The Forgotten Fifty Per Cent: A Review of Sexual and Reproductive Health Research and Programs Focused on Boys and Young Men in Sub-Saharan Africa

CA Varga[1,2]

ABSTRACT

This paper reviews existing literature on sexual and reproductive health research and programming among boys and young men in sub-Saharan Africa. While there is growing body of literature on adolescent and young adult women, much less is known about male sexual and reproductive health and its potential connection to well being, and in particular the risk of contracting and spreading HIV/AIDS. The author's premise is that both societal and individual vulnerability to HIV/AIDS infection are heavily influenced by socio-cultural factors and societal norms, and that gender and sexuality are among the most powerful of these elements. In keeping with this perspective, potential gaps in the literature are identified using a modification of Dixon-Mueller's framework, which illustrates how sexuality and gender influence reproductive health outcomes. The framework focuses on several interrelated elements of sexuality — sexual partnerships, sexual acts, sexual meaning, sexual drives and enjoyment, and sexual knowledge and awareness. (*Afr J Reprod Health* 2001; 5[3]:175-195)

RÉSUMÉ

Le cinquante pourcent oublié: un examen des recherches et des programmes de la santé sexuelle et reproductive concentrés sur les garçons et les jeunes hommes en Afrique subsaharienne. Cet article passe en revue la documentation actuelle de la recherche et la programmation sur la santé sexuelle et reproductive chez les garçons et les jeunes hommes en Afrique subsaharienne. Alors que le corpus de la documentation sur les adolescents et les jeunes femmes adults s'accroît, on connaît très peu de la santé sexuelle et reproductive des hommes et son rapport potentiel avec le bien-être et surtout par rapport au risque de contracter et de propager le VIH/SIDA. L'auteur tient à affirmer que la vulnérabilité de la société et de l'individu à l'infection VIH/DISA est beaucoup influencées par les facteurs socio-culturels et les normes sociétales et que les sexes et la sexualité sont parmi les plus forts de ces éléments. En conformité avec cette perspective, les lacunes potentielles dans la documentation sont identifiées à l'aide du cadre Dixon-Mueller modifié qui démontre comment la sexualité et les sexes influencent les issues de la santé reproductive. Le cadre concentre sur plusieurs éléments de la sexualité qui sont étroitement liés - l'association sexuelle, les actes sexuels, la signification sexuelle, la pulsion et la jouissance sexuelles, et la connaissance et la conscience sexuelles. (*Rev Afr Santé Reprod* 2001; 5[2]:175-195)

KEY WORDS: *Sexual, Reproductive Health, sub-Saharan Africa, boys, youngmen*

[1]*Health Transition Centre, National Centre for Epidemiology and Population Health, The Australian National University, Canberra 0200.*
[2]*Human Sciences Research Council (HSRC), 359 King George V Avenue, Dalbridge/Durban 4014, South Africa.*

Introduction

Along with the ever-increasing sophistication of how we understand the dynamics surrounding HIV/AIDS has come recognition of the need to more fully involve men in working to stop its spread. This is evident in the current theme of the World AIDS Campaign, *Men Make a Difference*. In keeping with this thematic emphasis, this paper provides a broad overview of existing work on sexual and reproductive health (S/RH) issues among boys and young men[k] in sub-Saharan Africa. Its purpose is to serve as a basis for the development of male youth-focused messages relating to the campaign itself, as well as foster greater attention to boys and young men in regional research, programs and policies.

There are many compelling reasons to focus on men in HIV prevention efforts. First, while men's health issues are important, they are often overshadowed by an emphasis on female health concerns. Such neglect may stem partly from the fact that in many, if not most, societies men perceive the need for treatment or advice as a sign of weakness and thus delay seeking health care. Further, as discussed in greater detail below, both research and programming have traditionally been dominated by the assumption that sexual and reproductive health issues are primarily female concerns. This is certainly not the case. For example, studies in Tanzania, Kenya, Zimbabwe and Zambia have demonstrated that men take a keen interest in sexual and reproductive health services, articulate their sexual and reproductive health needs, and have very specific recommendations for improving male S/RH services.[1,2] In this respect, it is also important to recognise the importance of male sexual and reproductive health both in and of itself, as well as a means towards improving women's well being. For example, male involvement is a necessary component of HIV and other sexually transmitted disease (STD) prevention. It is well known that in order for STD infection to be effectively curtailed both partners must be treated. Moreover, none of the female contraceptive methods currently available safeguards against HIV infection; only male-controlled or assisted means provide adequate protection. Thus, focus on men is absolutely vital in ensuring the sexual and reproductive health of both partners.

Another motivation for increased attention to men is the fact that they are equally or more likely than women to behave in ways that place both themselves and their partners at risk for sexual and reproductive health complications. By some estimates, one in four men worldwide engages in behaviours such as unsafe sexual practices and substance abuse, which increase the risk for HIV and STD infection. Moreover, there is growing evidence worldwide that many men engage in both (unprotected) homosexual and heterosexual intercourse; and that in developing countries adolescent homosexual experimentation (and preference) is more common than previously believed.[l] In their book, *Boy-Wives and Female Husbands*, Murray and Roscoe[3] went far to debunk the myth that homosexuality does not exist in sub-Saharan Africa. This sexual networking pattern means that for such men both their male and female partners are at risk for HIV/STD infection.

In the African context, for these and other reasons there is an undeniable need for a greater focus on boys and young men in the realm of sexual and reproductive health and HIV prevention. Across the continent over 10 million men are infected with HIV/AIDS, with a significant proportion of these individuals below 25 years of age.[4] While the reasons behind HIV spread on the continent are complex, the tendency among African boys and young men toward risky sexual behaviour and poor knowledge and attitudes surrounding S/RH issues certainly contributes to the epidemic's foothold in the youth population. Research in the region suggests that in general, boys engage in riskier sexual practices than girls. Boys report initiating sex earlier than girls, they have more sexual partners and intercourse more often, and are more likely to report having had an STD infection.[5-8] Moreover, as in many parts of the world, because gender norms dictate that men (appear to) be more knowledgeable and sexually experienced than women, boys

[k] *For purposes of this review, the terms "young men", "boys", "youth" and "adolescents" are used interchangeably, and refer to individuals between the ages of 10 and 24 years.*

[l] *Studies suggest that such partnering patterns may be due to men's attempts to hide their homosexual preferences by maintaining an overtly heterosexual relationship.*[10,11]

are also probably less likely than girls to admit ignorance of sexual and reproductive matters or to seek help in getting appropriate information.[4,9,10] At the same time, while the situation may be changing in some countries, a large proportion of young African men still do not view themselves at risk for HIV or other STD infection, and/or do not wish to know their HIV status.[11-13]

Socio-cultural factors also affect African male youths' risk for HIV infection. Writing of men in general, Martin Foreman notes that men who engage in risky sexual behaviour do so less from conscious choice than because that is how men are expected to behave. Most boys grow up believing, implicitly or explicitly, that their identity as men, and therefore as individuals, is defined by their sexual prowess.[m] This characterisation is especially appropriate to African boys and male adolescents, among whom gender-specific expectations of sexuality and practice largely dictate sexual behaviour. Bledsoe and Cohen note that throughout Africa, for male youth contemporary media and rumor present male power as entailing an active and varied sexual life with multiple partners. A study among Zimbabwean secondary school students revealed that in contrast to girls, boys were allowed and even expected to have many sexual partners.[93]

However, gender norms can also "trap" boys through social pressure to conform, and thus increase their vulnerability to HIV infection.[16,17] For example, while Zulu boys in South Africa associate masculinity with sexual performance and advocate the demonstration of male social success through sexual prowess, it appears that a significant minority prefers abstinence, but feel compelled to be sexually active for fear of social rejection. Moreover, girls seem as likely as boys to expect and even condone such masculine ideals.[12,n] Further, given the stigma attached to homosexuality in most African societies it is likely that young men with such preferences practice in secret, without the information and supplies necessary to protect them from infection. Foreman concludes that as long as men, and women, are influenced by such concepts of masculinity, HIV will continue to spread.[14]

Researchers and planners are only just beginning to recognise the importance of considering how developmental psycho-emotional and sexual experiential factors affect the sexual and reproductive health needs of adolescents in developing country settings. Given that even less is known about African boys and male adolescents than youth in general, these factors should be considered in attempting to understand their behaviour and S/RH needs. Adolescence is a critical developmental period for gender role formation, and a time during which notions of appropriate sexual comportment, awareness and understanding of such issues are shaped.[18] Early sexual experiences and the environment in which they take place can significantly influence later attitudes, behaviour and even risk for certain sexual and reproductive health complications. Dixon-Mueller[5] cites research indicating that girls who are subjected to physical or sexual abuse as children are more likely to initiate intercourse early and have more sex partners as well as experience S/RH problems such as STD infection and cervical cancer. It is likely that boys' subsequent sexual and reproductive health status is similarly influenced by early childhood experiences. In Hughes and McCauley's[19] review of factors necessary to improve the "fit" between adolescents' needs and S/RH programs, a major recommendation is consideration of how adolescents' level of sexual and reproductive experience affects their health needs.[o] For example, the needs of those who have not yet become sexually active may be more generic, and confined to (life) skills and information; whereas young people who are sexually active may be more in need of contraceptive supplies and clinical services. Thus, in order to use available resources efficiently, as well as meet young people's needs, the link between needs and experience should be given special consideration.

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[m] See also Hein et al[15] for both international and Africa-specific references to the relationship between masculinity, sexual performance and coercion.

[n] See also Shire's[20] rendering of growing up in Zimbabwe, discussed later in this paper. An important point arising from this work is the instrumental role played by women in reinforcing appropriate male gender roles and appropriate social comportment in African society.

[o] The authors divide adolescents into three groups: (1) those who are not yet sexually active; (2) those who are sexually active but have not experienced S/RH problems; and (3) those who are sexually active and have experienced S/RH problems.

With regard to African youth, recognition of the critical link between sexual behaviour, gender norms and the period of childhood and early adolescence has led sexual health educators, life skills trainers and those involved in behavioural intervention in countries such as South Africa and Uganda[21] to advocate work with very young children. Moreover, the rapidity of certain psycho-emotional and physiological changes during puberty suggests that conventional demographic categorisation of adolescents (i.e., 11-14 or 15-19) may obscure fundamental differences in sexual health and reproductive needs. Research among boys in Kenya provides an apt illustration of Hughes and McCauley's point concerning the importance of sexual experience in determining (in this case African male) adolescents' needs. The study revealed that while pre-teen boys were particularly concerned with issues such as "wet dreams", older male adolescents wanted information on sexual relationships and how to avoid STD infection.[9] As a result, the recommendation was that program planners divide young men by age groupings of no more than one to two years. Thus, in order to be effective, research, programming, and policy surrounding African boys and young men's sexual health needs should begin considering the developmental heterogeneity within this group and how variation in sexual experience affects boys' needs and capabilities.

What makes a developmental approach particularly important in understanding the S/RH needs and behaviour of African boys and young men is the fact that adolescence as a concept is relatively new in most African societies. Indeed, adolescence has been described as an epiphenomenon of modern, industrialised societies.[18] Traditionally, adolescence, the extended period of psycho-emotional and social maturation between childhood and young adulthood, was not a clearly defined period in the African social context.[18,19,21] Rather, extended families and social institutions incorporating puberty rites and sexuality education were responsible for guiding boys in making the transition to manhood in a relatively short period of time. While some African societies may not be entirely "modern" or "industrialised", many factors make the notion of adolescence pertinent for contemporary African youth. Traditional social structures have begun to give way to nuclear and single parent households. In addition, the emphasis on education, and increasingly higher education, in order to secure employment means the period during which young people remain in school has been radically extended; resulting in a prolonged period of psychological and material dependence on family, prolonged social maturation, and delayed marriage.[18,19] This new system has also left a void in young people's sexuality and life skills education; one filled only to varying degrees by the formal education system in most African countries.[21] Thus, without reliable and accurate sources of guidance and information as they make the transition to manhood, African boys are especially vulnerable regarding sexual and reproductive knowledge and gender-specific socialisation concerning sexual comportment; all factors that significantly affect their own and their partners' risk for HIV infection.

Finally, without a focus on boys and male adolescents there is a risk of "sexism" in HIV/AIDS prevention efforts,[22] which ultimately oppresses both young men and women. Such a skewed means of addressing HIV prevention also keeps men marginalised – out of choice or necessity – and perpetuates their vulnerability to HIV infection either through ignorance, awkwardness or self-perceived risk. This point has been mentioned in this introduction and will be further addressed below. Moreover, by channeling HIV prevention efforts exclusively toward women while excluding men, the risk exists of reinforcing notions that women are "responsible" for (un)safe sex; and by extension for the HIV pandemic. This is a predominantly female-focused approach hazards allowing men to abnegate their responsibility for HIV prevention.[22] Further, while there is a growing African literature linking gender inequalities and power dynamics to risky sexual practices and poor sexual and reproductive health outcomes including HIV/AIDS,[11,23-26] this situation cannot be balanced unless greater efforts are made to involve men as part of the solution, not the problem.[4,10,17]

Growing Interest in Involving Young African Men in Sexual and Reproductive Health?

The last decade has witnessed growing recognition of the need to involve men in sexual and reproductive health initiatives and to understand their needs. The 1994 International Conference on

Population and Development (ICPD) in Cairo called for a broader and more comprehensive approach to reproductive health, including a need not only to increase male participation as a means towards improving women's health but also to benefit men in and of themselves.[27,28] This was echoed a few years later in Beijing. Interest in men has also been stimulated both by the growing HIV/AIDS epidemic as well as the recognition of other sexually transmitted diseases as a cofactor for infection, and to a certain extent by growing interest in the role of sexual decision-making, networking and negotiation as determinants of sexual and reproductive behaviour.

However, despite such increased attention to men in this arena, most of what is known about sexual and reproductive dynamics in sub-Saharan Africa comes from work amongst women. To a large extent such a focus is an artifact of commonly held beliefs about the role of gender in sexuality and reproductive health. Historically, family planning programs and other sexual and reproductive health initiatives have excluded men due to assumptions concerning the primacy of women's needs and their involvement in health service utilisation, contraceptive use, and child-bearing. Becker[27] notes the various points conventionally used by contraceptive service planners to justify an exclusive concentration on women. These include the fact that women become pregnant and it is easier to intervene in the female reproductive system, and that women are both more amenable to family planning and have more contact with health services than men. Thus, for the most part reproductive health issues and services have become synonymous with women's (reproductive) health, and men are often assumed to have no special needs or interests in this respect.[29,30] If male needs are considered, they are often based on the premise that men want what women do not and not on direct observation of, or interaction with, men. Therefore, knowing about women is enough to extrapolate to men.

From a research perspective, disciplines such as anthropology and demography have also concentrated largely on women in the context of sexuality and reproduction. Anthropology has taken this course due to its theoretical preoccupation with feminism and gender definitions;[31,32] demography because of (Western) normative views concerning women's predominance in fertility and contraceptive use, and the assumption that – at least within marriage – men's and women's fertility interests are the same.[33] It is only since the mid-1980's that demographic and health surveys (DHS) in sub-Saharan Africa have begun to include men; though many DHS studies now routinely include men not only as partners or husbands but also as independently drawn samples.[34,35,p.9] Thus, as with health services and programming, to a large extent social science perspectives on men have been formed implicitly through work with women; with very little research conducted among men themselves.

These dynamics have resulted in a neglect of men – and boys and male adolescents in particular – in Africa-focused research and programming, and reliance on stereotypes about male sexual and reproductive health knowledge, attitudes and perceptions, and requirements. Such lack of focus has led some to characterise African men as the forgotten 50% of family planning (who) are ready to take part if only asked to do so.[2] Even with growing attention to African men in sexual and reproductive issues, the justification for male participation is most often linked to improved women's health; with less focus on male involvement for the sake of improving men's sexual and reproductive health. Further, as this review demonstrates, many gaps remain in our understanding of S/RH issues among African male youth.

A Gendered Approach to Understanding Young (African) Men's Risk for HIV/AIDS

How best to conceptualise what is known and what needs to be done in order to better understand African young men's sexual behaviour and increase their involvement in HIV/AIDS prevention efforts? This paper is based on the premise

[†]Since 1986, DHS surveys in 27 sub-Saharan African countries have included men, either as husbands or in independent samples, or both. Several countries, such as Kenya, Tanzania, or Mali have conducted three DHS rounds that have included men.

[¶]While the inclusion of men in the DHS is an important step toward understanding male sexual and reproductive practices, it is of limited use for those interested in male adolescents. Most surveys target men between the ages of 20 and 60 years.[34]

that both individual and societal vulnerability to HIV/AIDS infection are heavily influenced by socio-cultural factors and societal norms. In this respect, gender[f] and the manner in which it shapes male and female sexual behaviour is among the most powerful social factors influencing HIV risk.[10,27]

The recent and increasing recognition of gender issues in sexual and reproductive health forums provides an appropriate basis from which to address men in research, policy and programming. A gendered perspective on (male) S/RH is especially relevant in the context of sub-Saharan Africa. In most African societies, male decision-making authority over domestic matters means that men play an instrumental role in every aspect of sexual and reproductive dynamics, from the timing of intercourse and contraceptive use to STD treatment and antenatal care. Thus, men function as "gatekeepers" to women's sexual and reproductive health. Such a social climate may also leave men themselves vulnerable to poor sexual and reproductive health by equating masculinity with multiple STD episodes, many sexual partnerships, unprotected intercourse, or the avoidance of treatment for sexual and reproductive problems. Furthermore, certain risky male sexual practices such as homosexual relationships are so vilified in African society as to be completely ignored in health policy and programming.[10,36] Thus, another important factor in understanding male sexual and reproductive dynamics, and ultimately health risk, is sexuality.[s]

A perspective that incorporates gender and sexuality is critical to understanding the role of boys and male youth in the African HIV/AIDS epidemic and finding effective means of engaging male youth in the fight against it. Inherent in discussions of adolescent reproductive health are assumptions concerning the differences between boys and girls; though focus on gender itself, much less sexuality, as a factor influencing sexual and reproductive health has generally been poorly addressed in research, planning and policy.[5,22] Further, the well-known KAP-GAP phenomenon, that knowledge and awareness do not necessarily translate into behaviour change, suggests the need for greater consideration of socio-sexual environmental and individual developmental factors that guide sexual and reproductive behaviour. Thus, the role of sexuality and gender are critical to understanding boys' and male adolescents' sexual and reproductive health and behaviour.

In reviewing what is known or needs to be better understood about African boys and young men and their link to HIV/AIDS, we adopt as a guide a framework first put forward by Ruth Dixon-Mueller[5] in a paper entitled "The Sexuality Connection in Reproductive Health", which illustrates how sexuality and gender influence reproductive outcomes. The framework is based on two primary assumptions. First, that sexual and reproductive behaviour and health are influenced by sexuality. Thus, the importance of taking sexuality into account in research, programming, and policy cannot be underestimated. The second assumption is that power relations, or more specifically inequalities, fundamentally shape sexual and reproductive dynamics, and thus affect reproductive outcomes.

The original framework consists of four interrelated elements of sexuality, namely, sexual partnerships, sexual acts, sexual meaning, and sexual drives and enjoyment. For our purposes we have added a fifth element – sexual knowledge and awareness.[t] Three of the elements (sexual partnerships, sexual acts, and sexual knowledge and awareness) emphasise behavioural and objective features of sexuality. The remaining two (sexual meaning and drives and enjoyment) stress subjective, cultural and physiological aspects. Gender is positioned as a factor that cuts across each element in the framework and which leads men and women to experience each dimension of sexuality, and consequently sexual and reproductive health, very differ-

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[f] *Gender is defined as the widely shared expectations and norms within a society about appropriate male and female behaviour, characteristics and roles, which ascribe to men and women differential access to power, including productive resources and decision-making authority.*[10]

[s] *Sexuality is a broad concept that encompasses both personal feelings, desires, and beliefs as well as socially accepted and shared attitudes, norms and meaning with respect to (sexual) interaction with members of the same and opposite sex.*[11] *Dixon-Mueller defines sexuality as the physical capacity for sexual arousal and pleasure (libido) as well as personalised and shared social meaning attached to both sexual behaviour and the formation of sexual and gender identities.*[5]

[t] *In Dixon-Mueller's original framework, sexual and reproductive knowledge is housed under sexual drives and enjoyment.*

ently. Thus, the framework illustrates the integral role sexuality plays in sexual and reproductive health outcomes and, within the sexuality-reproductive health link, how gender acts to mold the factors that ultimately determine men's and women's physical well being. The five components of the framework are described below along with relevant existing literature on young (African) men for each sexuality dimension.

Besides highlighting the relationship between gender, power, sexuality and S/RH, the framework is useful in constructing a holistic, and thereby more solid, basis for understanding young men's sexual and reproductive behaviour. It encourages consideration of the broader underpinnings of sexual and reproductive behaviour and highlights the power of gender as a factor in organising both young people's sexual and reproductive behaviour as well as their needs*, and movement away from vertical behaviourist and descriptive approaches that often dominate research and planning. Thus, the framework can be used as a guideline for improving the "fit" between young people's S/RH needs and existing programs, both in terms of adolescents' gender-specific and more "generic" needs. Finally, by emphasising sexuality (and the social influences that shape it) as well as behaviour, the Dixon-Mueller framework allows greater clarity on the ways boys and young men are made vulnerable to sexual and reproductive health problems such as HIV/AIDS. For example, by asking us to focus on aspects such as sexual meaning among African boys and young men, the framework opens the possibility of considering the role of homosexual or even bisexual intercourse as a mechanism of STD and HIV transmission among youth. Similarly, addressing young men's sexual drives and enjoyment may provide insight on their contraceptive preferences and factors or circumstances that facilitate or discourage the use of one kind of contraceptive over another. Finally, understanding gender differences in young people's sexual knowledge and awareness may provide insight both on gender-specific IEC (information, education, communication) needs as well as barriers about how male and female adolescents express what they know or what means they take to seek sexual and reproductive information.

Sexual Partnerships

The first dimension of Dixon-Mueller's sexuality-reproductive health framework, sexual partnerships, addresses individuals' sexual networks and the social profiles of their partners. It includes attention to the number of partners, timing of sexual initiation, patterns of partner selection and change, partnership timing (for example, concurrent partnerships versus serial monogamy) and duration, and partners' social identities. Focus on sexual partnerships also involves exploration of social environmental dynamics affecting how partners are chosen and changed. Studies tend to adopt a primarily quantitative approach to sexual and reproductive health issues among African male youth. Thus, more is known about boys' age at sexual debut, reported number of partners, or even frequency of intercourse than the actual nature of their sexual relationships or who are their partners. Further, research rarely focuses on boys alone, but rather data are generally collected in a male-female comparative framework. Finally, differing data collection methods makes meta-analysis of existing works difficult.

Research throughout sub-Saharan Africa suggests that boys initiate sex earlier than girls. For example, data from a range of studies in South Africa indicate that on average boys report earlier age at sexual debut than girls; 14 and 15 or even 16 years respectively.[7,38] Similar results have been reported among youth in Guinea.[6] A study in Zimbabwe among school boys reported that by 12 years one fifth (21%) of respondents had had sex, a figure which rose to 43.5% among boys aged 20 years.[39] It remains unclear whether rural-urban differences exist in age at sexual initiation or level of sexual activity,[7] though in at least one study[13] urban boys initiated sexual activity significantly earlier (14.5 years) than their rural counterparts (15.2 years). There does not appear to be strong evidence for a relationship between age at sexual debut and socio-economic or educational factors.[7] Compared to girls, African boys are more likely to have ever had sex at a given age, had more sexual partners, had sex more often, and are more likely to report having had an STD.[17,22,40,41] A recent review of South

*"Campbell characterises HIV prevention, and by extension sexual health, efforts that do not consider gender as a major factor as "myopic".[22]

African literature focused on adolescent sexual and reproductive health examined 25 studies giving data on reported numbers of sexual partners. As noted above, such work is hard to summarise or compare due to varying data collection methodology. However, a general finding among those works that asked young men to report the number of partners in the recent past (6-12 months) was that, while the modal number of partners was one, often up to half or more of the male respondents had 2 or more (up to 4+) partners at that time.[42,46]

Especially with the rise of HIV/AIDS on the continent, an aspect of young men's sexual partnerships that has begun to receive greater attention is sexual and reproductive decision-making. Several South African studies have explored youths' reactions to the threat of HIV/AIDS and its potential impact on sexual decision-making and behaviour.[11,47,48] Early data from this series suggest that HIV/AIDS was not an overriding factor in how young men conducted their sexual relationships. Rather, young men reported having broad sexual networks (multiple concurrent sexual partnerships) and unprotected sex both because they did not perceive themselves at risk for infection, but also due to social pressure to engage in such behaviours. Sexual prowess, as demonstrated by many partners, was inextricably linked to both peer and general social recognition of a successful masculine profile. Later studies in South Africa[12,38] and countries such as Uganda[4] suggest young men have begun to report partner reduction and more regular condom use as a result of recognising the personal threat of HIV infection.

Together, these works have also begun to provide greater insight on the complex nature of African male youths' sexual relationships, and the role of HIV/AIDS in determining the dynamics within them. In terms of their sexual dynamics, African young people appear to have had mixed reactions to the threat of HIV infection. It seems that knowledge or even fear of HIV/AIDS is not necessarily sufficient to motivate young people to alter potentially dangerous partner interactions. Even in high prevalence areas where HIV/AIDS is an obvious threat to social stability, youths' relationships appear to be characterised by little verbal communication between partners on issues such as the timing and conditions under which sex should take place. Sexual dynamics are governed by scripted cues, social expectations and male partners' desires, not partner consensus. Among both young men and women, sex partners are chosen and contraceptive decisions (such as condom use) made, using subjective risk assessment criteria based on factors such as social reputation, physical appearance and personal hygiene, and even family background. Condom use is reserved for those who are viewed as both socially and physically "dirty".[38]

Further, while partner reduction appears to be a response to AIDS among youth in areas such as Uganda,[49] the extent to which partner dynamics are influenced by AIDS is mitigated by the political climate and government stance on the epidemic. For example, in South Africa, by 1999 some research suggested that youth, and young men in particular, had begun to incorporate partner reduction and monogamy into their sexual repertoire due to fear of HIV infection.[12] However, it appears youth began to disregard these practices after President Thabo Mbeki's controversial stance on the connection between HIV and AIDS. Reports suggested that adolescents interpreted the president's statements to suggest that being HIV positive did not lead to AIDS and, therefore, there was no longer reason to reduce partner numbers.[96]

Physical violence and sexual coercion by male partners appear to be common in the context of African young people's partnerships.[50] A worrying aspect of this dynamic is the finding in several studies that both boys and girls appear to view sexual coercion not only as a socially acceptable part of their sexual relationships but also as a symbol of (male) love and commitment.[38,48,51,52] Finally, due to poor communication skills, African young people's sexual relationships are often characterised by misunderstandings concerning partners' needs, preferences and desires. Such misconceptions can contribute to lack of contraceptive use, when each partner assumes the other's resistance to protected sex.

Despite such a basis for understanding young men's sexual partnerships, many questions remain concerning the nature and kinds of relationships African male adolescents become involved in, their sexual networks, and how these aspects might affect sexual and contraceptive practices. Some studies have suggested contraceptive use (primarily condom use) to be inversely associated with the seriousness of young people's love relationships.[8,38,53] The negative connotations and symbolism of con-

traception clash with the intimacy provided by serious relationships thereby rendering protected sex appropriate only in those kinds of relationships that are casual or during sex with unfamiliar partners. In contrast, an other work suggests that fear of HIV infection has led to a socio-sexual culture among African youth that embraces monogamy, condom use, and even abstinence.[12,49]

There is a great need to better understand conditions surrounding male youths' sexual initiation and early sexual experiences. There is some evidence to suggest that among African girls early sexual experiences are often with much older men; a situation which frequently leads to girls' material dependence upon their partners (the so-called "sugar daddy" syndrome).[19,50,79,97] In contrast, at least one study in Nigeria revealed no such age differences between partners.[54] Report in Guinea[6] suggests that early sexual networking experiences are more complex in that girls initiate sex with partners of a similar age, but subsequently seek out older partners once they begin to fear the risk of pregnancy, the rationale being that older men are more economically able to support a child.

Much less is known about young men in this respect, that is, with whom boys initiate intercourse and under what circumstances, and to what extent coercion or abuse, or material or forms of dependence are involved in their early sexual partnerships. The authors of the Guinean study cited above[6] suggest that while the sexual experiences of boys in Guinea begin with same age partners, once their female peers seek out older men boys often look for much younger girls as sex partners. It is not clear how young African men's patterns of partner selection change over time or what impact shifts in sexual networks have on their risk for HIV infection. Finally, most work on sexual partnerships and HIV/AIDS has been conducted among unmarried youth. Few studies have explored sexual dynamics and the role of young male partners in stable marital relationships.[18]

Sexual Acts and Behaviours

The second framework dimension addresses sexual acts and behaviours. This element focuses on the nature and frequency of specific behaviours (such as anal or oral sex, contraceptive use or violent sexual acts) as well as the conditions within which sexual acts take place, such as having intercourse under duress or due to economic need.

Numerous studies have focused on contraceptive use among African adolescents, though differences in study design and means of eliciting information about contraceptive practices make cross-study comparison difficult. However, the general profile derived from this body of research suggests low and erratic contraceptive use. The South African review note above found that across studies among sexually active youth the prevalence of contraceptive use (all forms) ranged from 25 to 75% with an average of about 60%.[7] Moreover, it is extremely difficult to collect accurate and meaningful data concerning contraceptive prevalence. Studies often overlook the fact that type and frequency of contraceptive use among adolescents vary widely according to sexual experience, gravidity or parity (for girls), and the nature or kind of relationship between sex partners.[7,13,48,51] Conventional questionnaire items attempting to measure current contraceptive use by their very nature risk simplifying the complexity of the issue, rendering prevalence percentages inaccurate if not totally meaningless. In this respect, one study among South African university students showed that only 8% of respondents reported using a condom every time they had sex.[7]

There is no clear gender-specific pattern of contraceptive practice. Some studies have found higher contraceptive prevalence among girls than boys,[41,55,56] while others reveal the reverse.[5,57,58] In addition, Flisher et al[7] note that boys tend to report using condoms more than girls, while girls are more likely to use female methods such as injectables or oral contraceptives. Such differences in reported contraceptive use between young men and women may be attributable to differential access as well as gender-specific connotations of contraception. Health care providers are often more likely to provide boys with condoms and encourage girls to use female methods.[7,v] With regard to the latter, in many African societies female contraceptive use is associated with sterility, promiscuity, or unattractive

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[v] Especially injectables due to the perception that girls are likely to forget pills.[51]

physical side effects such as varicose veins, vaginal wetness or weight gain.[38,51] For these reasons adolescent girls are likely to be reluctant to admit their true level of contraceptive use for fear of social and partner stigmatisation. This could also help explain the observation that women consistently under-report contraceptive use rates.[34] For men, contraceptive use carries much less stigma than for women, and could even be construed as connoting prolific sexual activity, an attribute that often increases African male social prestige. Thus, young men may over-report specific types of contraceptive use in order to fulfill social and cultural expectations regarding male sexual activity. There is a great need for studies exploring contraceptive practices among youth to focus on the relationship between gender and reported contraceptive practice. Studies should also explore the relationship between gender and the reliability and validity of reported use.

Most research addressing male adolescents' contraceptive practices focuses on condom use with almost no work on young men's participation in other (female) forms of contraceptive practice. Condom use is problematic in many African societies because of its association with promiscuity and disease[7,11,13] or the danger of blocking natural physiological processes.[59,60] While African male acceptance of protected sex in general appears adequate, personalising condom use remains problematic. Resistance to condom use among adult African men has been well-documented.[60-66] Male youth also appear disinclined to use condoms,[13,67,68] though in some cases among younger boys condom use appears to be an increasingly acceptable alternative in the face of the risk for HIV infection.[12,13]

Our understanding of condom use among African youth is also limited by the fact that many studies either focus on girls exclusively or do not disaggregate results by gender. Flisher et al[7] reviewed 35 South African studies that included focus on condom use among youth in various ethnic groups and geographic regions of the country. Of these works, only nine reported condom use by gender, and one[69] focused exclusively on male youth. Among these studies, Black males' ever use of condoms ranged from 33.0% to 62.1%[45,70] and current use between 14.7% and 24.5%.[43,69] However, it must be stressed that the methodological inconsistencies both within and between studies leave questions over the extent to which such figures can be generalised.

These works do not provide much insight into the circumstances surrounding what Dixon-Mueller calls conditions of choice.[5] What factors determine whether, when and with whom male adolescents are willing to and do use condoms? Some recent reports suggest that for young Zulu men condom use is determined by the perceived risk posed by a potential sex partner (often judged by the individual's physical appearance or social reputation), that is, the higher the likely perceived risk of contracting HIV or other STDs, the more likely boys are to use condoms.[13] Other studies emphasise boys' avoidance of condoms due to problems related to size or fit, the stigma associated with condom use and fear of rejection by a partner, the apparent decreased physical sensation accompanying condom use, and even ignorance of condoms or how to use them properly.[7,14,44,77]

While an argument can be made for ceasing to engage in further research following the well-known knowledge, attitudes and practices (KAP) format, many aspects of African male youths' sexual behaviour remain virtually unexplored. For example, almost no work has focused on young men's experience of sexual abuse or rape, engagement in homosexual or bisexual behaviour, oral sex, masturbation or other forms of non-penetrative sex play, sex with animals or other patterns of sexual intercourse such as repeated penetration in quick succession or sex for money. In describing sexual relations between men and women in Tanzania, Rweyemamu suggests that few Tanzanians (10% of a study in Mwanza) have heard of anal sex, but admits that the extent of the practice is unknown.[72] The author also notes that while some reproductive health promotion programs address masturbation, it is not widely promoted due to cultural resistance to the practice. Swart-Kruger and Richter found that among South African street boys rape was a constant threat by older or bigger street boys, adult men casually or routinely as part of the street scene, and in reformatories and prisons when they were apprehended by the police.[72] The study revealed that boys also engaged in sex play among themselves as well as with same age girlfriends and that most were involved in various forms of transactional intercourse with both men

and women, which often involved unprotected oral and anal or vaginal intercourse. In this respect boys distinguished between prostitution,* seen as sex on the street for money, and survival sex* that involved exchanging sexual favours for protection, appeasing powerful street factions, accommodation, food or glue. The age range of study participants was 11 to 17 years.

The lack of information about and perceived resistance to these practices may be due at least in part to assumptions on the part of researchers and health care workers that such behaviours are socially unacceptable or too rare to merit attention. It may also have escaped attention for methodological reasons. Given that these topics are potentially highly sensitive social and personal issues, eliciting such information necessitates carefully chosen and innovative approaches including qualitative data collection methods and other anthropological techniques such as in-depth or key informant interviews or participant observation in carefully chosen settings such as night clubs, bars, pharmacies, boarding schools, bookstores, etc. Ultimately, in order to construct a complete picture of male adolescents' sexual behaviour (and thus risk for S/RH problems), researchers and those involved in sexual and reproductive health fields must make efforts to overcome preconceived notions concerning what sexual acts male adolescents engage in, and consider alternative means of collecting information about sexual behaviour in general. Furthermore, explanations of why young men engage in risky behaviour must include consideration of their social identities and the social context in which notions of masculinity are formed.[73] As is shown below, very little is known about how masculinity is constructed among contemporary male youth in sub-Saharan Africa.

Sexual Meaning

The third element of the research framework is sexual meaning, which differs from the previous two in that it is a product of subjective and sociocultural forces. Sexual meaning addresses the social construction of sexual feelings, mores, and acts and ideology surrounding what is considered (in)appropriate sexual comportment. It is the filter through which thoughts, behaviours, and conditions (for instance, virginity) are interpreted and ascribed cultural meaning.[5] Thus, by definition, focus on sexual meaning involves consideration of gender roles and ideals, and notions of masculinity and femininity, and how they are expressed.

Issues surrounding masculinity and sexual meaning during the period of adolescence are poorly understood in the sub-Saharan African context. Among the few notable works addressing men in this respect are Shire's[20] work on the construction of masculinity in Zimbabwe, Setel's[74] description of young men in Tanzania, Campbell's[75] research among mine workers in South Africa, and work on male sexuality and sexual socialisation in Nigeria.[25,75] A recent article by Kiama[36] draws attention to research conducted by he PANOS Institute on homosexuality in Kenya.

Drawing from personal experiences growing up in Zimbabwe, Shire[20] describes the different social influences determining a Shona male's sense of masculinity. His account also underscores the point that the shape and content of an individual's masculinity, and how it is expressed, vary between social situations. In Shire's case, different sets of masculinity factors and corresponding behaviours were at work depending on whether he was with women or men, yet both were equally valid and acceptable means of conveying manhood. Taking a more general historical perspective, Setel[74] describes changing concepts of Chagga masculinity accompanying modernisation and the advent of HIV/AIDS in Tanzania. HIV/AIDS came to be seen as associated with a particular kind of young masculinity defined by urban living and livelihood, low moral character, and loose sexual morals. Drawing information provided by both men and women, Orubuloye et al[25] describe cultural notions of male sexual needs and appropriate behaviour among the Yoruba of southwestern Nigeria. Men saw having multiple sex partners as a cultural right and a male biological need, and appeared certain of their ability to remain free of sexually transmit-

*Interestingly, while the boys openly admitted to engaging in prostitution themselves, they associated (presumably female) prostitutes with the spread of HIV/AIDS and roundly condemned such individuals for this reason.

*Boys differentiated survival sex from rape in that the former was not physically coercive.

ted diseases by knowing the background of their partners. Particularly in urban areas, while wives objected to their husbands' infidelities, they rarely voiced their displeasure over these matters. The authors suggest the instability of urban life and women's reliance on men for material stability as a reason for wives' reticence. Orobaton echoes these findings, and stresses the fact that sexuality among Nigerian men is inextricably linked with power both in social and gender relations. Ali's[60] work suggests that for Egyptian men, masculinity is defined through various means including general sexual performance, the ability to provide sexual pleasure to their wives (the author suggests this as a subtle mechanism to control women), and economic status.

By exploring homosexuality in Kenya, Kiama[36] highlights an important and largely overlooked aspect of masculinity and sexuality in the sub-Saharan African context. The author suggests that homosexuality in Kenya is more common than conventionally assumed, but due to stigmatisation surrounding the practice it is kept secret. A very important point made in this article is the connection between HIV/AIDS infection, covert homosexual practices and heterosexual relationships. Highlighted in the case studies described is the fact that many men who prefer sex with men feel social pressure to marry and be sexually active within marriage but still maintain their homosexual relationships, often with men much younger than themselves. Thus, while such men may be socially identified as heterosexual, their bisexual practices broaden their sexual networks and place both their male and female partners at risk for HIV infection. Further, Kiama's work echoes a point made earlier in this article, that preconceived notions concerning (male) sexuality and sexual categories can lead to potentially common alternative, and often high-risk, sexual practices and dynamics remaining unnoticed.

Some studies have begun to shed light on the meaning of masculinity among contemporary African boys and male adolescents. In Zimbabwe both male and female adolescents support the notion that masculinity is demonstrated through a boy's having multiple sex partners.[16,76] A study focused on rural and peri-urban communities in KwaZulu/Natal, South Africa, found that demonstrating sexual prowess and popularity was inextricably linked with having many girlfriends.[77] Similarly, another work among Zulu youth[38] found that young men's interest in and practice of sex was heavily influenced by perceptions of partner and peer expectations. Many young men expressed the desire not to be sexually involved but felt peer pressure to do so. Verbal communication between partners on issues such as the timing and conditions under which sex should take place was largely absent. Sexual dynamics appeared to take place as a result of scripted cues usually initiated by the male partner. From a male perspective, contraceptive use is considered a female issue, but many young men still view (particularly female) contraception with suspicion, linking it to promiscuous female sexual behaviour. Sexual violence and coercion is not uncommon, though the study revealed that significantly more female than male participants advocated or condoned coercion under certain circumstances (such as refusal to have sex or infidelity). The study also revealed many misconceptions on the part of young men concerning what they felt their partners, or women in general, want out of relationships and sexual interactions; this was particularly the case with condom use. Aliro and Ochieng[21] report similar problems and misconceptions between male and female Baganda youth in Uganda.

One completely overlooked aspect in this context is a developmental perspective on masculinity and sexual and reproductive practice. A small but growing number of studies have begun to examine various aspects of masculinity among adult men, but no work has directly explored the effect of events and experiences during childhood and adolescence on adult male sexuality. Traditionally, in African society adolescence was not an obvious aspect of the male life cycle, with boys making the transition to manhood relatively directly through a series of initiation activities. However, as traditional systems give way to and are integrated with more Western social models, modes of male socialisation have certainly begun to shift. However, little research has actually documented such changes, their impact on the expression of masculinity later in life, or their implications for sexual and reproductive health. Such a life course perspective would be of tremendous importance especially if one assumes that what is needed in order to improve (both youths' and adults') sexual and reproductive health is an ideological shift to the acceptance of

safe sex practices. As Mensch et al[18] noted, encrypted in the largely ten unexplored years of adolescence are the lifetime choices of girls and boys.

Sexual Drives and Enjoyment

The final framework element, sexual drives and enjoyment, emphasises social collective as well as physical and psycho-emotional experiences associated with sex. This dimension includes individuals' ability to obtain pleasure from intercourse, as well as individual sexual identity and responses.

While much more needs to be done to understand the development of masculinity among contemporary African young people, some works have begun to provide insight on boys' and male adolescents' sexual drives and the conditions under which they obtain sexual pleasure. The notion that male sexual enjoyment can only be derived in the presence of a dry and tight vaginal environment has been noted in many parts of Africa.[99] In addition, fear of excessive vaginal wetness, and its association with female promiscuity and thus peer and partner rejection, is a commonly cited reason for adolescent girls' avoidance of hormonal contraceptive use.[51] It also appears that boys themselves find sex with girls who use contraception distasteful for this reason and that an inviting vaginal environment is important for young men to properly enjoy sex. In focus groups conducted among urban male Zulu youth, Varga[36] found that boys derided girls perceived to be promiscuous by referring to them as either a cow's or a mother's vagina*, the image in both cases meant to convey that enjoyable sex could only be had with well-behaved (and even virgin) girls whose fidelity was reflected in the fact that they had narrow, tight sex organs.

In contrast, Rweyemamu describes women's use of herbal treatments to increase vaginal secretions to please their partners sexually, a habit that may lead to vaginal abrasions during sex. Aliro and Ochieng[21] noted that in Uganda, Baganda girls engage in a custom known as *kunika*, the practice of methodically pulling and stretching the labia minora and clitoris due to the belief that elongated sex organs heighten male sexual pleasure. Female circumcision, or female genital mutilation, is also commonly practiced in many Muslim societies in Africa, apparently at least in part to enhance a male partner's sexual satisfaction. One caveat in this respect is the fact that information on most of these practices and (male) preferences regarding them is derived primarily from interviews among women, not men.[78] The pleasure that men derive from such practices is often assumed, and little is known about how they actually feel about having intercourse under these conditions.

Some insight on how male youth derive sexual enjoyment comes from the increasingly common finding that a major deterrent to condom use is boys' complaints that condoms interfere with (male) physical sensations and pleasure during sex.[7,13,14] Thus, an emerging picture of African male youths' sexual drives and enjoyment includes the need for intense physical stimulation resulting from female partners' having taken means to either externally or internally modify their sex organs to ensure male sexual enjoyment. It also appears that a woman's ability to provide appropriate sexual satisfaction in this way reinforces an important socio-psychological aspect of the sexual experience for young men, that their partners should be faithful and well-behaved, if not a virgin.

Sexual Knowledge and Awareness

Like many aspects of male sexuality and reproductive health, much of what is known about African male sexual and reproductive knowledge comes from studies among adult men. Both large-scale surveys such as the DHS as well as small-scale studies focus on husbands or adult men. In general, both kinds of surveys suggest that men's knowledge of male methods is higher than women's, and that their knowledge of female methods is equal to or only slightly less than women's.[34] In addition, African men have greater knowledge and general approval of (male or female) contraceptive use than women. Data from Zimbabwe,[79] Nigeria,[80] Tanzania,[81] Uganda,[82] Burkina Faso,[83] and South Africa reinforce this profile. This does not, however, imply that male contraceptive knowledge is of sufficient depth to ensure proper use. Some studies have shown that while men were able to name at least one modern con-

*The implication being that both cows and women who have given birth have wide, loose vaginas, and thus do not offer men a pleasurable sexual experience.

traceptive method, they did not have detailed knowledge concerning how to use it consistently or correctly.[79,80] Another work suggests that misconceptions concerning the side effects of contraception prevent African men from actually using it.[83]

Such differences between men and women in terms of contraceptive knowledge may reflect gender-specific social connotations of contraception. For socio-cultural reasons it may be that men and women have differential access to opportunities and resources for learning about contraception, and that their ability to voice knowledge of such matters is also constrained by differing standards concerning appropriate expression of sexuality. In this respect, there is a great need for better understanding of how social constructions of gender, sexuality and even age affect individuals' ability to obtain, articulate and use sexual and reproductive health information. For example, how are individuals' information networks constrained or facilitated by gender or age? Finally, how do institutions (e.g., schools, religious institutions, or even NGO-based outreach programs), which bear increasing responsibility for educating contemporary African youth in sexual and reproductive health matters, actually manage or perpetuate gender differences in access to, acceptance, and utilisation of such information?

Research exploring sexual and reproductive knowledge and attitudes among adolescents typically focuses only on girls, or on both male and female youth together. The latter often does not explore or even report gender differences, making it difficult to draw conclusions concerning boys' sexual and reproductive knowledge. For African young people as a whole most studies suggest that adolescents' (particularly those in rural settings) understanding of basic reproductive facts is often poor, though a more accurate description is that many teens are more ill-informed than uninformed. It is rare for African youth and adolescents to be completely ignorant of sexual and reproductive issues, rather, their knowledge is often incomplete or incorrect. Another characteristic of adolescents' S/RH knowledge is the inability, or perhaps unwillingness, to personalise what they know about sexual and reproductive health issues. For example, while many young people are aware that sexual intercourse leads to pregnancy, they also hold to the belief that conception cannot take place soon after initiating sexual activity or that teenage girls are too young to fall pregnant despite being sexually active.[44,71,84]

This pattern of misinformation combined with lack of self-perceived risk for the consequences of their actions is a common pattern among youth throughout sub-Saharan Africa; in countries as disparate as South Africa,[7,85-87] Liberia,[41] Nigeria,[40] Guinea,[6] Uganda,[57] Zimbabwe,[88] and Kenya.[55] Such a phenomenon is likely due to a combination of factors including breakdown of traditional institutions for sex education, poor inter-generational communication regarding such matters, limited and inappropriate approaches to sexuality education in schools, and cultural values such as gender-specific expectations of sexual and reproductive behaviour. It also suggests that in addition to providing high quality and accurate information, educational intervention activities must also focus on finding ways to convey and contextualise educational messages in a way that is personally meaningful to African young people.

A large number of studies have addressed African youths' knowledge of HIV/AIDS-related matters, though very few[39,72] focused specifically on male youth or young boys. As with reproductive knowledge, adolescents' understanding of HIV/AIDS must be assessed at different levels. Surveys suggest that most young men and women have heard of HIV/AIDS, and that they are aware of certain basic facts about prevention, transmission, and the consequences of infection. Thus, the general mechanics of HIV infection seem to be reasonably well entrenched. However, specific matters surrounding HIV are not so clearly understood. These include confusion concerning matters such as the difference between HIV and AIDS, the relationship between HIV and other STD infections, the inactive or dormant phase of HIV infection, and the relationship between various forms of blood contact and HIV.[7,71,72] Further, it appears that particularly among young adolescents, AIDS myths such as the role of mosquito bites or sharing of utensils in facilitating HIV infection are still common enough to suggest the need for intensified HIV education efforts.[89] Moreover, there is a clear need for greater attention to elucidating whether and why gender differences in HIV/AIDS knowledge and awareness exist among African youth.

One neglected area of focus is male youths' knowledge of reproductive biology and the poten-

tial S/RH consequences of their beliefs in this respect. Studies among adult males in Zimbabwe[64] and Egypt[60] illustrate why it is important to ensure that men have a solid grasp of reproductive biology. These works revealed that most men did not understand the purpose and circumstances of vaginal wetness, often associating it with lack of (female) cleanliness, STDs and other diseases, and not with female arousal. Nor did men recognise that fluids or wetness during sex also derives from the male partner. As a result, most men expected their partners to have dry, tight vaginas during sex, and did not associate such practices with potential physical injury or transmission of sexual disease.

Implications for Programming and Service Delivery

As focus on adolescents has begun to intensify, there is increasing acceptance among sexual and reproductive health service program managers and providers that adolescents have specific S/RH needs that merit special programming.[90,91] Among the most important aspects of appropriate programming is recognising the need to meet young people on their own level of functioning, and to incorporate youths' articulated needs and concerns into programs and services. In this respect, Hughes and McCauley[19] provide six principles to improve the "fit" between adolescents' reproductive health needs and health programming. While their recommendations are for ARH in general, they clearly have relevance for boys and young men. These principles include:

- Recognition that youths' needs vary according to age and sexual experience.
- Program design around youths' perceived needs and current efforts to obtain sexual and reproductive health information and services.
- Inclusion of both generic and reproductive health specific skills building in core interventions.
- Focus on and engagement with adults to create a safe and supportive environment for youth to seek reproductive health services and supplies.
- Use of multiple settings and service providers, including private and public, clinical and non-clinical.
- Integration of new endeavours with existing programs and services.

While there are few research findings concerning boys' and young men's specific sexual and reproductive health needs, a range of programmatic approaches is being tested worldwide. This includes: (1) youth centres and the involvement of youth-focused organisations such as sports clubs, church groups, and organisations such as Boy Scouts, the Red Cross and the YMCA in providing S/RH and life skills education; (2) community outreach in areas where boys and young men congregate, such as video arcades and pool halls; (3) peer education and counseling; (4) male-friendly clinic services, including hiring male staff, offering special service hours and separate clinic entrances and waiting areas for males; (5) the use of mass media; (6) condom social marketing; and (7) workplace-focused IEC programs.[9] Moreover, all these approaches should consider the incorporation of positive male (adult and peer) role models as a means of encouraging and reinforcing healthy sexual and reproductive behaviour.[92] Not all these methods have been implemented in sub-Saharan Africa. The most popular approaches for African male youth appear to be the use of youth centres and youth-focused organisations, peer education, and social marketing. Nor is it clear whether and how such programs have been monitored or evaluated for effectiveness.

Further, as demonstrated by Dixon-Mueller's framework, along with these varied approaches is the need to consider a life cycle approach to young men's reproductive health that takes into account the rapid emotional and developmental changes during adolescence. Boys' sexual and reproductive health needs and priorities, as well as their ability to articulate these issues, vary vastly between late childhood and early adulthood, and are also heavily dependent on their level of experience with sexual and reproductive health issues. For example, work in Kenya revealed that the greatest concern among pre-teenage boys was physiological changes during puberty, such as so-called "wet dreams", whereas older boys were more concerned with relationship dynamics and STD prevention.[9] Work among male Zulu youth between the ages of 10 and 24 years revealed that compared to older teens (aged 15–19 years), younger boys (aged 10–14 years) were less likely to discuss personal concerns or voice individual preferences concerning sexual and reproductive health concerns than their older counterparts.

Similarly, 20 to 24-year-olds were more concerned with matters concerning family formation and parenting issues than middle teens.[38] Such a developmental approach may also assist both program planners and service providers to appreciate the range of masculine heterogeneity that is increasingly apparent among male youth, and allow the identification of positive peer role models to reinforce health sexual and reproductive health behaviour.

Policy Context

On a national level, few sub-Saharan African countries have focused on policy-related aspects of adolescent sexual and reproductive health. This is likely due to several factors including the public sensitivity of the issue itself, the generally nascent state of reproductive health policy in the region, and on some parts of the continent the prioritisation of sexual and reproductive health issues such as HIV/AIDS. In some countries such as Nigeria, Ghana and South Africa, adolescent health policies and guidelines are in various stages of development. Adolescent reproductive health is often couched within a broader adolescent health policy strategy, and gender-specific matters within ARH often do not receive special attention. Where ARH guidelines exist, their implementation can be hindered by lack of ministerial capacity or resources, or the need for clarity between ministries concerning jurisdictional responsibility for adolescent reproductive health. Further, a strengthened policy environment for boys' and young men's reproductive health is held back by the fact that many African countries are still struggling with the broader issue of how to devote greater resources to overall adolescent reproductive health needs.[93] Thus, it is likely that increased emphasis on gender-specific aspects, such as focus on males' needs, will require as a prerequisite a stronger ARH policy environment in general.

Nonetheless, the framework presented here suggests a number of changes that could be incorporated into health program guidelines and practices with a focus on adolescent sexual and reproductive needs. First, there is a need for a youth-friendly approach in policy and planning which will take into account the multiple and varied influences on youths' sexual and reproductive beliefs and behaviour, such as family, peers, material circumstances and even broader socio-political forces. Health planners should also consider the developmental aspects of adolescence, and how this may differentially affect boys' and young men's sexual health needs. Further, health information and patient history guidelines should rely on both qualitative and quantitative data collection methods for obtaining boys' reproductive histories. Such approach would strengthen the diagnostic power of reproductive history data and foster an appreciation among providers for contextual factors leading boys and young men to engage in risky sexual practices. Finally, in that most African public health systems are overburdened and under-resourced, efforts should be made to seek alternative sources of support for male-focused, youth-friendly service provision approaches such as private or NGO sector, or community-based service organisations. One way to ensure a varied approach would be to strengthen civil society commitment to adolescent (male) reproductive health as a community concern and encourage community groups to advocate for stronger adolescent-focused health policies.

Research Needs

The framework described in this paper points to a number of conclusions and gaps in existing research on young African men and sexual and reproductive health. First, while there is a growing body of literature focused on adolescent sexual and reproductive health, very little of it directly addresses boys and male adolescents. In addition, comparison of, and conclusions drawn from, existing research is hampered by methodological inconsistencies and weaknesses. As a result many topics merit greater attention in order to facilitate a better understanding of how to involve African boys and young men more fully in sexual and reproductive health initiatives, and to increase their profile in efforts to reduce the spread of HIV/AIDS.

Among the most basic research needs is better documentation of boys' and adolescent males' sexual and reproductive health knowledge, behaviour and health service requirements. Moreover, such work must not only be descriptive but etiological, that is, focus on the social environmental and biological determinants of male sexual and reproductive needs and behaviour. Thus, research should adopt a holistic framework that takes into account

developmental, socio-cultural, political and economic influences on (male) sexual socialisation and sexuality. Furthermore, there is a need for innovative techniques to collecting such information. This could include work using narrative techniques and life history approaches, cohort studies[a] and participatory research methods that involve youth themselves in all aspects of research – conceptualization, data collection and analysis, and dissemination.

DATABASES/ORGANISATION WEBSITES SEARCHED

The following databases, search engines and organisation websites were searched for this review:

Organisation	Website
Adolescent Reproductive Health Network (ARHNe)	www.nutrition.uio.no/arhne
Alan Guttmacher Institute	www.agi-usa.org
AMREF	www.amref.org
AVSC International	www.avsc.org/index.html
Center for African Family Studies (CAFS)	www.cafs.org
Center for Development and Population Activities (CEDPA)	www.cedpa.org
DHS/Macro International	www.macroint.com www.measuredhs.com/data
Family Health International	www.fhi.org
ICPD	www.unfpa.org/icpd/icpdmain.htm
International Center for Research on Women (ICRW)	www.icrw.org
IPAS	www.ipas.org
International Planned Parenthood Foundation (IPPF)	www.ippf.org
Johns Hopkins University Communications Program	www.jhuccp.org/popline/himfr.stm
John Snow International	www.jsi.com/corp.htm
JSTOR – scholarly journal search engine	www.jstor.org/jstor/
Henry J. Kaiser Family Foundation	www.kff.org
Marie Stopes International	www.mariestopes.org.uk www.mariestopes.org.uk/links.html
Medline	www.igm.nlm.nih.gov/index.html
The Panos Institute	www.panos.org.uk
Pathfinder International	www.pathfind.org
Popline	www.jhuccp.org/popline/interpop.stm
Population Council	www.popcouncil.org
Population Reference Bureau	www.prb.org
Reproductive Health Outlook (PATH)	www.rho.org
Social Science and Medicine Abstracts	www.oxford.elsevier.com/cgi-bin/JAO/A-
UNAIDS	www.unaids.org
UNDP	www.undp.org/popin/journals
UNFPA	www.unfpa.org
USAID	www.info.usaid.gov
World Health Organization	www.who.int

[a] *Mensch et al*[18] *advocate a longitudinal focus on adolescents with specific attention to year-by-year changes, not conventional age category techniques. While conflating the experience of 25–29-year-olds may be appropriate, the density of transitions during adolescence requires a more refined picture.*[18]

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