reason: after all, for instance, in all phases of life members of Germany's bottommost fifth of the population, as defined in terms of education, occupation and income, run approximately twice as much risk of falling seriously ill or dying as members of the topmost fifth.

The development of concepts and the practice of Aids prevention will have to connect with this challenge to public health and health policy, a challenge that rests on epidemiological facts. This implies attention to different class-specific life situations with their implicit differences in forms of perception, motivation, styles of communication and health resources. That means attention is now focusing as well on the concept of health promotion formulated in the Ottawa Charter of WHO (1986), which aims at the development and structural enabling of social and health-related self-determination – with suspension of risk-specific strategies. Class-specific concepts and forms of intervention oriented to target groups could find a common roof under this paradigm.

With greater attention being paid to social differences within the groups targeted for prevention the phase of "Aids exceptionalism" should draw to an end and "normalization" should be pushed. The social innovation of Aids prevention will remain a torso if attention is not given to socially related inequality in the conditions of peoples' lives.

The report by Lisa Luger (Imperial College, London, UK) therefore embeds her portrayal and discussion of class-specific differences in the effectiveness of Aids prevention in the general debate about equity and health. It can only be hoped that it will help to strengthen the theoretical and practical efforts being made to lessen this inequality.

Berlin, March 1998

1. Introduction

1.1 Background

There are indications that despite a multitude of prevention activities people continue to be infected by HIV. Prevention programmes seem not to be as successful as intended. One possible explanation is that prevention programmes have focused on risk behaviour and behaviour change rather than considering factors which may encourage risk behaviour or make individuals vulnerable to infection with HIV. This could be factors such as poor education, poor living and working conditions and poverty. Another explanation is that prevention messages have failed to reach certain disadvantaged population groups. The messages may not have been accessible to certain groups, have not well been understood by them, or have not been related to their social and cultural context, and therefore have not been perceived as relevant to them. Prevention programmes may not have taken into account possible class- and socio-economic differences and their implications on HIV/AIDS.

1.2 Aims

This work aims to provide an overview of what is known about class- and/or socio-economic factors and their influence on HIV infection. It presents reasons why prevention interventions have had limited success and draws on the complex factors which may limit behaviour change. It tries to find an answer why there has been a reluctance to study social inequalities in connection with HIV, and stresses concerns around racism, paternalism and ignorance. Finally it aims to provide recommendations how prevention strategies could be improved in order to more successfully prevent HIV infection.

1.3 Methodology

This report is based on a review and analyses of international published reports and literature on this subject.

Several data bases have been used via Internet to access a wide range of publications (Medline, Medline express, Somed, Internet publications from WHO, UNAIDS, and UNDP, databases of libraries at King's Fund, London, London School of Hygiene and Tropical Medicine, and Health Education Authority, London).

Keywords for the search were HIV prevention in relation to socio-economic factors, socio-economic status, class differences, socio-economic differences, marginalisation, disadvantaged population groups, knowledge level, unemployment, and poverty. Researchers active in the field have been contacted, and unpublished papers, conference presentations and grey literature were included.

Although the main focus is on European countries, examples from other industrialised countries, and also from some developing countries are included to illustrate the findings.

1.4 Structure

Background information is given in Chapter 2 on the context of the subject and the dimension of the HIV/AIDS epidemic. It will be pointed out that HIV infection is continuing despite extensive prevention programmes, and cited as possible explanations that prevention programmes may have focused solely on behaviour change rather than taking into account possible class and socio-economic differences and their implications on HIV/AIDS.

Chapter 3 provides a definition of class and discusses the implications of class- or socio-economic inequalities in health.

Chapter 4 considers the relation of class and socio-economic related inequalities to the risk of HIV infection. On the basis of the available literature an overview is given on what is known about socio-economic differences among people with HIV/AIDS, focusing on different population groups at risk, such as ethnic minority groups, drug users, women and gay men. An excursus looks at the effect of socio-economic status once a person is infected with HIV, in respect to access to health care, health status and disease progression.

Chapter 5 identifies from the available literature factors which explain the diverse effectiveness of prevention intervention, such as sexual identity, the importance of social networks, or cognitive issues.

Chapter 6 presents strategies how to improve prevention programmes in order to overcome social inequalities in relation to HIV infection.

The final analysis identifies gaps in the research information and offers recommendations where additional information is needed, where to explore more in detail the implications of socio-economic inequalities on HIV infections and the consequences for prevention interventions.

2. Background

2.1 Dimension of the HIV/AIDS Epidemic World-wide

“*AIDS is not over, not even close*”, admitted Peter Piot, Executive Director of UNAIDS, at the World Economic Forum, in Davos, 3 February 97.

On the contrary, the HIV/AIDS epidemic is expanding. The latest UNAIDS report on the Global HIV/AIDS Epidemic estimates for the year 1997 5.7 million newly infected people, with close to 16,000 new infections per day, and a total number of people living with HIV/AIDS of 30,6 million and 11.7 million AIDS deaths since the onset of the epidemic. 46 % of the 2.3 million people who died of AIDS in 1997 were women (UNAIDS 1997).

However, the virus is not equally distributed. There are important differences in the spread: socially and geographically, within communities and countries, and also between them. The overwhelming majority of HIV infected people (more than 90 %) live in the developing world, where HIV is spreading explosively. In some places the epidemic has just started, e.g. in Eastern Europe and China, and the numbers of infected people are still low. Most infected people live in Sub-Saharan Africa (20.8 million) and in South and South East Asia (6,0 million). North America counts an adult prevalence rate of 0,6 % with 860.000 total infections, Europe reports only 0.3 % with 530.000 infected people (UNAIDS Report 1997).

Whereas in developing countries heterosexuals, prostitutes, intravenous drug users (IDUs) are the main population groups at risk, in North America, Australia, and Europe gay men still remain the most affected population group, but injecting drug users also play an important part in the dynamics of the epidemic.

In the USA in recent years the HIV epidemic has slowed down, partly due to a decrease in sexual transmission between men as a result of behaviour change, although the HIV prevalence is still high. HIV prevalence among IDUs (injecting drug users) has decreased, but there is an increasing number of heterosexuals diagnosed of being infected with the virus, and children being infected through mother to child transmission. Although there has been an overall slow down in AIDS incidence, a substantially shift in the populations affected has been recognised: The AIDS incidence in the USA was found to be 6,5 times greater for black people and 4 times greater for Hispanics than for whites (Vancouver 1996).

In Europe, the AIDS incidence seems to have stabilised in several countries in north-western Europe (Vancouver 1996), however, in south-western Europe, particularly Italy and Spain, no decrease has been shown. The highest incidence rates in AIDS in these countries are reported from heterosexual adults and children (UNAIDS 1997).

As we can see from these figures the HIV/AIDS pandemic is as powerful as ever. From a global perspective HIV/AIDS affects disproportionately the countries of the developing world, where it is feared that the social, economic and demographic impact of the disease will increase the existing economic and social burden on individuals, communities and countries (Vancouver 1996).

However, “*HIV continues to spread also in the industrialised world, where increasingly it affects people, who for reasons of race, sex, behaviour or social and economic status have lesser access to services.*” (Vancouver 1996)

2.2 Focus on EU Countries

The focus of this work is why are people still getting infected by the virus, although the ways of transmission are well known and many prevention activities are carried out. Who is being infected by the virus, and do socio-economic differences play a major role? What are the reasons that prevention messages are currently not successful in all population groups? How do they need to be changed to be able to effectively reach all population groups at risk, and to successfully prevent the spread of the virus.

The geographic focus of this report is on European countries with some examples of experiences from other industrialised countries, such as US, Canada and Australia, and also from developing countries, to illustrate the findings and to present different kind of responses to the epidemic.

2.3 Ongoing HIV/AIDS Infection Despite Extensive Prevention Activities

Hardly any other disease has been researched so profoundly as HIV/AIDS. Many studies have been carried out on the medical, social and psychological issues of the disease, concerns with service provision of statutory and voluntary sector services, and population groups at risks. The epidemiology of the disease is well known as are the ways of transmission of the HIV virus.

However, despite a multitude of prevention and education activities world wide people continue to be infected by HIV. In recent years prevention activities have been improved and are increasingly targeted at the specific population groups at risk, but still prevention seems not to be so successful as hoped. A study on change in homosexual HIV risk behaviour among gay men in UK concluded:

“Despite an increase in prevention work targeted at this population, aggregate levels of sexual risk-taking have remained very stable. A reassessment of the efficacy of current HIV

prevention messages and methods with this population is urgently required." (Hickson et al., 1996)

Various factors may explain why some population groups are not reached by prevention programmes. One possible explanation may be that epidemiological data of HIV infection broken down by risk groups, such as gay men, intravenous drug users (IDUs), and young people, have rarely been interpreted by social classes or socio-economic factors. At the same time most prevention programmes, even when directed at specific population groups at risk, focus only on behaviour change and do not take into account possible class and socio-economic differences and their implications on HIV/AIDS.

However, the relationship between health and class- and/or socio-economic factors is well known and widely acknowledged (Townsend et al., 1998). The issue of class and sexuality has been given a new dimension and a new urgency by AIDS (Connell et al., 1993, Bochow 1997).

3. Definition of 'class' and social inequality

3.1 Definition of 'class'

The terminology 'class' seems out of fashion nowadays (Dowsett et al., 1992). The term is often used in a general way to distinguish between different population groups, but without reference to a concrete sociological concept of class.

The ongoing controversy between neo-Marxist and non-Marxist class theorists has drawn attention to the association of social inequality with economic factors, to the continuing differences in the life conditions and also to the characteristic ways of thinking and behaviours of people from different social classes (Geissler 1992).

Supporters of the concept of social inequality question the validity of the concept of class; it is seen to be superficial. In this view 'class' reduces the social character of individuals in society to their economic- professional position, ignoring their cultural, political, and psychological condition. Models of class aiming to describe the structure of social inequality are considered too narrowly designed, too simple, too static and too far from life (Hradil 1994).

It is further argued, that the number of different classes and their relative size have been subject to more or less arbitrary sociological definition (Hradil 1994). Models of class diverge greatly. In Germany, for example between 5 and 25% of the adult population are categorised as 'lower class'. Depending on the model chosen, the 'lower class' turns out to be very small when only the marginalised and socially

despised individuals are classified in it. It becomes much bigger when unskilled and poorly qualified workers are also included (Geissler 1992).

Another criticism of the traditional class model in Germany is that for a long time it has not taken immigrant workers into account. Most native German working-class people have experienced an upgrading in their status as immigrants have replaced them at the lowest level of the social hierarchy (Hradil 1994). In the mid '80s 60% of immigrants belonged to the unskilled and less qualified population (Geissler 1992).

3.2 *Problems with the 'class' model in the context of HIV*

A conventional classification of a person's position within society is 'prestige' or 'social reputation'. These categories are generally determined by objective indicators as education, occupation, income and financial assets (Biechele 1996) But as soon as other criteria of social inequality are taken into account (gender, religion, age, nationality), classification becomes much more complicated (Bolte and Hradil 1988, Biechele 1996).

Recent work on this subject have, besides the conventional criteria of class, also taken into account additional criteria, such as housing and environment, social security (employment, health, old age), stigma and discrimination (Biechele 1996). Another criterion to involve could be the psychological dimension of 'coping style': how an individual is able to confront conflicts and problems (Biechele 1996). With the integration of criteria, such as discrimination or coping style, the classification of 'high' and 'low' class does not make much sense. All gay men, for example, would than be subsumed in the lower level due to discrimination and stigma (Biechele 1996).

Another fact which may hinder the approach of 'class'-focused research is that the perception of 'working class' as class-conscious proletarians who take pride in the product of their labour has largely been displaced by the characteristics of members of the lower class in relation to their perceived 'deficits'. The picture has changed: the lower classes are seen not as containing potential, but as 'lacking' something: lack of self-confidence, lack of perspective, lack of health awareness (Korcak 1994; Bochow 1997b).

The accumulation of deficits may be the reason why researchers are reluctant to undertake studies looking at specific differences in working-class populations. They may perceive it as politically incorrect to talk about lower class deficits. Particularly when measured against middle class life styles, behaviour and living standards, every differentiation might be interpreted as a deficit. (Bochow 1997b) In other words, to differentiate might be to stigmatise. This has been apparent with some British researchers. When faced with criticism that middle-class gay men were over-

represented in their study, they countered that to 'factor out' this possible bias would be to run the risk of paternalism and dismissiveness (Davies et al 1993). They were reluctant to distinguish between the 'good guys', often middle class men who might be shown to be on the whole more responsible and sensible, and the 'bad guys', those who continue to behave irresponsibly and those about whom there is little or no research evidence: the working class, black men, the young and those living in rural areas. Pointing the finger at groups marginalised not only by their sexuality, but also distanced from the established gay culture is held to be unhelpful in the search for appropriate ways of diminishing the risk of HIV infection (Davies et al., 1993).

3.3 Socio-economic related inequalities in health

The British Black Report (1980) on socio-economic inequalities in health encouraged in Western European countries a broader debate on this issue. Subsequently health inequalities have been found in other European countries where research on socio-economic health differences have been carried out (Hauss F., Naschold, F., Rosenbrock R., 1981, Smith et al., 1990, Donaldson C., K. Gerard ,1992, Whitehead M., 1988, Fox 1989).

Different approaches have been developed to explain the relation between increasing mortality and decreasing socio-economic status. In the following some of them are presented.

In Britain and Western Europe mainly four different approaches were used to interpret the findings on social inequalities:

The *artefact explanation* that assumes the observed correlation between socio-economic status and mortality is due to a result of biased data collection and data distortion. The *social selection explanation* acknowledges the existing correlation between socio-economic status and mortality, yet, explains it by the fact that people who are less healthy are less likely to advance socially and economically and more often to lower their social status. Whereas artefact and social selection find only limited use, the cultural/behavioural explanation is mostly used for interpretation. The *cultural/behavioural explanation* accepts the association between socio-economic status and mortality. In contrast to the 'social selection' approach, it stresses the importance of differences in the individual risk behaviour, and highlights the fact that risk factors, such as smoking, are more common in persons with a low socio-economic status.

The *structural/material explanation* points to the importance of living and working conditions affecting the possibility of falling ill or disease progression. The structural/material approach, however, does not get the same attention as the cultural/behavioural approach (Elkeles T., Mielck A., 1993).

WHO strategy

The WHO “Health for all” strategy focuses on unfair or unacceptable inequalities in health, and the proclaimed target is to reduce the actual differences in health status between countries and between groups within countries by at least 25 %, by the year 2000, by improving the level of health of disadvantaged nations and groups (Gepkens et al., 1996, Whitehead 1991).

The WHO considerations give priority to the disadvantaged situation of lower socio-economic groups. The focus is on the unequal chances of staying healthy, or in case of illness, recovering. The reasons and influences for staying healthy or falling ill and the role of socio-economic differences associated with these are under investigation.

Following these considerations three pragmatic objectives are stated for health promotion in disadvantaged population groups (Dahlgren/ Whitehead, 1992):

- reduction of risk factors, such as improved working conditions, reduction of unemployment, support in attempts to giving up smoking
- support in dealing with risk factors, such as improvement of counselling and support in case of threatened unemployment
- and in case of illness, improvement of health care for specific groups at risk.

Socio-psychological factors

Siegrist (1989) argues that social inequity in health cannot be explained solely by low utilisation of health resources in situations, in case of illness, but by a lack of long-term health strategy. Low utilisation of antenatal and child surveillance programmes, deficits in medical knowledge as well as inappropriate awareness of early symptoms are seen to be encouraged by low socio-economic status, however, influenced by socio-psychological factors.

Siegrist advocates to broaden the socio-economic status as indicator of social inequalities and to include more specific and relevant components, such as psycho-social factors to a more comprehensive pattern of social and health related inequalities. In this argumentation the cumulative effect of both, insufficient prevention behaviour and unequal ability of coping and resistance lead to inequalities in health (Siegrist 1989).

Dimensions of social differences as class and gender

Blank and Diderichsen agree that socio-economic factors are found to be related to different ill-health measures. However, as they point out, particular dimensions of social differentiation, such as class and gender, although correlated with health, are

unlikely to show direct causal relationship with health outcomes. These dimensions can be said to encompass economic, political and cultural differences representing a complex set of social conditions and processes, which are likely to interact more or less important, according to the person's social position (Blank, Diderichsen 1996).

The ongoing debate on explanation of socio-economic inequalities in health by 'cultural/behavioural' versus 'materialist/structuralist' approaches (Townsend and Davidson 1988, Blane 1985, Smith D. et al., 1994) has important consequences for the evaluation of observed inequalities, and the strategies for reducing them. For example: inequalities in health which result from differences in structural living conditions could be regarded as unfair and to be reduced, while inequalities which arise as a result of free choices made by an individual cannot be called unfair and should therefore be accepted (Whitehead 1990, Stronks 1996).

Most empirical studies in their attempt to explain socio-economic inequalities in health consider cultural/behavioural factors (Smith et al., 1994). These studies which analyse data on socio-economic status, health and lifestyle simultaneously, show that a substantial part of the observed inequalities in health is due to the diverse distribution of behavioural factors among different socio-economic groups. For example, the British Whitehall Study and the Regional Heart Study stated that almost half of the increased risk of heart disease mortality of the lowest socio-economic group could be attributed to lifestyle-related factors (such as smoking, physical exercise, body mass index, blood pressure, cholesterol and obesity) (Marmot et al., 1978, Pacock et al., 1987). But in both studies a gradient remained which was not explained by the traditional risk factors. However, other studies suggest that, given their effect on health (Forsdahl 1977, Martin et al., 1987, Hasan 1989) and their distinctive distribution among socio-economic groups (Hasan 1989, Mackenbach 1992) structural factors (such as housing, working conditions, financial problems employment status) are expected to contribute to the socio-economic gradient in health. Although the input of structural factors is admitted, few studies acknowledge the importance of structural factors in the same way that the contribution of lifestyle has been accepted. Behaviour is to some extent influenced by the cultural environment, through aspects such as low income, living and working conditions, and freedom of choice with respect of lifestyle may be restricted by the environment. At the same time, an individual may choose to smoke as compensation for unfavourable circumstances such as a low income (Smith et al., 1994). Higher smoking rates among women in lower socio-economic groups for example are associated with a high level of material deprivation among these groups (Graham 1994)

The authors concluded from their findings that policies promoting healthy behaviour should in any case be supplemented with measures which aim at a reduction of material inequalities (Stronks et al., 1993).

Greg J. Duncan confirms the economic dimension of socio-economic status as it relates to health. However, he claims that links between socio-economic status (SES) and health are not yet well understood and asks: “Do low-SES individuals have worse health and shorter life expectancy because of a gradual process of accumulation of disadvantages in the form of reduced access to health care, polluted or accident-prone home and work environments, worse health behaviour (e.g. smoking, drinking and diet), or more stressful and less supportive family, neighbourhood, and employment situations? Or are many of the health differences the result of short-term differences in access to economic resources that could be addressed with tax- and tax transferred changes in the distribution of income?” (Duncan 1996).

He also underlines that the concept of socio-economic status is ‘nebulous’, because past research has used different indicators of SES, with the choice usually dictated by the available data. British studies for example generally rely on an occupation-based measure since that is often provided on vital statistics records. Cross-national comparative studies often find years of schooling the most comparable across countries. US-based research has measured SES as occupational categories, prestige, education and household income. Although ‘household income’ is not consistently used, research evidence has established that household income is a powerful correlate of mortality and the strength of the correlation between income and mortality has increased over the last 30 years (Duncan 1996).

The debate on socio-economic related inequalities in health recently received a boost when in a series of articles published in British Medical Journal in early 1997 several authors examined factors that affect the relation between deprivation and health. Some of the arguments are summarised below.

Relative poverty vs. absolute poverty

In his article on socio-economic determinants of health Richard G Wilkinson argues that mortality in industrialised countries is affected more by relative than absolute living standards. In his view, mortality is related more closely to differences in relative income within countries than to differences in absolute incomes between them. National mortality rates, therefore, tend to be lowest in countries with smaller income differences and lower levels of relative deprivation. Most of the long-term rise in life expectancy, ultimately, seems unrelated to the long-term economic growth rate.

Important for the understanding of the reasons for these differences in health is the distinction between the effects of relative and absolute living standards.

Socio-economic gradients in health are associated with social position and with different material circumstances, from which both have implications to health. The

question remains whether health disadvantage is a reflection of the direct physiological effects of lower absolute material standards (of bad housing, poor diet etc.) or is it a matter of the direct and indirect effects of differences in psycho-social circumstances associated with social position in relation to others. The indirect effects would include increased exposure to behavioural risk due to resulting from psycho-social stress, such as stress related smoking, drinking, eating disorders. Whereas the direct effects may centre on the physiological effects of chronic mental and emotional stress.

Evidence suggests that the psycho-social effect of social position has a larger part in health in equalities. This perspective would have fundamental implications for public policy and for our understanding of how socio-economic differences have an impact on health (Wilkinson 1997).

The author argues further, that the reasons for the relation between income equality and better health lies in the fact that greater income equality tends to improve social cohesion and reduce social division. Equality is proven as an essential feature of the civic community (Putman et al., 1993) Better integration into a network of social relations is known to benefit health (House et al., 1988). However, social well being is not simply a matter of strong networks. Psycho-social factors, such as low control, insecurity, and low self-esteem are known to interrelate between health and socio-economic circumstances. Measures, such as integration in the economic life, reduced unemployment, material security and smaller income differences are expected to provide the material base for a more cohesive society (Wilkinson 1997).

Equity, poverty and health for all

In his article 'Equity, poverty and health for all' Kenneth C Calman, the Chief Medical Officer in the British Department of Health, confirms that health is determined by a number of factors, including biological and genetic factors, lifestyle and behaviour, the environment, social and economic factors, and health services. In all these, the concepts of equity and equality are important, and the existing variations in health may be related to any of them (Calman 1997).

Lifestyle and behaviour patterns chosen by individuals can also result in inequalities in health (e.g. cigarette smoking). However, lifestyle and behaviour that is not freely chosen, and that results in poorer health might be considered as avoidable and thus inequitable. Examples for this are health inequalities arising from the level of resources, housing conditions, dangerous working conditions, or exposure to environmental hazards, and which lead to health inequalities (Calman 1997).

The author concludes that poverty is an issue that needs special attention and those who are at particular disadvantage need special care and consideration. Tackling

poverty is therefore an essential component of improving the population's health (Calman 1997).

4. HIV/AIDS and 'class' and socio-economic factors of risk of HIV infection

The HIV/AIDS epidemic has continued to develop, and despite differences in its details within each society, there is a common feature: in each society, the marginalised, stigmatised and discriminated became at highest risk of HIV infection. *"Those whose human rights and dignity are least respected are most vulnerable"* (Mann 1995). For example, in the US, the epidemic has moved increasingly towards ethnic minority communities, poor inner city-residents, drug users, and women. In Brazil, the epidemic started among the "jet-set", but has now become a raging epidemic among women and men in the poor regions around big cities. In Ethiopia, AIDS first seemed to affect mainly the social elite; it has now rapidly become a disease of the poor and the disenfranchised, and in France, AIDS has increasingly moved towards the excluded, those living on the margins of society (Mann 1995).

4.1 What is known about socio-economic differences among people with HIV and AIDS?

In the light of the continuing epidemic a multitude of studies were undertaken which identified the most affected population groups at risk, such as gay men, especially younger ones, women, injecting drug users and ethnic minority groups, and to highlight their knowledge level and their risk behaviour (Bochow et al., 1994, Wadsworth et al., 1994). Subsequently prevention activities have been targeted at these groups. Surprisingly few studies look more closely at the differences within these population groups at risk and relate their socio-economic situation with their risk behaviour.

The following chapter aims to provide an overview on what is known about socio-economic differences among people with HIV and AIDS.

4.1.1 Social inequality and HIV/AIDS globally

The WHO report on the Global HIV/AIDS Epidemic documents differences in the spread of the HIV virus in the different parts of the world, with important variations in patterns of spread in different communities and geographic areas within the same country (WHO 1997). The report refers mainly to differences between industrialised and developing countries, where the majority (90%) of people infected with HIV live, and within developing countries. "In some places there is clear evidence of

increasing spread among poorer and less educated parts of the population. The report concludes: "This will require a much greater focus on meeting the special prevention needs of marginalised and impoverished populations." (UNAIDS 1997)

According to the UNAIDS report 1997, epidemiological data prove that the epidemic disproportionately affects the people in the developing world. Generally, urban and trading centres show higher prevalence of HIV infection than rural areas, although even in rural areas HIV infection continues to increase. Open conflicts, wars, natural disasters, environmental damage, and economic needs encourage many people to leave their homes in seek of better prospects. In some cases, the report concludes, the social and economic needs may encourage risk behaviour, i.e. unprotected (commercial) sex (UNAIDS 1997).

Socio-economic differences in the spread of HIV infection are more likely to be admitted in reports from developing countries. However, little is known about socio-economic differences in industrialised countries, and their relation to HIV/AIDS. Most epidemiological information is on demographic factors, such as geographic distribution, gender, and risk exposure.

For example, the WHO country information on health status in Europe reports about Switzerland, which has the highest rate of AIDS cases in Europe, a

"gradual increase in the proportion of heterosexually infected people, a decline in the proportion of people infected through intravenous drug consumption by using contaminated syringes and a stable proportion of persons infected through homo-/bisexual contacts." (WHO Country Information 1997)

The defined population groups at risk are not characterised in more detail by socio-economic differences.

Similarly, a study in STD (sexually transmitted disease) clinics in Paris, France, to assess trends in HIV infection among clinic attenders defined specific subgroups which should be targeted for prevention (HIV/positive or older homosexuals, heterosexuals from Africa and Caribbean). After adjustment by age the study found that despite a decrease in general STD incidence and HIV infections among patients aged under 25 years, overall HIV incidence has not decreased, but increased in homo-/bisexual men and in those aged 35 years and more (Meyer L et al., 1996). Socio-economic differences within these groups were not studied.

The comprehensive comparative study on sexual behaviour and HIV risk reduction strategies among gay and bisexual men in 8 European countries (Bochow et al., 1994) which gained important insight in risk behaviour and response strategies to HIV/AIDS did not consider class-related or socio-economic inequalities within the study population.

In the following, an overview will be given on what is known about socio-economic differences and the risk of HIV infection.

Although the focus of this report is mainly on European countries, examples from other industrialised countries such as US, Canada and Australia are included. At the same time, examples from developing countries are given, to illustrate the issues analysed in this report, and also to refer to experiences and prevention and policy approaches in these countries.

4.1.2 HIV and income related inequality: the poor are more likely to be infected

Since the beginning of the epidemic gay men and intravenous drug users (IDUs) in industrialised countries have been epidemiologically identified as the two largest groups at risk for AIDS. Analysis of demographic data, as documented in the previous chapter, have also shown that some ethnic minorities are increasingly infected with HIV at much higher rates than white people (Dondero 1987, Krueger et al., 1990).

However, demographic risk factors, such as ethnicity, are known to be associated with income, and research has shown that impoverished population in general are differently affected by public health problems (Krueger et al., 1990). A study of demographic and behavioural risk factors for infection with HIV in a HIV counselling and testing clinic in Seattle, Washington, USA, found an independent association between income and HIV infection after controlling for other demographic and risk factors known to be associated with HIV infection. People with lower income were found to be more likely to be infected with HIV. This result supports the hypothesis that the impoverished are at increased risk for HIV infection because of the social and physical circumstances in which they live (Krueger et al., 1990).

Explanations may be that poor people have not adapted reduced-risk behaviours to the degree that other groups have during the last years, and that HIV prevention activities have been less effective in reaching the impoverished population groups. Messages might either not have been accessible for the poor population (not reached the locations or not published in the media preferred by the poor) or the messages have not well been understood or were perceived as not being relevant (Krueger et al., 1990).

These findings highlight the additional risk among impoverished people and stress the importance of designing risk-reduction messages which are able to reach all socio-economic levels (Krueger et al., 1990).

Increasing attention has recently been paid to social and cultural factors which influence behaviour. Gillies et al., highlighted the important influence of the social and economic context of HIV/AIDS and risk behaviour associated with HIV transmission. They confirmed previous findings that in a developed country socio-economic impoverishment is a significant factor in HIV infection, regardless of the number of sexual partners, age, race or injecting drug use habits of individuals (Gillies et al., 1996, Krueger et al., 1990). They also explored a relationship between poverty and AIDS in relation to global economic development, industrial developments and rural to urban migration, homelessness, the breakdown of social networks within neighbourhoods, migration and systems of labour and production. Although the individual situation of homeless people may vary concerning their education, their health and personal history, their vulnerability towards discrimination and assault was found to be a common daily life experience (Centrepont, 1989).

Relative poverty is seen to make individuals and populations vulnerable to HIV/AIDS (Gillies et al., 1996). For example, HIV infection is not a top priority in homeless people's lives, concerns about finding a place to sleep or getting some hot food predominate (Smith 1991).

Another explanation why HIV prevention messages are not successfully accepted is that it is impossible to 'build in' behaviour change into the habitualised lifestyle and into the given living conditions.

In the context of rural to urban migration and industrialisation it has been found that e.g. in Thailand most migrants were young females looking for employment in the commercial sex industry in major cities like Bangkok. At the same time, studies have found extremely high levels of HIV among female prostitutes in Thailand (Gillies et al., 1996). In the country's poor economic situation Thai families are dependent on their daughter's income. Many women experienced that the low salaries they got in industrial companies were not enough to fulfil their duty to send money to their families, and chose to move from the manufacturing industry to the commercial sex industry with higher financial benefits (Gillies et al., 1996).

Social, occupational and economic systems may shape sexual life and facilitate the spread of HIV. On the example of the migrant workers in the South African mining industry Jochelson et al., identified how working condition enables the spread of the virus: Separation of their wives and families, poor living conditions in hostels, and low wages make migrants feeling miserable. Contact offered by prostitutes promises not only sexual satisfaction but also female company. Subsequently, a market for prostitution for poor and poorly educated women has been organised to provide sexual and domestic service for men. Epidemiological studies have shown that the HIV prevalence amongst these migrant workers and prostitutes is higher than for the general population (Jochelson et al., 1991, Gillies et al., 1996).

The same in Nigeria, where the working and social life of long-distance truck drivers and the economic needs of women who provide sexual and domestic services along the route for money, has shown to influence sexual behaviour and facilitate the transmission of STDs (sexual transmitted diseases) and HIV (Orubuloye et al., 1993, Gillies et al., 1993).

As demonstrated on these examples, economic growth, urbanisation, industrialisation, education, the status of women and the economic need to migration to find work can make populations vulnerable to HIV infection (Gillies et al., 1996).

4.1.3 Educational level and HIV-prevalence

Few studies in Europe and USA focused on socio-economic differences in HIV prevalence. Some of the studies which looked closer at links between AIDS and poverty (Hoover et al., 1991, Birn et al., 1990, Mielck A., 1992) suggested that the rate of HIV infection increases with decreasing educational level and that low maternal education is associated with high HIV prevalence of newborns (Morse et al., 1991).

A study on white homosexual men, non intravenous drug users involved in the Chicago cohort of the Multicenter AIDS Cohort Study (Kaslow et al 1987, Mielck 1992) tested the hypothesis that the risk of HIV infection increases with decreasing socio-economic status, and that unsafe sex practices and intravenous drug use, suggested risk factors to HIV infection, are more common in lower socio-economic groups. The study was restricted to white men, because ethnicity was seen as a potential confounder (Mielck 1992).

The study confirmed that the most important risk factor for non-IV drug using homosexual men is risky sexual behaviour, mainly unprotected receptive anal intercourse. The study indicates further that HIV-prevalence increases with decreasing educational level. However, the study did not confirm the hypothesis that risky sexual behaviour increases with decreasing educational level (Mielck 1992).

The study concluded that since educational level per se does not cause HIV-infection the risk associated with educational level after controlling for sexual behaviour remains unexplained. Three possible explanations were identified:

- Men with less education could have a higher prevalence of sexually transmitted diseases than men with more education.
- The partners of men with lower education could be more likely to be infected with HIV than the partners of men with higher education.
- The immune system of men with less education could be weaker than that of men with higher education (Mielck 1992).

The results from the Multicenter AIDS Cohort Study indicate that decreasing educational level is a risk factor for HIV infection even after controlling for sexually transmitted diseases (Chmiel et al., 1987, Mielck 1992).

The study calls for more research to confirm these study findings and to study other risk factors which can be used to explain associations between educational level and HIV infection (Mielck 1992). The study also highlights the importance of its results for public health issues and stresses the need for more preventive initiatives in the group of those with low education (Mielck 1992), but the study fails to mention, the link between lower education level and poverty, which, as discussed, is a risk factor for HIV.

A multi-state surveillance project in 11 US state and city health departments between 1990 and 93 interviewed 2,898 persons reported with AIDS. The project's aim was to characterise the socio-economic status of persons with HIV/AIDS. The indicator 'education level' revealed that among men who have sex with men, white men reported the lowest percentage (9%), and Central/South American (50%) and Mexican men (40%) reported the highest percentages of less than 12 years of schooling.. Among intravenous drug users (IDUs) 35% of white men, 64% of black men, 67% of Puerto Rican men, 29% of white women and 63% of black women had less than 12 years of schooling. The authors conclude that HIV prevention programmes must be oriented to the educational level of the populations served (Diaz et al., 1994).

A study of the relationship between perception of risk of HIV infection and risk-related sexual behaviour was conducted with attenders at a genito-urinary medicine (GUM) clinic in the UK. Significant differences between social class groups were found for knowledge level, with the highest level among professionals and the lowest among the unemployed. Increasing age was significantly associated with better knowledge. Significantly more young people did not perceive themselves as 'at risk', and had lower knowledge than older people who did not perceive themselves to be at risk. From the heterosexuals who reported having sex with other people in addition to their partner, 79% did not perceive themselves to be at risk of HIV infection, and in these, 64% reported only infrequent use of condoms with casual sexual partners. Significantly more heterosexual men (67%) than women (44%) reported multiple sex partners (James et al., 1991).

4.1.4 Ethnicity as risk marker

“Just as homophobia and sexism have fuelled this epidemic, so too has racism.”
(Alcorn 1997)

HIV/AIDS has disproportionately affected people of colour in the United States, the UK and some European countries (Alcorn 1997). Recent studies, especially in USA, have acknowledged that migration into industrialised countries has caused a shift in the population affected by HIV and AIDS. In the United States the AIDS incidence was found to be 6,5 times greater for black people and 4 times greater for Hispanics than for whites (Vancouver 1997). In the UK 59 % of those diagnosed with AIDS, infected through heterosexual contact were black or Asian in June 1994 (Alcorn 1997).

A disproportionately high rate of HIV prevalence among African Americans and Latinos and continuing high rates of new infections among younger gay and bisexual men of all ethnic groups have been identified in a work at the Centre for AIDS Prevention Studies at the University of California, San Francisco. The study calls for the development of more carefully refined research methods for AIDS prevention interventions, particularly designed for population subgroups at high risk for HIV, such as minorities, young gay and bisexual men and injecting drug users (Centre for AIDS Prevention Studies (1997). Socio-economic differences were not considered.

UNAIDS documented that the decrease of 11% in AIDS cases in the USA in 1997 only occurred among homosexual men, the group which is said to have most benefited from the multitude of prevention activities, which since the early years of the epidemic have enabled open exchange of information about risky sexual behaviour. However, in some disadvantaged sections, AIDS continues to rise: among the African-Americans, and Hispanic communities. Gender issues have not been considered. This rise can partly be explained by the fact that these communities once infected by HIV may have problems to access the expensive new drugs, which may delay the onset of AIDS, and partly, because prevention efforts in minority communities with mainly heterosexuals infected have been less successful than in the predominantly well-educated and well organised white gay community (UNAIDS 1997), and consequently more people get infected by HIV.

As epidemiological evidence indicates that African-American adults as well as adolescents have a disproportionately high risk of AIDS, programmes are urgently needed which are designed to increase “self-protective behaviour” and consequently to decrease risk behaviour. At the same time, it is stated that there is little understanding of African-American socio-cultural factors that may influence the acceptance of HIV information and the adoption of HIV preventive behaviour. In respect of this, emphasis needs to be put on exploring the cultural values which may be related to risk behaviour. At the same time the barriers for the effective adaptation of the HIV education messages need to be identified in order to enable the implementation of culturally-appropriate HIV behavioural modification programmes (Airhihenbuwa et al., 1992).

Several articles discuss the different prevalence and incidence rate on HIV/AIDS for ethnic minorities in industrialised countries. However, ethnicity itself is not a risk

factor, and most of these studies lack of an analysis of the role of social class and socio-economic status in relation to HIV infection. By focusing solely on 'ethnicity' rather than on socio-economic factors attention is drawn from the fact that a disproportionate number of African-American and Hispanics are poor, and also that at least 10 % of white people live in poverty (US Bureau of the Census, 1991).

Vicente Navarro looked closer at the increasing mortality differentials between white and black people in the USA, which caused alarming concerns within government and public and called for urgent activities to reduce race differentials. (Navarro 1990) He argued that these differentials cannot be explained merely by looking at race, because, as he states,

"...after all, some blacks have better health indicators (including mortality rates) than some whites, and not all whites have similar mortality indicators. Thus we must look at class differentials in mortality in the US, which are also increasing rather than declining. .." (Navarro 1990).

Although there is evidence that within each class black people and other ethnic minorities often have a worse health status than white people (National Centre for Health Statistics 1990), Navarro pointed to the fact that the overwhelming majority of black people (and people from other ethnic minority groups) belong to the poorly educated working class, with low income, poorly housing, who have generally higher morbidity and mortality rates than people with high income and better education. Navarro concluded that the growing mortality differences between white and black people cannot be explained by only looking at race, they are part of class differentials (Navarro 1990).

In Europe and the United States the particular issues facing black and other ethnic groups in relation to HIV and AIDS have widely been neglected. The disadvantages which characterise black peoples lives stem from the long-term marginalisation and low economic status from black people in white-dominated societies, but also from racism experienced by black people. These disadvantages which increased the risk of HIV infection have been failed to recognise (Alcorn 1997). Few HIV prevention services are directed to black communities and mainstream AIDS organisations have been criticised for failing to provide appropriate services to black communities (Alcorn 1997).

Sexual transmitted diseases (STDs) and ethnicity as risk markers for targeting HIV prevention intervention

The prevalence of infectious diseases is higher in areas of marginalisation and poverty all over the world. Since poverty is disproportionately concentrated in black communities in the developed and developing world it is not surprising that HIV has seriously affected black communities all over the world (NAM 1997).

Infection with sexually-transmitted diseases (STDs) is identified as a risk indicator of HIV infection, and the successful treatment of STDs has been proven to reduce the incidence of HIV infection (Grosskurth H. et al., 1995, Mayaud P. et al., 1997). A study was carried out on the socio-demographic characteristics of heterosexuals who attended the genito-urinary medicine (GUM) clinic at St. Thomas' Hospital in South London because of gonorrhoea with the aim of enabling the targeting of HIV prevention strategies (Daker-White and Barlow 1997).

The study followed the example of research in Colorado Springs (US) where the social, demographic and sexual characteristics of gonorrhoea-infected patients and their sexual contacts were studied. It was found that those most at risk of gonorrhoea were young, non-white heterosexuals connected to the military and living in certain neighbourhoods (Potterat 1985). A study in Washington found that gonorrhoea incidence was associated with age, gender, ethnicity, socio-economic status and area of residence. The highest incidence was found for black female teenagers residing in urban areas of low socio-economic status. The authors concluded that interventions to control the disease should be focused on age-specific and culturally sensitive behavioural and social strategies (Rice et al., 1991).

The same is true in London: The patients admitted to St. Thomas' with gonorrhoea were also more likely to be young and black African-Caribbean. St. Thomas' catchment area has at 21.8% one of the highest proportions of black Caribbean, black African and 'black other' residents in London, which, "however, does not itself explain the high incidence of gonorrhoea in these minority populations" (Daker-White et al., 1997). These findings correlate with other studies in London (Lewis et al., 1995) and are of special concern considering the high incidence rate of HIV infection in the Caribbean and also the high sexual activity among travellers to that region (Daker-White et al., 1997).

The authors defend their use of ethnic groups as possible indicators of risk of gonorrhoea and possible subsequent HIV infection with the argument, that they perceive 'race' as a social explanation rather than a biological one. They assume that the possible variations in disease prevalence result from social and economic factors.

"We view race not as a risk factor or determinant of gonorrhoea incidence, rather, follow Rice et al., who see both race and ethnicity as 'risk markers' for behaviours of subgroups within racial or ethnic categories that lead to exposure to or persistence of gonorrhoea".

(Daker-White et al., 1997; Rice et al., 1991).

The results highlight the need for sexual health interventions with young people both before and after they reach the clinic. Successful prevention interventions are expected to reduce the risk of HIV infection as well as reduce the health and social costs (Daker-White and Barlow 1997). However, sexual health interventions who focus on behaviour change rather than taking into account the socio-economic

background which may drive risk behaviour may have limited success in reducing risk. They may instead be used for blaming the victim for his or her risk behaviour.

'Ethnicity' is a very sensitive issues, and research on ethnicity may raise many concerns of racism and discrimination.

"Is research into ethnicity and health racist, unsound, or important science?" asks Raj Bhopal from the Department of Epidemiology and Public Health, University of Newcastle (Bhopal 1997). The reason behind his question is that much historical research on ethnicity, intelligence, and health was found to be racist, unethical, and ineffective (Bhopal 1997). The concepts of race and ethnicity are difficult to define; however, they have been routinely applied to the study of health of migrant and ethnic minority groups in the hope of advancing the understanding of the causes of diseases. Bhopal is concerned that, much of these studies may be "black box epidemiology". He argues that as researchers have not advanced in the understanding of ethnicity and health, it may occur that by emphasising the negative aspects of the health of ethnic minority groups, research may damage their social position and withdraw the attention from their health priorities (Bhopal 1997).

4.1.5 Women and socio-economic differences in HIV infection

Increasing numbers of women are acquiring HIV (Berer 1993, Gorna 1996) Currently, after gay and bisexual men, those most vulnerable to HIV are women who have sex with men (Gorna 1996).

Reasons for the rapid increase are a complex mix of biological, economic, social and psychological factors. Additionally women are affected by inequity between the sexes in terms of socio-economic and political factors (Gorna 1996).

There is evidence that there are gender differences in the acquiring of HIV infection. "Just as homophobia fuels the HIV crisis among gay men and bisexual men, so sexism and gender inequality fuel the HIV crisis among women (Gorna 1996)."

HIV has affected all social classes, but not equally. Poor and ethnic minority women are disproportionately infected with HIV/AIDS in developed countries, and gender differences are likely to affect the poor and disadvantaged women to a higher degree (Berer 1993).

In USA, affected women are more likely to be poor, from an ethnic minority and from a drug using community. In New York City it was found that affluent areas have much lower HIV prevalence than areas where the poor people live (Berer 1993). In Toronto Canada it was found that the incidence of AIDS was growing fastest in the black, predominantly Caribbean community (Wilson 1990).

Although there is evidence on socio-economic and gender-related differences in the risk of HIV infection (Gorna 1996, Berer 1994, Alcorn 1997), few studies looked at these issues in Europe. The main focus of European researches in the field of HIV and women is on issues such as risk behaviour, exposure, population groups at risk, pregnancy in HIV positive women, ante-natal testing and vertical transmission (de Cock et al., 1998, Nicoll A. et al., 1998, Gibb D. et al., 1998). There is more information on HIV and women at risk in developing countries than in Europe.

No wonder, that feminists like Robin Gorna suspect that “Fundamental to public concern about women and AIDS is anxiety about child-bearing potential and risks to heterosexual men. Women are simply pit stops en route to more vital populations: babies and men.” (Gorna 1996)

For example, a French study on socio-economic consequences in HIV infection in women and children identified a dramatic shift in the epidemic towards women and children with 0.9% of pregnant women infected. HIV positive women were found to be predominantly young, unmarried, smokers, foreign-born or have used drugs (Henrion R., Mandelbrot L. 1990). No explicit socio-economic factors were taken into account, as one might have expected from the title of the study.

A European Collaborative Study confirmed the growing number of infected women in Europe and that an increasing proportion of them have acquired their infection through heterosexual contact. The examination of the socio-demographic characteristics of the women in the study found that most of the women were white, primiparae, married or cohabiting and born in Europe. Two-thirds had a history of injecting drug use (IDU) (Thorne C., Newell ML, Dunn D., Peckham C. 1996). They did not include questions concerning sex workers, nor socio-economic factors.

A Medical Research Council (MRC) collaborative study of HIV infection in women looked at ethnic differences in women with HIV infection in Britain and Ireland. It analysed baseline data (such as ethnic group, sexual history, likely route of HIV infection, reasons for HIV testing and first AIDS-defining disease) among women who had attended genito-urinary clinics. 65% of women were white and 29% were black African. 93% of black African and 43% of white women were probably infected through sexual intercourse. Injecting drug use was found to be the most likely route of infection in 55% of white women. 7% of white women and 16% of black African women had developed AIDS at the time when the HIV infection was diagnosed. The distribution of the first AIDS defining diagnoses differed: In white women, the most common disease was *Pneumocystis carinii* pneumonia; in black African women it was pulmonary tuberculosis. The study concluded that there are important differences between black African and white women in sexual history and route of transmission, disease stage at diagnosis and pattern of AIDS-defining diseases (Anderson et al., 1996). The socio-economic status of these women was not taken into account.

A US study conducted by the Department of Health Education, University of Maryland, looked at the impact of AIDS on African-American women and found that the disproportionate impact of HIV on these women is devastating to their lives, their families, their communities, and the society. Among AIDS cases in women, 52,5% are black. It is assumed that African-American women with HIV are the least powerful and most burdened of the society. The study concludes that

“these women whose behaviour places them at risk for HIV infection must be the focus of increased prevention and treatment efforts. Health educators must overcome their fear, class prejudice, and racial bias in order to form the inter-racial coalition necessary to lead our nation in the struggle to stop the devastation of AIDS among African-American women and children” (Quinn 1993).

As we can see from the previous example, there is a risk that although sympathising with the disadvantaged women, findings may be used to “blame the victim” or to patronise. Prevention messages involving this approach may continue to stress behaviour change, rather than developing a holistic response to HIV by taking into account the disadvantaged situation of these groups.

The US feminist magazine MS explored:

“This epidemic offers terrible proof of the dire need for women’s empowerment... Women need prevention strategies and programmes that addresses the social, economic, and political realities that increase our risk of infection.” (MS 1995)

However, prevention initiatives to empower women and to develop self-esteem are rare. There is little work that addresses the specific and complex gender and socio-economic related constraints which increase the risk of HIV infection.

Excursus: The risk of HIV infection in disadvantaged women in developing countries

There is more information on these issues in women in developing countries. Various studies have been carried out in respect of disadvantaged women in developing countries and their increased risk of HIV infection. Although the main focus in this report is on European countries a short excursus is made to highlight the experiences of disadvantaged women in Thailand, Botswana and Brazil in relation to HIV infection, and to present some of the strategies which have been developed to fight the virus. Empowerment of women was found to be a successful approach in HIV prevention interventions:

- In Thailand heterosexual contact has been identified to be the main route of HIV transmission. Female commercial sex workers play a key role in the spread of HIV into the general population (Weniger et al., 1991). A cross-sectional study was undertaken aiming to identify socio-economic and demographic factors related to

prevalent HIV infection among female commercial sex workers in Thailand 1992 (van Griensven et al., 1995).

The study found that women who had started commercial sex work at a young age were at higher risk of HIV infection. This can be explained by the fact that younger girls may be physically more vulnerable, have not yet developed appropriate negotiation skills to deal with their customers and generally work in lower-class brothels with low use of condoms and high HIV prevalence among the clients. Poverty and the responsibility to maintain the family were found to be the main reason to enter commercial sex work. Being in debt with the employer, mostly due to forwarded money to the women's family, increased the risk of infection: these debts induce women to work longer, to have more customers and also to accept unprotected intercourse when more money is offered.

The authors conclude that prevention programmes have to take into account these findings. Efforts should be undertaken to empower these young commercial sex workers through peer-group education to improve their communication and negotiation skills (van Griensven et al., 1995).

- Botswana has currently one of the highest incidence rates of HIV infection in Africa. A study on the socio-economic and cultural factors influencing the transmission of HIV in Botswana identified gender issues as the main factors, which explain the rapid spread of HIV: the position of women in society, especially their lack of power in sexual relationships, and cultural attitudes to fertility (MacDonald 1996).

The traditionally perceived superiority of men over women is still actual reality. Men dominate relationships and there is generally a lack of respect for women. A significant number of women in Botswana stated that in their first experience of sexual intercourse they were physically forced. Women feel at risk from HIV because of cultural expectations to provide sexual satisfaction to their husband or boyfriend. They feel powerless in demanding or negotiating safer sex and condom use.

A significant factor in the context of HIV is the cultural imperative for a single women to have a child to prove her fertility and to endorse her relationship with a man. A married women who failed to have a child is likely to be neglected or ill-treated by her husband. Many young women want to prevent this humiliation by proving their fertility before marriage. At the same time men must prove their manliness by making a women pregnant. Fertility is therefore a cultural determinant of the non-use of condoms (MacDonald 1996).

- In Sao Paulo State, Brazil, a study has been conducted with female sex workers in Sao Paulo State, Brazil, with the aim to determine how HIV risk behaviour and the prevalence of sexually transmitted diseases vary according to socio-economic status and city. The study found that the lower the socio-economic status of the

sex workers, the longer were the hours worked each day, and the greater the number of clients per day. 23% feared violence if they insisted that their clients wear condoms. A similar fear was expressed by 74% regarding their non-client sexual partner. 11% of these sex workers were HIV positive, 43% had syphilis and 39% hepatitis B. Those with a lower socio-economic status were more likely than those with a higher socio-economic status to be infected with HIV, syphilis and hepatitis B.

The authors found a correlation between infection with HIV and other sexually transmitted diseases among sex workers in Sao Paulo State and differences in socio-economic status. They concluded that interventions to prevent HIV transmission among sex workers must be tailored to the local environment and, in particular, to the socio-economic status of these workers (Lurie et al., 1995).

4.1.6 Injecting drug users and socio-economic differences in HIV infection

Although intravenous drug users (IDUs) are identified as a key factor in the transmission of HIV, little epidemiological information exists on this group, particularly in relation to HIV infection. Usually they are classified to poor and marginalised groups (Bochow, 1998). But few explicit information exists on their socio-economic background.

Mainliners, a HIV prevention project for drug users in south London, characterises its clientele:

“There is no such thing as a stereotypical injecting drug user or female sex worker. Individuals within these groups vary widely and range from: very rich to the very poor, articulate to inarticulate, well educated to ill educated, people with high and those with low self-esteem, employed to unemployed...” (Mainliners 1997)

Recent research in UK confirmed assumptions for a strong relation between problem drug use and deprivation. Explanations for this relationship can be that problem drug users drift into the poorer areas of cities as with increasing drug use they lose their job, their family and home, and also that drug use for some individuals in deprived circumstances may be perceived as a viable alternative to alleviate the harsh realities of their lives (Drug Link 1994).

The National AIDS Manual acknowledged the poor socio-economic background of drug users: Drug addiction has been heavily concentrated amongst disadvantaged populations in the US and Europe. Drug addiction has been a problem especially in areas with high levels of unemployment amongst male youth (Alcorn 1997).

The demographic characteristics, drug use behaviour, and sexual practices of intravenous drug users (IDUs) were studied at the Montefiore Medical Center in the Bronx, NY from 1984-88. The IDUs situation was characterised by poverty, over-representation of minority groups (more than 80% were Black or Hispanic), and initiation to injecting drug use at an early age. From the findings the research concluded that a complex interaction between high-risk demographic characteristics, drug use and sexual behaviour contributed to the spread of HIV in this population. Consequently, prevention interventions to interrupt transmission of HIV need to consider the complexity of these characteristics (Schrager et al., 1991).

A wide variety of interventions aim to develop community based HIV prevention and health promotion amongst drug users. These include outreach, low-threshold crisis centres, methadone programmes, needle exchanges and peer or street education projects (Hartnoll and Hedrich 1996)

Drug users are confronted with widespread discrimination and disgust. In the context of HIV/AIDS prevention the US government and media policies is said to have been characterised by racial scapegoating and scapegoating of drug users. A culture of individual blame and responsibilities had been created (Friedman 1997).

4.1.7 Gay men and socio-economic differences in HIV infection

Of the few studies which have been published in Europe and other industrialised countries on HIV/AIDS and its interrelation with class or socio-economic status most have focused on gay men. It has, however, to be acknowledged that most surveys on HIV/AIDS and gay men are biased with reference to class-related social criteria, such as education level, locality, occupation etc. (US: Baumann and Siegel 1987; UK: Davies 1986; in Australia: Connel et al., 1988).

“In many studies one could be forgiven for thinking that a university degree is mandatory to be a fully fledged gay men! .. Our understanding of homosexuality is drawn from the sexual practices and meanings of affluent, highly-educated men. ... We cannot be confident that sexual meanings and practices of middle-class gay and bisexual men are equivalent to those of working-class men. We need to recognise this if preventive education on HIV/AIDS is to be effective.” (Dowsett et al., 1992)

In France Michael Pollak carried out surveys via a gay magazine in the years 1985-89. Although most respondents were well-educated middle class men, the study found that among the lower classes high-risk sexual behaviour was more common than in the middle class. People with less than high school education practised riskier sex. It was found that lower levels of education correlated with an ambiguity concerning their sexual identity and lack of information on AIDS. Individuals who completed

high school and university were generally well informed about AIDS and clearly identified themselves as homosexual.

Pollak interpreted his findings that intellectual gay men, living in big cities, would have more sexual contacts and be more at risk. As the threat of infection with HIV is more obvious to them, they are more motivated to get information on HIV/AIDS, and consequently practise safer sex. Pollak argued that the circulation of the virus via social networks and contacts at the beginning of the HIV/AIDS epidemic had made AIDS a disease of the urban middle class, with high levels of education and information. These classes, however, were the quickest to develop a response to the virus and to protect themselves. Consequently, the trend moved from the higher classes towards the lower classes (Pollak 1990; Biechele 1996).

The results of a more recently conducted nation-wide survey in France in 1995 on gay men and HIV/AIDS infection confirm the conclusions from the previous studies, showing differences in HIV-infection between lower class, lower middle class and middle class gay men. The study also reports class-related vulnerability for HIV infection (Schiltz et al., 1995, Bochow 1998).

In four surveys from 1987/88 in western Germany and 1991/92 in east and west Germany, modelled on M. Pollak's work in France, Michael Bochow studied living conditions, information behaviour and knowledge in relation to HIV and AIDS, sexual behaviour and prevention behaviour and their changes over time (Bochow 1994). In his sample middle-class men were also over-represented. While class-specific considerations were not a high priority for Bochow, he nevertheless, found that gay men with lower education and professional position and those living in small towns and rural areas derive less benefit from the prevention campaigns. They also seemed to have a less thorough knowledge of means of infection than middle class-men in big cities, identified as 'core groups'. The reasons are to be found in insecure identity as gay men and less involvement in the gay community, as well as less access to gay-specific prevention and information services from AIDS support groups (Bochow 1994, Biechele 1996).

A long-term study in the Netherlands on the prevention of HIV infection among homosexual men identified only one class-specific correlation: among unemployed men the incidence of inconsistent safer sex behaviour was relatively high; those employed by contrast seemed to maintain safer sex behaviour once they had adopted it. No class specific effects are reported from the other criteria under study, such as risk behaviour, condom use, unsafe sex, and unsafe anal intercourse (John de Wit 1994, Biechele 1996).

In Great Britain four surveys have been carried out by SIGMA Research between 1984 and 1992 investigating sexual behaviour and the significance of sexuality among gay men. In this set of studies, where well educated white middle class gay men

again were over-represented, relationship and age have been identified as influencing factors. No effects have been found in relation to the places where people live. Class-related parameters have not been included in the study. As mentioned above, the authors have been reluctant to look at marginalised groups, because they are concerned to be seen as chauvinistic and paternalistic. They argue, they do not want to divide between the 'good guys' with reasonable behaviour and the 'bad guys' with unreasonable behaviour. Besides, they do not see empirical evidence of distinctions among middle class gay men living in big cities and workers, black people, young people, and those from rural areas. The responses of their interviewees when asked about their sex with lower-class gay men did not lead to the assumption that there were considerable differences (Davies et al., 1993).

Yet, a study on class-based inequalities amongst gay and bisexual men is underway. The study, conducted by the HIV project in London, aims to assess the extent to which current sexual health promotion materials (including HIV prevention) meet the needs of working class gay and bisexual men. The research will identify to what extent working class gay and bisexual men differ from middle class gay and bisexual men in terms of identity, lifestyle, and community attachment. It will also investigate to which extent the current HIV prevention messages are able to meet the needs of this groups of people, and, subsequently, what factors need to be considered in the design of health promotion materials targeted to working class gay or bisexual men (NHPIS 1997). First results are expected to be available mid 1998.

In 1989, Gagnon stated that in the USA nothing was known about the situation of men who have sex with men and who belong to minorities or the working class, and how HIV is spread in small town and rural areas. Research has been limited to places where well-educated middle-class gay men are living (Gagnon 1989). Since then the situation has not much changed. Theoretical conceptualisation of gay socialisation and development of gay identity in lower-class gay men are still missing. In most studies focusing on the sexuality of gay men, class parameters are collected, but not analysed (Gerrard et al., 1993).

As mentioned above, in a multi-cultural country like USA a definition of 'lower class' can hardly be made without the consideration of ethnic minorities. Belonging to a non-white-ethnic minority correlates strongly with social deprivation (UNAIDS, 1997, Centre for AIDS Prevention Studies, 1997). However, within the different ethnic groups there are huge differences which make a generalisation of ethnic minorities unreasonable. One of the few studies on homosexuality in ethnic minority groups has been carried out by Carballo Dieguez and Colezal (1994). They looked at Puerto Rican men who have sex with men and found that men with higher education levels and higher income are more likely to identify themselves as gay men, than men in lower class settings. However, no difference was found in safer-sex behaviour. Factors hindering safer-sex behaviour seem to be poverty, lack of

professional education, language problems, housing, and a general feeling of deprivation (Dieguez and Delozal 1994; Biechele 1996).

In his study of gay men's social network in the light of AIDS in Germany, Biechele characterised the specific situation of lower-class men as marked by high degrees of depression and alcohol dependence. Depression is associated with feelings of uselessness and powerlessness. Self-identification as a homosexual is considered as having an important influence on the social network to be built up. Those who are living in a homosexual relationship with a close partner or those men who are having sex with men but are married used the gay community only as a gatekeeper to meet sexual partners (Biechele 1996).

The gay community mostly comprises gay men who define themselves as homosexual, and is mainly situated in big cities, where most gay men live. In relation to the use of safer sex, Biechele distinguished three different concepts which have emerged to prevent HIV infection: the situation related (referring to the safer-sex concept of the AIDS support groups), the person related (only having sex with a person supposed not to be infected), and a fatalistic approach (has problems other than AIDS). Most people practised a mixture of situation- and person-related strategies. Risk factors were "love" and "alcohol". One common response to HIV/AIDS for men who are not close to the gay community is to engage in a close relationship. However, all the men interviewed who were living in a partnership did not practise safe sex. An agreement of practising safer sex outside the relationship existed only in a few relationships. Talking about safe sex is perceived to destroy confidence within the relationship.

A specific risk factor for gay men from lower classes was inconsistent knowledge about infection. For example, having sex with a married man was perceived to be safe, as sex was also thought to be safe outside the scene of the gay community (Biechele 1996).

In Australia several studies confirmed the findings of similar studies in US and Europe: Men of lower socio-economic status are more vulnerable to become infected with HIV (Connell et al., 1991, Connell et al., 1993, Dowsett et al., 1992, Dowsett 1996).

A study on the base of the results of a previous study on the social aspects of the prevention of AIDS (SAPA), a survey of 535 gay and bisexual men in Sidney and non-metropolitan New South Wales, had uncovered social class influences in the men's response to HIV/AIDS. Men with lower education levels and those who were distanced geographically and socially from organised gay communities had received less information about safer sex. Changes in partner relations and sexual practices toward safer sex were also related to education level, geographic location and gay community attachment. Those who continued to practice unsafe sex were more likely

to be in lower-status occupations and were less attached to gay community life. The looser attachment to the gay community was found to be an important factor, because prevention activities are almost exclusively delivered by gay community AIDS service organisations. Informed social support was found to be a vital ingredient in a collective response to the epidemic. This response worked on different levels: The gay community organisation created a safer-sex culture, using the idea of the community protecting itself. There was also an informal aspect where gay men were providing information, support and encouragement to each other. It was, however, acknowledged that gay community based prevention programmes were not reaching all homosexually active men equally (Dowsett et al., 1992).

A re-examination of the study findings to explore the differences between socially advantaged and disadvantaged homosexual men focused on three key dimensions: education level, income, and labour-market vulnerability. The study shows, that while the levels of sexual and social engagement in the gay community do not show class effects, involvement in gay community politico/cultural activities does, with the less advantaged less likely to participate. It was found that men with lower incomes are less likely to use condoms, and receptive anal intercourse with casual partners is most likely among those with least education and lowest economic position. There is also a tendency for the less advantaged to be sexually initiated younger; they are also less likely to have an HIV-antibody test. There was an indication that less educated men are more segregated from the gay community compared with more affluent gay men, and that they had less access to educational and informational resources about HIV/AIDS (Dowsett et al., 1992).

In their study about 'homosexual desire and practice among men in working-class milieux' Connel et al., confirmed that widespread homophobia in working class settings makes the acknowledgement of the sexual preference quite difficult. Entry into networks where sexual preference is easily realised means a major step. The commonest occasion for this step is the discovery of 'beats' (public meeting-places for casual sex encounters between men) and the possibility of frequent free sex with a range of partners. The beats fit with working-class tradition: they are informal, egalitarian, self-made, communal and anti-authoritarian. A relationship with an older men, who acted as sexual and social 'mentor', was most often found to be the means of entering the networks (Connell et al., 1993).

The two main settings of sexual activity were found to be beats and homes. These correspond to distinct relationships and distinct erotic practices. Venues (bars, clubs etc.) are common settings for the social pleasures of conversation, joking, and drinking rather than direct occasions for sex. Monogamous stable couples are the hegemonic rather than the normal thing. Anal-genital practice is much more likely in relationships than at beats, because for these men anal sex is associated with intimacy and trust.

This has important consequences for safe sex strategy: When safe sex is identified with using condoms for anal sex, and anal sex at the same time is identified with intimacy and relationship, then the less intimate sexuality in the beats may seem not to require precautions. A relationship based on the ideal of monogamy may be seen as safe. Most respondents in the study who were currently engaged in couple relationships practised unprotected anal sex with their lovers whether or not they were sure their partners had no other sexual contacts (Connell et al., 1993).

4.1.8 Excursus: Socio-economic status and shorter survival

Although the focus of this report is on socio-economic status in the context of prevention of HIV infection, it is worth having also a look at the effect of socio-economic status once a person is infected with HIV, considering access to health care, health status and disease progression. These findings underline the importance of successful prevention interventions.

A Canadian study looks at the effects of socio-economic status on those already infected with HIV. This research on socio-economic status and survival in HIV-infected homosexual men during 1982-84 confirmed a significant higher risk of disease progression for low income men, despite adjustment for age at infection, health status and treatment (Hogg et al., 1994).

This finding is consistent with the experiences in other diseases. A link between lower socio-economic status and higher morbidity and mortality rate becomes increasingly evident for several diseases, including various cancers and cardiovascular disease (Wilkinson 1992; Hogg et al 1994). The relation between low economic status and HIV-mortality is of growing concern, particularly as the HIV/AIDS epidemic is shifting toward the more socially and economically disadvantaged (Centres for Disease Control and Prevention 1993, Hogg et al., 1994). Most studies on HIV positive patients have concentrated on pathophysiological and clinical issues and viral load measures as predictors of disease progression. Much less attention has been paid to the social determinants of HIV disease progression (Hogg et al., 1994).

There are several explanations for the relation between low economic status and disease progression.

- One explanation is that low income is a consequence of more rapid HIV disease progression. This is also known from other disease groups, e.g. an association was found between schizophrenia and lower socio-economic status, which was assumed to contribute to a downward drift in the individual patient's status (Marneros et al., 1990; Hogg et al., 1994). In relation to HIV, this means that those infected are less likely to remain fully employed or to maintain their income as

their disease advances. The decline in income due to the disease would therefore be the cause of a more rapid HIV morbidity, although ultimately caused by the disease itself.

- Another explanation is that the shorter survival in people with lower income is a consequence of less access to medical care. Evidence has shown that Black and Hispanic patients seem to progress more rapidly from AIDS to death than non-Hispanic white patients (Rothenburg et al., 1987, Hogg et al., 1994). However, this also depends on the stage of diagnoses. Black people are found to present rather late for health care.

The shorter survival of HIV-infected patients was explained as stemming from limited resources for the complex treatment of the infection and its subsequent complications (Stein et al., 1991, Hogg et al., 1994). However, in British Columbia, where this study took place, HIV-infected patients receive free antiretroviral therapy. This may be the reason why no differences were found between low- and high-income men in their use of treatment. Nevertheless, even after adjustment for use of treatment the association between lower income and shorter survival still remained (Stein et al., 1991, Hogg et al., 1994).

Another Canadian study (Schechter et al., 1994) compared non-progressors (with stable CD4 count, no antiviral treatment or treatment against opportunistic infections) with rapid progressors (defined as those who had developed AIDS). It was found that a significantly higher proportion of the non-progressors had annual incomes above 10,000 dollars. They were more likely to have finished secondary school, and reported employment in management and professional positions. These associations cannot be explained by unequal access to care, since all subjects were covered by universal health insurance and received a standardised approach to disease management within the context of the study. Differential access to therapy cannot be considered responsible either, since none of the non-progressing group had ever received these treatments. The socio-economic differences were present at baseline, so that downward socio-economic drift due to advancing disease cannot explain these observations. The authors conclude that other factors than access to care but affected by socio-economic status are likely to be involved. They propose that psychological or nutritional factors have to be considered (Schechter et al., 1994).

The observations in these studies are supported by the findings of other studies, which confirm that people with lower incomes experience higher rates of mortality. Income, for example, has also been found to be a predictor of survival in multiple myeloma, Hodgkin's disease, and lung, gastric and pancreatic cancers (Cella et al., 1991; Hogg et al., 1994). Significant differences in mortality across income groups have been found in children and adults in Canada and elsewhere (Wilkins et al., 1989; Wise et al., 1985; Hogg et al., 1994). In the US, disparities in mortality by income groups have significantly increased since 1960 (Pappas et al., 1993; Hogg et al., 1994). The fact that two-thirds of the mortality rates in developed countries can be

accounted for by income distribution strengthens the association between health and income distribution, and suggests that overall health within a society is less dependent on the population's material circumstances, than on the social inequities that exists within the society (Wilkinson 1992; Hogg et al., 1994).

5. Factors which explain the different effectiveness of prevention intervention

While the previous section gave an overview on what is known about socio-economic or class-related factors and their role in HIV infection, the following chapter presents the reasons for higher vulnerability for HIV infection which lead to differences in effectiveness of prevention intervention. It also shows the complexity of motivations for risk behaviour which have their roots in marginalisation and socio-economic inequality.

The fact that most of the available literature on socio-economic differences in the context of HIV focused on gay men is reflected in the provision of possible explanation. Only few aspects from a women' perspective contribute to the pattern of explanation. Literature on ethnic minority groups or drug users did not propose explanations nor intervention strategies.

5.1 Sexual Identity

Various studies documented a relation between sexual identity, socio-economic status and HIV infection (Dowsett et al., 1992, Connell et al., 1993, Bochow 1994, Biechele 1996).

Homosexuality is easier to practice openly in the presence of a supportive environment, with the acceptance from family, friends, and colleagues. This is generally more common in a middle class environment. Homophobia and discrimination of people with other sexual preferences is more common in working class settings. This limits the development of a homosexual identity for working class men (Connell et al., 1993).

In addition, sexual identity itself is an important factor in terms of prevention of HIV infection. A person, whether homosexual or heterosexual, who is aware of her or his sexual needs and desires is more likely to express needs, desires or even anxieties in terms of HIV/AIDS infection. Such a person is more likely to communicate about sexuality, sexual risk behaviour and strategies to prevent HIV infection (Gorna 1996).

5.2 Self-confidence

Being able to express sexual needs, discuss sexual risky behaviour or demand strategies for HIV prevention requires self-confidence. Self-confidence is strongly related to social status. Individuals who perceive themselves as inferior (e.g. working class gay men, women, drug users, immigrants) are more likely to lack self-confidence. The fear of discrimination, humiliation, ridiculing or even punishment or violence limit the ability to express desires on sexual behaviour or to insist on safe sex (Gorna 1996, Lurie et al., 1995).

The specific situation of lower class men is marked by a high degree of depression, which goes together with feelings of uselessness and powerlessness and a general feeling of deprivation. This does not help to increase self-confidence (Dieguez and Delozal 1994, Biechele 1996)

The experience of cultural exclusion through inadequate education erodes the self confidence of working class people too (Dowsett 1996).

5.3 Emotional issue

Emotional aspects are closely related to sexual identity and self-confidence. They may limit communication about safe sex, and therefore influence the effectiveness of prevention intervention (Biechele 1996).

A person who is shy or feels intimidated to talk about sexuality, about his or her preferences, needs and desires will not easily be able to talk about methods of HIV prevention, such as safe sex, changing risky sexual behaviour or insist on the use of condoms (Mann 1995).

Other emotional risk factors for HIV infection may be 'love' and 'partnership'. Love can make risk of infection seem irrelevant. Fear of losing a partner may make people accepting and tolerating risky behaviour. Perceived trust in partnership may make safer sex methods within partnership and in outside sexual relationships taboo subjects, because they are implying mistrust and unfaithfulness (Biechele 1996, Gorna 1996).

Persons who lack self-confidence or see themselves in a inferior position are more vulnerable towards these issues (Gorna 1996, Mann 1995, Gillies et al., 1996).

5.4 Ability to communicate

The ability to communicate about sexuality is limited by several factors, including sexual identity, self-confidence and emotional issues.

However, the ability to communicate about sexuality and risk behaviour is also connected with issues on an intrapersonal and interpersonal level. A key factor of the interpersonal level is that HIV risk and decision making exist in the context of the interaction between 2 and more people. This means that individual behaviour alone is not the result of individual predispositions, but depends also on the interactions with others, with social environment, social status, and power relationships (Gorna 1996). For example, HIV prevention efforts which are directed only at behaviour change in women and not at their male sexual partner, will have little success within the existing imbalance of power and decision making within the relationship.

5.5 The social status of women

As discussed before, gender differences are an important factor in the manifestation of HIV/AIDS. Closely related to their self-confidence and their ability to communicate about safe sex is the social and economic status of women.

The inferior status of women in nearly all societies means that women tend to be far more vulnerable than men for reasons beyond physiology (Alcorn 1997).

Women in general have less power in society (Gorna 1996). A key factor to power is access to resources, which also influences decision making. Women still earn less as their male counterpart, and those who are not employed depend on the wages of their husband or male partners. Gender based economic inequality is the reality even in 'developed' countries. In the context of HIV prevention women's economic inequality can have serious implications (Gorna 1996). The economic and power inequality may lead to a situation where a women is not able to insist on practice of safe sex, either in case of rape or violence or financial dependency. It is estimated that as many as 80 % of HIV infected women worldwide acquired the virus from their one and only partner (Gorna 1996).

A financially dependent women may find herself exchanging sex with her partner for the money for food, clothing, living etc. However, as Gorna argued, this is not to suggest that all marriages are legalised prostitution but stress that dependencies create tensions and inequities in many partnerships.

The economic dependence on their male sexual partners can have important consequences for women's sexual health. Women may decide not to try to persuade

a partner to wear a condom, particularly if this request will cause a dispute about fidelity.

Many women experience coercive sex and even rape within their primary relationship. Some decide not to resist this either because they experience or fear further physical violence, or because the economic and social constraints are so great (Alcorn 1997).

On the other hand, poverty and limited economic opportunities may encourage women's decisions to use sex as currency, as survival sex or in commercial sex. All these may lead to increasing vulnerability to HIV (van Griensven et al., 1995).

HIV prevention messages that recommend that women reduce the number of their sexual partners fail for various reasons: Jonathan Mann has argued that a woman's risk is related to her sexual partner's behaviour. In Kigali, for example 1 in 5 HIV infected women had only one single life time partner; and in Morocco 45% of infected women had been infected by their husbands. In some cases multiple sexual partners may be necessary for survival. In addition, women often lack control over their sexual relationships. In marriage the threat of physical violence may disempower a women, even if she is aware of the danger of AIDS, even if condoms are available, and even if she knows her husband is HIV infected (Mann 1995). Mann argues that the central problem for HIV infection among women cannot be solved with posters, information campaigns or condom distribution. The central issue is the inferior role and status of women to the extent that women's human rights and dignity are not respected, and society creates and enhances their vulnerability to HIV. Current HIV/AIDS prevention initiatives tend to focus on individuals by creating programmes, but do not address the societal issues which frame and define vulnerability to HIV (Mann 1995).

5.6 Social Networks

Several studies highlighted the importance of the involvement in social networks in the context of HIV prevention (Gillies et al., 1996, Dowsett et al., 1992, Bochow 1989). The gay community in big cities with its well educated middle class members quickly developed a collective response to the threat of HIV infection. A safe sex strategy was implemented and a safe sexual lifestyle proclaimed. However, these prevention messages remained very much within the gay community and failed to reach individuals outside the social gay networks (Dowsett et al., 1992).

It was found that urban gay communities who produced a strong response to HIV in the form of a Safe Sex strategy and a great deal of community activity in prevention and care have a definite class character (Connell et al., 1993). The members are highly

educated and affluent in comparison with the general population (Research and Decision Corporation 1984; Bauman and Siegel 1987; Connell et al., 1988).

Although attachment to the “gay community” has been identified as central to the achievement of sexual behaviour change, participation in the gay community was not easily achieved. Working class gay men are vulnerable not just because of their stigmatised sexual interests, but also because of their insecure economic circumstances. Modern gay life style seems to require more than a homosexual orientation. Economic security seems to be a significant basis for participation in gay community life.

Many working class gay men and men who have sex with men, but do not identify themselves as homosexuals, do not feel comfortable in the settings in the gay community, where well educated middle class men dominate. They feel excluded. Their social networks are usually situated more in heterosexual working class settings with colleagues or family. (Dowsett et al., 1992).

As a consequence of their social exclusion from gay community life, most working class men’ links with the gay community are primarily sexual. The gay community is mainly used by them as gate keeper for sexual contacts with other men. Political and cultural aspects of gay community life are of little interest to them (Dowsett et al., 1992).

Because of lack of involvement in the gay community, working class gay men may get less access to the information on HIV prevention proclaimed by the gay community than members of these communities do (Dowsett et al., 1992, Bochow 1994, Biechele 1996).

Social isolation and disintegration of community is in general a critical co-factor in the rapid spread of HIV infection, and social networks are important aspects of the health and economic well-being in communities. Destroyed or displaced social networks weaken mechanisms of social support and can make people vulnerable to the spread of HIV, particularly in the interaction with drug dependency, poor access to services and resources, wider social discrimination and a lack of political power (Wallace 1993, in: Gillies et al., 1996).

HIV/AIDS prevention strategies operating within ‘gay communities’ may therefore fail to reach a very large proportion of men who have sex with men, those who come from a different class background. It is suggested that these prevention strategies might be inappropriate in working-class settings. HIV/AIDS prevention programmes, however, have taken little account of this. They are mostly designed by professional people and reflect middle-class experience and assumptions. Exceptions are HIV/AIDS prevention outreach activities, such as beats (Bennet et al., 1989; Dowsett and Davis 1992; Connell et al., 1993).

5.7 Social issues of prevention receptivity

Prevention messages may not have been accessible for disadvantaged people, either they have not reached the locations where these people live, work or socialise, or they have not been published in the media preferred by people from lower socio-economic classes (Krueger et al., 1990). For example, individuals who are distant to the gay community may not be reached by any information on HIV prevention. Mass media, like newspapers, TV and radio who reach people with lower socio-economic status do rarely touch the subject in an appropriate informative way.

5.8 Cognitive issues

People from lower socio-economic background may not have reduced risk behaviours to the same degree that other population groups have. It is likely that HIV prevention efforts have been less effective in reaching the impoverished, disadvantaged (Krueger et al., 1990).

The consistent findings on the relation between educational attainment and knowledge about and behavioural responses to HIV/AIDS may point beyond individual capacities to a more systematic social process, the effects of social inequality, e.g. the way in which safe sex is understood and appropriated (Dowsett et al., 1992).

“Educational level is not simply a variable which describes an individual characteristic or lack of knowledge and skills. It also indicates about access to and appropriation of a valuable social resource “ (Dowsett et al., 1992).

It was found that men with lower education levels and those who were distant to gay communities had received less information about safe sex. But, even though working class men are in contact with AIDS service organisations doing HIV/AIDS education, they - more often than middle-class gay men - do not completely comprehend or practise safe sex. They often acquire an approximation of knowledge (i.e they get information by word-of mouth and learn experientially.) Sometimes they get it wrong. They may struggle with an image on sustaining safe sex educational campaign designed for inner-city gay community, because visual metaphors or abstract thinking are not familiar to them. Cultural unfamiliarity and a lack of sophistication in understanding the point of the representation may lead to exclusion from modern gay culture (Dowsett et al., 1992).

Working class gay men who were asked to comment on existing HIV/AIDS education materials rejected and criticised some information as being obviously irrelevant to HIV/AIDS, and material using complex linguistic and visual images was rejected as boring. Prevention materials often assume a high level of education

in the target audience. They are wordy, jargon-filled, or simply too complex. Many of the materials did not reflect the sexual and social experiences of these men's lives (Dowsett et al., 1992).

It was found that there was considerable evidence of informal learning occurring among working class gay men, such as information exchange and support for safer sex practices. Men talk to other men in beats, informal places where they meet and have sex. This could be seen as a potential resource available to HIV/AIDS prevention programmes. These men could be used as "barefoot educators", as volunteer educators in their local areas and social networks (Dowsett et al., 1992).

Many campaigns or interventions are not related to the social and cultural context of people from lower socio-economic background (such as working class men or members of ethnic minority groups), and might therefore not be seen as relevant to them. The inability to develop and direct HIV prevention messages in accordance to the knowledge level and social and cultural context of disadvantaged population groups may lead either to an ignorance of the AIDS problem, to seeing oneself not at risk, or to an approximation of knowledge with the possibility of continuing risk behaviour and risk of infection (Dowsett et al., 1992).

Prevention messages focusing on promiscuity may not reach individuals who are living in a stable relationship and believe their partner to be faithful. These people will not perceive themselves at risk and will not engage in HIV prevention activities (Biechele 1996).

Consequently, instead of applying safer sex strategies to protect themselves from infection with HIV many individuals take up more selective strategies, such as reducing the number of partners, paying attention to the appearance of the prospective partner, avoiding partners from the gay scene who are supposed to be highly infected, picking up sexual partners who are probably distant to the gay community, preferably married men who are supposed to be not infected, all strategies whose protection is quite illusory, or they turn to a monogamous relationship (Biechele 1996).

5.9 Social issues of risk perception

Evidence suggests that individuals from lower socio-economic background have less health awareness. They take part less frequently in prevention programmes and health check-ups (Siegrist 1989).

However, as evidence shows, impoverished people are at increased risk for HIV infection because of the social and physical circumstances in which they live (Krueger 1990). It is reported that persons with lower socio-economic status do less

often come forward for HIV testing, because they do not perceive themselves to be at risk. Many of them present late to the health services with severe symptoms of the disease, not knowing their HIV positive status (Krueger 1990).

The longevity and uncertainty of the risk of HIV infection hinder prevention. HIV prevention requires risk reduction behaviour, the consequences of which might be relevant in 5 or 10 years time. The fact that the outbreak of the disease is delayed for many years after infection makes the threat of HIV/AIDS less imminent for people with a less reflective perspective of life. Preventive behaviour is therefore dependent whether a long-term perspective exists (Rosenbrock 1987)

As the ways of transmission of the virus is known and defined to certain situations the prevention message appears to be very simple: safer sex and sterile needles and syringes (Rosenbrock 1987) However, with sexuality and drug use areas of life are addressed in which behaviour is not necessarily a result of rational reflection (Clement, 1986, Quensel, 1982) An education campaign appealing only to reason will not be successful. The importance of sexual behaviour and drug abuse behaviour must be addressed, too. These differ significantly according to social environment, 'scene', age, sexual orientation, region and social stratum (Rosenbrock 1987).

In addition, many individuals from disadvantaged population groups might have other problems currently more pressing than HIV/AIDS infection. Injecting drug users may need a place to sleep, immigrants may have problems with their residence permit, for others economic worries, unemployment, and poor living conditions may displace anxieties about HIV infection. So, HIV infection is not a priority for them (Smith 1991). As a long-term problem which manifests itself in the future, it does not attract immediate attention. So, the degree of ignorance is quite high.

5.10 Specific vulnerability

People from lower socio-economic groups more frequently have untreated genito-urinary infections because of sexual transmitted diseases, which increases their vulnerability to infection with the HIV virus (Daker-White et al., 1997).

The spread of HIV infection depends on the distribution of risk behaviour and the effectiveness of transmission of the virus. HIV transmission is encouraged by the existence of ulcerating infections (STDs). This means that the physical condition of the genitalia and the overall physical health are predictors of HIV transmission (Rosenbrock 1993).

Consequently, people from the lower classes are at higher risk of infection: They are physically more vulnerable and have fewer social and health-care choices. They have cognitive problems understanding and accepting prevention messages, and they have fewer resources for coping with the disease (Rosenbrock 1993, Mielck 1989).

Physiological reasons for women's specific vulnerability:

Women are more likely to acquire HIV from sex with men than vice versa. Estimates of the efficiency of transmission vary, but it is suggested that vaginal intercourse with an HIV infected person is between 2 and 20 times more risky for a woman than for a man (Alcorn 1997).

Added to this vulnerability is the fact that throughout the world women are becoming infected with HIV at a younger age than men. Women tend to have relationships with men who are at least a few years older than themselves. In some countries women are up to 10 years younger, for reasons of child bearing etc. Men generally are more likely to have had more sexual relationships and therefore are more likely to be infected with HIV. In the light of HIV/AIDS recently some men particularly started to have sexual relationships with young girls, preferably virgins, to avoid the threat of HIV infection (Berer 1993).

In immature female genital organs the vaginal walls are thin, and trauma during intercourse is more likely, which facilitates HIV acquisition by girls and young women (Alcorn 1997).

Additionally, women who have had a circumcision have a higher vulnerability as sexual intercourse will often cause bleeding (Alcorn 1997). As the practice of circumcision is often hidden and illegal and/or carried out in poor hygienic circumstances, the operation itself can create a risk of infection in the reproductive organs which increases the risk for HIV infection.

Even infections in the genital tract and the uterus, which may be caused by chronic irritations of contraceptives, such as IUD's (Intrauterin device), are expected to increase the vulnerability towards HIV infection (Denenberg R. 1994).

The presence of sexually transmitted diseases increases the risk of HIV infection (Grosskurth et al., 1995, Mayoud et al., 1997). Women who acquire sexually transmitted infections may not be aware of the infection (many infections are initially symptomless in women, whereas men may develop symptoms rapidly), or if they are aware, treatment facilities may not be available (Alcorn 1997). These infections are more likely to be found in poor women, who are more vulnerable as well as having less access to health services for prevention and treatment (Berer 1993, Siegrist 1989).

Sexual violence restricts the ability of women to protect their health in Britain, as throughout the world (Gorna 1996) The high prevalence of rape, coercive sex and sexual abuse of adult women and girls is of a major concern for HIV, not only that condom use is unlikely, but the act may well involve violence and force which causes trauma and a greater risk of transmission (Alcorn 1997).

5.11 Unspecific vulnerability

Studies on strengthening of health resources and the psycho-social immune system look at factors which enable individuals even under great burden and stress and risky health behaviour to remain healthy.

The concept of 'salutogenesis' has been the leading model of various researchers in this field. It states that individuals and groups have a bigger chance to stay healthy when they are able to predict and categorise demands, when they are able to react and interfere and influence the situation, and when individual or collective objectives can be aspired and achieved (Antonovsky 1987, 1991, Rosenbrock 1996).

The factors 'comprehensibility', 'manageability' and 'meaningfulness' together build the 'sense of coherence', the sense of living under conditions which are better understood and more controllable (Rosenbrock 1996). This means that people with a higher sense of coherence have more influence in their life and have an unspecific higher resistance against health risks. People who lack this sense of coherence are more vulnerable to health risks.

Adapted to HIV /AIDS this would confirm that people with lower socio-economic status, who have less sense of coherence because of their living and working conditions and status, are less able to influence or manage or have an global understanding of their health. Instead they rather feel powerless and lost, which makes them more vulnerable to diseases.

6. Intervention strategies to overcome social inequalities in relation to HIV infection

In response to the previous section which identified factors which limit the effectiveness of prevention programmes, intervention strategies are presented in this chapter which aim to overcome social inequalities in relation to HIV information and to increase the effectiveness of prevention activities. Similarly to the previous chapter, the majority of literature focuses on gay men. Some of the intervention strategies can be adapted to the needs of other disadvantaged people amongst ethnic minorities, drug users, and women. However, there is an urgent need to look more in detail at socio-economic differences in these population groups and to develop appropriate strategies to enable them to successfully prevent infection with HIV.

6.1 Sexual Identity

The successful development of a clear sexual identity requires a supportive environment. Activities against homophobia and discrimination of people with other sexual preferences or lifestyles are urgently needed and have to be directed toward

the lower socio-economic population groups (Biechele 1996). At the same time the stigma of HIV/AIDS needs to be addressed within the working class setting, but also within the whole society, including health workers (Biechele 1996).

6.2 Empowerment

Empowerment goes beyond the development of self confidence.

The importance of empowerment, community mobilisation and social change in the face of HIV/AIDS was highlighted by Parker (Parker 1996). He argued that an important shift has begun to take place in the understanding of and response to the HIV/AIDS epidemic. A growing awareness of the complex social, cultural, political and economic forces which are shaping the epidemic and of the link between social injustice and increased vulnerability to HIV, has led to a recasting of both the theory and the practice of HIV/AIDS prevention: The focus of HIV/AIDS prevention efforts has increasingly shifted from models aimed at changes in individual risk behaviour to models aimed at community mobilisation. The earlier emphasis on information-based educational campaigns has been displaced by intervention programmes aimed at enablement and empowerment. The author concludes:

“These developments have been linked to a new awareness of the fundamental connection between public health and human rights, and to a new understanding of the fight against AIDS as part of a much broader process of social change aimed at redressing structures of inequality, intolerance and injustice” (Parker 1996).

Robin Gorna calls for empowerment for women in all domains of their lives, to make sexual decision-making possible in the context of their whole live. This means also enabling women to explore and enjoy the full range of their sexuality. She describes empowerment as a potential transformation from victim to victor. Such empowerment frequently improves not only the quality but also the quantity of life (Gorna 1996).

Empowerment in this understanding means a reorientation of power towards the powerless on a individual, interpersonal, collective and environmental level. The focus is hereby on the context of decision-making and action. The individual level requires access to information, money and support, and also includes self-esteem and the development of a ‘critical consciousness’, which is the recognition of the link between personal problems and social structural problems (Freire 1983) The personal power also includes autonomy and needs to be transformed into interaction with others, to the interpersonal level, with the ability to influence and control others. The collective level refers to familial, communal, political and economical issues and means, having the power to access and participate in the planning and decision making. The environmental empowerment encourages women to develop their skills

in community participation, social action and to create changes in health and non-health related environments, such as schools, community, and work place.

Gorna concludes, that the development and interaction of personal, communal and environmental power lead to safer sex. It increases one's self-esteem and give a sense of control of the life and a belief that they can make a difference in their own life in the lives of others around them (Gorna 1996).

6.3 Social Networks

As a response to the risk of HIV infection, and in order to increase the ability to communicate about risk behaviour and safe sex the creation of new social networks or support which build on existing networks has been found to be useful for successful empowerment of individuals and groups (Gillies et al., 1996).

Some community-based HIV prevention and sexual health promotion activities are following the idea of empowerment (Freire 1973), enabling people to analyse their own situation, to decide on their priorities, develop solutions to their problems and take collective action to improve particular aspects of their life. For example, a female prostitute outreach programme in Rio de Janeiro, Brazil, initiated by prostitute workers in partnership with local health officials, and which promotes advocacy for prostitute rights and support provides a social network of support (Peterson and Szterenfeld 1992). Similarly, in a women's health programme in Gujarat, India, aimed at empowerment of women, local village women were trained as women's health workers, promoting knowledge, but also analysing and supporting women's role in existing social networks (Khanna 1992).

Since the attachment to gay community organisations is vital for successful HIV prevention, over-proportionally many working class gay men, however, are excluded, there is a need for adaptation of prevention interventions towards the needs of these people.

"The processes of subcultural appropriation and inclusion/exclusion need to be recognised if preventive education, care and support programmes for such men are to work effectively"
(Dowsett et al., 1992).

Social networks are very important in the support of their members as part of community development programmes providing active support e.g. in child care, health and social services, housing, advocacy etc. (Gillies et al., 1996), when they are built on existing social networks of local communities.

The importance of social networks for the well-being of communities in developed and developing countries is known. A study in Italy (Putnam 1993) provided

evidence that networks of support by people of equal status enabled a profound framework for citizen engagement, economic growth and healthy citizens. Social networks are characterised as the 'glue' of 'social capital', with voter participation, community participation and co-operation, trust, civic engagement in terms of community planning and policy making as fundamental elements of it (Putnam 1993).

6.4 Social Issues of information distribution

The ways of distribution of information on prevention of HIV infection need to be improved to ensure that people outside the social networks (e.g. gay communities) are also reached by the information. At the same time, understandable information on HIV infection has to be published via mass media, such as popular TV and radio programmes, and local newspapers.

Information needs to go where these people live and work or spend their free time. Outreach work has been found to be successful to communicate with people who are otherwise difficult to access (Biechele 1996, Dowsett et al., 1992).

Condoms as the most popular method of safe sex may not provide total protection, but they will help considerably if used properly and consistently. Therefore they need to be available when required and it may be worthwhile encouraging local chemists, pubs and clubs and the local health authority to improve availability, as well as aiming to improve image and acceptability (Johnson A., MW Adler 1993).

A rational policy is recommended to prevent the infection with HIV among drug users, which includes harm reduction principles as ensuring the convenient free availability of risk reduction resources and programmes including drug treatment (e.g. methadone maintenance) and supplies such as syringes and condoms, build and/or maintain solidarity and responsible relationships between drug injectors and other people. Furthermore to build a culture of lower risk, policies should encourage drug injectors and other drug users to organise against HIV (Friedman 1997).

6.5 Cognitive Issues

Prevention messages have to be improved and adapted to the knowledge and socio-cultural level of disadvantaged population groups (Krueger 1990, Biechele 1996). Emphasis should be put on the personal communicative element of outreach work for lower class homosexual men, without neglecting the use of mass media, such as radio, TV and print media for the dissemination of understandable HIV prevention messages (Biechele 1996).

There is considerable evidence in informal learning, information exchange and support for safer sex practices between working class gay men and men who have sex with men. Men talk to other men in beats, informal places where they have sex. These 'barefoot educators' could be used as volunteer educators in their local areas and social networks (Dowsett et al., 1992).

The concept of these informal barefoot educator activities is similar to processes of collective action in adult literacy work (Freire 1973).

“These men may ... be the only ones who can reach other homosexually active men using public sex environments - the married men, the closeted, the frightened. This is a strategy which must be integrated with other, more conventional public-health prevention strategies, but these programmes are definitely possible and should be developed. ... These educators are a cautious reminder that researchers' and educators' downward-looking gaze, ... our familiarity with words, images, concepts and abstractions, are perhaps not the best bases on which to develop educational strategy” (Dowsett et al., 1992).

Similarly, experienced gay men who are both sexually and socio-culturally interested can be used as gatekeepers facilitating access to the gay community and supporting access to information (Biechele 1996, Bochow 1998).

The discourse of HIV prevention must shift in emphasis from individual and group behaviour to include systematic, societal, political, as well as cultural factors (Gillies et al., 1996).

6.6 Specific Vulnerability

Specific vulnerability can be decreased by an improved quality of health service and improved health promotion programmes. Health promotion programmes have to be targeted specific to people from lower socio-economic background, in order to increase health awareness and a positive attitude towards the use of prevention programmes (Siegrist 1989).

At the same time consideration has to be given to the increasing numbers of sexual transmitted diseases (STDs). As the presence of STDs increases the risk of HIV infection sexual health intervention are needed to prevent and/or treat STDs in order to reduce the risk of HIV infection (Daker-White et al., 1997, Grosskurth et al., 1995). Specific attention has to be given to the specific vulnerability of women which has already been documented in 5.8 (Gorna 1996, Berer 1993).

6.7 Unspecific vulnerability

Unspecific vulnerability is strongly related to the general social and labour market policies of a particular country. A re-orientation of social and economic policies would be urgently needed to decrease the gap between the rich and the poor. These more long-term strategies are crucial if prevention interventions were to be successful in preventing HIV infection.

However, the available literature on HIV/AIDS is very vague in this aspect, although in general (see 3.3) there are calls for measures, such as integration in the economic life, reduced unemployment, material security and smaller income difference which are expected to provide the material base for a more cohesive society (Wilkinson 1997). And, there is a recognition that poverty is an issue that needs special attention and those who are particular disadvantaged need special care and consideration (Calman 1997).

Interventions of empowerment (see 6.2) are expected to be successful in improving the unspecific vulnerability of marginalised population groups. They can increase one's self esteem and give a sense of control over one's life. People experience that they can have influence and make change in their own and other people's lives (Gorna 1996, Parker 1996). The gained 'sense of coherence' (see 5.11) makes them less vulnerable to health risks (Rosenbrock 1996).

A long-term strategic human-rights based approach is used by Jonathan Mann, who demands a rethinking of the public health concept in the light of HIV. He argues that, as marginalisation, stigmatisation and discrimination are issues of modern human rights, public health should engage in a new strategic approach based on human rights analyses. This means to identify and address the violation of human rights, which creates vulnerability of a particular group of people to becoming infected with HIV (Mann 1995).

Examples of systematic rights violations which interfere with HIV prevention include: discrimination against women, gay and lesbian people, the deaf, minority populations, and youth; violations of the right to information about HIV and safer sex, including condoms; lack of access to education; lack of access to health care etc. (Mann 1995).

A human rights analysis would break down a large problem into many component parts, so that action can occur at the local level. For example: the unequal role and inferior status of women is a fundamental problem which increases women's vulnerability to HIV. One way of improving women's status is to increase their access to education, which involves two vital rights, the right to education and the right to non-discrimination according to gender. The next step is community action, to make schooling more accessible to girls. Another right can be selected for action:

such as the right to information, or the right to equal status before the law. Improvement of any aspect of women's rights will make a solid, incremental, contribution to improving women's status and to women's health. The author finally concludes, that without commitment to change the societal conditions which constrain health, the positive impact of public health work will be limited (Mann 1995).

7. Conclusions

The findings in this report clearly document that people with lower socio-economic background are at greater risk of contracting HIV. They have fewer possibilities to cope with the risk of HIV infection.

These factors need to be considered by clinicians, public health staff and others engaged with preventive interventions for HIV infection. Risk reduction messages have to be designed and adapted to the knowledge level and culture of disadvantaged people in order to reach all socio-economic levels.

The relationship between low socio-economic status and ill-health is already well known (see chapter 3.3) With the HIV/AIDS epidemic this issue becomes more visible and present a challenge that needs to be addressed (Rosenbrock 1993).

This literature review identifies gaps in the research carried out on HIV and the effectiveness of HIV prevention strategies. Little is known about class and socio-economic related inequalities and their relation to HIV infection in Europe. From the few studies which look more closely to these issues, most studies relate to inequalities in developing countries. In Europe and other industrialised countries the studies which considered socio-economic differences in the relation to HIV infection predominantly have looked at gay men. Some studies also looked at ethnicity as a risk marker. Little research was carried out in respect to women or to drug users.

The reluctance to study socio-economic inequalities in the context of HIV infection could be due to a tendency to ignore the high level of poverty in Europe. It may be far easier to focus on developing countries, where poverty is more obvious and supposedly beyond one's own responsibility and ability to change.

However, poverty is increasing in Europe with a widening gap documented between the rich and the poor (Wilkinson 1997, Siegrist 1989).

The reluctance of many researchers to conduct studies in disadvantaged population groups with lower educational level, poor living and working conditions may be due

to fearing to be seen as a highly educated middle-class researcher, perceived as voyeuristic and patronising, particularly in a study about sexual risk behaviour.

Fixation with one's own social class may be reductionist, ignoring the existence of marginalised people and their needs. Focusing on the socially disadvantaged means taking their problems seriously, respecting them, and offering professional skills and advice to support them in identifying the problems and to develop together strategies in order to solve these.

Research which is based on empowerment, i.e. enabling people to gain control over all domains of their lives is less likely to patronise and is more likely to be accepted. In order to successfully prevent HIV infection in all socio-economic population groups in Europe, more information is needed on the factors which make people vulnerable to disease and vulnerable to infection with HIV.

More evidence-based interventions need to be developed and implemented to improve the living and working conditions of disadvantage people (such as employment, housing, education) to decrease their vulnerability to HIV infection and health risks in general.

At the same time, prevention messages need to be designed and adapted to the knowledge level and culture of people in working class settings.

The effect of socio-economic status in quality of life and life expectancy once a person is infected with HIV needs to be examined more closely. These issues could only be given marginal importance in this literature review. The attitudes towards testing, access to health care and quality of health care may be strongly influenced by socio-economic differences, which highlights the importance of improved prevention interventions.

8. Literature

- Abeni DD, Porta D, Perucci CA (1997): Deliveries, Abortion and HIV-infection in Rome, 1989-1994. The Lazio AIDS Collaborative Group. In: *European Journal of Epidemiology* 13(4):373-378.
- Aggleton P, I Warwick (1992): Young people, homelessness and HIV/AIDS. Issues from a national consultation exercise involving the statutory and voluntary sectors. London. HEA.
- Airhihenbuwa CO et al. (1992): HIV/AIDS education and prevention among African-Americans: a focus on culture. In: *AIDS Educ Prev* 4(3):267-276.
- Alcorn K (1997): *AIDS Reference Manual*. NAM Publications London.
- Anderson J et al. (1996): Ethnic differences in women with HIV infection in Britain and Ireland. The study group for the MRC collaborative study of HIV infection in women. In: *AIDS* 10 (1): 89-93.
- Antonowsky A (1987): *Unravelling the Mystery of Health. How people manage stress and stay well*. San Francisco.
- Bauman LJ and Siegel K (1987): Misperception among gay men of the risk for AIDS associated with their sexual behavior. In: *Journal of Applied Social Psychology*. 7, 329-350.
- Bennett G. et al. (1989): Sex and beats: AIDS related sexual practices in a sample of homosexual and bisexual men in the western area of Sydney. In: *Medical Journal of Australia*. 151, 309-322.
- Berer M (1993): *Women and HIV/AIDS. An international resource book. Information, action and resources on women and HIV/AIDS, reproductive health and sexual relationships*. London.
- Bhopal Raj (1997): Is research into ethnicity and health racist, unsound, or important science? In: *BMJ*, 314:1751-6.
- Biechele U (1996): *Schwule Männer aus der Unterschicht. Sexuelle Identität und HIV Prävention*. Deutsche AIDS Hilfe e.V., Berlin.
- Birn AE, Santelli J, Burwell LG (1990): Pediatric AIDS in the United States: Epidemiologic reality versus government policy. In: *Int. J. Health Services* 20 (4): 617-630.
- Black Report (1980): *Inequalities in Health: Report of a Research Working Group*. London. Department of Health and Social Security.
- Blane D (1985): An assessment of the Black Report's explanations of health inequalities. *Socology of Health and Illness*, 7, 423-45.
- Blank N and F Diderichsen (1996): Inequalities in health: the interaction between socio-economic and personal circumstances. In: *Public Health* 110, 157-162.

- Bochow M (1997b): Informationsstand und präventive Vorkehrungen in Hinblick auf AIDS bei homosexuellen Männern in der Unterschicht. Expertise im Auftrag des Bundesministeriums für Gesundheit, Bonn. AIDS Forum DAH, 26, Berlin
- Bochow M (1998): AIDS in Europe: New Challenges for Social and Behavioural Sciences. The prevalence of HIV among gay men in France and Germany as a function of socio-economic status. Presentation at the conference AIDS in Europe, January 1998 in Paris.
- Bochow M et al. (1994): Sexual behaviour of gay and bisexual men in eight European countries. In: AIDS Care Vol.6, 5, 533-549.
- Bolte KM.and S Hradil (1988): Soziale Ungleichheit in der Bundesrepublik Deutschland. Opladen.
- Calman, K.C. (1997): Equity, poverty and health for all. In: BMJ 1997, 314: 1187-91
- Carballo-Dieguez A and C Dolezal (1994): Contrasting Types of Puerto Rican Men who have sex with men (MSM). In: Journal of Psychology & Human Sexuality, 6(4), 41-67.
- Cella DF, Orav EJ, Kornblith AB et al. (1991): Socioeconomic status and cancer survival. J Clin Oncol; 9:1500-09.
- Centre for AIDS Prevention Studies (1997): High Rates of HIV in Minority Groups and Young Gay Men. University of California, San Francisco. News Release 9.10.1997.
- Centre for Disease Control and Prevention (1993): Update: mortality attributable to HIV infection/AIDS among persons aged 25-44 years - United States 1990 and 1991. JAMA;270:305-06
- Centrepoint (1989):. Hungry and homeless - A sign of the Times. London: Centrepoint, Soho.
- Chmiel, J.S., Detels, R., Kaslow, R.A., et al., (1987): Factors associated with prevalent Human Immunodeficiency Virus (HIV) infection in the Multicenter AIDS Cohort Study. In: Am J Epidemiol 126 (4): 568-577
- Cock KM de, et al. (1998): From exceptionalism to normalisation: a reappraisal of attitudes and practice around HIV testing. In: BMJ 316 (7127):290-293.
- Cock KM de, N Low (1997): HIV and AIDS, other sexually transmitted diseases, and tuberculosis in ethnic minorities in United Kingdom: Is surveillance serving its purpose? In: BMJ 314;(7096) 1747-51
- Connell RW et al. (1988): Social Aspects of the prevention of AIDS. Study A. Report No. 1 - Methods and Sample. Sydney; Macquarie University, School of Behavioural Sciences.
- Connell RW et al. (1991): Social class, gay men and AIDS prevention. In: Australian Journal of Public Health, 15(3)178-189.
- Connell RW, MD Davis, GW Dowsett (1993): A Bastard of a Life: Homosexual Desire and Practice among Men in Working-class Milieux. In: ANZJS, 29 (1) 112-135.

- Dahlgren, G. and Whitehead M (1992): Policies and strategies to promote equity in health. World Health Organisation, Regional Office for Europe.
- Daker-White BA and D Barlow (1997): Heterosexual gonorrhoea at St. Thomas' - I: patient characteristics and implications for targeted STD and HIV prevention strategies. In: *International Journal of STD & AIDS*; 8:32-35
- Davies AG, Dominy NJ, Peters AD, Richardson AM (1996): Gender differences in HIV risk behaviour of injecting drug users in Edinburgh. In: *AIDS Care*; 8(5):517-527
- Davies PM (1986): Some problems in defining and sampling non-heterosexual males. Project Sigma Working Paper No. 3. Cardiff: University of Cardiff. Department of Sociology. Project Sigma Social Research Unit.
- Davies, PM, Ford CI Hickson, P Weatherburn and AJ Hunt (1993): *Sex, Gay Men and AIDS*. London, New York and Philadelphia
- Denenberg, R (1994): Unique aspects of HIV infection in Women. And: Treatment and Trials. The Act-up-New York Women & AIDS Book Group. Reinbek.
- Department of Health (1995): Variations in health. What can the Department of Health and the NHS do? London. HSMO.
- Diaz T, Chu SY, Buehler JW, Boyd D, Checko PJ, Conti L, Davidson AJ, Hermann P, Herr M, Levy A, et al. (1994): Socioeconomic differences among people with AIDS: results from a Multistate Surveillance Project. In: *American Journal of Preventive Medicine* 10(4):217-222.
- Donaldson, C and K Gerard (1992): The visible hand. Economics and health care financing. pp72-83.
- Dondero TJ (1987): Human immunodeficiency virus in the United States: a review of current knowledge. *MMWR*, 36:801-804.
- Dowsett GW et al. (1996): *Practising Desire Homosexual Sex in the Era of AIDS*. Stanford. Stanford University Press.
- Dowsett GW, MD Davis and RW Connell (1992): Working class homosexuality and HIV/AIDS prevention: some recent research from Sydney, Australia. In: *Psychology and Health*, 6, 313-324
- Doyal, L (1995): *What makes women sick. Gender and the Political Economy of Health*. London.
- Drug Link (1994): *Drugs and Deprivation*. ISDD, Institute for the Study of Drug Dependence London. January/February.
- Drug Link (1996): *British Crime Survey: drug use tops 50 per cent*. ISDD, Institute for the Study of Drug Dependence London. July/August.
- Duncan GJ. (1996): Income Dynamics and Health. In: *International Journal of Health Services*, 26, 3, 419-444.

- Elkeles T, Mielck A (1993): Soziale und gesundheitliche Ungleichheit. Theoretische Ansätze zur Erklärung von sozioökonomischen Unterschieden in Morbidität and Mortalität. Publications series of the research group "Health Risks and Preventive Policy" Wissenschaftszentrum Berlin
- Forsdahl, A (1977): Are poor living conditions in childhood and adolescence an important risk factor for arteriosclerotic heart disease? *British Journal of Preventive and Social Medicine*, 31, 91-5.
- Fox J (1989): *Health Inequalities in European Countries*. Gower, Aldershot
- Freire P (1972): *Pedagogy of the oppressed*. London Penguin
- Freire P (1973): *Education for Critical Consciousness*, New York: The Seabury Press.
- Freire P (1983): *Education for Critical Consciousness*, Continuum Press, New York.
- Friedman S (1997): The political economy of drug user scapegoating and the philosophy and politics of resistance. Presentation at the international conference 'Narrowing the Divide. The interface between HIV, sexual health and intravenous drug use'. London, 28./29. October 1997.
- Gagnon, JH (1989): Disease and Desire. In: *Daedalus*, 118(3) 47-77. Quoted in: Biechele 1996.
- Geissler R (1992): *Die Sozialstruktur Deutschlands*. Opladen 1992.
- Gepkens, A and LJ Gunning-Schepers (1996): Interventions to reduce socioeconomic health differences. A review of the international literature. In: *European Journal of Public Health*; 6: 218-226
- Gerrard, M et al. (1993): Perceived vulnerability to HIV infection and AIDS preventive behavior: A critical review of the evidence. In: Pryor, JB and GD. Reeder (Ed.): *The Social Psychology of HIV infection*. Hillsdale NJ, pp 59-84.
- Gibb, D et al. (1998): Factors affecting uptake of antenatal HIV testing in London: results of a multicentre study. In *BMJ* 316 (7127): 259-261.
- Gillies, P, K Tolley, J Wolstenholme (1996): Is AIDS a disease of poverty? In: *AIDS Care*, 8, (3): 351-363.
- Gorna, R (1996): *Vamps, Virgins and Victims. How can women fight AIDS?* London.
- Graham, H. (1994): *When Life's a Drag. Women, Smoking and Disadvantage*. Department of Health, London, HSMO.
- Griensven GJP van et al. (1995): Socio-economic and demographic characteristics of HIV-1 infection among female commercial sex workers in Thailand. In: *AIDS Care*, 7 (5): 557-565.
- Grosskurth H et al. (1995): Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: randomised controlled trial. In *Lancet* 346 (8974): 530-536.
- Hartnoll R et al. (1996): AIDS prevention and drug policy. Dilemmas in the local environment. In: *AIDS, Drugs and Prevention. Perspectives in individual and community action*. Tim Rhodes, Richard Hartnoll (Ed) London, New York.

- Hasan, J (1989): Way-of-life, stress, and differences in morbidity between occupational classes. In: Fox J. (Ed) (1989).
- Hauss F, F Naschold and R Rosenbrock (1981): Schichtenspezifische Versorgungsprobleme im Gesundheitswesen. Forschungsbericht 55 des Bundesministers für Arbeit- und Sozialordnung, Bonn.
- Henrion R, Mandelbrot L (1990):The socio-economic consequences of HIV infection in women and children. In: Bull Acad Matl Med; 174 (8): 115-1159).
- Hickson FC, Reid DS, Davies PM, Weatherburn P, Beardsell S, Keogh PG (1996): No aggregate change in homosexual HIV risk behaviour among gay men attending the Gay Pride festivals, United Kingdom, 1993-1995. Sigma Research. In: AIDS 10 (7) 771-4.
- Hogg RS, SA Strathdee, Kevin JP Craib, MV O'Shaughnessy, JSG Montaner, MT Schechter (1994): Lower socioeconomic status and shorter survival following HIV infection. In: Lancet Vol. 344,1120-1124.
- Hoover DR, Munoz A, Carey V et al. (1991): Estimating the 1978-1990 spread and future spread of Human Immunodeficiency Virus Type 1 in subgroups of homosexual men. Am J Epidemiol 134 (10): 1190-1205.
- House JS, Landis KR, Umberson D. (1988): Social relationships and health. Science 1988; 241:540-5.
- Hradil, S (1994): Neuerungen der Ungleichheitsanalyse und die Programmatik künftiger Sozialepidemiologie. In: Andreas Mielck (Hg): Krankheit und soziale Ungleichheit. Ergebnisse der sozialepidemiologischen Forschung in Deutschland. Opladen (1994), pp 375-392.
- James NJ et al. (1991): AIDS-related risk perception and sexual behaviour among sexually transmitted disease clinic attenders. In: Int J STD-AIDS; 2(4):264-71.
- Jochelson, K, Mothibeli, M & Leger, JP (1991): HIV and immigrant labour in South Africa. International Journal of Health Services, 21, 157-173.
- Joergensen K and A.L. Kristiansen (1991):. Brugerbetaling I Sundhedsvaesement. Copenhagen, AKF. Quoted in: Donaldson et al., 1992.
- Johnson A et al. (1992): Sexual lifestyles and HIV risk. In: Nature Vol. 360, 410-412.
- Johnson A et al. (1994) Sexual Attitudes and Lifestyles. Blackwell Scientific Publications.
- Johnson A, MW Adler (1993): Patterns of hospital care for patients with HIV infection and A.I.D.S. In: Journal of Epidemiology and Community Health: 47 (3): 232-237.
- Kaslow RA et al. (1987): Multicenter AIDS Cohort Study: Rationale, organization, and selected characteristics of the participants. In: Am J Epidemiol 126 (2): 310-318.
- Khanna R (1992): Taking charge: Women's health as empowerment. The Sarthi experience. Baroda India: Society for Health Alternatives. Quoted in: Gillies et al., 1996.

- Kinsey, AC, WB Pomeroy and CE Martin (1948): *Sexual Behaviour in the Human Male*, Philadelphia, Saunders. Quoted in: Connell et al., 1993.
- Korcak, D (1994): 'Der Einfluss des Sozialmilieus auf das Gesundheitsverhalten. In: Mielck, A: (Ed) *Krankheit und soziale Ungleichheit*. Opladen 1994, 267-297.
- Krafft-Ebing R von (1965[1886]): *Psychopathia Sexualis*, 12th edn, New York, Paperback Library. Quoted in: Connell et al. 1993.
- Krueger LE, RW Wood, Diehr PH and Maxwell CL (1990): Poverty and HIV seropositivity: the poor are more likely to be infected. In *AIDS* 4 (8) 811-814.
- Leeder SR (1987): Looking forward to better health. *Medical Journal of Australia*, 146: 340-341.
- Lewis DA, Ison CA, Livermoore DM et al. (1995): A one-year survey of *Neisseria gonorrhoeae* isolated from patients attending an east London genitourinary medicine clinic: antibiotic susceptibility patterns and patients' characteristics. *Genito-urin Med* 71:13-17.
- Lurie P et al. (1995): Socioeconomic status and risk of HIV-1, syphilis and hepatitis B infection among sex workers in Sao Paulo State, Brazil. In: *AIDS*. 9 Suppl 1:s31-7.
- Lurie P, P Hintzen, RA Lowe (1995): Socioeconomic obstacles to HIV prevention and treatment in developing countries: the roles of the International Monetary Fund and the World Bank. In: *AIDS* 9 (6): 539-546.
- Mackenbach, JP (1992): Socio-economic health differences in the Netherlands: a review of recent empirical findings, *Social Science and Medicine*, 34, 213-26.
- Mackenbach, JP (1994): Socio-economic inequalities in health in the Netherlands: impact of a 5 years research. In: *BMJ* 309, 1487-1491.
- Mainliners (1997): *Mainliners' holistic approach to HIV prevention*. London.
- Mann, J (1995): The next step: AIDS, Communities and Human Rights. Presentation at the 2. International Conference on Home and Community Care for people living with HIV/AIDS. In Montreal Canada, 24./27th May 1995.
- Marcuse, H (1956): *Eros and Civilisation: a philosophical inquiry into Freud*. Boston.
- Marmot, MG, Kogevinas, J and Elston, MA (1987): Social/economic status and disease. *Annual Review of Public Health*, 8, 111-35.
- Marneros A, Deister A, Rohde A. (1990): Psychopathological and social status of patients with affective, schizophrenic and schizoaffective disorders after long-term course. *Acta Psychiatr Scand* 82:352-58.
- Martin, CJ, Platt SC and Hunt SM (1987): Housing conditions and ill health. In: *BMJ*; 294, 1125-7.
- Mayaud P. et al. (1997): Improved treatment services significantly reduce the prevalence of sexually transmitted diseases in rural Tanzania: results of a randomized controlled trial. In: *AIDS*, 11(15):1873-1880.
- Mc Donald D S (1996): Notes of the socio-economic and cultural factors influencing the transmission of HIV in Botswana. In: *Soc.Sci Med*. 42 (9):1325-1333.

- McClelland A (1991): 'In Fair Health'? Equity and the Health System.' Canberra., National Health Strategy Unit, Background Paper No. 3. Quoted in: Donaldson et al., 1992.
- Meyer L et al. (1996): Trends in HIV infection among sexually transmitted disease patients in Paris. In AIDS 10 (4): 401-5.
- Mielck A (Ed) (1994a): Krankheit und soziale Ungleichheit - Ergebnisse der sozialepidemiologischen Forschung in Deutschland. Opladen.
- Mielck A. (1989): Educational Level and Infection with the Human Immunodeficiency Virus: Risky Behavior and Susceptibility in White Non-IV-Drug Using Homosexual Men (Unpublished manuscript, Munich: GSF/MEDIS).
- Mielck A. (1992): Educational level and HIV-prevalence in white, non-IV drug using homosexual men. (unpublished manuscript, GSF, Munich).
- Morse DL, Lessner L, Medvesky MG et al. (1991): Geographic distribution of newborn HIV seroprevalence in relation to four sociodemographic variables. Am J Public Health 81 (Suppl.): 25-29.
- MS US Feminist Magazine (1995) March/April, p18. Quoted in: Gorna, 1996, p261.
- National Centre for Health Statistics (1990): Health of black and white Americans, 1985-87. Vital and Health Statistics, Washington DC. Ser.10, (171):14.
- Navarro V (1990): Race or class versus race and class: mortality differentials in the United States. In: The Lancet, 336, 1238-1240.
- Newell ML, Dunn DT, Peckham CS, Semprini AE, Pardi G (1996): Vertical transmission of HIV-1: maternal immune status and obstetric factors. The European Collaborative Study. In: AIDS 10(14):1675-1681.
- Newell NL, Thorne C (1997) Pregnancy and HIV infection in Europe. In: Acta Paediatr Suppl, 421:10-14.
- NHPIS (1997): National HIV Prevention Information Service: Current HIV Education Research. Health Education Authority. London.
- Nicoll A et al. (1998): Epidemiology and detection of HIV-1 among pregnant women in the United Kingdom: results from national surveillance 1988-96. In: BMJ 316 (7127): 253-8.
- Orubuloye, IO., Caldwell, P and Caldwell, JC (1993): The role of high risk occupations in the spread of AIDS: Truck drivers and itinerant market women in Nigeria. International Family Planning Perspectives, 19 (2), 43-48.
- Pappas G, Queen S, Hadden W, Fisher G (1993): The increasing disparity in mortality between socioeconomic groups in the United States, 1960-1986. N Engl J Med 329 (2) 103-09.
- Parker RG (1996): Empowerment, community mobilization and social change in the face of HIV/AIDS. In: AIDS 10 Suppl 3:S27-31.
- Pereira J (1990): Equity objectives in Portuguese health policy. Social Science and Medicine, 31: (1); 91-94.

- Peterson, C. and C. Szterenfeld (1992): Organising a project with community-based health agents recruited from prostitutes in Rio de Janeiro. *Public Health*, 106, 217-223.
- Petrou S, Dooley M, Whitaker L, Beck E, Kupek E, Wadsworth J, Miller D, Renton A (1996): Community service needs of people with HIV infection in London. In: *AIDS Care* 8(4): 467-478.
- Pocok, SJ, Shaper AG, Cook DG, Philips AN and Walker M (1987): Social class differences in ischaemic heart disease in British men, *Lancet*, 2, 197-201.
- Pollak, M. (1990): *Homosexuelle Lebenswelten im Zeichen von AIDS. Soziologie der Epidemie in Frankreich*. Berlin 1990.
- Potterat JJ, Rothenberg RB, Woodhouse DE, et al. (1985): Gonorrhoea as a social disease. *Sex Transm Dis* 12(1):25-32.
- Prescott N and Jamison DT (1985): The distribution and impact of health resource availability in China. *International Journal of Health Planning and Management*, 1: 45-56.
- Pulley LV, Mc Alister AL, Kay LS, O'Reilly K (1996): Prevention campaigns for hard-to-reach populations at risk for HIV infection: theory and implementation. In: *Health Education Q* 23(4):488-496.
- Putnam R.D., Leonardi R, Nanetti RY (1993):. *Making democracy work. Civic traditions in modern Italy*. Princeton, NJ: Princeton University Press:102-5,224.
- Quinn SC (1993): AIDS and the African American woman: the triple burden of race, class and gender. In: *Health Educ. Q.* 20 (3): 305-20.
- Reich, W. (1972):, *Sex pol: Essays 1929-1934*, (Ed) L. Baxandall, New York, Vintage Books.
- Rice RJ, Roberts PL, Handsfield HH et al. (1991):Socio-demographic distribution of gonorrhoea incidence: implications for prevention and behavioural research. *Am J Public Health*:81 (10):1252-8.
- Rosenbrock R (1993): AIDS: Questions and Lessons for Public Health. In: *AIDS & Public Policy Journal*, 8 (1) 5-19.
- Rosenbrock R (1997): Theoretische Konzepte der Praevention. In: Chr. Klotter (Hg): *Prävention im Gesundheitswesen*, Göttingen: Verlag für Angewandte Psychology, 41-60.
- Rothenberg R, Woelfel M, Stoneburner R, Milberg J, Parker R, Truman B (1987): Survival with the acquired immunodeficiency syndrome. Experience with 5833 cases in New York City. *N Engl J Med* 317 (21):1297-302.
- Schechter MT, Hogg RS, Aylward B, Craib KJP, et al. (1994): Higher socioeconomic status is associated with slower progression of HIV infection independent of access to health care. *J Clin Epidemiology*; 47:59-67.
- Schiltz M.et al. (1995): *Les homosexuels face au SIDA. Enquete 1993 sur les modes de vie et la gestion du risque HIV*. CAMS, CERMES. Paris.

- Schrager L et al. (1991): Demographic characteristics, drug use, and sexual behavior of i.v. drug user with AIDS in Bronx, New York. In: Public Health Report; 106(1):78-84.
- Siegrist J (1989): Steps towards Explaining Social Differentials in Morbidity: The Case of West Germany. In: Fox, 1989.
- Smith D.G., Bartley M. and Blane D (1990):. 'The Black Report on socioeconomic inequalities in health 10 years on. BMJ 301: 373-377.
- Smith DG, D Blane and M Bartley (1994): Explanations for socio-economic differentials in mortality. Evidence from Britain and elsewhere. European Journal Public Health, 4 (2): 131-44.
- Smith T (1991): AIDS and homeless. In P. Aggleton & I. Warwick (Eds), Young people, homelessness and HIV/AIDS, pp.35-39. London. University of London, Goldsmith's College.
- Stein MD, Piette J, Mor V, et al. (1991): Differences in access to zidovudine (AZT) among symptomatic HIV infected persons. J Gen Intern Med; 6:35-40.
- Stronks, K, H Dike van de Mheen, C WN Looman and JP Mackenbach (1996): Behavioural and structural factors in the explanation of socio-economic inequalities in health: an empirical analysis. In: Sociology of Health & Illness; 18 (5), 653-674.
- Thorne C, Newell ML, Dunn D, Peckham C (1996): Characteristics of pregnant HIV-1 infected women in Europe. European Collaborative Study. In: AIDS Care; 8(1):33-43).
- Townsend P and N Davidson (1988): The Black Report. In: Townsend, P, N. Davidson, and M. Whitehead (Eds). Inequalities in Health: The Black Report, and, The Health Divide. London.
- Tramarin A et al. (1997): The influence of socioeconomic status on health service utilisation by patients with AIDS in North Italy. The North-East Italian Group for Planning of AIDS Health Care. Soc. Sci. Med 45(6): 859-866.
- UNAIDS (1996) Discrimination and HIV/AIDS. United Nations Commission on Human Rights. Subcommittee on Prevention of Discrimination and Protection of Minorities. Statement by UNAIDS. Aug. 96 (48 session, Item 4 of the Agenda).
- UNAIDS (1997) Business in a World of HIV/AIDS. Statement by Peter Piot, Exec. Dir UNAIDS at the World Economic Forum, Davos, 3 February 1997.
- UNAIDS (1997): Renewed action against Tuberculosis and AIDS. Statement at the World TB Day, 24 March 97.
- UNAIDS (1997): UNAIDS Report on the Global HIV/AIDS Epidemic, 26 Nov. 97.
- UNAIDS/WHO (1997) Report on the global HIV epidemic, 26.11.97
- US Bureau of the Census (1993) Recent HIV seroprevalence levels by country: Research Note No. 11. Washington: Centre for International Research.

- Vancouver Conference (1996): Final Report. The Status and Trends of the Global HIV/AIDS Pandemic. XI International Conference on AIDS, Vancouver July 7-12, 1996).
- Wadsworth J, Wellings K (1994): Risk Reduction Strategies. In: Johnson AM, Wadsworth, J., Wellings K., Field J. (1994): Sexual Attitudes and Lifestyles. P.296-344.
- Wallace, R (1993): Social disintegration and the spread of AIDS II. Meltdown of sociographic structure in urban minority neighbourhoods. *Social Science and Medicine*, 37, 887-896.
- Weniger BG et al. (1991): The epidemiology of HIV infection and AIDS in Thailand. *AIDS*, 5 (Suppl. 2), pp.s71-s85.
- Whitehead M. (1988):. *The Health Divide. Inequalities in health in the 1980s*. London.
- Whitehead M. (1991): The concepts and principles of equity and health. *Health promotion International*; 6(3): 217-228.
- WHO Regional Office for Europe (1997): Country Information, Health Status, Press release December 1997.
- Wilkins R, Adams O, Brancker A (1989): Changes in mortality by income in urban Canada from 1971 to 1986. *Health Reports*; 1: 137-74.
- Wilkinson RG (1992): Income distribution and life expectancy. In: *BMJ* 304:165-68.
- Wilkinson RG (1997): Health inequalities: relative or absolute material standards? In: *BMJ* 314, 591-5.
- Wilson J (1990): AIDS, Black women and the Black community in Toronto, in J Manthorne (ed):. *Canadian Women and AIDS: Beyond the Statistics*. Montreal.
- Wise PH, Kotelchuck M, Wilson ML, Mill M (1985): Racial and socioeconomic disparities in childhood mortality in Boston. *N Engl J Med* 313 (6): 360-366.
- Wit J de (1994): Prevention of HIV infection among homosexual men. *Behavior Change and Behavioral Determinants*. Amsterdam 1994.
- World Health Organisation (WHO) (1985):. 'Targets for all: targets in support of the European regional strategy for health for all. Copenhagen, WHO Regional Office for Europe.