Addressing the Sexual and Reproductive Health Needs of People Living with HIV in Zambia: Challenges and Opportunities

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Zambia

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ADDRESSING THE SEXUAL AND REPRODUCTIVE HEALTH NEEDS OF
PEOPLE LIVING WITH HIV IN ZAMBIA: CHALLENGES AND
OPPORTUNITIES

A thesis submitted in partial fulfilment of the requirement for the degree of
Master of Public Health
by
Francis Dingiswayo Mangani
Zambia

Declaration:
Where other people’s work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis “Addressing the sexual and reproductive health needs of people living with HIV in Zambia: challenges and opportunities” is my own work.

Signature:.............................................................

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Finally, I thank my family for the constant love and inspiration over the years. This thesis is dedicated to the memory of my beloved parents, the late Mr. Dominic Mangani and Mrs. Joyce Mangani.

This work marks the end of a journey and the start of another. Praise and glory be to the Almighty God.
LIST OF ABBREVIATIONS AND ACRONYMS

ART  Anti-Retroviral Therapy
AIDS  Acquired Immune Deficiency Syndrome
ARVs  Anti-Retrovirals
ANC  Ante Natal Clinic
CSO  Central Statistics Office
GNP+  Global Network of People Living with HIV/AIDS
MOH  Ministry of Health
MOFNP  Ministry of Finance and National Planning
NAC  National AIDS Council
PEPFAR  President’s Emergency Fund for AIDS Relief
PLWHA  People Living With HIV/AIDS
PMTCT  Prevention of Mother-to-Child Transmission
HIV  Human Immunodeficiency Virus
HPV  Human Papillomavirus
ICW  International Community of Women living with HIV/AIDS
ICPD  International Conference on Population and Development
RTI  Reproductive Tract Infection
SGJP  Sonke Gender Justice Project
SRH  Sexual and Reproductive Health
STI  Sexually Transmitted Infection
SADC  Southern African Development Community
UNAIDS  Joint United Nations Programme on HIV/AIDS
UNDP  United Nations Development Programme
UNFPA  United Nations Population Fund
UNGASS  United Nations General Assembly Special Session on HIV/AIDS
WHO  World Health Organisation
ZSBS  Zambia Sexual Behaviour Survey
ZDHS  Zambia Demographic and Health Survey
ABSTRACT

Objective: With increased access to treatment, people living with HIV (PLWHA) in Zambia have better health status and live longer. This study aims to identify the challenges and opportunities of addressing their sexual and reproductive health (SRH) needs within the health system.

Methods: This thesis is a literature review of selected studies to explore the supply and demand-side barriers that PLWHA encounter in accessing SRH services. The Andersen-Newman Behaviour model is used to analyse the literature.

Results: PLWHA have a number of SRH needs that are not uncommon. These include: desire to have children; fertility regulation services; treatment for sexually transmitted and reproductive infections and pleasurable sexual relationships. The challenges faced in fulfilling these needs include: negative health staff attitudes; inadequate social support; cost of accessing services and socio-cultural norms that discourage health-seeking behaviour. In practice, the supply and demand-side factors are found to be interrelated. Discrimination within the community and the health care facilities limit service uptake. Restrictive policies, laws and provider beliefs further limit the supply of SRH services to sub-populations including adolescents and prisoners living with HIV. PLWHA have some specific SRH needs that require special attention.

Conclusion: Gender roles, health beliefs and structural weaknesses in the health care system have to be addressed to improve the fit between SRH needs and services. A supportive and non-discriminatory legal and policy framework can facilitate informed sexual and reproductive health choices by PLWHA. More evidence is needed on the preferred and feasible packaging of integrated HIV and SRH services.

Key words: HIV; AIDS; HIV/AIDS; sexual health; reproductive Health; SRH needs; sexuality, fertility intentions, SRH services; PLWHA; PLHIV; resource-poor settings; Zambia

Word count: 14,377
INTRODUCTION

Years ago, I had just concluded a post-test counselling session with a client who tested HIV positive when I found myself in a challenging situation. In his mid 30s, the client asked if it was fine for him to marry and have children. I realised that rather than being depressive, as I imagined, the client’s thoughts were clearly on other matters. I also realised I had no ready answer. So began my journey to understand the sexual and reproductive concerns of people living with HIV. Presently, my job as administrator of a number of donor-funded projects in an HIV service organisation in Zambia also involves interaction at the national policy level. The call for more insight into the sexual and reproductive health concerns of people living with HIV is being made with increasing regularity.

Southern Africa, where Zambia is located, is considered the global epicentre of the epidemic. The region is also home to more than two-thirds of the world’s population of people living with HIV. Zambia has an adult prevalence of 14.3% and mature epidemic whose main mode of transmission is heterosexual sex. As such, interventions to address the SRH needs of people living with HIV are required as a matter of priority. From a public health standpoint, an effective HIV response requires understanding of the drivers of the epidemic and the socio-cultural context that creates vulnerability to HIV transmission. From a rights perspective, people living with HIV are also entitled to sexual and reproductive rights that must be recognized in designing and implementing interventions. The introduction of free treatment in public health facilities has considerably improved the health status of many HIV positive Zambians, helping them to live longer. The estimated number of 1.5 million HIV positive men and women is projected rise in the coming years.

Through this study, I have been able to broaden my understanding of the sexual and reproductive needs of people living with HIV. It is my hope that this study will contribute to the evidence base on what we ought to be doing to improve the quality of life of people living with HIV in Zambia.
CHAPTER 1: Country profile

1.1 Geographical and socio-demographic profile
Zambia is a Sub-Saharan African country located in the southern part of the continent. It shares borders with Angola, Botswana, Democratic Republic of Congo, Malawi, Mozambique, Namibia, Tanzania and Zimbabwe. The country’s surface area is approximately 752,612 Square Kilometres. Zambia’s 2007 population is estimated at 11.9 million people (WHO, 2009). The life expectancy at birth for both sexes is 46 years (WHO, 2009). The country has a high dependency ratio with a relatively youthful population; 47% of the population is under the age of 15 years.

Administratively, the country comprises nine provinces namely: Lusaka, Central, Copperbelt, Eastern, Northern, North/Western, Western, Southern and Luapula provinces. Only Lusaka and Copperbelt provinces are predominantly urban and industrialised; the rest are mainly rural. Despite this, Zambia is considered to be one of the most urbanised countries with 36% of the population resident in the urban areas (CSO, 2006a).

1.2 Socio-economic situation
Zambia is classified among the least developed poor countries of the world with a per-capita-GDP\(^1\) of US$1,023 (UNDP, 2009). Its social-economic situation is characterized by a weak economy, and high levels of unemployment, poverty prevalence and disease burden, especially in rural areas. Poverty prevalence countrywide is estimated at 67% (MOFNP, 2006). Copper is the country’s main export.

1.3 Literacy levels
According to the 2007 Demographic and Health Survey (ZDHS), the national literacy rate is 74.4%. Literacy levels for men are higher than for women across all age groups. The total literacy level for men is 81.6%, against 60.6% for women. In the rural areas, 26.7% of the population have no primary education compared to 9.2% of the urban population (CSO, 2008).

1.4 Health System

1.4.1 Health care delivery system
Once described as a “broken-down Cadillac” in the 1980s in reference to the disproportionately huge share of the total health budget consumed by a few run-down tertiary hospitals, the public health care system has been undergoing comprehensive reforms since 1992. Under the new government, services were decentralised to newly-created District Health Boards and more resources were channelled towards the refurbishment

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\(^1\) Gross Domestic Product
and construction of new health centres. These efforts were in a bid to improve access to quality health care (MOH, 2005). Most of the user fees introduced in 1992 were abolished in 2006 following evidence that they were a barrier to access especially for the rural poor.

As Table 1 shows, the health care system in Zambia is predominantly public. More than 80% of all hospitals and clinics are government-run. The private-not-for-profit facilities are mainly concentrated in the rural areas. The government currently provides some financial support and staff to these institutions mainly through the Churches Health Association of Zambia (CHAZ), the umbrella body. Private chemists, private clinics, traditional healers and other providers of non-western medicine also form part of the health care system. Itinerant informal traders peddling various types of medication are also to be found all over the country, including the major cities.

A number of donor-funded local and international non-governmental organisations (NGOs) are involved in the provision of SRH services and commodities. Their contribution to the total supply of services and commodities is quite substantial. For instance, 47% of all the male condoms on the market are provided by Society Family Health under its social marketing programme (Brown and Syacumpi, 2006).

**Table 1.1: Zambia health facilities by type and ownership, 2008**

<table>
<thead>
<tr>
<th>Type of Facility</th>
<th>Number of facilities by ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Government</td>
</tr>
<tr>
<td>3rd Level hospital</td>
<td>6</td>
</tr>
<tr>
<td>2nd Level hospital</td>
<td>13</td>
</tr>
<tr>
<td>1st Level hospital</td>
<td>39</td>
</tr>
<tr>
<td>Rural Health Centres</td>
<td>930</td>
</tr>
<tr>
<td>Urban Health Centres</td>
<td>206</td>
</tr>
<tr>
<td>Health Posts</td>
<td>161</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,355</strong></td>
</tr>
</tbody>
</table>

Source: MOH, 2008

1.4.2 Health Financing
The country’s health care system is highly dependent on external funding. In 2004, donor funding accounted for 38% of total health expenditure followed by households’ out-of-pocket expenditure at 29% as shown in figure 1.1.
Figure 1.1: Total health expenditure by source, 2004

Data source: Phiri and Tien, 2004

The proportion of donor funding is even higher for HIV related activities. The Global Fund for AIDS, Malaria, Tuberculosis and Malaria and the US President’s Emergency Fund for AIDS Relief (PEPFAR) are the major donors; the latter is expected to fund more than 60% of all HIV/AIDS activities for the period 2006 to 2010 (MOH, 2007b).

The total health expenditure as a proportion of the annual budget is relatively low. A trend analysis for the last few years shows that the highest level it reached is 12.4%, in 2004 as highlighted in figure 1.2. Total per-capita expenditure on health averaged $10.5 between 2001 and 2004 compared to the $33 needed to provide the basic health care package as defined in the national health strategic plan (MOH, 2005). These figures suggest sub-optimal funding considering the resources required for the delivery of quality and equitable health care.
**Figure 1.2: Health budget as a percentage of national budget, 2002-2007**

Adapted from Goma, 2008

### 1.5 HIV/AIDS in Zambia

Zambia’s first HIV case was diagnosed in 1984. Over the years, the number has grown and the country is currently experiencing a mature generalised epidemic with a national adult prevalence of 14.3% (NAC, 2009). The current estimated HIV positive population is 1.4 million adults and 82,000 children (MOH, 2008). The total number of people living with HIV/AIDS (PLWHA)\(^2\) eligible for anti-retroviral therapy (ART) in early 2008 was 172, 225 with 55% on treatment (NAC, 2009). There are geographical disparities in both prevalence and access to treatment. For instance, prevalence ranges from a peak of 20.8% in Lusaka province to 6.8% recorded in Northern province. In Luapula province, only 60% of eligible PLWHA are on treatment compared to 99% for Western Province (NAC, 2009).

As observed in much of Sub-Saharan Africa, women are disproportionately affected in Zambia. According to the 2007 Demographic and health survey (ZDHS), the prevalence is highest (26%) among women of age 30-34 years (CSO, 2008). Figure 1.3 shows that the HIV prevalence is higher for women across all the age groups except for those 40 years or

\(^2\) The author is aware of the UNAIDS recommended terminology of PLHIV. However, the more common abbreviation “PLWHA” was used in the majority of the studies and reports analysed in this study. This applies to other terms as well. For consistency and to maintain the terminology as originally stated, the older terminology is used.
older. Cross-generation sex, biological and cultural factors are cited among the reasons young women are more vulnerable to HIV infection.

Figure 1.3: HIV prevalence by age and sex, 2007

Data source: CSO, 2008

1.4 Sexual and Reproductive Health (SRH) situation
Attempts to develop a global consensus around the meaning of sexual and reproductive health (SRH) date back to 1994 at a United Nations-brokered international meeting in Cairo, Egypt. The 179 countries attending this International Conference on Population and Development (ICPD) endorsed a Programme of Action in which SRH was defined as follows:

"Reproductive health is a state of complete mental and social well being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes". (UNFPA, 1994)

Over time, this definition has undergone revisions on various grounds, including the realisation that sexual health, initially considered subsumed within the original text, is much broader than reproductive health. Though not an official WHO definition, the conceptualisation of sexual health commonly used and employed in this study is:

"Sexual health is a state of physical, emotional mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. It requires a positive and respectful approach to sexuality and sexual relationships as well as the possibility of having
pleasurable and safe sexual experiences free of coercion, discrimination and violence.” (WHO, 2004)

Table 1.2 shows how Zambia compares with rest of sub-Saharan Africa on selected SRH indicators for which data are available. At 14.3%, the country’s HIV prevalence is more than double the regional average.

**Table 1.2: Selected SRH indicators: Zambia and sub-Saharan Africa**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Year</th>
<th>Zambia</th>
<th>Sub-Saharan Africa</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV prevalence,% (men and women aged 15-49 years)</td>
<td>2007</td>
<td>14.3</td>
<td>5</td>
<td>CSO, 2008; UNAIDS, 2008</td>
</tr>
<tr>
<td>Syphilis prevalence,% (men &amp; women aged 15-49 years)</td>
<td>2007</td>
<td>3.7</td>
<td>_</td>
<td>CSO, 2008</td>
</tr>
<tr>
<td>Condom use at first sexual intercourse,% (sexually active women aged 15-19 years)</td>
<td>2007</td>
<td>27.6</td>
<td>_</td>
<td>CSO, 2008</td>
</tr>
<tr>
<td>Total fertility rate (number of children per woman)</td>
<td></td>
<td>5.13</td>
<td>2.69</td>
<td>UNFPA, 2008</td>
</tr>
<tr>
<td>Births attended by Skilled health staff, % (estimated total deliveries)</td>
<td>2005</td>
<td>43</td>
<td>43</td>
<td>UNDP, 2009</td>
</tr>
<tr>
<td>Maternal Mortality Ratio (per 100,000 live births)</td>
<td>2007</td>
<td>591</td>
<td>_</td>
<td>CSO, 2008</td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>2006</td>
<td>102</td>
<td>95</td>
<td>UNICEF, 2008</td>
</tr>
</tbody>
</table>
CHAPTER 2: Research goals and methodology

2.1. Problem statement
The HIV epidemic remains one of the major public health concerns in the world today. However, scientific and technological developments in recent years have generally improved the prognosis of PLHWA. For instance, access to anti-retroviral therapy enables many HIV positive men, women and children to live for much longer and suffer fewer episodes of illness.

In much of the world today, HIV infection has morphed into a chronic condition. Unfortunately, this has not been matched by related societal and health system changes (Boonstra, 2006; Gruskin et al., 2007). Despite the recent inclusion of the sexual and reproductive health needs of PLHWA on the global health agenda, there is a paucity of evidence on how to design and implement effective strategies to address these needs (Nostlinger et al., 2008). The historical development of HIV/AIDS and sexual and reproductive services as separate programmes also contributes to the lack of appropriate interventions to address the problem.

The stigma associated with being HIV positive, cultural norms and personal beliefs regarding use of health care services are some of the underlying causes of the unmet needs. Furthermore, health service factors such as hostile staff attitudes and unaffordable costs deter many PLHWA from utilising health care services.

Zambia’s current HIV prevalence of 14.3% is one of the highest in the world. More than 75% of all HIV infections in the country occur heterosexually with vertical transmission accounting for 20% (NAC, 2004). Additionally, there is growing concern about the limited access to contraceptives, appropriate counselling and similar family-planning services as a result of one’s HIV positive status.

2.2 Justification of Study
This study seeks to clarify the causes of the unmet sexual and reproductive health needs of PLHWA in Zambia. From a public health perspective, effectively addressing these needs would help to prevent new HIV infections and facilitate informed fertility choices. Meeting the SRH would also contribute to the mental well-being of PLHWA. Declining national economic growth, loss of skilled manpower and rising poverty at household level are just some problems that could potentially be addressed through the prevention new HIV infections.

2.3. Research Objectives

2.3.1 General Objective
To identify the causes of the unmet sexual and reproductive health needs of PLHWA in Zambia so as to provide recommendations for more effective and appropriate strategies for meeting these needs.
2.3.2 Specific Objectives
1. Explore the sexual and reproductive health needs of PLWHA internationally and in Zambia
2. Analyse the factors that influence the supply of sexual and reproductive services for PLWHA in Zambia
3. Analyse the factors that influence demand for sexual and reproductive health services by PLWHA
4. Analyse the extent to which the SRH services meet the SRH needs of PLWHA
5. Based on the study’s findings, provide recommendations for more effective and strategic interventions to meet the SRH needs of PLWHA in Zambia

2.4 Research Methodology
2.4.1 Conceptual Framework
The study’s framework of analysis is based on the Andersen-Newman Behaviour Model for investigating access to health services. Originally developed by Anderson as part of his dissertation in 1973, the model was revised in 1995 (Andersen and Newman, 1973; Aday and Andersen, 1974; Andersen, 1995) and has been extensively applied in various forms in health services research worldwide (Gold, 1998; Bradley et al., 2002; Chevan, 2006). The fundamental components of the model are indicated in figure 2.1.

**Figure 2.1 Andersen-Newman Behaviour model**

<table>
<thead>
<tr>
<th>Supply-factors</th>
<th>Demand-factors</th>
<th>Behaviour</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(A)</td>
<td>(B)</td>
<td>(C)</td>
<td>(D)</td>
</tr>
<tr>
<td>1. Health care system</td>
<td>1. Needs (felt or evaluated)</td>
<td>Utilisation of services</td>
<td>Perceived Health status</td>
</tr>
<tr>
<td>2. External Environment</td>
<td>2. Predisposing factors</td>
<td></td>
<td>Evaluated health status</td>
</tr>
<tr>
<td></td>
<td>3. Enabling factors</td>
<td></td>
<td>Client satisfaction</td>
</tr>
</tbody>
</table>

Source: Andersen, 1995

The model posits that the decision to utilise health care services is a factor determined by the nature of the care services available,
predisposing factors, enabling factors and the external environment in which the care seeking takes place. In addition to these factors, the utilisation of health services is also driven by an individual’s self assessment of being unwell, referred to as needs in the model. Only upon professional evaluation can one conclude that the need is perceived. According to this model, an individual utilises care services so as to restore or increase his or her health status to some level.

**Predisposing factors** are those personal characteristics that make some people more likely than others to use available health services. Examples of these factors include age, sex, level of education and personal beliefs about the causes of ill-health (Andersen, 1995). **Enabling factors** refer to the resources that an individual requires to access care services. Health insurance is one such factor.

An important attribute of the model is that it places health care services as just one of the factors that determine health status. Also, the model emphasises the interrelationship between the supply-side and demand-side of care seeking. For instance, dissatisfaction with the service received can prevent an individual’s future uptake of services, and in the process alter health beliefs.

These features make the model suitable for this study as it facilitates a structured analysis of supply and demand-side factors that determine the unmet sexual and reproductive health needs of PLWHA. The model is also consistent with other frameworks that emphasise the role of factors outside the health system in determining health outcomes, such as the Lalonde model (Lalonde, 1974). The model’s conceptualisation of “access” being synonymous with “utilisation” is also applied in this study.

**2.4.2 Research design**

This study is based on the review of published and unpublished scientific studies on the SRH needs of PLWHA. Reports (published and unpublished) on the HIV/AIDS and SRH situation in Zambia and in other settings were reviewed. Using Science Direct, Scopus and Google Scholar search engines, research reports and journals as well as publications by relevant international organisations such as UNAIDS, Engenderhealth, Family Health International, Alan Guttmacher Institute and World Health Organisation (WHO) were also analysed. Additional information was obtained from the resources available in the KIT and VU libraries.

Articles were selected on the basis of relevance to the study topic. Only studies done between 1994 and 2009 were included. The following search terms were used in combination to obtain journal articles and other relevant documents on the internet: HIV; HIV/AIDS; HIV positive; concerns; PLWHIV; PLWHA; AIDS; child-bearing; conception; parenthood; sexual; health; reproductive; SRH; needs; fertility; family planning; integration; beliefs; utilisation; SRH services; resource-poor settings; Zambia.
Quotes that emphasise a particular theme were taken from some of the studies reviewed especially those involving focus group discussions. Care was however exercised in the selection process to ensure that the quotes reproduced in this study reflect the main thrust of the arguments of the paper in which they originally appear. This was done to avoid quoting out of context.

2.4.3 Study Limitations

- Some of the studies examined in this study pre-date the introduction of free ART in public facilities in Zambia, which could have influenced the responses on aspects such as perceived quality of care and costs incurred in accessing services.
- The literature search was confined to publications in English.
- Information on the SRH needs of men in Zambia is limited.
- Due to resource constraints, it was not possible to collect primary data from Zambia. The perspectives of the PLWHA in Zambia in this study are therefore limited to what was captured from the literature reviewed and the author’s experience working with PLWHA.
CHAPTER 3: Sexual and Reproductive Health needs

This chapter focuses on identifying the sexual and reproductive health needs of PLWHA. The evidence analysed is drawn from both developed and developing countries.

3.1 Sexual desires
The sexual desires of PLWHA may be dampened by ill-health or concerns about re-infection or infecting the sexual partner. Self-stigma and psychological distress may also lower interest in sexual relations (Delvaux and Nostlinger, 2007). However, access to ART, psychosocial support and condoms can reduce the challenges posed by such conditions. The following quote from a study on women living with HIV provides further insight into this:

"What do you do about fulfilling your sexual needs and desires when you keep getting gynaecological infections as I do? What makes things worse is that these infections make you feel totally undesirable. With treatment...you can have healthy pleasurable sexual activity, which is what we all desire."

HIV positive woman, Nigeria (Bell et al., 2007:116)

The resumption of sexual activity following improved health status suggests that ART, on its own, has a bearing on the SRH choices of HIV positive men and women.

3.2 Sexual dysfunction
The sexuality of men and women with HIV is diminished by the fear of infecting others and being re-infected, as well as guilt, anger and ill-health resulting in negative physical and psychological effects on sexual desire (Shapiro and Ray, 2007). Concerns about loss of libido, problems with erections and ejaculation, which may be related to illness or opportunistic infections or medication, are often reported among HIV positive men. An Italian study involving 612 respondents on ART found that 21% reported some form of sexual dysfunction. Sub-optimal adherence to ART was noticeably higher among the subjects who reported sexual dysfunction (Trotta et al., 2008). This study highlights the influence of perceived sexual health on adherence to treatment among PLWHA. The authors however, do not clearly indicate whether the sexual dysfunction was caused by the medication. Nonetheless, there is some evidence the certain drugs used in ART regimens are associated with erectile dysfunction. For example, Nelfinavir, one of the drugs used in some ART regimens, is associated with diagnosed erectile dysfunction in some patients on ART (Collazos, 2007).
3.3 Parenthood
Childbearing is deeply rooted in many societies. In Africa in particular, socio-cultural and economic factors strongly influence the reproductive choices of men and women regardless of HIV sero-status (Preston-Whyte, 1999). In Zambia, women are generally expected to bear children as soon as they get married. In some communities, this societal pressure to conceive extends to single women. In a study on condom use in Zambia, Bond and Dover (1997) observe that pregnancy among young unmarried female respondents was considered a means of becoming a "proper" woman or acquiring a husband.

Among PLWHA, the pleasure and happiness associated with parenthood (Boonstra, 2006), family pressure (Cooper et al., 2009), and the need for someone to carry on the family name (Kanniappan et al., 2008) are some of the reasons cited for their fertility intentions. For a childless wife, the close alignment of motherhood with the social identity of a woman can attract as much stigma and discrimination as that associated with being HIV positive (Dyer et al., 2005). The diversity of motivating factors for parenthood among PLWHA is highlighted by the following answer from a respondent in a study in Zambia:

"I want two or three . . . because children help out when you are sick and you send them to go and do one thing or the other”
HIV positive woman, Zambia (Underwood et al., 2007:12)

PLWHA often face the dilemma of balancing the fertility desires with the need to protect oneself and partner from possible infection or re-infection. A number of studies have identified services such as assisted conception as possible means of addressing this situation (Boonstra, 2006).

Infertility or involuntary childlessness is a concern that is often underestimated or neglected in resource-constrained settings (Ombelet, 2009). Untreated sexually transmitted infections (STIs) and incomplete abortion-related complications are some of the known causes of secondary infertility, the inability to conceive after already having at least one child. Emerging evidence shows that HIV infection is associated with reduced fertility, especially among women. In a cohort study of HIV positive women in Cote d’Ivoire, it was observed that the number of pregnancies and live births progressively declined as the CD4\(^3\) cell count, a measure of the immune system, fell (Loko et al., 2005). These results are consistent with the findings from similar studies in rural Tanzania (Hunter et al., 2003) and Rakai, Uganda (Sewankombo et al., 1994) in which lower fertility was observed among HIV positive women compared to their HIV negative peers. Among men, HIV infection is linked to, inter

\(^3\) CD4 count refers to the number of helper T-lymphocytes in a cubic millimetre of blood. It drops as the body’s immune system weakens.
alia, low quality and quantity of spermatozoa, particularly in advanced stages of the disease (Zaba and Gregson, 1998).

Much of the infertility among PLWHA can be addressed through the timely diagnosis and proper treatment of sexually transmitted and reproductive tract infections. In most countries, a major reproductive health concern among couples - discordant⁴ or concordant – is the lack of access to fertility treatment even where available. Negative health worker attitudes regarding such fertility desires are frequently cited as a factor. Concerns over drug interactions between the fertility drug regimens and certain antiretroviral drugs may also influence uptake of fertility treatment. A number of assisted reproductive technologies ideal for couples considering childbearing do exist, but are not easily accessible especially in resource-constrained settings such as Zambia. These techniques also reduce the risk of infection for the uninfected partner in discordant couples and re-infection among concordant ones. Their use also depends on the sero status of the partners as summarised in the table below.

**Table 3.1: Assisted conception techniques for PLWHA**

<table>
<thead>
<tr>
<th>HIV sero-status</th>
<th>Available Technique</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female HIV+, Male HIV-</td>
<td>Insemination with partner’s semen</td>
<td>A relatively cheap option that can be done by the couple at home with minimal equipment</td>
</tr>
</tbody>
</table>
| Male HIV+, Female HIV-| 1. Sperm washing 2. Lowering the Viral load with ART 3. In vitro fertilisation (IVF) 4. Donor semen | • 1 & 3 are expensive, not available in developing countries.  
• Research on 2 still ongoing  
• 4 May not be culturally acceptable |
| Male & Female HIV+    | Limiting unprotected sex to woman’s fertile period        | Difficult to implement in married couples.                               |

Source: (Delvaux and Noslinger, 2007; Sauer, 2005)

In Zambia, infertile couples in some instances resort to informal adoption facilitated by the existence of the extended family system and the large number of orphans among families. A typical case involves the couple taking over the care and overall responsibility for a deceased sibling’s young son or daughter. Nevertheless, the large number of new HIV

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⁴ Among PLWHA, **HIV sero-discordant** is the term used to describe a couple in which one partner is HIV positive and the other is HIV negative i.e. with the partners having different sero-status. **HIV sero-concordant** refers to couples in which both partners are HIV positive.
infections occurring in the matrimonial setting is an indication of the limited access to safe conception techniques.

3.4 Family planning and unintended pregnancy services
With few exceptions, the family planning methods generally available globally can be used by HIV positive women as well (Gruskin et al, 2007; Delvaux and Nostlinger, 2007; WHO, 2006). Condoms, for instance, offer dual protection against STIs (including HIV) and unintended pregnancy, making them highly effective in any sexual relationship. Most of the hormonal contraceptives can be used without any adverse outcomes. WHO guidelines provide options in specific cases where drug interactions may reduce the effectiveness of certain oral contraceptives (WHO, 2006). The ability to make informed, independent choices regarding family size and child spacing is one of the major reproductive health desires of PLWHA.

HIV positive women, like their negative counterparts, also have to make decisions on avoiding conception or dealing with an unintended pregnancy. Lack of contraceptive use, contraceptive failure or sexual assault can result in unintended pregnancy for any woman of reproductive age regardless of HIV status. An unintended pregnancy can also be the result of inability to negotiate safe sex with a partner. When administered in time, emergency contraception can avert unintended pregnancies (Trussell et al., 2004). However, access to safe and legal abortion and post-abortion care services becomes critical for any HIV positive woman considering termination of an unintended pregnancy. This may also be the case for women who become aware of their HIV positive status after conceiving and consequently opt not to carry the pregnancy to full-term.

Globally, women are disproportionately affected by the HIV epidemic. In sub-Saharan Africa where transmission is mainly through heterosexual sex, women of reproductive age constitute the majority of PLWHA. Consequently, the need for access to safe and legal abortion services has been regularly highlighted in studies on the SRH needs of PLWHA. Cooper and colleagues (2009), in their recent survey on the fertility intentions of PLWHA in South Africa found that 11% of the female respondents who were not on treatment had been pregnant since their HIV diagnosis and all of them reported the pregnancies as unintended. Justifying her decision to terminate pregnancy, an HIV positive married woman in Chennai, India, had this to say:

"As we are both HIV-positive we decided not to have the second child. We want to take care of the living child and give him a good education” (Kanniappan et al., 2008:629)

For some women, the decision to terminate a pregnancy is due to pressure from the spouse or family members as was the case for the respondent in an Indian study:
“I had the abortion with the consent of my in-laws and parents. They told us to abort the child since we already had a child.”
HIV positive woman, India (Kanniappan et al., 2008:628)

HIV-positive women are prone to septicaemia and maybe particularly at risk of complications following unsafe abortions. Therefore, access to safe and legal abortion including post-abortion care for those who do not want to carry a pregnancy to term is an essential means of safeguarding their reproductive health (WHO, 2006).

In Zambia, abortion is permissible for defined social and medical reasons. However, the procedure is only legal if performed under specified conditions. The Termination of Pregnancy Act of 1972 permits an abortion to be performed if three registered medical practitioners are of the opinion formed in good faith that (a) continuation of the pregnancy would involve risk to the life or of injury to the physical or mental health of the pregnant woman, or of injury to the physical or mental health of any existing children of the pregnant woman, greater than if the pregnancy were terminated; or (b) that there is substantial risk that if the child should be born, it would suffer from such physical or mental abnormalities as to be severely handicapped (MOH, 2000). However these strict conditions are some of the factors that limit access to safe and legal abortions for many women.

In Zambia, unsafe, illegal abortions abound. Although reliable data are not readily available partly due to the sensitivity and secrecy surrounding the practice, mortality and morbidity due to unsafe abortions are relatively common in Zambia. A recent edition of the Times of Zambia, a major daily newspaper in Zambia reports of a male nurse from Northern province currently on the run following the death of a teacher from a botched abortion he performed (Zulu, 2009).

Staff shortages, lack of materials and supplies, and personal beliefs on the part of the health workers are some of the underlying causes of poor access to safe abortions. The stigma and discrimination associated with HIV infection, coupled with the exaggerated risk of infection that service providers may perceive, makes it even more challenging for HIV positive women to obtain safe and legal abortions.

3.5 Sexually Transmitted Infections (STIs) and Reproductive Tract Infections (RTIs)
Globally, there is growing attention being paid to the HIV-STI synergy and its public health implications. Research shows that STIs such as syphilis and chancroid increase the risk of sexual HIV transmission by increasing both infectivity and susceptibility (Mabey, 2005). In most countries, this relationship partly explains the high prevalence of HIV in sub- populations that also exhibit high prevalence of STIs. On the other hand, HIV infection increases the frequency of episodes of some STIs and RTIs. Furthermore,
the weakened immune system associated with HIV infection increases the severity and resistance to treatment of STIs and RTIs such as vaginal candidiasis and genital herpes and also makes them more difficult to treat (Sebitloane, 2005; WHO, 2006).

In 2006, STI’s were the 10th major cause of visitations to public health facilities in Zambia (MOH, 2007a). Treatment for STIs is free in all public health facilities in the country. In recent years, there has been growing emphasis on the syndromic management to increase the overall number of patients effectively treated.

Most STIs and RTIs are asymptomatic in women so they may not seek treatment. In addition, the gender driven unequal power relations restrict some women’s access to health facilities in general. Gender inequality is also linked to women’s inability to insist on condom use to prevent infection. Among men, the poor health seeking behaviour is often linked to delays in seeking treatment. PLWHA, therefore need accessible STI and RTI screening and treatment services.

3.6 Cervical Cancer screening
Cervical cancer was classified as an AIDS-defining illness in 1993. In many countries, it is the most common malignancy among women and the leading cause of cancer deaths among women (WHO, 2006). The primary underlying cause of cervical cancer is infection with one or more high-risk types of the Human Papilloma virus (HPV), an STI that is highly prevalent among sexually active men and women.

Several studies reveal that HIV positive women are more prone to persistent HPV infection compared to their HIV negative peers and are thus at higher risk of developing cervical cancer. Singh and colleagues, in their observational cohort study of 936 women in Rwanda, reported higher prevalence of HPV among the HIV positive subjects (Singh et al., 2009). Similar outcomes were observed in an earlier study in Zimbabwe (Baay et al., 2004) and further corroborated by the results showing the presence of high risk HPV strains in 83% of a group of HIV positive women screened at the University Teaching Hospital in Zambia (Parham et al., 2006).

At 53.7/100,000 women annually, Zambia has the second highest cervical cancer incidence rate in Africa. A single visit “see and treat” cervical cancer screening programme was introduced in 2008 and is offered in 14 health facilities in the country (NAC, 2008). An outpatient prevention unit, open to all women irrespective of HIV sero-status, operates at the country’s largest referral hospital and more than 20,000 women to date have been screened. There is still considerable need to increase effective coverage of these services given the high HIV prevalence and the attendant high number of potential cancer cases that can be prevented through routine HPV and cervical cancer screening.
3.8 Prevention of Mother-to-child Transmission services (PMTCT)

In the absence of any intervention, vertical transmission rates of HIV are high, especially in low-resource settings. Infection rates range from 5-10% for intrauterine transmission, 10-20% for intrapartum transmission and between 10-20% during breast feeding (Segundo and Paiva, 2007). In settings where prolonged breast feeding is the norm, transmission rates ranging between 20 to 45% have been reported (WHO, 2007).

The chances of an HIV-positive woman transmitting the virus to her baby increase considerably in the presence of other conditions such as high viral load, co-infection with gonorrhoea or syphilis, and early rupture of membranes. In addition to increasing susceptibility to malaria infection, HIV infection also increases the risk of placental malaria, which in turn is linked to higher chances of vertical transmission (Ter Kuile et al., 2004).

Pregnancy per se does not sizeably alter the health status of an HIV infected woman. In advanced stages, however, the infection raises the risk of poor pregnancy outcomes including low birth weight, premature birth and spontaneous abortions. These complications are in addition to the vertical transmission and some post partum complications that may affect the woman herself. To this effect, the WHO PMTCT guidelines recommend a comprehensive package of interventions for pregnant HIV-positive women. It includes antiretroviral drug regimens for the woman and her newborn, safe obstetric practices and counselling and psychosocial support on infant feeding options to minimise the risk of the baby getting infected during breastfeeding (WHO, 2007a).

Among HIV positive women, comprehensive PMTCT interventions can reduce the rate of transmission to as low as 2% (Boonstra, 2006; WHO 2007a). In Zambia for instance, the provision of PMTCT services is mainly responsible for the decline in vertical transmission rates from 30% to 12% observed between 2006 and the beginning of 2008 (NAC, 2009). When combined with ART and psychosocial support for the mother, PMTCT services provide an opportunity for improving the health status of HIV positive women.

In Zambia, PMTCT services are offered in public health facilities in all the nine provinces. All pregnant women accessing antenatal services are routinely screened for HIV under the opt-out approach and those found positive referred for PMTCT services. The initiative has been integrated into the maternal and child health services under the Ministry of Health. Family Health International (FHI) and the Centre for Infectious Diseases Research in Zambia (CIDRZ), using PEPFAR funding, are among the major providers of financial, technical and logistical support for the implementation of the PMTCT services in the government-owned hospitals and clinics (NAC, 2009).
High travel costs, fear of adverse drug effects on the unborn baby, long waiting times and negative health worker attitudes are some of the challenges women face in accessing PMTCT services. In some cases, the women only know of their HIV positive status during the ANC visit. Subsequently, they may fail to adhere to the prophylactic medication in fear of the consequences once their spouses discover their sero-status.

In summary, it can be inferred from the forgoing that the fulfilment of SRH needs of PLWHA is part of the public health considerations of preventing infections and limiting the impact among those infected. The evidence reviewed further shows that PLWHA desire safe and pleasurable sexual relationships treatment for sexual dysfunction and access to contraceptives including male and female condoms. Additionally, sexual dysfunction, in various forms, is yet another concern for PLWHA. As the evidence shows, HIV positive men and women have specific needs that require responsive interventions.
CHAPTER 4: Supply-side factors

Health care services constitute an important dimension of the determinants of health (Lalonde, 1974; Kiragu et al, 2008). The type of services offered, the process of service delivery, and the costs incurred by the client are some of the factors that influence access to health care services. Taking a systemic perspective, this chapter reviews the supply-side barriers to access to SRH services for PLWHA.

4.1 Legal and policy framework
Laws and policies - including those enacted for other sectors – have an influence on the availability and delivery modes for health care services (Gruskin et al, 2007). Policies also guide the setting of fees for services in addition to spelling out the roles of the different cadres in the health system in delivering care. Thus, the legal and policy environment plays a role in PLWHA’s access to SRH services.

At national level, Zambia has in place an HIV/AIDS policy that was officially launched in 2005. The current five-year strategic plan to guide the implementation process runs until 2010. In both documents, components of SRH services such as condoms and prevention and treatment of STIs are mentioned. Zambia is also a signatory to a number of international commitments and charters relating to SRH rights in general, including the ICPD and the Millennium Development Goals.

Most of the reviewed study reports, international declarations and treatment guidelines relating to the health needs of PLWHA globally make reference to various components of SRH. However there are hardly any that can be considered binding on governments. As Bell et al (2007) argue, there no binding international or regional declarations on the SRH services to be provided to PLWHA. Nonetheless, Box 1 highlights some international initiatives that draw attention to the SRH concerns of PLWHA using a rights-based approach.
Box 1: Selected International charters, guidelines, and declarations on the SRH rights of PLWHA

1. **Guidance Package on the SRH and Human rights of People Living with HIV (2009)**
   The report is the outcome of a collaboration involving Engenderhealth, Global Network of People Living with HIV/AIDS (GNP+), Young Positives and International Community of Women Living with HIV (ICW), IPPF, UNAIDS and WHO. The SRH rights of PLWHA include: pleasurable sexual relationships, sexual orientation, access to treatment for SRH needs and founding a family. The required legal and policy framework is also elaborated. The specific SRH concerns of sub-groups including refugees, migrants, prisoners and drug users are also articulated.

2. **Model Law on HIV in southern Africa (2008)**
   This was developed by the Parliamentary forum of the 16 member Southern African Development Community (SADC). Its aimed at guiding national HIV legislative reform efforts in member countries. It states that PLWHA entitled to all sexual and reproductive health rights, including marriage and parenthood.

   This document has a special emphasis on HIV positive of women and children in resource constrained-settings. Areas covered include: family planning; STIs; RTIs; cervical cancer and the continuum of care from conception to newborn care for women who opt to have children.

   Drawn up in Swaziland at a gathering organised by ICW, the Charter declares that the SRH rights of HIV positive women include the right to: practice protected sex; control own sexuality; sex education; decision on child bearing non-coerced abortion; information on contraceptives and antenatal, delivery and post-partum care.

   This Bill originated from the 2002 International AIDS Conference in Barcelona, Spain. ICW was one of the groups that led the initiative. Enshrined in the Bill are the SRH rights for HIV positive women including: the right to sexual autonomy and sexual pleasure and non-discriminatory health care.

   The session produced the UNGASS Declaration, highlighting the need for commitment to universal access to care and declaring that investment in SRH is a major foundation for both HIV/AIDS prevention and Treatment.

   **Sources:** (Engenderhealth et al. 2009; WHO, 2006; Bell et al. 2007; SADC, 2008)

However, the country has no specific overarching policy on the package of SRH services that should be provided for PLWHA. A draft reproductive health policy initiated more than 7 years ago remains under discussion within the Ministry of Health. A population policy developed by the Ministry of Finance and National Planning does not discuss sexual reproductive health in the context of HIV and AIDS. Seemingly, the protocols and guidelines for particular services such as screening and treatment of STIs, PMTCT and family planning are expected to guide health care providers in both public and private health facilities.

Regarding the legal system, the practice of men having sex with men for instance, is a criminal offence under Zambia’s penal code. Consequently,
SRH services for PLWHA among such groups are non-existent (NAC, 2009). Calls for the distribution of condoms in Zambian prisons, where evidence of men having sex with men exists, remain unheard the legal implications of the initiative.

The lack of appropriate polices focusing on PLWHA is also observed at sectoral level. Despite its mandate and the relatively large number of personnel it employs, the public health sector in Zambia has no HIV workplace policy for its staff. Facility administrators make their own ad-hoc arrangements to provide support for HIV positive workers (Dieleman et al, 2007). In their study on the impact of HIV and AIDS on health care workers in Zambia, Dieleman and colleagues (2007) observed that in one district the only impact mitigation initiatives and support groups were those organised by the Zambia Nurses Association for its members. The absence of coherent HIV workplace policies can constrain access to SRH services for health care workers as illustrated in the following response from a clinician at one of the major hospitals in Zambia:

"No one wants to be seen [getting condoms]...I wish they had designed a system where they could just have these condoms in the toilet. Like one time, I went to the pharmacy and wanted them. When I asked for them [the pharmacy attendants] started laughing.... I have never gone back" (Kiragu et al., 2008:22).

The conditions that some donors attach to financial support to Zambia’s health sector are sometimes the source of restrictive policies and guidelines for SRH services. The “gag rule” - the former United States government’s policy barring funding to NGOs providing abortion related services – triggered the termination of a number of reproductive health programmes run by the Planned Parenthood Association of Zambia (PPAZ), the country’s leading non-governmental provider of reproductive health care and related services (Global Gag Rule Impact Project, 2006). This followed the NGO’s loss of the US government’s funding as a consequence of its rejection of the gag rule in 2001.

4.2 Health care services

4.2.1 Organisation and distribution of services

Different sub-populations among PLWHA tend to have unique SRH needs and distinct patterns of seeking related care. Therefore, the manner in which services are provided has a bearing on accessibility. For example, services provided as under the PMTCT programmes within ANC services exclude men as well HIV positive women who are not pregnant. PMTCT-plus services, which include the woman and her family, are only available in 16% of all facilities offering PMTCT services country wide, according to a countrywide survey (CSO, 2006b).
Shapiro and Ray (2007) argue that in seeking care, men tend to use services where health education is not the norm, such as STI clinics, workplace clinics, and private or informal health services. They also tend to prefer the private sector which they associate with higher levels of privacy. In Zambia, men suffering from STIs generally seek care from private clinics, pharmacies and even traditional healers in the first instance (Ndulo et al., 2000). On these grounds, a lot of men, some of whom are HIV positive, miss out on the free STI services offered in public health facilities. Adolescents in need of SRH services may equally face access hurdles stemming from the parental or guardian notification required by some health services providers. It is easy to visualise the dilemma faced by an unmarried youth whose nearest source of free condoms is a public health clinic manned by an elderly nurse from the neighbourhood.

Operationalising the concept of “integrated HIV/AIDS and SRH services” remains one of the major challenges faced by many health systems in resource constrained settings. The situation in Zambia closely mirrors the description by Berer (2004) of SRH and HIV/AIDS advocates as distinct camps competing for attention, funding and other resources. The development of SRH and HIV/AIDS as distinct, vertical programmes in Zambia is historical. In recent years, the increased funding for HIV/AIDS activities continues to inadvertently reinforce this state of affairs. For example, a number of NGOs initially set up to provide family planning services have completely changed their focus to delivering HIV/AIDS services in response to the perverse incentive created by donors’ propensity to fund narrowly-defined HIV/AIDS services. The Planned Parenthood Association of Zambia (PPAZ) is presently one of the few private SRH service providers in the country. Although it offers a comprehensive package of services, its operations are now mainly confined to a few districts due to due to limited funding (Gordon and Mwale, 2006).

Only a few HIV/AIDS services in Zambia also offer SRH services. Information on where to access safe, legal abortions for instance, is generally not available in VCT sites. Service providers in ART sites may not be able to identify cases of sexual and gender based violence among their clients due to lack of skills. Also, this aspect of SRH is rarely considered part of their mandate.

**4.2.3 Lack of tailored services**
According to UNAIDS and WHO, hyper-endemic scenarios are HIV epidemics where HIV prevalence exceeds 15% in the adult population with extensive heterosexual multiple concurrent partnerships featuring among the major drivers. Low and inconsistent condom use characterise such epidemics (UNAIDS, 2008). In Zambia, research shows that the HIV/AIDS epidemic is mainly driven by heterosexual sex as is the case in much of sub-Saharan Africa (NAC, 2004; UNAIDS, 2008).
Gender, cultural practices and socio-economic considerations are some of the underlying factors influencing the large number of new infections occurring in the matrimonial setting and other long-term relationships. Using data from a population-based survey, Dunkle and colleagues (2008) estimated that at least 55% of all new heterosexual HIV infections in urban Zambia occurred between discordant married or cohabiting couples. Similar findings are evident from figure 4.1 which is extracted from a recent technical report on the national HIV response in Zambia.

**Figure 4.1: HIV incidence by mode of exposure**

![HIV incidence by mode of exposure chart]

Source: NAC, 2009

Figure 4.1 shows that the highest HIV incidence of 37.3% is related to partners of adults involved in casual heterosexual sex. Married or cohabiting couples, or the low-risk heterosexual group, exhibit a noticeably high incidence of 21%. Incidence is less than 1% in the remaining groups (NAC, 2009). The incidence for MSM could be an understatement considering the limited data on the practice in Zambia.

The elevated risk faced by the HIV negative partner in a long-term discordant relationship is further highlighted by an earlier investigation. In a prospective cohort study on the sexual behaviour of 963 cohabiting discordant couples in Zambia, the results of DNA sequencing confirmed that 87% of all the new infections in the cohort were acquired from the spouse (Allen et al., 2003).

It can be argued that the lack of access to evidence-based SRH services and commodities such as sperm washing, artificial insemination and
female condoms contribute to the picture depicted by these statistics. HIV-positive married women cannot benefit from the dual protection of male condoms in situations where their husbands are the ones who decide whether or not to use them. Thus, tailored services that take into account the special circumstances of the various sub-groups can enable PLWHA to have fulfilling sexual and reproductive lives with little or no risk of infecting their partners.

4.2.4 Inadequate supplies and commodities
The lack of supplies and equipment to provide even basic health care services is a widespread concern in health facilities in Zambia. In a study on family planning services for HIV positive women, Banda et al., (2004) report some staff shunning procedures such as vaginal examinations due to shortages of gloves. The issue of inadequate supplies in the delivery of SRH services is echoed by Mwanahamuntu et al. (2009), who cite limited medical supplies as an obstacle in the running of the Zambia’s cervical cancer screening programme.

Irrespective of HIV sero-status, women of reproductive health age in some parts of Zambia face difficulties in obtaining reproductive health commodities. The uneven distribution of reproductive health commodities across the country, as reflected by the unmet need for contraceptives, is partially caused by supply-chain factors (Brown and Syacumpi, 2006). For example, forecasting demand for condoms and reproductive health drugs remains a problem due to the parallel funding, procurement and distribution arrangements maintained by donors in the health sector. The resulting instances of stock-outs, expiry and shortages of drugs also underscore the risk posed by the health sector’s over-dependency on external funding.

4.2.5 Cost of services
In the process of accessing health services, patients incur a number of indirect costs in addition to the various charges and fees payable for the services. Even when health services are offered free at the point of access, the indirect costs may high enough to be financially ruinous for poor patients. Creese and Parker (1994) identify some of the indirect costs as being the travelling expenses, the income foregone when seeking care facility and the monetary value of all the hours spent in queues at different stages of the care seeking exercise. The cumulative time costs can be immense considering the relatives or friends who often accompany the patient to the health facility.

A household survey on the economic costs of accessing health services in Zambia showed that for a poor household in rural Zambia, time costs (travel and waiting time) constituted 14% of the total monetary cost of a single visit (Hjortsberg and Mwikisa, 2002). This proportion rose when estimated during the peak of the farming season when the rural populace cultivate their time fields. Even among the urban poor, a few hours spent
navigating through a health facility may be mean the loss of a whole day’s sales for one eking out a living from a small vegetable stand in the local market.

In Zambia, the major SRH services including maternal and child services, family planning commodities and PMTCT are ostensibly free in public health facilities. Nevertheless, travel costs especially in the remote parts of the country can be immense. In a study on delays in seeking maternal care in Kalabo, a rural district in Zambia, 50% of the 332 women interviewed had to walk for more than two hours to the nearest health facility (Steekelenburg et al., 2004). Moreover, the average waiting time during an ambulatory visit to a rural health centre is estimated at 54 minutes in Zambia (MOH, 2007b). In the cities, women with pregnancies in the advanced stages are forced to use taxis when going to health facilities as the crew on the cheaper commuter buses often refuse to ferry them. For poor households, such costs are a major barrier in accessing services.

4.3 Health care providers

4.3.1 Negative Staff attitudes
By allowing their own personal opinions and values to sway the information and services they provide, service providers can constitute a major impediment to SRH services for PLWHA (Myer et al, 2005). In addition, providers’ judgmental attitudes regarding fertility intentions can lead to detrimental health-seeking behaviour on the part of PLWHA (Cooper et al, 2009). A survey among clinicians in a Mumbai suburb in India found that only 15% of the respondents allowed HIV positive women to deliver at their clinics (Mhase and Reddy, 2000). The following quote from an HIV positive woman in South Africa highlights the role of personal views in coercion towards particular services:

"I went to the clinic for counselling and abortion. They said why don’t you sterilise because you will have an HIV positive child and because of your condition. They said it is no use having another child...I didn’t get sterilised.” (Ramkinssoon et al., 2006:319)

Provider’s attitudes can be particularly influential in the decision making process of some potential users of health services. For marginalised groups such as sex workers and men who have sex with men, the fear of negative reactions coupled with the HIV-related stigma and discrimination in health care settings can lead to the avoidance of health services altogether. From both public and human rights perspectives, it is a matter of concern when services are withheld by a health care worker who opts to follow the direction of his or her own moral compass.

4.3.2 Lack of skills and knowledge
Service providers need the right knowledge and skills to effectively respond to the SRH needs of PLWHA (van der Kwaak et al., 2006;
Engenderhealth et al., 2009). Within the health system, the competencies necessary for a comprehensive and responsive SRH service package vary considerably. Requisite skills range from the provision of information on positive prevention for instance, to the ability to perform complex medical procedures requiring specialised training.

In a European multi-country study on SRH services for PLWHA, health care workers highlighted sexual health counselling as a much-needed service which they were unable to provide due to lack of skills (Nostlinger et al., 2008). Similarly, some counsellors in a site providing HIV-related services in Uganda narrated difficulties in discussing alternative sexual practices with clients. Anal and oral sex, and sex between men were specifically mentioned (Kwagala, van der Kwaak and Birungi, 2008). In Zambia, a number of nurses and midwives in several facilities offering family planning services mentioned limited counselling skills, out-dated knowledge and the need to respect their client’s freedom of choice as constraints in their work (Banda et al., 2004). Providers also need to be aware of the ethical and legal implications of their conduct in the process of delivering care.

### 4.3.3 Shortage of staff

In Zambia, poor access to SRH services due to staff shortages must be viewed against the backdrop of the longstanding human resources crisis within the health system as a whole. The HIV/AIDS epidemic, by affecting both the capacity of the health care sector to provide services and increasing the overall demand for services, further burdens a weak health system suffering from years of inadequate funding.

**Table 4.1 2007 Zambia Human Resource Needs and Ratios**

<table>
<thead>
<tr>
<th>Total # Needed</th>
<th>Authorised Staff Establishment</th>
<th>% Shortfall</th>
<th>Staff :population ratio</th>
<th>Staff per 1,000 population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Doctor</td>
<td>1,778</td>
<td>1,290</td>
<td>27%</td>
<td>1:9,660</td>
</tr>
<tr>
<td>Nurses</td>
<td>14,053</td>
<td>8,165</td>
<td>42%</td>
<td>1:1,526</td>
</tr>
<tr>
<td>Midwives</td>
<td>4,751</td>
<td>2,775</td>
<td>42%</td>
<td>1:4,491</td>
</tr>
<tr>
<td>Medical Licentiate</td>
<td>547</td>
<td>79</td>
<td>86%</td>
<td>1:157,739</td>
</tr>
<tr>
<td>Clinical Officer</td>
<td>3,737</td>
<td>2,657</td>
<td>29%</td>
<td>1:4,690</td>
</tr>
<tr>
<td>Env. Health Technician</td>
<td>2,555</td>
<td>1,276</td>
<td>50%</td>
<td>1:9,766</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>1,238</td>
<td>693</td>
<td>44%</td>
<td>1:17,982</td>
</tr>
<tr>
<td>Laboratory Technician</td>
<td>1,403</td>
<td>697</td>
<td>50%</td>
<td>1:17,879</td>
</tr>
<tr>
<td>Radiographer</td>
<td>732</td>
<td>327</td>
<td>55%</td>
<td>1:38,108</td>
</tr>
<tr>
<td>Paramedical</td>
<td>1,379</td>
<td>485</td>
<td>65%</td>
<td>1:25,694</td>
</tr>
<tr>
<td>Teaching staff</td>
<td>422</td>
<td>237</td>
<td>44%</td>
<td>1:52,579</td>
</tr>
<tr>
<td>Admin.</td>
<td>7,769</td>
<td>3,952</td>
<td>49%</td>
<td>1:3,153</td>
</tr>
<tr>
<td>Support</td>
<td>11,040</td>
<td>8,250</td>
<td>25%</td>
<td>1:1,510</td>
</tr>
<tr>
<td>Total</td>
<td>51,404</td>
<td>30,883</td>
<td>40%</td>
<td>1:404</td>
</tr>
</tbody>
</table>

Source: MOH, 2008

The country as a whole has significant shortages of all core cadres as highlighted in Table 4.1. Compared to the WHO-recommended staff to
population ratios of 1:5000 and 1:700 for doctors and nurses respectively, the staffing deficits are telling. The staff shortages are more pronounced at lower levels of service delivery compared to hospitals.

Analysis of staffing by province shows a skewed staff distribution in favour of urban areas. For instance, Lusaka’s doctor to population ratio is 1:6,247 compared to Northern Province’s ratio of 1:65,763 (MOH, 2005). The picture is similar at lower district level. According to a 2007 health facility survey, Ndola district, which is urban, had 106 midwives but only 7 delivery facilities, compared to Mbala, a rural district in which 13 out of 20 Health Centres had no midwife at all (MOH, 2008). This translates to a midwife to population ratio of about 1:11,000. Thus, the range of available SRH services is limited particularly in the rural areas.

4.4 Stigma and Discrimination

In many countries, the stigma and discrimination associated with HIV infection rank among the major barriers to an effective response to the HIV epidemic (Gruskin et al., 2007; Piot, 2006). PLWHA can be subjected to stigma and discrimination in a variety of settings, including health care facilities. A study on stigma and HIV/AIDS in a rural community in Zambia revealed various forms of enacted stigma by health care health providers. Incidents narrated by respondents included: denial of drugs and treatment; being left in the corridor; being dealt with last; being labelled or called names; early discharges to create space for patients with ‘other’ diseases; and breaches of confidentiality (Bond, Chase and Aggleton, 2002).

Untreated STIs, failure to disclose sero-status to sexual partners and the failure to observe PMTCT breastfeeding guidelines are some of the adverse outcomes likely when HIV-related stigma drives PLWHA away from appropriate SRH care. Indeed, the recognition of stigma and discrimination as obstacles to access to SRH services for PLWHA has renewed global interest in the integration of SRH and HIV services as elaborated by several scholars and global entities (Banda et al., 2004; Bell et al., 2007; Berer, 2004; UNAIDS, 2008)

Some of the institutional and structural barriers identified in this chapter have more to do with the absence of a clear SRH policy rather than limited resources. Regarding HIV-related stigma, health care workers can reinforce the practice as the evidence shows. Equally important is their strategic position to challenge it.
Chapter 5: Demand-side factors

The preceding chapters have reviewed the supply-side and the needs-based factors of access to SRH services. In keeping with the Andersen behaviour model which underpins this study’s analytical framework, this chapter analyses a number of demand-side factors.

5.1 Predisposing Factors

5.1.2 Age

Age is one of the demographic characteristics that serve as predictors of utilisation of many health services (Andersen, 1995). Irrespective of HIV sero-status, the SRH needs of an individual evolve over time. The transition from infancy to old age is a journey marked by SRH concerns that can be identified with a particular stage. As observed by the United Nations Population Fund (UNFPA), the life cycle approach is a useful tool for analysing the age-defined inequities in access to SRH services (UNFPA, 2000). The biological transformation does not occur in isolation; growing up has physical, cognitive and socio-cultural milestones that do not always coincide with legally-defined markers. Figure 5.1 provides a synopsis of some of the SRH issues that relate to the different life stages.

Figure 5.1: Sexual and reproductive health concerns in the human life cycle

Adapted from UNFPA, 2000
The first “Youth friendly” SRH service outlets in Zambia date back to 1994 when the Lusaka District Management Team opened 10 sites within the city in collaboration with UNICEF and other partners (Mmari and Magnani, 2003). In 2000, SRH for adolescents as a topic was integrated in the curriculum in nurses’ training institutions. Over the years, coverage has expanded particularly in the urban areas, where a number of public health facilities and NGO-run sites provide SRH services targeted at young people.

A few studies highlight the challenges young people face in accessing the services. For instance, Warenius and colleagues (2006) examined the attitudes of nurses and midwives towards the SRH needs of adolescents in Zambia and Kenya. Findings show that 81% of the respondents in Zambia stated that the first option would be to recommend abstinence to any adolescent who approached them for contraceptives. Regarding counselling for condom use, 70% of the respondents in Zambia indicated they would offer the services to out-of-school adolescents but the number reduced to 53% for schoolboys. Furthermore, 94% of the Zambia respondents stated that abortion should not be allowed for adolescent girls with unwanted pregnancies.

An evaluation of the performance of youth friendly SRH services in Lusaka Zambia, records hostile staff attitudes and lack of privacy during the consultation as some of the reasons young people cited for not wanting to return to the facilities in future (Mmari and Magnani, 2003). Interestingly, some of the non-users of services indicated a preference for traditional healers for reproductive health concerns. The main reason forwarded was that the family planning services in the conventional facilities were only available to married adults.

Figure 5.1 also shows that STIs and HIV affect all age groups. In Zambia, health facilities are attending to a growing number of young children presenting with STIs, including HIV, acquired through sexual abuse. When added to the number of children who acquire HIV infection at birth, a picture emerges of a significant number of children with special SRH needs in the country. At the other end of the spectrum, older adults living with HIV also face access barriers due to cultural norms that preclude them from discussing SRH concerns with younger people. However, it is the adolescents or young adults for whom the age is a significant barrier to SRH services.

Although the minimum age for consensual sex in Zambia is 16 years, 18.6% of adolescents aged 15 years interviewed in 2005 reported having sexual intercourse in the preceding year (CSO, 2006). Furthermore, only 24.7% of the respondents between 15-19 years reported condom use during the first sexual encounter. Indeed, the HIV prevalence among male and female adolescents of 3.6% and 5.7% respectively suggests a need for more consideration of the age factor in the delivery of SRH services.
Among young Zambians, those living with HIV, those in marriages and those living on the streets are subgroups that often “fall through the cracks” regarding access to SRH services. The age barrier is reinforced by their “atypical” situation. For young people, adolescence is a turbulent period of exploring sexuality, intimacy and forming relationships which often involve sex. Nonetheless, HIV positive adolescents have to contend with disclosure of their status, concerns over re-infection or infecting their partners and the worries about safe parenthood as additional considerations. Without integration, the options available are either exclusively HIV/AIDS services or integrated SRH services that are only for an adult clientele.

5.1.3 Residence
Ensuring equitable access to health care remains a core objective of the health sector reforms in Zambia (MOH, 2007b). The historical imbalances in the distribution of health services between the urban and rural areas underpin the inequitable access to health services evident from various indicators. Access to modern contraceptive methods for women can be cited as an example. Between 1992 and 2007, the national contraceptive prevalence rate (CPR) for modern methods more than tripled from 8.9% to 32.7% (CSO, 2008). Scrutiny of the disaggregated figures, on the other hand, shows that the 1992 CPR for urban areas (15.3%) was nearly 5 times that of the rural areas (3.2%). The situation in 2007 was similar; but with a slight reduction in the difference between the two geographical areas. Therefore, HIV positive women in urban areas are more likely to have better access to modern contraceptives compared to their rural counterparts.

Figure 5.2 Contraceptive prevalence rate by residence (selected years)

Data source: CSO, 2008
## 5.1.4 Gender

In Zambia, the influence of gender on access to health services is quite different for men and women. Financial dependence and the submissive role that many women are expected to play particularly in a marital setting, can impede access to SRH services. Without control over the means to reach health services, a woman in such a situation is likely to postpone or fail to seek care unless the spouse decides so.

Physical assault and coerced sex occasioned by husbands and other-long term partners are some of the forms gender-based that violence takes in Zambia. The 2003 and 2005 population-based Zambia Sexual Behaviour Surveys (ZSBS) both carried questions on forced sex for female respondents. The responses highlighted in figure 5.3 provide some indication to the extent of sexual violence although the percentages are likely to be underestimates due to under-reporting.

### Figure 5.3: Percentage of females reporting forced sex by perpetrator, 2003 and 2005.

![Percentage of females reporting forced sex by perpetrator, 2003 and 2005](image)

Data source: CSO, 2006

Out of 2,174 respondents interviewed in 2005, 15.1% reported having experienced an episode of forced sex (CSO, 2006). As figure 5.3 shows, more than 60% of the reported perpetrators were husbands or live-in partners in both 2003 and 2005. The data show that sexual violence in relationships is a widespread sexual health concern for which access to the attendant care is negatively influenced by gender. For women living with HIV, the lack of control over when to have sex can lead to adverse health outcomes such as unwanted pregnancy and infection with STIs.
On the other hand, the gender norm that casts men as invincible, strong and possessing high pain thresholds may instead inhibit access to health services, including health education. In some high HIV prevalence areas in Africa, this stereotype of masculinity is a precursor to the risky sexual behaviour boys and men engage in through which they get infected in the first place. Research shows that in a number of African countries, men are less likely than women to access HIV services including testing, treatment and other care and support services. Men are often reluctant to use health services because of the belief that it is unmanly and that doing so would indicate weakness to their peers (Beck, 2004). For instance, “Gono rinoonekwa nemavanga aro” meaning “A real bull is identified by its scars” in English, is a Shona proverb used in the past to glamorise repeated STI infections among Shona men in Zimbabwe (Pearson and Makadzange, 2008). In South Africa, only 21 per cent of those presenting to be tested for HIV are men. Despite similar infection rates, South African women are twice as likely as men to be on antiretroviral therapy and their CD4 counts are much higher than men’s when they start treatment (SGJP, 2006). In Zambia, HIV prevalence is higher among women, but men’s under-utilisation of health services is acknowledged as one of the reasons for more women being on ART countrywide (NAC, 2009).

The reversal in vulnerability is not confined to high prevalence settings only. Bila and Egrot (2009) conducted an anthropological survey on health-care seeking patterns of PLWHA in Burkina Faso, whose HIV prevalence is 1.8%. The results showed more women than men accessed various HIV-related services despite having the same HIV. Within the health care facilities, the researchers also observed the widespread practice of HIV positive men having their wives queuing for services on their behalf while they stood nearby. The men would only appear when necessary, as in the case of giving a blood sample (Bila and Egrot, 2009). Evidently, being a man can be a hindrance rather than a predisposing factor as regards access to SRH services for PLWHA.

5.1.5 Health Beliefs
Cultural beliefs about the aetiology of many sexual and reproductive concerns play a prominent role in the health seeking behaviour of the affected individual (Plummer et al., 2006; Ndulo et al., 2000). In many parts of Africa, witchcraft, biological causes, ancestral curse, bad luck and supernatural beings are commonly cited as the underlying causes for sexual and reproductive problems (Pearson and Makadzange, 2008; Plummer et al., 2006). The decision regarding when and where people seek care is also informed by the perceived efficacy of the chosen treatment.

Kleinman (1980) describes three broad categories of health service providers in a health care system: the popular, the folk and the professional. In Zambia, an individual seeking health care may turn to the
popular sector characterised by self-treatment and informal sources of assistance such as friends, relatives or neighbours. It is usually the first port of call. Alternatively, care may be sought from the herbalists, spiritual healers, traditional healers or unlicensed medicine sellers that constitute the folk sector (Ndulo et al., 2000). An affliction attributed to biological causes will prompt the patient to visit a formal private or public health service provider for consultation. However, it is not uncommon for a patient to seek care from different providers simultaneously.

Reliable data on the number of PLWHA utilising the services of traditional healers in Zambia are unavailable. However, data on the health usage in the general population suggest that PLWHA also patronise traditional healers’ services. A study by Banda and colleagues (2007) on the prevalence of traditional medicine use among pregnant women in Lusaka, Zambia reported that 30% of all the respondents had visited a traditional healer in the past. Asked about the current pregnancy, 21% of the women reported ongoing visits to traditional healers. An earlier study on health seeking behaviour in western Zambia observed that 53% of the people interviewed had visited a traditional healer at least once (Stekelenburg et al., 2007). Infertility and “kanono”, a condition linked to fits or epilepsy, were observed to be among the most common reasons for enlisting the services of a traditional healer.

Erectile dysfunction, which may be related to ART, is one concern for which advice, help from friends or spiritual healing may be sought. For instance, the Goba of Chiawa area in southern Zambia describe “Nyamutonono” as a form of impotence attributed to having sex with elderly women or being bewitched for having sex with another man’s wife (Ndubani et al., 2003). The locals consider the condition to be quite common.

5.2 Enabling Factors

5.2.1 Financial resources
Income is one of the enabling factors regularly assessed in health service utilisation studies (Aday and Andersen, 1974; Hjortsberg, and Mwikisa 2003). The ability to meet the costs related to seeking care has a bearing on an individual’s decision to access treatment. In many resource constrained settings, income poverty is linked to poor health seeking behaviour (MOH, 2008).

Zambia has no social health insurance system and out-of-pocket payments constitute 29% of total expenditure on health (Phiri and Tien, 2004). The government has tried to mitigate the inequity in access to health care inherent in such a health care system by making a number of services free at the point of access in public health institutions. Treatment for STIs, maternal and child health services and family planning services are offered at no charge (MOH, 2007b).
A report on the HIV/AIDS specific expenditure by PLWHA in Zambia reveals uptake of health services is positively related to a household’s level of income (Phiri and Tien, 2004). As shown in figure 5.5, the richest 20% made more out-patient visits to provincial hospitals and private providers than the poorest 20%. Although the study was done prior to the introduction of free ARVs in public health facilities in 2006, household income is still likely to be a factor given the indirect costs associated with seeking care. The relatively higher expenditure on private providers by the lowest quintile is perhaps due to higher spending on private informal providers described earlier. These findings are consistent with the results of a similar study involving PLWHA in Kenya showing strong correlation between wealth levels and health service utilisation (De and Dmytraczenko, 2006).

**Figure 5.4: PLWHA annual per capita outpatient visits by household wealth index**

![Chart showing annual per capita visits by wealth quintile and provider type](chart.png)

Data Source: Phiri and Tien, 2004

### 5.2.3 Supportive social network

In the context of utilisation of health services, social support is defined as “a range of interpersonal relationships or connections that have an impact on the individual’s functioning, and generally includes support provided by individuals and by social institutions” (Barker, 2007:3). The support can be in material form as in the case of financial assistance for a hospital visit. It may also be intangible, such as the emotional support offered by friends and family. In a study on use of mental health services among African Americans, Martin and colleagues (2003) describe social support in terms of the family and friends that motivated or directed patients to seek care.

Barker (2007) asserts that the role of a supportive network in uptake of health services is more pronounced when the condition for which help is sought is either highly stigmatised or sensitive; with high confidentiality
connotations. In Zambia, HIV infection still attracts pervasive stigma and discrimination despite the numerous HIV sensitisation campaigns. Self-disclosure of a positive HIV test result is often tortuous process.

Research shows that among PLWHA in Zambia, increased uptake of SRH services is correlated with a supportive social network. Jones et al. (2005) conducted an intervention prospective study involving a sample of 332 HIV-positive women and their partners in Lusaka, Zambia. Following a series of four sensitisation group sessions over a 12-month period, the results showed that women with greater partner involvement during the sessions reported greater condom use, among other aspects. In another study, reported condom use in a group of discordant couples increased from 3% to 80% before and after couple counselling (Allen et al. 2003).

Some of the SRH concerns of PLWHA are a result of the lower general state of health in the absence of treatment. In such situations, improving the health status serves to resolve the problems the social networks can play a critical role. For instance, prayers and psychosocial support from family members and peer support groups were cited as important facilitators of treatment uptake and adherence among the PLWHA on treatment in a qualitative study in the Copperbelt province of Zambia (Sanjobo, Frich and Fretheim, 2008). Additionally, decision-making on marriage intentions, child bearing and coping with self stigma are situations in which the non-judgemental attitude of health providers, family and friends is a key determinant of the SRH choices of PLWHA in Zambia.
Chapter 6: Discussion

Focussing on Zambia, this study set out to identify the factors leading to the unmet SRH needs of PLWHA in Zambia. The first part of the chapter summarises the main findings from the preceding chapters. Further analysis, with reference to some opportunities for improving the situation, is carried out in line with the theoretical framework set out in chapter two.

**Figure 6.1 Interaction of demand, supply and unmet needs**

- **Effects**
  - Vertical HIV infection
  - Partner HIV infection & re-infection
  - Untreated STIs & RTIs
  - Unwanted pregnancies & unsafe abortions
  - Mental ill-health

- **Unmet needs**
  - Sexual relationships
  - Parenthood
  - Sexual dysfunction therapy
  - Cervical cancer screening
  - RTI & STI treatment
  - Family planning

- **Inadequate Supply & Demand for SRH Services**

- **Health care system**
  - Negative staff attitudes
  - Staff shortages
  - Inadequate knowledge & skills
  - Cost of services
  - Shortage of supplies & commodities
  - Lack of tailored services
  - Stigma & Discrimination
  - Restrictive laws & policies
  - Lack of a guiding SRH policy

- **Individual characteristics**
  - **Enabling Factors**
    - Low income
    - Inadequate social support
  - **Predisposing factors**
    - Age
    - Gender roles
    - Lack of knowledge
    - Negative cultural & social norms
    - Health beliefs
    - Stigma & Discrimination

- **Supply side factors**

- **Demand-side factors**

Source: Author
From the summary of findings presented in the preceding chapters and summarised in figure 6.1, we see that unmet SRH needs in Zambia result from both supply and demand-side factors. The different components do not operate in isolation; they interact in several ways. Firstly, health providers sometimes create demand for services, a function illustrated by the social marketing efforts aimed at promoting use of contraceptives. The establishment of the cervical cancer screening programme in the country illustrates this as women especially, those living with HIV, are now accessing the services. In some cases, the unmet needs serve as a signal for the health system to introduce service where needed. The introduction of community based distributors to provide contraceptives in some rural parts of the country is an example. Secondly, the policy and legal environment affects both the supply and the demand of SRH services. The same holds for stigma and discrimination, which PLWHA face in the community as well as the health care setting. Finally, some of the health personnel are PLWHA and are therefore affected by the supply-side and demand-side barriers to access. Regarding stigma and discrimination, HIV positive care workers are among the worst affected. Some opt for transfers to other towns or leave employment just to avoid stigma.

The findings show that sexual health needs of PLWHA in Zambia are similar to those of PLWHA in other parts of the world. For example, engaging in relationships and enjoying a fulfilling non-coercive sexual life are mentioned by PLWHA in different settings. Like their HIV negative counterparts, the need for sex education, prevention and treatment of STIs and skills to negotiate safe sex also apply to PLWHA. Likewise, the reproductive health concerns of HIV positive men and women are to a large extent, similar to those of HIV-negative Zambians of reproductive age. HIV positive women also require access to appropriate family planning services including information and commodities that would enable them avoid unwanted pregnancies. For a number of reasons, these services are not always accessible. The introduction of PMTCT services has increased the chances of HIV positive women to fulfil their fertility desires with minimal risk of infecting their children. Nevertheless, the initiative would perhaps be more effective if the focus was extended to the well-being of the mother and her spouse as is case in the MTCT-plus programmes available in a few facilities in the country. Finally, this study also shows that PLWHA in Zambia, like in other countries, do require specific attention for some SRH needs.

Staffing levels, availability of supplies and cost of services are some of the features of the health care system that have a bearing on the utilisation of care services. Both the supply-side and the demand side of care are
further influenced by policies, laws and the socio-cultural practices in the community.

To some extent, the disapproval of PLWHA as sexual beings by family members, health care providers and society in general lies at the root of non-disclosure of status by many PLWHA. In addition, the fear of social sanctions for their sexuality forces some PLHWA to self medicate or forego treatment altogether.

In this study, it has not been possible to distinguish between perceived and evaluated SRH needs as outlined in the Andersen model. In the author’s interaction with HIV positive men, the anxiety of adhering to treatment without unintentionally disclosing their status is occasionally mentioned as a cause of erectile dysfunction.

Sexual behaviour that is considered both criminalised and considered to be in breach of social norms heightens the challenges to accessing SRH services that PLWHA face. In Zambia, not only is sex work criminalised but it also stigmatised and associated with social exclusion the community. Thus HIV positive sex workers are generally hesitant to access the ostensibly free SRH services in public health institutions for fear (real or perceived) of negative attitudes from health care workers. Consequently, it can be argued that SRH services targeted at PLWHA need to be guided by a detailed analysis of the different sub-populations and their specific needs.

Admittedly, revising or enacting laws as part of the HIV response is a complicated exercise to which there are no easy solutions. For instance, the surge in child sexual abuse cases in Zambian courts, sometimes with victims as young as one year old, is partly attributed to the belief that unprotected sex with a virgin is a cure for HIV infection. When the child gets infected with HIV as a result, then the case falls within the realm of wilful transmission, which has been used in number of countries to enact laws criminalising the offence. Currently, such cases are dealt with under the existing laws on child defilement or rape. The government’s challenge in addressing the increasing calls for stiffer laws lies in the inadvertent criminalisation of mother-to-child transmission that could result from the proposed laws. Even among discordant couples, the cultural norm that makes marital sex an obligation for the wife and an entitlement for the husband could subject an HIV positive woman to criminal prosecution after suffering sexual violence. Presently, the penal code has neither a specific law on domestic violence nor makes explicit mention of marital rape.

According to WHO, service delivery is one of the six building blocks for a health system focussed on improving health status. Good services, it is stated, are those which deliver effective, safe, quality personal and non-personal health interventions to those that need them, when and where needed, with minimum waste of resources (WHO, 2007b). To its credit,
the Zambian government has made remarkable progress in improving the quality of life of PLWHA through the various care, treatment and support services delivered through the public health system. The introduction of free ART in public health facilities in 2005 is a case in point.

Nonetheless, the unmet SRH needs of PLWHA in Zambia presented in this study are in a way attributable to health services that fall short when viewed through the prism of good health services. As highlighted earlier, the geographical differentials in accessing health care services in general are apparent even for SRH services. In some remote parts of the country some services just don’t exist for lack of infrastructure, staff or both. For the country as a whole, services such as in vitro fertilisation as an intervention for discordant couples are not likely to be available in the foreseeable future given the costs involved and the lukewarm attention being paid to the reproductive health aspirations of discordant couples. What is feasible, but often lacking, is the access to non-judgmental, evidence–based counselling to allow such couples make independent and informed fertility choices.

Ironically, the plethora of better paying donor-funded HIV and AIDS projects in Zambia is partly driving the shortage of clinicians and critical personnel in public health institutions. Comprehensive research on this internal brain drain in the country is yet to be done. Current initiatives such as the involvement of PLWHA as lay counsellors in PMTCT and ART sites are clearly helping to provide more responsive SRH services than would otherwise be possible. Family Health International (FHI) and the Centre for Infectious Disease Research in Zambia (CIDRZ) count among the major PMTCT service providers who have managed to scale-up their operations with the help of community health workers. Nonetheless, task-shifting particularly in the health sector requires a supportive legislative framework and advocacy to obtain the support of health cadres keen to safeguard their professional identity.

Bharat and Mahendra (2007) observe that for health workers, frustration with the lack of equipment, drugs and other supplies is sometimes a greater issue than poor salaries. In this study none of the studies analysed contained a hierarchical ranking of the challenges health workers face in the course of duty. However, inadequate supplies were a common complaint in studies involving health workers in Zambia. Indeed, erratic water supplies, no electricity and the absence of post-exposure prophylaxis for HIV infection are structural barriers on which health care workers sometimes base their decisions not to provide particular services to PLWHA. In Zambia, an unfavourable working environment and poor remuneration are probable causes of some of the reported incidents of negative attitudes towards the reproductive intentions of PLWHA.

The socio-cultural and economic context in which PLWHA make their SRH choices leaves health care workers in need of competencies beyond what they traditionally have. In Zambia, it is fairly common for older persons to
remarry following divorce or the death of a spouse. Thus, health care providers can play an important role in providing sex education and negotiation skills to HIV positive elderly persons who choose to resume sexual relationships. Also, providing HIV positive mothers who have not disclosed their HIV sero-status with comprehensive postpartum support requires counselling skills which most maternal and child health care providers may not ordinarily have.

The convergence of SRH and HIV/AIDS services in Zambia can at best be described as a work in progress. In the round 8 funding proposal to the Global Fund, the government included a budget line for the integration of PMTCT into reproductive health and family planning services. The proposal further indicates that mobile PMTCT, ART and other services would be integrated following research on best practices and integration modalities (NAC, 2008). Some innovative approaches have been instituted by the government and private service providers alike, but these are yet to be taken to scale. In the meantime, PLWHA subgroups seeking SRH services grapple with challenges of accessing them without incurring a lot of costs in the process. The weak linkage between HIV/AIDS and SRH services in the country also contributes to the loss to follow-up of clients who are referred across the health care system. Notably, care must be exercised to avoid romanticising integration. Structural deficiencies within the delivery of either HIV/AIDS or SRH services are likely to persist even when offered as an integrated package.

The popularity of traditional healers as suppliers of SRH services cannot be simply attributed to ease of access compared to the nearest conventional health facility. From the author’s interactions with PLWHA in Zambia, privacy, confidentiality, flexible payment terms and a client-centred approach in providing care frequently come up as reasons for seeking care from traditional healers. This suggests that a patient’s perception of quality in service delivery is an important factor in care seeking. Furthermore, health beliefs, which in turn guide health seeking, further entrench the traditional healers as services providers within the health care system. Together with the largely unregulated private health facilities, traditional healers provide a unique opportunity for increasing the uptake of SRH services by PLWHA through appropriate linkages. This is happening with the not-for-profit players, but more needs to be done to regarding the private-for-profit providers into the fold.

Gender permeates the social fabric of Zambia society. In most ethnic groups, the socialisation that boys and girls undergo manifests itself in the unequal power relationships later in life when they start their own families. PLWHA are not immune to the gender norms that define their roles. Men may see avoidance of health facilities and fathering children as expressions of their virility. Women on the other hand may see their husbands as the ultimate authority for approval on when and where to seek treatment for an STI. Disregarding partner involvement in the
provision of family planning services and information on preventing and treating STIs creates an asymmetry of information; the women who bring home the contraceptives and the information often have little or no say on their usage. Armed with little SRH knowledge and immense power, the male partners then proceed to determine the course of events regarding the couple’s sexual and reproductive life. However, for some discordant couples in Zambia, unprotected sex is sometimes at the request of the HIV negative partner as a show of intimacy.

The role of social networks in facilitating access to, and augmenting health services is more pronounced in the case of SRH services and for that matter, when the clients happen to be HIV positive as well. The evidence showing a positive correlation between strong supportive social ties and better SRH seeking behaviour in Zambia is corroborated by the accounts of similar observations by other researchers. For instance, Gruskin et al. (2007) posit that PLWHA with stronger family and communities ties are more predisposed to access needed care and treatment than others of similar socioeconomic status but with less stronger ties. In fact the emotional support from family and friends can have a protective effect, particularly in the case of mental ill-health.
Chapter 7: Conclusions and Recommendations

This chapter presents the conclusions drawn from the study. Based on the findings, recommendations and some proposed areas for future research are also presented.

7.1 Conclusion
The study demonstrates that in general, the needs of PLWHA do not differ from those of their HIV negative counterparts. PLWHA do engage in sexual relationships. Also, they aspire to parenthood and harbour desires to found their own families. HIV positive women are also confronted with the challenges of dealing with unwanted pregnancies, addressing spousal sexual violence and lack of access to contraceptives on account of age or location. PLWHA are also affected by STIs for which they require treatment. However, the study also shows that PLWHA do have special SRH concerns necessitating attention, including ART-related erectile dysfunction, infertility, persistent RTIs and cervical cancer.

In Zambia, the supply side barriers to the fulfilment of these needs include non-availability of services, negative attitudes by staff and the long distances and waiting times involved in accessing care. On the demand-side, the factors that hinder access to services include: lack of financial means, socio-cultural beliefs that negatively influences health-seeking, and gender norms that limit access to information. HIV-related stigma and discrimination, amplified in some cases, negatively affects both the supply and demand for SRH services in Zambia.

Indeed, effectively addressing the SRH needs of PLWHA requires recognition and acknowledgement of the contextual factors that shape their SRH decisions.

7.2 Recommendations
Based on the findings and conclusions of this thesis a number of recommendations at policy, service delivery and community/individual level have been identified. These include:

Policy level
- The government should develop a national policy on the sexual and reproductive health package of services for PLWHA.
- The government and its cooperating partners should improve the funding to facilitate adequate staff, supplies, equipment and commodities for the delivery of SRH services for PWLHA
- The government should initiate legislative reform to address laws that restrict access to SRH services for various sub-populations of PLWHA, including prisoners and sex workers.
- Training providers should integrate SRH for PLWHA in the curricula for training programmes for health care providers.
• The government should engage with the traditional healers and private health care providers to promote referral systems and regulate the quality of care for SRH services.
• The government should develop and implement an HIV workplace policy for the health care workers in the public sector.

Service delivery level
• The Ministry of Health and other providers of health care services should collaborate with PLWHA in designing SRH services that are responsive to the needs of PLWHA in Zambia. Also, the use of PLWHA as counsellors in facilities delivering SRH services should be scaled up.
• Where feasible and acceptable, steps should be taken to integrate SRH and HIV/AIDS services to improve accessibility for PLWHA.

Community/Individual level
• PLWHA must be the prime advocates for their SRH interests. They should use every opportunity to articulate their needs to policy makers, programme implementers and the community at large.
• PLWHA should take responsibility in protecting their SRH through prevention and seeking appropriate treatment.
• PWLHA support groups should help their members in dealing with disclosure of status to their partners.
• Advocacy groups for PLWHA should build the capacity of their members to meaningfully engage in SRH policy formulation, implementation and monitoring.
• Community leaders should actively participate in addressing HIV related stigma in all settings.

This study’s findings suggest the following areas for future research:
• Identify the attributes of the preferred SRH and HIV integrated service package according to PLWHA in Zambia. This could be done using logistic regression models and conjoint analysis.
• There is need for more facility-level evidence on what health care providers consider the most pressing challenges in the delivery of SRH services to PLWHA. Such information would be useful for priority-setting.
• The extent to which perceived needs influence utilisation of service among PLWHA.
• Using a mixed methods approach, further investigate the provider choices that PLWHA make.
• Research is required to investigate how SRH needs evolve with duration of ART.
• There is need to explore the willingness to pay for SRH services. This information could then be used to explore the type of services that to be offered under a public-private partnership initiative.

• The link between specific laws and policies and supply of SRH services at facility level should be explored. The results can be used to inform legal and policy reform.
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