

Menstruation and body awareness: linking girls' health with girls' education

This paper examines the relationships between adolescent girls' health and well-being, with a particular emphasis on the intersection between post-pubescent girls' menstrual management and education. The paper focuses on developing country contexts, such as sub-Saharan Africa and Asia, where physical, socio-cultural, and economic challenges may render girls' menstrual management in school particularly difficult. We begin with a general introduction on menstruation issues for girls, and then focus on its relationship to girls' educational participation and success. We examine how poor sanitary facilities, provision of sanitary supplies, and educational practices can impact negatively on girls in terms of school access and experience. We also examine the possibilities for school-based programs to address some of these menstrual or maturation-related concerns and to improve the situation for post-pubescent girls. We end with a series of broad, overarching recommendations for further work on this topic, including a call for additional research, policy and programming on this critical issue for girls.

Menarche, menstruation and adolescent girlhood

Puberty and adolescence can be challenging times for any girls. Although it may occur at different ages for different girls, adolescent girlhood is always a critical time of identity formation and a period of transition from childhood to womanhood. In most societies, menarche is an indication of a girls' developing sexuality. In Western contexts, the literature suggests that the moment of menarche may be alternately exciting or terrifying to young girls, while family and community members may range from ignoring the moment entirely to announcing it as a celebratory moment. For example, Burrows and Johnson (2005) note that in Western societies, 'it is argued that menarche conveys conflicting societal messages; it represents the beginning of womanhood and sexuality, but girls of this age are seen as too young to be sexually active' (p. 236). In other contexts, however, this new fertility may interest parents because of a post-pubescent girls' new status as marriageable, which may be directly linked to increasing the family income from a dowry payment. The advent of HIV/AIDS has led to reports of an increasing prevalence of early marriage due to the desperate circumstances of AIDS orphans in search of an income for their own survival and that of their family members (UNICEF 2001; UNAIDS, UNFPA and UNIFEM 2004).

Myths and taboos about menstruating women, such as the need to abstain during sex or being forbidden to prepare food, while not having disappeared entirely, have generally diminished in Western settings. Nevertheless, menstruation is still frequently perceived in a negative light, with little research conducted on healthy menstruation in 'normal' women. Professional journals and popular magazines generally place an emphasis on menstrual pathology, with articles and studies about angry, depressed and unreasonable

women and girls. Even medical and other health care textbooks tend to utilize negative metaphors for both menstruation and menopause (Houppert 2000; Martin 1998). There has been minimal attention given to the significance or meaning of menstruation to girls as they transition through puberty, with researchers more focused on girls' psychological response to the event and its consequences for their self-esteem (Golub 1983; Brooks-Gunn 1983). Even in social contexts where teen pregnancy and sexually transmitted diseases amongst adolescents are of serious concern, research tends to focus on sexual attitudes and related activities, with little or no mention of issues pertaining to the actual processes of body maturation. More surprising is the lack of mention in the growing field of 'girlhood studies.' (Mitchell 2006 personal communication). As the average age of menarche is dropping around the globe and the average age of marriage is simultaneously rising, it seems remarkable how little attention is given to young post-pubescent girls' experiences and needs within this now prolonged period between sexual maturation and marital status (Brumberg 1997).

Even fewer studies exist that are specific to the topic of menstruation in non-Western societies and contexts (Du Toit 1987; Van de Walle and Renne 2001; Kirumira 2004). However from what literature is available, and from references made to the issue in health and education reports, it appears that in much of Asia and sub-Saharan Africa, girls' knowledge levels and understandings of puberty, menstruation and reproductive health are very low. In traditional and more conservative communities, the physical changes of puberty, and of menstruation in particular, are subjects that may be difficult to address directly in the home and unlikely to be discussed in the school context.

As part of a multi-country study of sexual maturation financed by the Rockefeller Foundation, the Forum of African Women Educationalists, Uganda (FAWE U) conducted extensive research with girls and their families in rural communities of Uganda (FAWE U 2004). They found that along with lack of knowledge and understanding about menstruation amongst girls themselves, other members of the community, including the male members of their families, were completely uninformed as well. Fathers, uncles, brothers and male cousins appear to have very little factual information on menstruation. They understand it as a mysterious weakness of women rather than a biological and normal recurring experience of life for post-pubescent girls and women. A series of myths, euphemisms and mysterious language have been adopted to hide this lack of knowledge and understanding; for example, the phrase 'going to the moon' is commonly used to refer to the menstrual period and yet FAWE U discovered that few men and boys had any idea of what this actually was (FAWE U 2003). This likely serves to reinforce misunderstandings about natural bodily processes, and to perpetuate the stigma that is attached to menstruating women and girls. Girls explain that menstruation is a taboo subject even within their own families, describing a 'culture of silence' with regard to their menstruation. They feel unable to discuss menstrual issues with their mothers and certainly not with their fathers. Not being able to talk about their experience and having limited information means that menstruation becomes something shameful and something to hide, and is consequently ignored in families, schools and communities (FAWE U 2003).

In India, as Shukla writes (2005), menstruation is considered a polluting factor among Hindus. In many places menstruating girls and women are considered untouchable. Even where strict untouchability is not observed, girls learn from early adolescence that during their monthly cycle they may not touch anything in the kitchen or visit a temple. As an additional example, it is commonly believed that pickles made by a menstruating girl/woman will rot. Some of such taboos are also prevalent among non-Hindus.

Such attitudes and practices are unlikely to create a positive self image within girls. Shukla and her colleagues at the Vacha Women's Resource Centre in Mumbai found that girls and women teachers were very knowledgeable about the intricate system of taboos and sanctions that pertained to menstruation, but had very little actual knowledge about the biological processes of maturation and normal physiology. This lack of factual information, compounded by the prevalence of myths, means that girls' practical needs related to managing menstruation are often not appreciated or appropriately addressed, e.g. of the provision of adequate sanitary protection. Most girls are left to cope as best they can with rags or other insufficient protection (Shukla 2005).

FAWE Uganda calculated that to cover their sanitary protection needs at market prices, girls must find ways of justifying a recurrent expenditure of at least Sh 2,000 (just over US\$1) every month. Such costs are prohibitive to a poor family where the household income is on average Sh 20,000 a month. As FAWE Uganda states, 'Buying sanitary protection means a monthly spending equivalent of four radio batteries or enough paraffin to last a family one month. Where men most often control the household budget, how can girls succeed in getting sanitary materials on to the priority list? What is worse, where sanitary protection for one girl may cost around a tenth of a monthly family income, how can a household afford this where there are two or three girls?' (Kanyike, Akankwasa and Karungi 2004).

In some communities the tradition of excluding menstruating women and girls from normal activities or tasks and public spaces is also practiced. This creates significant challenges for women and girls who are prepared to overcome the practical difficulties of menstrual management *and* other gender-related barriers in order to participate fully in the public realm. A study of women teachers in Nepal highlights such an issue. As Bista (2004) reports, local cultural expectations that menstruating women should remove themselves from public spaces has led to classes taught by female teachers being discontinued for several days at a time – or to women teachers who continue to teach during menstruation being viewed negatively by the community. Not only does this disrupt the learning process, but it may simultaneously perpetuate very negative messages about what is expected of women and girls. Having said this, as Buckley and Gottlieb (1988) stress in their review of menstruation and anthropology to date, it is important to recognize the potential for intra-cultural variations in the interpretation of meanings of menstruation, and how 'taboos' may in fact serve the interests of women, even if at first glance they appear to be negative. For example, women may appreciate the 'banishment' to menstrual huts as they are given a rest period from the normal intensity of daily chores.

Beyond the cultural issues discussed above, there are also health issues to consider relating to girls and menstruation in development contexts. Poor protection and inadequate washing facilities may increase susceptibility to infection, with the odor of menstrual blood putting girls at risk of being stigmatized. The latter may have significant implications for their mental health. In communities where female genital cutting (FGC) is practiced, and in particular infibulation, multiple health risks exist such as the potential for haemorrhage, shock, and life-threatening septicaemia during and shortly after the procedure; followed by possibly painful scarring. The onset of menstruation in girls who have been circumcised, and specifically those who have been infibulated, can create additional health and hygiene problems. Where the vaginal aperture is inadequate for menstrual flow, a blockage and build-up of blood clots is created behind the infibulated area. This can be a cause of protracted and painful periods (dysmenorrhoea), increased odor, discomfort and the potential for additional infections (Obuekwe Ifeyinwa and Egbagbe Eruke 2001). Additionally, in relation to menstruation and adolescent girls' health, Beausang and Razor (2000) argue that girls' lack of knowledge about their own bodies and normal maturation processes puts them at great risk for 'unwanted pregnancies and sexually transmitted diseases as well as makes communication about gynaecological problems difficult' (p. 520).

Lastly, and infrequently mentioned in studies conducted in developing countries, are the simple discomforts, such as lower back pain, bloating, cramping, mood swings, and other symptoms related to menstruation that have been well documented in the Western literature. Whereas girls in developed countries generally have access to a range of general – and specific – painkillers and other pharmacological products, girls experiencing similar symptoms in sub-Saharan Africa and Asia do not have access to such 'luxuries'.

Menstruation and education: the challenges

As mentioned above, in contexts where cultural taboos restrict the activities of menstruating women and girls, and where the lack of adequate sanitary protection makes movement away from home physically impossible, the onset of menses will inevitably have an impact on girls' access to education. For girls who are able to continue attending and participating in school, the widespread reality of poor sanitary facilities, ignorance about menstruating girls' needs and experiences, can mean that the schooling experience is far from a positive one.

Access

The onset of menstruation signals an end to girlhood – and therefore frequently also to education - as parents in many cultures begin to consider marital prospects for their daughters. Parents may believe that it is no longer necessary or appropriate for a daughter to continue to attend school past puberty. They may prioritize knowledge that is not taught in school, such as how to maintain a household. For girls who missed opportunities for schooling when they were young and are not yet enrolled in school at the age of puberty, menarche may serve as an additional barrier to initiating their education. Parents may regard schooling as even less important for post-pubescent girls

due to a belief that they should be preparing themselves for marriage and motherhood. A significant but related barrier are the anecdotally reported concerns that girls past puberty will be targeted for sexual abuse by teachers and fellow students, both in the school compound and en route to the school compound (Christian Science Monitor May 4, 2005).

In sub-Saharan Africa, adolescent girls' participation in school is generally very poor (UNICEF 2006). Even in contexts where gender parity is achieved in the early grades, by late primary school (Grades 4 or 5) the numbers of girls in school has dropped significantly. In reviewing education data, enrollment rates are important. Yet retention and successful completion rates provide a stronger test of Education for All (EFA) achievements and more particularly of achievement of the Millennium Development Goal Number 2¹. In an International Rescue Committee (Rhodes, Walker and Martor 1998) study of primary schools in Guinea, although girls represented almost 50% of students in early grades, they made up only 34% of those who complete the cycle at Grade six. Similarly, as found by UNICEF/AET (2002) in southern Sudan, enrollment rates of girls in Grade 1 are already very low (an average of only 26% of total enrollment) with a drop to 21% at Grade 8 (an absolute drop of more than 20,000 girls). And in the reconstruction and development of the Somali educational system, gender related disparities are a key concern; only 35 % of the students enrolled in Grade 1 are girls, and this proportion declines with girls making up only 29% of Grade 8 pupils (UNICEF/AET 2002).

Such drops in girls' participation can be attributed to multiple factors, including the lack of female teachers, (and therefore successful role models), curriculum content that is irrelevant to girls' lives, and the poor quality of schools, both the facilities and the instruction. Another under-explored factor, and hence the subject of this article, are the linkages between the onset of menarche, girls' response to sexual maturation, and the subsequent impacts on their educational access and experience. Anecdotal evidence from a number of countries suggests that a main reason the onset of menses disrupts schooling are familial expectations that a post-pubescent girl will marry and move to her new husband's home, thereby removing her from her school. UNFPA, UNICEF and WHO (2003) report that parental fears about sexual abuse can mean that for unmarried girls movement is often restricted after menarche; a reality which can also interfere with schooling. In some societies, 'menarche' may be seen as shameful if occurring in unmarried girls due to beliefs that its onset is somehow linked to sexual intercourse. Therefore girls in some parts of the world are married off even younger to assure there will be no family loss of honor at girls' believed unchaste behavior. Finally, early marriage is often cited as a reason for girls' dropping out of school (for example UNICEF 2001), as household responsibilities or expectations from their new husbands prevents further school attendance. In conflict-affected contexts, there may be economic and security imperatives for girls to be married as soon as they reach puberty. An example is in southern Sudan where girls are often married off by their families at a young age in order to bring wealth (e.g. cattle or other goods) into otherwise poverty-stricken

¹ Millennium Development Goal 2 states: "Ensure that by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling".

households. The long running conflict, and the cattle raiding, destruction, and displacement of people that it has caused, means that families who have been dependent on their cattle or on their own land can no longer depend on traditional livelihood strategies. Girls have long been seen as a source of wealth to a family and to a community, but in times of crisis, this resource has to be 'cashed in' earlier than usual. Hence reports suggest that girls are forced into ever earlier marriages. In locales where there are few eligible men, girls are also forced into compromising arrangements with, for example, far older men, and/or with men who already have several wives. Girls who enter into such arrangements are vulnerable not only to sexual exploitation, risk of HIV/AIDS and domestic violence from their husbands, but also exploitation and abuse from other wives (Fitzgerald 2002). The onset of menses may be the trigger that removes them from school prematurely and places them in such inopportune circumstances.

From a very practical perspective, girls who lack adequate sanitary materials may miss school each month during their period. If girls attend schools which – as many do - lack adequate latrines and water supplies for girls to comfortably change sanitary pads and wash themselves in privacy, they may be unable to remain comfortably in class during their menstrual cycle (Kirk 2005). In southern Sudan, for example, the lack of sanitary protection during menstruation is often mentioned as a barrier to girls' regular attendance in school. There is very limited availability of commercial sanitary products and those that exist are financially out of reach for most women and girls. In many poor families, providing adequate clothing for the whole family can be a challenge. Hence finding used fabric rags from which to make home-made sanitary pads can be very difficult. Insufficient or inadequate sanitary protection can be very embarrassing for a girl attending school during her monthly period. This is made worse if her school clothing is flimsy, worn and/or too small for her. Soiled uniforms can provoke ridicule from boys as well as from other girls, putting her at great risk of experiencing stigma and discrimination. For girls who cannot afford to buy washing soap, regular cleaning of her uniform or school clothes may not be easy. This situation means that for many girls and young women it is preferable to stay at home during menstruation and not to attend school at all. At home they do not have to worry as much about sanitary protection, nor about having adequately concealing clothing. Few of the girls' mothers attended school and so they do not have experience to share with their daughters as to how to manage menstruation away from home. Regular absence from school for several days a month can – even in the short term - have a negative impact on a girl's learning and therefore on her academic performance in school. Various internal Sudan Basic Education Project reports refer to comments made by girls, mothers, women teachers and other community members that interrupted attendance, insufficient learning and therefore poor results in the long term can contribute to eventual drop out.

Studies funded by the Rockefeller Foundation in Uganda, Kenya and Zimbabwe highlight the challenges to physical management of menstruation in low-income settings. In particular the reports speak to the prevalence of overcrowded and overflowing toilet cubicles currently existing in far too many sub-Saharan African schools. 'Beyond being health hazards, they [unsanitary conditions] are symbolic of the failure of the education system to provide essential facilities to ensure that children, especially girls are not

excluded from full participation in the system because of their maturing bodies' (Rockefeller/ QUEST n.d.). There are rarely separate cubicles for boys and girls and the cubicles that do exist provide little privacy. Although all three countries have an official guideline of 1 toilet per 30 students, researchers found that this figure was exceeded many times over, with some schools having a ratio of 200 students to 1 toilet. And although schools may have toilets, many are lacking in water and therefore do not meet the basic health and hygiene requirements for educational institutions.

While dirty and insufficient toilet facilities are a serious issue, in many cases there are no toilets at all. According to the School Baseline Assessment of 2002, almost half of existing schools in southern Sudan do not have access to water and only 30% have latrines (UNICEF/AET 2002). When asked what they do when they need the toilet, girls in school replied, 'You just have to wait until you go home.' Similarly, in a study conducted in Ethiopia, fewer than half the schools had latrines and only one school had a separate latrine for boys and girls; while in Ghana, only a third of schools had latrines and in many cases these were unfit for use (studies quoted in UNESCO 2003).

While such poor facilities contribute to creating unfriendly school environments for all children, they are particularly so for menstruating girls. Even if girls are able to buy commercially-produced sanitary pads or make adequate pads from rags or other materials, the absence of clean and private sanitation facilities that allow for menstrual hygiene may discourage girls from attending school when they menstruate (World Bank 2005). No systematic or rigorous research has been conducted on the relationship between the lack of appropriate sanitary facilities and the drop-out rate of adolescent girls. UNICEF (2005) estimates that about 1 in 10 school-age African girls do not attend school during menstruation, or drop out at puberty because of the lack of clean and private sanitation facilities in schools. Few schools have any emergency sanitary supplies for girls, and communal toilet facilities are generally very unsuitable for changing sanitary pads given a lack of water, and of sanitary material disposal systems. One study in Uganda found that 1 in 3 girls missed all or part of a school day during their menstrual cycle (GAPS/ FAWE U 1999). Although data on the topic is scarce, similar patterns are likely to exist elsewhere. The issue of 'latrine safety' demonstrates the complexity of finding solutions, while simultaneously highlighting the importance of community and 'girl-driven' solutions. Recent reports have suggested that girls view latrines as extremely unsafe, given they are frequently the site of sexual attacks (Human Rights Watch 2003; Lloyd, Mensch and Clark 2000).

There is little information available regarding disabled girls' participation in education, and it is generally thought that very few such girls in the developing world attend school at all. Reports from Australia, Mexico and Uganda indicate that inaccessible toilets are a barrier to disabled girls' education. This is a factor which becomes even more critical at the onset of menstruation and may contribute to dropping out of school (Roussio n.d.).

Poor sanitary facilities in schools also affect women teachers' experiences. Outside of Nepal where, as mentioned, there are cultural taboos operating which discourage women from teaching during menstruation, it is very likely that women teachers elsewhere are

frequently absent during menstruation due to the inability of the school infrastructure to meet their health and hygiene needs. Given the unavailability of substitute teachers due to teacher shortages all over the developing world, this means that teachers' instruction time in school will be reduced by 10-20% (World Bank 2005). These absences inevitably impact on the quality of children's education. They may also contribute to shaping children's attitudes about menstruation.

Experience

Where girls are able or determined to attend school throughout menstruation, the insufficient facilities and sanitary protection may nevertheless create discomfort for girls in the classroom and an inability to participate. For example, menstruating girls may hesitate to go up to the front of the class to write on the board, or to stand up as is often required for answering teachers' questions, due to fear of having an 'accident' and staining their uniforms. The very short skirts worn by girls in many African schools may add to these feelings of self-consciousness.

This discomfort is augmented when male teachers and students show insensitivity to the challenges girls face in managing menstruation. Male teachers, for example, do not always understand a girl's urgent need to go to the bathroom, and may insist that she wait until the end of class. Worse still are the situations where male teachers and boy students tease the girls (Kirk 2005). This teasing may be fueled by the lack of knowledge about normal biological and maturational processes, and reinforced by local cultural myths or beliefs about menstrual blood. In conversations on the subject of menstruation in southern Sudan, girls explained, 'We have to ensure that we are very clean before we get back to school otherwise boys will tease us publicly, bully, and say nasty things about us. It is so embarrassing that we avoid the embarrassment by staying away from school' (Janda 2004). A less visible but nonetheless dangerous consequence of girls' simple need for soap in order to wash soiled school uniforms is that it can lead to girls engaging in risky income generating activities, such as taking cooked items to houses to sell. Such activities place girls at risk from sexual abuse and some girls may even be led to trade sex for small amounts of money in order to purchase soap or related supplies (Kirk 2005).

Lastly, school curricula typically do not cover the topic of menstruation and puberty in a very girl friendly way, and so do not help girls to understand the changes in their maturing bodies. An example is provided by the government schools attended by girls in suburban slums of Mumbai, India. The biology textbooks contain sexless bodies and make no reference to menstruation or reproductive health, leaving girls - and boys - ignorant about the topic (Shukla and Hora 2004). The 1995 Beijing Platform for Action insists on access for women and girls to sexual and reproductive health education within formal education programs. However, as a recent review report highlights, in many countries, such education is rarely available. There may be cursory references to human reproduction in biology curricula, but the focus is on the biological and technical aspects of reproduction, rather than the social and emotional issues which adolescents in particular need to explore (INSTRAW 2005).

There is little literature available on the current state of school curricula in terms of the inclusion of topics such as puberty and menstruation. However there are studies on sexuality and sexuality education which give insights into what children may be learning about their bodies and physical maturation in schools (e.g. Lawrence, Kanabus and Regis 2000). In the context of the HIV/AIDS pandemic, the attention being given to sex education in some countries of sub-Saharan African is encouraging. This may open up opportunities for girls to access accurate information about their own bodies. However, programs still tend to focus on sexually active young people and sexual relationships rather than on body awareness and puberty information in general. Furthermore, there is still much work to do in schools in North America and Europe, as well as in Africa and Asia. In his recent report to the Human Rights Commission, the United Nations' Special Rapporteur on the Right to Education (2004) highlighted the reproductive health needs of adolescent girls, and based on his concern for the issue, plans follow up work on the topic. As he states, 'It is a matter of concern that in many countries that have made notable progress in school enrolment, students still do not have a guaranteed right to receive an education in responsible sexuality' (2004, Paragraph 84). The UK study by Lawrence, Kanabus and Regis (2000) on sex education in secondary schools found that there were serious gaps in even the most basic programs. Topics such as puberty and parts of the body were considered to be comprehensively covered in only 85% of the schools and sexual development, including menstruation, in only 72% of the schools.

As part of the Rockefeller Foundation project in Uganda, researchers at Makerere University investigated how sexual maturation was being dealt with in primary schools. Their findings indicate that there is no deliberate information on puberty either at school or at home (Kamuli and Katahore n.d.). Adolescents learn from their peers which results in misinformation and the perpetuation of myths. A summary of the Rockefeller research conducted in Zimbabwe, Kenya and Uganda concluded that primary school pupils are not given enough accessible and accurate information on the processes of sexual maturation. There are problems relating to the subject's absence in the formal curriculum, poor teacher preparation and instruction, and few, if any, appropriate teaching resources (Kamuli and Katahore n.d.). It is particularly interesting to note the significance of teachers' discomfort with the subject matter and children's awareness of this discomfort. One student commented, 'Teachers do not tell us much about sexual maturation. They are shy and scared to tell us more' (Samkange 2000). The teachers' own limited understandings and knowledge also leads to avoidance of the topic. This is partly due to the fact that the teacher training does not adequately prepare teachers. Trainee teachers in Uganda reported that various topics related to maturation, puberty and sexuality were missed altogether or were only cursorily covered by their tutors (Kamuli and Katahore n.d.).

However, even the most confident and knowledgeable teachers have other concerns about engaging with students on the topic of menstruation and reproductive health. As part of the International Rescue Committee's Healing Classrooms Initiative, teachers in home-based schools in Afghanistan were interviewed about their teaching and the particular needs of their students. One female teacher was explicit about the needs of her girl students for information on menstruation and puberty, but said that she was unable to

provide such information openly in class because of concerns about community displeasure. Instead, she speaks to girls on an individual basis before and after lessons, but still in rather veiled terms. This testimony provides evidence about the important role that schools and teachers can play in providing information and awareness for adolescent girls, whilst at the same time serving as a reminder of the resistance which still exists for girls to access adequate information about their bodies (Kirk 2004).

The girls in the above-mentioned class are lucky even to have a female teacher with whom they can raise such issues. In many schools in Africa, girls have very little chance of being taught by a woman. Across the developing world, less than one quarter of primary school teachers are women (Global Campaign for Education 2003), and in some countries the percentage can be as low as 10% or 13% (UNESCO 2002). For different reasons, schools tend to be dominated by men, both with the teaching corps and the administration, creating situations where school facilities are oriented by male perspective. Practically speaking, there are few women around even to raise alternative perspectives or to highlight the specific needs of girls. And there are few women in school with whom girls can discuss issues such as menstruation, puberty, and sexuality.

Menstruation and education: creating girl-friendly, health-promoting learning environments

In the face of these many challenges, there are a number of new promising programming initiatives attempting to address the puberty and menstruation challenge. Most aim to create schooling environments which are comfortable and welcoming for menstruating girls to attend. A step called for in this paper is to go beyond the practical issues of menstrual management in schools, and to use the vehicle of education to challenge the negative attitudes and lack of awareness described above, thereby empowering women and girls with factual information about their bodies and how to look after them.

In terms of practical programs, the provision of adequate sanitary facilities for girls, especially an appropriate number of separate latrines for girls, with water available for washing, is of major importance. Providing water and sanitation facilities to schools is widely considered to contribute to increased enrollment and retention of girls. It is one of the factors believed to have helped countries like Bangladesh make significant progress in reducing the gender gap in education. UNICEF's child friendly school model is also being widely used to guide programming to improve educational access and experience. Within this gender-sensitive model, a child friendly school is necessarily a healthy one, with clean water and adequate sanitation facilities, including separate facilities for girls and boys. Such interventions are a key strategy for progress towards the MDG goals in education, and gender equality as well as in water and sanitation². A recent roundtable meeting on water, sanitation and education hosted by UNICEF also made the important link to improved girls' education, 'Many [girls] are denied their rightful place in the classroom by lack of access to separate and decent toilets at school, or else the daily chore of walking miles to collect water for the family. Education for girls can be

² Millennium Development Goal 7 is to ensure environmental sustainability. One of its targets is to halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015.

supported and fostered by something as basic as a girls-only toilet. Parents are more likely to allow their daughters to attend school if they believe that girls' safety and dignity will be protected. And fewer girls will drop out once they reach adolescence' (UNICEF 2005).

It is interesting that even the discussions of water and sanitation projects in schools frequently fail to make explicit the issue of menstruation. Rather, there may be vague references to particular impacts of puberty for adolescent girls, such as in the quote above. Furthermore, such interventions tend to focus on the physical management of menstruation. The overall objective of such initiatives is to enable girls to physically participate in and benefit from education without necessarily being linked to educational interventions to improve body awareness, knowledge and understanding of reproductive health. The increasing recognition of the potential impact of providing separate, private and safe latrines for girls to improve school access, attendance and retention, especially for adolescents is significant. There is an urgent need however for thorough evaluations of existing and newly initiated efforts that address the menstruation and sanitation issue.

Yet adequate facilities are only part of the solution. We must also ensure that girls can regularly obtain adequate sanitary protection – either commercially produced or home-made depending on what is locally available and sustainable to enable them to confidently continue attending class right through their menstrual cycles. In addition, providing the physical or material means for 'menstrual management' does not necessarily empower girls who lack information about their own bodies. Such knowledge is critical if girls are to feel comfortable and confident about coping with the normal developmental changes they are experiencing, and attain a sense of positive body awareness.

More research into the linkages between girls' health, menstruation and education is certainly needed. As mentioned, there exist only tentative data on the impact of interventions related to improved school sanitation and increased menstrual awareness on the lives and experiences of female students. Comparative and baseline data would help to quantify the influence of such educational, health, environment and sanitation programs as well as improve future initiatives. At the same time, qualitative research is required in order to gain more nuanced understandings of the cultural significance of menstruation, of girls' attitudes to and experiences of puberty, and of how the latter are changing over time and with the impact of modernizing influences. Pre-adolescent girls are often an invisible group whose needs and perspectives are marginalized compared to those of younger and older girls. As Vacha Women's Resource Centre, Mumbai, has learned, for girls aged roughly 9-13, menstruation is a very relevant issue. These girls are on the cusp of menarche while simultaneously coping with the physical and emotional issues of adolescence and entry into the world of adulthood. In order to better meet the needs of girls, we need to hear their stories. By listening to them share their lives, much can be learned about their personal experiences and understanding of menstruation (Shukla and Hora 2004; Vacha 2002). Research is also required to fill the large gaps in awareness of the situation for disabled girls in developing countries.

There are critical, longer term issues to explore and address as well. For example, does the distribution of sanitary pads discourage women and girls from using locally- and home-made solutions and encourage a dependency on external supplies? Does open discussion of issues such as menstrual cramps, mood swings and other experiences related to menstruation perpetuate the pathology of menstruation critiqued earlier? What are the most appropriate ways to challenge negative cultural practices and attitudes towards menstruation? What are the most effective ways to work with (often mostly male) policy makers on health and education issues related to menstruation? How can the experiences and understandings of policy makers and practitioners in the reproductive health sector be channeled in relation to menstruation and body awareness so as to benefit younger girls? A conceptual challenge from feminist theory is how to work on menstruation issues in a strategic way and avoid further entrenching notions of the female body as ‘messy’, ‘leaky’, ‘disruptive’ and problematic to the serious processes of teaching and learning.

There is also the critical issue of menstrual-related shame to address, including a need to empirically document the anecdotal evidence suggesting girls are harassed at school or stay home out of fear of potential harassment or a menstrual accident and be ‘discovered.’ Any programming that seeks to address the knowledge level of girls and boys in school about menstruation – needs to move away from traditional anatomical explanations and towards discussion that encompasses meanings and beliefs. Such programming also needs to be sensitive to the environment in which it is given, and to the sensibilities of female students who – at least initially – may feel shy and embarrassed to talk about menstruation at school. Strategies to address this include, for example, dividing girls and boys into separate discussions, and ensuring that a female teacher is available and well-trained for the girls’ lesson.

It is becoming clear that multi-sectoral approaches are needed. Addressing menstruation challenges for girls in a strategic way requires more than simply building a toilet or drilling a well. We need to link physical infrastructure and water and sanitation projects to health education and reproductive health programs and address the issue in more holistic ways. Education programs are required for teachers and education authorities, as well as sensitization for parents and wider communities. Such approaches require the experts from health, water and sanitation, and the education sectors to all work together, and to collaborate when possible with local women’s organizations, girls’ clubs in and out of school, and other grassroots organizations aiming to address persistent gender inequalities in the community and larger society. Given the many cultural or traditional beliefs around menstrual blood and menarche, approaches developed for specific locations must be informed by understandings of local social and cultural attitudes and perspectives on the significance of menstruation for girls and their families. Such approaches may challenge current organizational structures, funding parameters and the attitudes of programmers and policy-makers, however they remain critical in this context where educators, health, and water and sanitation experts are needed to provide the community work and support for the fulfillment of girls’ rights. Women’s and girls’ rights activists also have important advocacy roles to play in drawing attention to the issue and proposing solutions. Such solutions, however, should be developed based on

the insights of the girls themselves; as Kirk and Garrow point out (2003), girls are 'knowers' of their own lives, of the challenges they face and of possible solutions for these. Participatory approaches are needed in order to engage with girls and to see the challenges they face from their perspectives.³

³ For further recommendations for policy and practice see Kirk & Sommer, 2005.

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A. Annex: Project examples

Working on Menstruation with Girls in Mumbai, India: Vacha Women's Resource Centre By Sonal Shukla, Vacha Women's Resource Centre

To develop a teaching module for girls from poverty affected families in urban and rural areas in western India we made a body chart of cloth layered with body parts, including blood circulation and respiratory systems, attached with velcro so that girls could pull them apart and stick them together. This facilitated separating menstruation from socio-religious misconceptions and showing it as an important biological phenomenon. We also made a set of seven cloth charts, some of which they could wrap around themselves and learn where, how and why menstruation and takes place. Discussions of girls' own physical and social experiences were encouraged and they raised many questions, particularly on abdomen and back pain and menstruation flow. Girls were highly excited and shared this knowledge with their mothers, one even with her father! Some teachers asked us to have special lessons for themselves. We could do this during some major gender training programmes in several districts under Education For All schemes.

Helping girls and women change their minds about their bodies being polluting agents will require multi-pronged strategies as these beliefs are supported by family, caste and religious systems. They are also internalized and perpetuated by women. One other way Vacha is working to dispel such myths is through health fairs organized for girls in which there is a special booth for private consultation, and teaching of yoga exercises to reduce pain.

Providing 'Comfort Kits' in Southern Sudan Sudan Basic Education Program

Few girls in Southern Sudan are able to buy or even make their own sanitary pads and so those who are enrolled in school are usually forced to miss class during menstruation. Girls in boarding schools normally stay in their dormitories, lying out their period and taking regular showers. Those in day school merely stay home. This means that girls miss a number of days of school every month and are disadvantaged in their learning.

To address this issue, the Sudan Basic Education Program distributes 'comfort kits', containing a set of reuseable cotton sanitary pads and underwear, to girls in secondary schools and women in teacher training institutions. The aim is to impact on girls' attendance and ultimately completion of school. The comfort kits were also designed to help make girls feel clean and confident in school even during their menstrual period.

The comfort kits have been enthusiastically received by girls and the kits appear to be a very practical solution to a serious gender equity issue. An early impact assessment indicates the significant impact these kits on girls' attendance and on their levels of confidence and participation in class. Girls are encouraged that they no longer have to struggle alone to cope with the management of menstruation (Kirk, 2005). Furthermore,

the open distribution of the kits in school has raised awareness amongst teachers and school administrators and made it much more possible for girls to talk about menstruation at school. Assessment also revealed that few girls really understood the biological process of menstruation. The SBEP has now developed a simple booklet explaining menstruation and other bodily changes associated with puberty to include in future comfort kit distribution.

Comfort kit distribution also raises a number of conceptual and programming challenges and questions for further consideration and impact analysis. For example, as indicated above, many of the schools included in the program do not have toilets and washing facilities and many girls lack soap. This means that even if girls receive washable sanitary towels, they may have to walk a long distance to look for water, and then struggle to do their laundry without soap and buckets. Most girls who want to go to school have to raise their own fees or part of the fees including pocket money for such necessities. The need for such items puts girls at risk of sexual abuse and exploitation as they are tempted into transactional sex. This makes it paramount to adopt a more holistic and long-term approach to addressing the needs of girls, and to work with the schools, communities and other organizations to provide other necessary facilities such as water, basins or buckets and soap. Plans are now being made to provide instructions for girls to make own sanitary pads from locally available materials to replace those provided and also to encourage sisters, mothers and other women in the community to do the same.

A Research-action 'Sexual Maturation Project' in Uganda FAWE Uganda

The Forum of African Women Educationalists (FAWE) is a Pan-African NGO committed to supporting governments to eradicate the gender gaps in education, at all levels. There are 33 chapters across the African continent, and Uganda is one of the most active and innovative. FAWE Uganda's work to promote improved sexual maturation management in schools emerges from the linkage between poor attendance, high drop-out and ultimately low levels of literacy. In the 'Strategic Resource Planning for Girls' Education in Africa', a Ministry of Education and FAWE study on Gender and Primary Schooling, puberty was found to underlie deteriorating performance, absenteeism and drop-out in upper Primary School in Uganda. The Pregnancy Study (FAWE 1999) also linked absenteeism, loss of interest in school to puberty.

Supported by the Rockefeller Foundation, FAWE Uganda (FAWE U) has been leading a comprehensive program of activities in five pilot Districts of Uganda, which provides information for girls on their bodies, puberty, and menstruation, makes boys aware of how normal monthly periods are, and sensitizes parents and community members to the need for sanitary protection for girls. The project is aimed at developing interventions which address the management of sexual maturation and therefore contribute to accelerated literacy.

The project has been implemented in five pilot Districts of Kisoro, Kalangala, Katakwi, Kiboga and Nebbi. These districts represent the four traditional regions of Uganda. Kisoro for West, Katakwi for East, Nebbi for North and Kalangala, Kiboga for Central. Kalangala and Nebbi were chosen for their low achievement in National Examinations in 1999. Katakwi and Kisoro have wide gender gaps both at primary and secondary levels and have big numbers of out of school children especially girls. In each of the districts, FAWEU works hand in hand with the existing government structures of Ministry of Education and Sports. The District Education Officers and District Inspectors of schools, Coordinating Center tutors, headteachers and senior male and female teachers are key stakeholders in the project.

The major project activities comprised awareness-raising on the biological process of menstruation, and dispelling local myths and mystery surrounding it. Teen clubs have been established in primary schools, and supplied with 'emergency' sanitary towels which they give to girls who begin their menstruation at school when they are not prepared. Materials development has also been an important part of the project. These materials comprise posters and booklets aimed at girls themselves with messages relating to good hygiene especially during menstruation, and also posters for teachers and community members which promote positive attitudes towards and understandings of menstruation.

One of the key issues which has emerged from this work is the importance of raising the awareness of boys, community members, and fathers that menstruation is normal and healthy. In this way, boys can learn to be supportive (rather than taunting) to the girls who, for example, by accident soil their dresses. It also has the impact of making fathers more understanding of the sanitary protection needs of their wives and daughters and more likely to provide money for them to buy or make these.

Further, FAWEU advocates the inclusion of menstruation and its management as a specific topic in the life skills curriculum and in the activities of the already established 'life skills clubs'. Experience with these clubs indicates that when boys understand what menstruation is about, they are more cooperative towards girls. Another crucial component is further sensitization of parents – both men and women - on the importance of hygienic protective materials. Teachers, community-based organizations (CBOs) and parents have received training on sexual maturation, which helps girls to overcome negative misconceptions, shyness and avoidance of the topic. This should help parents and guardians to see the necessity of budgeting for sanitary materials. FAWEU is also committed to finding ways of making appropriate sanitary protection available to poor girls, and especially those in rural areas. Locally-made sanitary towels have also been discussed with girls, their teachers and parents. This is important in relation to the girls' health and well-being, but is also seen as having the potential to impact positively on attendance and active school participation. FAWEU has provided some schools with sanitary towels for emergency use for girls, thus enabling them to continue with their studies instead of staying away from school during this period. However this is not sustainable and the challenge there is to bring the parents on board to take up the responsibility (FAWE Uganda, 2004).

FAWEU is a well-known and-respected organization, a very active participant in the education sector and a technical partner to the Ministry of Education and Sports on gender. The fact that FAWEU has invested time and attention to this issue, and is widely disseminating the results of its work, helps to situate menstruation as central to educational policy-making and planning for girls' education and for gender equality. Their attention to this issue helps to ensure that it is taken seriously at different levels of the education system, from the classroom to the ministry boardrooms.

Improving menstrual knowledge and management for school girls in Eritrea

By Rozina Michael, CRS Eritrea

Catholic Relief Services (CRS), in collaboration with the National Union of Eritrean Women (NUEW), found that many Eritrean schoolgirls either miss school entirely or feel uncomfortable at school during their menstrual cycle, and hence report a decrease in their participation and performance in the classroom. To address this challenge, CRS initiated a girls' empowerment project aimed at increasing schoolgirls' reproductive health and hygiene knowledge, improving girls' confidence in the classroom through extracurricular tutoring on basic subjects, and facilitating their school attendance during menstruation through the construction of girls' latrines and the provision of sanitary materials, soap and undergarments. Under the reproductive health awareness objective, the project produced an adolescent reproductive training manual that was used for training-of-trainers (TOT) of adolescent peer educators. Weekly TOT workshops were conducted over a seven-month period for selected adolescent girl educators, who subsequently disseminated the knowledge to their peers. Girls' toilets were rehabilitated in the target schools, with a new girls' latrine currently under construction in one school in collaboration with the parent-teacher association. A recent evaluation of the two-year project demonstrated that girls' attendance had increased during their menstrual cycles in the target schools, and that as a result of the project's hygiene education, the frequency of changing sanitary materials has increased from once per day to two or three times per day. Lessons learned included the need to sensitise parents to girls' reproductive needs; the importance of strengthening linkages with school parent-teacher associations; and the need to develop linkages between schools and local factories producing menstrual sanitary supplies.

Bios

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