

Research Into Hygienic and Acceptable Disposal of Waste Generated During Menstruation and Sexual Activities

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for:


National Sanitation Coordinating Office (NaSCO)

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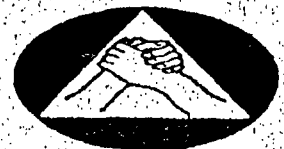


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1 INTRODUCTION

The National Sanitation Co-ordinating Office (NaSCO) commissioned Social Surveys and Partners in Development to undertake research into the hygienic and acceptable disposal of waste generated during menstruation and sexual activities.

Social Surveys is a social research consultancy that has been in existence for fourteen years. The company has conducted a substantial number of community based, public health, housing and other policy based projects. These have involved both qualitative and quantitative analysis of data collected in rural, peri-urban and urban areas. The experience of which contributed greatly to the design of this study.

Partners in Development has extensive experience in the design, training and construction management services on over 50 infrastructure projects that primarily focus on rural development. The majority of these have been in rural water supply, upgrading of informal settlements and provision of community-based sanitation.

NaSCO is the executive arm of the National Sanitation Task Team (NSTT) with the overall mandate to develop a National Sanitation Programme based on the National Sanitation Policy. The NSTT comprises six national government departments (Water Affairs and Forestry, Environment and Tourism, Provincial and Local Government, Education, Health and Housing). Mvula Trust, an NGO working exclusively in the area of water and sanitation also plays a key role in the NSTT.

NaSCO had identified hygienic and acceptable disposal of sanitary towels and condoms as a problem especially in areas without efficient waste management services. It acknowledges that certain groups of people are comfortable disposing of waste material generated during menstruation and sexual activities by putting them in waste bins. This is not necessarily a solution as these waste materials normally end up in garbage dumps, which are often playgrounds for children in certain areas.

According to NaSCO in areas where waste management services are efficient, putting sanitary towels and condoms in waste bins does not constitute a health hazard. In the townships, rural and peri-urban areas however, proper sanitation and waste management can be described as dismal. In some of these areas waste is sometimes thrown in the nearby open veld where it is accessible to children. Even in those areas



where waste is managed properly, there are some people, who do not feel comfortable disposing of this type of waste by throwing it into the bin. It frequently gets flushed down the toilet causing blockages to sewers in the case of pads and clogging of sewage treatment plants in the case of condoms.

Waste management has been identified as burdensome to local governments particularly in peri-urban areas where as concluded in the Support to Peri-urban Sanitation Strategy in South Africa: Part 1, the social and physical infrastructure and services are generally lacking. In addition, the Greater Johannesburg Metropolitan Council document entitled An Analysis of Waste Production in Greater Johannesburg, observed that there are large amounts of waste produced by poorer communities and the lack of access to regular refuse removal services poses an environmental and health threat to these communities.

Lastly, most local governments lack capacity, resources and appropriate technology to collect and dispose of waste in an acceptable manner as prescribed by the Waste Management and Minimum Requirements policy documents. These documents do not give guidance to local governments regarding the classification and disposal of waste generated during menstruation condoms. It is not clear whether these should be treated as hazardous (e.g. medical waste) or solid waste materials. Furthermore, there is a dearth of literature on this particular subject making it difficult to inform policy initiatives. It is against this background that NaSCO commissioned this research. The results of which are intended to promote healthy and socially acceptable practices on the one hand and the protection of the environment on the other as outlined in the White Paper on Integrated Pollution and Waste Management for South Africa.

Direct quotations from group discussions and in-depth interviews with respondents are used in the report, providing the contextual basis for the analysis and discussion. The report discusses and illustrates with quotations, the variety of attitudes, perceptions, experiences and beliefs around the disposal of waste generated during menstruation and sexual activities.



2 OBJECTIVES OF THE STUDY

The objectives of the study were:

- ⇒ To identify current perceptions and practices regarding the disposal of waste material generated during menstruation and sexual activities
- ⇒ To identify and understand any cultural or religious beliefs that may impact on the handling and disposal of materials generated during menstruation and sexual activities
- ⇒ To assess the social problems being experienced by different cultural and religious groups with regards to the disposal of waste generated during menstruation and sexual activities
- ⇒ To assess the technical impact of current disposal practices
- ⇒ To propose socially acceptable and hygienic practices for the safe disposal of waste material generated during menstruation and sexual activities
- ⇒ To undertake a technical assessment of the proposed system



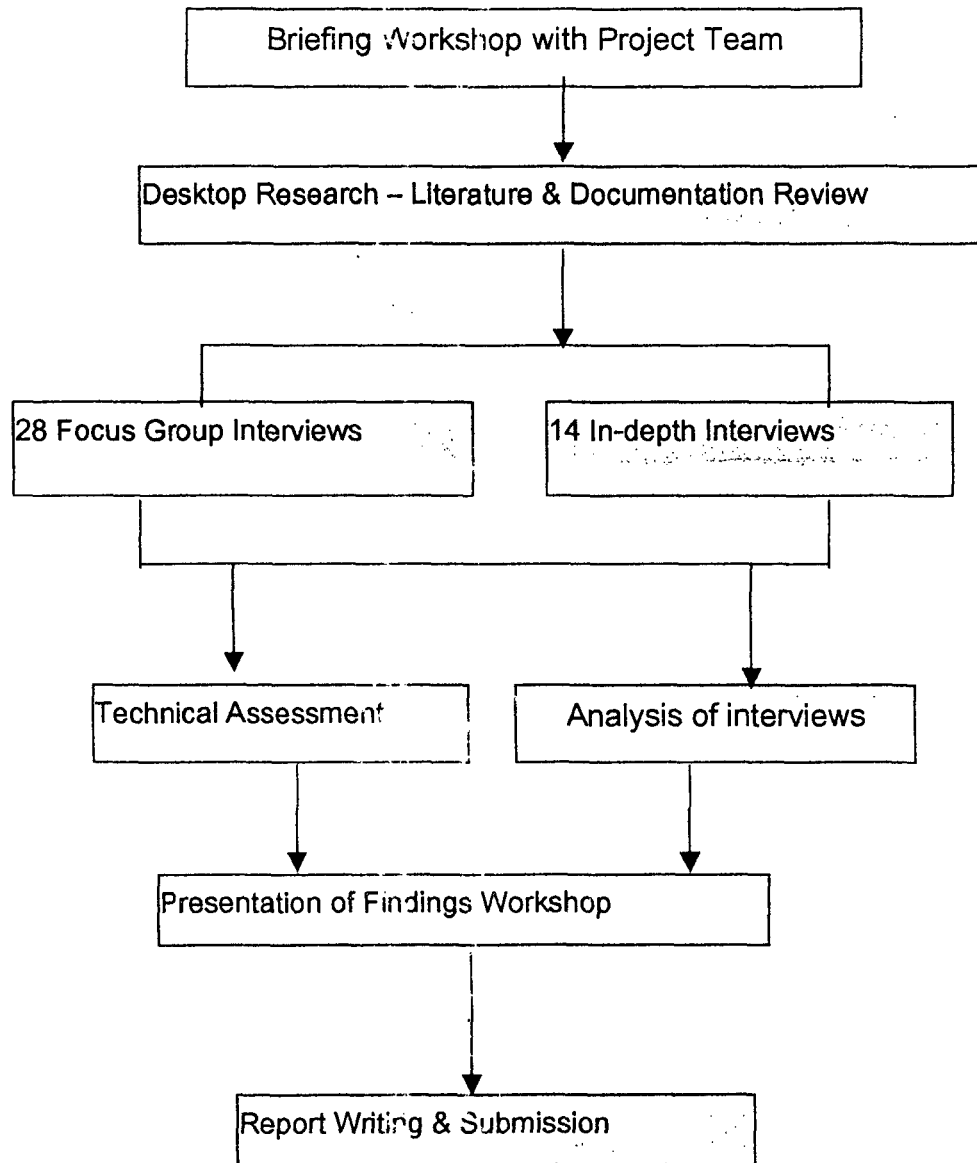
3 METHODOLOGY AND APPROACH

In studying this subject, attitudes, beliefs, practices and the needs of different interest groups were considered. Due to lack of existing research the project team decided that the emphasis of the study should be exploratory in nature, examining cultural, religious and social practices, beliefs and taboos surrounding this subject. The methodology deemed appropriate for this research study was qualitative due to the sensitive nature of the subject matter. This method allows the subject to be introduced in a way that a researcher of the same gender and age will not offend the respondent.

A multi-pronged methodological design was utilised which included workshops with the project team, qualitative group interviews with different cultural and religious groups, and in-depth interviews with stakeholders, technical assessment.



3.1 Methodological Summary



3.2 Sampling

The sampling technique used was intended to be representative of the dominant cultural, language and religious groups. It is a purposeful or targeted sampling method intended to gain an understanding of the current practices, attitudes, problems and to explore acceptable ways of disposing sanitary waste across a broad range of community groups.

For this reason, a combination of focus group discussions in various communities across the country and in-depth interviews with representatives of a wide variety of interest groups and stakeholders were recommended. Tables 1 and 2 below represent the sample used.



Table 1: Total groups by sex, language, race, religion, culture and geographical area

PROVINCE	TOWN	GEO. LOCATION	RELIGION / CULTURE	RACIAL GROUP	LANGUAGE	SEX
WC	Langa	Township	Afro centric	African	XH	F
WC	Browns Farm	Informal Settl	Christian	African	XH	F
WC	Langa	Township	Afro centric	African	XH	M
WC	Cape Town	Suburb	Moslem	Coloured	AFR	F
KzN	Bester	Informal Settl	Afro centric	African	ZUL	M
KzN	Indwedwe	Rural	Afro centric	African	ZUL	F
KzN	Umlazi	Township	Christian	African	ZUL	F
KzN	Inanda	Informal Settl	Shembe	African	ZUL	F
KzN	Phoenix	Town	Hindu	Indian	ENG	F
NP	Thohoyandou	Rural	Afro centric	African	VEN	M
NP	Thohoyandou	Rural	Afro centric	African	VEN	F
NP	Seshego	Township	ZCC	African	NS	F
MP	Weltevrede	Rural	Afro centric	African	ND	F
MP	Weltevrede	Rural	Afro centric	African	ND	M
MP	Malelane	Rural	Christian	African	SWA	F
MP	Malelane	Rural	Christian	African	SWA	M
FS	Farm	Rural	Mixed	African	SS	F
FS	Farm	Rural	Mixed	African	SS	M
NW	Pudimoe	Rural	Christian	African	TSW	F
NW	Pudimoe	Rural	Christian	African	TSW	M
NC	Kimberly	Urban	Islam	Coloured	ENG	M
NC	Kimberly	Urban	Christian	Coloured	AFR	M
NC	Kimberly	Urban	Christian	Coloured	AFR	F
NC	Barkley West	Informal Settl	Christian	Coloured	AFR	F
GT	Lenansia	Urban	Islam	African	ENG	M
GT	JHB South	Urban	Christian	African	ENG	F
GT	JHB North	Urban	Judaism	African	ENG	F
GT	Alexandra	Informal	Christian	African	Sotho	F

WC = Western Cape; KzN = Kwazulu-Natal; NP = Northern Province; Mp = Mpumalanga;

FS = Free State; NW = North West; NC = Northern Cape; GT = Gauteng

XH = Xhosa; ZUL = Zulu; AFR = Afrikaans; SWA = Swati; ND = Ndebele; SS = South Sotho;

NS = North Sotho; TSW Tswana



Table 2: Total number of in-depth interviews

RELIGIOUS ORGANISATIONS	South African Catholic Bishops Conference (SABC)
	Church of the Province of Southern Africa (Anglican)
	Council of African Independent Churches
	Zion Christian Church
	Islam
	Hindu
LOCAL GOVERNMENT	Greater Johannesburg Metropolitan Council
	Bophirima District Council
	Thohoyandou District Council
	Umduzi District Council
	Amatole District Council
	Ekangala/Bronkhorstpruit District Council
NON-GOVERNMENTAL ORGANISATIONS	Mvula Trust- Northern Province Office
	Tsogang



4 FINDINGS

The findings of the research study are presented under the following headings:

Infrastructure

- ⇒ Rural
- ⇒ Informal Settlements
- ⇒ Urban

Menstruation

- ⇒ Protection used and reasons
- ⇒ Disposal
- ⇒ Concerns
- ⇒ Education
- ⇒ Cultural and Religious Taboos
- ⇒ Summary on the disposal of menstrual waste

Condoms

- ⇒ Usage and reasons
- ⇒ Disposal and reasons
- ⇒ Concerns
- ⇒ Education
- ⇒ Cultural and religious taboos
- ⇒ Summary on waste generated during sexual activities



4.1 Infrastructure

In terms of the findings of the research study, infrastructure impacted considerably on the manner in which people dispose of waste generated during menstruation and sexual activities. Culture, religion and gender were found to have little bearing on the disposal behaviour of individuals as far as the aforementioned waste is concerned. Thus any intervention should put more emphasis on the improvement of infrastructure particularly in the rural and peri-urban areas. In the urban areas more effort should be placed on educating the public about the disposal of this type of waste. The focus of the education should be on the acceptable disposal in public places.

For the purpose of this study, three community types namely urban, peri-urban and rural were studied. It should be noted that the three areas were used in the study to represent levels of services and infrastructure available to people and not geographical areas.

4.1.1 Urban

Urban represents those areas that have access to infrastructures such as water, water borne toilets and refuse removal services. These included both formal townships and suburbs. In these areas, most people preferred method of disposal is either flushing down the toilet or putting in the bin. There are also those who favoured burning them.

Several infrastructure related problems were identified with the manner in which this particular waste is disposed. Firstly, there is a problem of toilets and sewerage systems blockages especially in townships where in most cases there are too many people sharing toilets and this causes a strain on them. In such cases, landowners build shacks in their properties and leases them to several people who in turn share one toilet which is normally outside. Secondly, those who prefer disposing in the bins worry about dogs spilling them and scattering them in the yard and causing illnesses to those that come into contact with them. Lastly, in townships, people mentioned that the garbage removal service was irregular forcing people to throw their garbage in streets where dogs and children play with it.



4.1.2 Peri-urban

Peri-urban was used to delineate recent and old informal settlements, some of which are currently being transformed into formal townships. In the study, these areas tended to have inadequate services offered by local government.

The common toilets used in the area were buckets, which residents shared, and they also shared a common waste bin provided by local government. A few in these areas did have pit latrines, but as a result of cramped living conditions others, even though they desired to build pit latrines for themselves could not do so. The other difficulties experienced in such areas was that as in urban areas there are too many people per toilet and this causes toilets to fill up quickly before they can be serviced. As a result inhabitants of these areas, are forced to throw the waste in open places.

4.1.3 Rural

The term rural in this case represents both farm and deep rural contexts. In these areas there were no services in terms of water, sanitation and waste management provided by local government. Pit latrines toilets were mostly used however there were instances in which people used the veld nearby to relieve themselves. In terms of water, people relied on water faucets in streets or on rivers and dams. There were no waste management services being provided and thus people dug garbage holes in their yards and later burnt it or alternatively threw it in the veld.

In these areas, many people were content with throwing the waste in pit latrines as this ensured their privacy. However some voiced concerns about the quality of their pit latrines. They complained that some toilets tended to flood and thus fill up quickly during rainy days. Others were concerned about the lifespan of their toilets as they did not have enough land to keep on building these types of toilets. Finally the waste thrown in the veld usually get to the dams and rivers where it pollutes water that is vital for consumption in those areas.



4.2 Menstruation

4.2.1 Protection Used and reasons

The common menstruation protection used is pads and tampons, mostly in urban areas, however, there are those who use other products such as cloths, newspapers, toilet paper, tissues, panties and panty hose. The choice of a particular product seems to be influenced by affordability instead of comfort. For instance, some females indicated respondents would like to use pads but because they are expensive they use other things.

"Some women cannot afford to buy pads. She might put all her bits of money together to buy that packet of pads but she won't use the whole packet in one month. She will use one for the whole day to save (Pudumoe, male group)".

"I use the lilets. My problem with them is that they are very much expensive. I wish that they could just reduce their price so that they can be affordable. This is because these are things that we use every month. I feel that the manufacturers should reduce them because they are the basic needs (Alexandra, female group)".

Others use pads only when their periods are heavy and switch to other things during light days. The purpose of this is mainly to save money.

I use cloth when I don't have money to buy pads (Rural Female, FS)".

If I have gone through all my pads and it is during the month, and I don't have money to buy them again, I use pantyhose (Rural Female, Malelane, MP)".

On my first day I use toilet roll because the flow is not that much (Rural Female, NW)".



4.2.2 Disposal and reasons

The general practice that people are comfortable with is to dispose of menstruation waste in toilets or rubbish bins. Some also prefer burning them. The rural women respondents usually rinse the blood first before disposing. The reason behind this is the belief that blood is sacred and it should not be left around in the open. In addition, those who believe in witchcraft fear that if they don't rinse off their pads, the blood might be bewitched and cause women to be barren. This is difficult particularly for those women in rural areas where they have to walk a distance to get water and given the scarcity of water at times.

Settlement and types of toilet people used also differentiate behavioural patterns. In the rural areas where pits are used, people said they threw them inside the pit.

"I wrap it up with a newspaper then throw it into the toilet (Rural Female, Pudomoe, NW)".

"I burn mine first then throw it into the toilet (Female Rural Farm, FS)".

"If I have been using a cloth, I rinse that cloth then throw it into the toilet (Rural Female Malelane, MP)".

"I end up rinsing the lilets then throw them away in the veld (Rural Female Malelane, MP)"

"I wash them and wait until the pads are dry and then I burn them (Rural Female Weltevrede, MP)."

The disposal of menstruation protection seems to be influenced by location. Women dispose of this differently depending on where they are at the time. For instance, their behaviour when they are at home is different than when they are in public places. When in public places, the behaviour of rural people who are accustomed to throwing products in the pit, changes according to the toilet type used. For instance, when they are in a place using flush toilets, they flush the products in the loo. When it does not flush, they take it out, wrap it with toilet paper and throw it in the dustbin inside the



toilet. There are those who also say that they wrap it and carry it home with them and dispose it in their pit toilets.

In the suburbs and formal townships the common behaviour seems to be throwing them in the bin or flushing them down the toilet and sometimes it gets burned when at home.

I usually throw them in the outside bin, but at night I can't go outside. So I wrap it and put it safe in a plastic bag, then in the morning I take it to the bin (Urban African Female, KzN).

We flush them down the toilet (Urban White Female, GT)

With the toilet paper you squash it and throw it away in the bin or burn it (Urban Female, NC)

However there seems to be a noticeable shift in behaviour when in public places. For instance as some women are aware that flushing it down the toilet might cause toilet blockage, they put it in a bin at home so that they do not have to deal with the problem themselves. However, when in public they would flush it because they are not directly responsible for fixing the toilet if it blocks.

If I go to town I just flush what I have used in the toilet but if I am at home I remove the inner part and just flush only that. It is because it is my home and if the toilet gets blocked it is only me who is going to be responsible (Urban African Female, GT)

4.2.3 Cultural and Religious Taboos

There were no clearly identifiable cultural or religious beliefs identified that influences the disposal of waste generated during menstruation. All cultural groups had no knowledge of any religious practices that their particular religion or culture espouses as far as this subject is concerned. Religious leaders that were interviewed or corresponded with also said that their organisations did not have any policies regarding these issues. A representative of the Church of the Province of Southern Africa (Anglican) said that they have no policy what they do is to respect the beliefs of the local tradition. Some said they don't have any particular practices that they encourage.



When probed further on this issue, some religious groups said there were separate roles between men and women within their organisations and that they do not prescribe to women how they should behave.

“Look, we do not have anything specific to encourage as I have mentioned earlier. It is that the teenage girls are taught already about menstruation, what should be done, how that should be done and the different stages of menstruation. So, it is basically up to them, upon the Moslem mother of the family who then ensures everything is being followed accordingly (Islam Priest)”.

“There are problematic matters as far as African cultural tradition and customs are concerned. There are matters that are dealt with separately, there is a man's domain and there is a woman's domain. Now in many instances men do not want to interfere in something that is predominantly women and visa versa. A woman is not allowed to talk about the things like circumcision schools that are meant for men she can instead discuss with other women about their own issues (Archbishop of CAIC)”.

Even though there were no direct policies or practices linked with any religion or culture, there were several themes that surfaced from the research that influence the disposal of used menstruation protection. These are discussed below:

Menstruation is a private and personal issue that people do not necessarily talk openly about.

This comment was raised by majority of our groups including religious leaders that we interviewed. Both men and women groups felt that this is a subject matter that they never entertain in their conversations with anybody including family members. When asked where this belief comes from; the respondents said they were taught from any early age that they should not discuss it with anyone—i.e people should not even know when you are menstruating let alone discuss the subject.



"According to our culture and tradition, when a child or a girl starts menstruating, she is called by the elders here at home. They will then tell her that she must keep it private, no one must know about it (Rural Venda Female, NP)".

"We really would not know about that because it's not something we talk about (Peri-Urban Zulu Female, KzN)"

However, the white women groups expressed that they speak openly about it now, although when they were young, their parents never said anything to them. These women unlike the others also knew what type of protection their friends and family members were using.

"Yes, when we were kids, these things were never mentioned at home. Now I don't know if you do it, but I do it, I have an open conversation with my daughter... We are open, I mean, when she got her first period she came with me and we went and bought the stuff together. (English White Female)"

"It was different you know, my mom never talked to me about it. She used to send my dad to go and buy my stuff... And that was all, she never talked to me and said: "this is what's going to happen... I had to go through all that by myself... our society has come to a stage where they talk more (English White Female)".

The privacy and secrecy associated with menstruation, impacts on how menstruation waste is disposed. For instance, as women do not want to be seen, they will look for a way that they can dispose in secret. It was apparent that women feel embarrassed if people can tell that they are menstruating. Thus, in urban areas women with in-house water borne toilets at home would easily flush them down the toilets. Women in these areas actually preferred this type of behaviour. Those using tampons and toilet papers and tissues in particular felt that this was best method as these products were easy to flush.



"I dispose my pad in the toilet and I make sure that it's gone after flushing (Jewish woman)"

"I flush everything even the pads, except for those big fat maternity pads... those you can't flush (Urban white woman)".

Other women whatever they do, chose the behaviour that will ensure that no one will know that they are menstruating.

Menstruation is associated with dirtiness or being unclean

Majority of the religious and cultural groups identifies menstruation with being unclean. Many religions discourage women from entering praying houses and forbids them from performing certain rituals when they are having their periods.

"She cannot enter any Mosque for that matter that is, because of that state of experiencing monthly changes which is regarded as unclean. Because of her condition as it is in Islam a person cannot even touch the Holy Koran. It is based on cleanliness (Islam priest)".

"I think it's an excellent thing because the woman is unclean at that time (Jewish woman)".

"It is even a mistake even to touch your wife or daughter if she is at that particular thing. In a way here I want to put it in Sesotho "O tshilafetse" (she is dirty) on that stage (Archbishop of Council of African Independent Churches)".

"You know for that particular three days or four days or five days of woman's menstruation they actually isolate that woman... for cleanliness purposes... is that if they are secluded, confined to a particular place, they would not mess the entire house (Hindu priest relating orthodox Hindu practices)".

As a result of this belief, women that we spoke to associated menstruation with bad odour and perceived themselves to "smell bad" when they are menstruating. Thus women see the need to wash frequently during this time.



"I also find myself much smelly during my periods I don't know. That is why I need to shower every time (Jewish woman)".

As women are regarded as being unclean during their menstruation time, most religions forbid married women from sleeping with their husbands during this time.

"Yes we are told that when you are having a period you should not go near your husband until after you have finished your period, even then you have to make sure that there is no trace visible that you are still having a period (Shembe woman)".

"As far as menstruation is concerned from the Jewish religion when you are married there are laws about that like you are not allowed to sleep with your husband not even touch him (Jewish woman)".

"You are not allowed to sleep with your husband during that time (Hindu woman)".

"According to our culture what they told me is that when you are experiencing menstruation you do not have to sleep with your husband or any man (Sotho woman)".

Blood is sacred and should not be left lying around

There is a belief amongst some African groups that blood is sacred and therefore, should not be left lying around. This belief had a direct bearing on the manner in which people disposed of their menstrual waste. For instance those who adhere to this belief and are based in urban areas would flush their protection down the toilet. Those in peri-urban and rural areas on the other hand, would rinse of the blood first before burning or putting into pit latrines.

"I wash them and wait until the pads are dry and then I burn them (Peri-urban Coloured woman)".

"I wash it first then wrap it up then throw into the toilet (Rural Sotho woman)".

"I first wash the lilets then I bury it (Rural Swati woman)".



"I set them alight at home after I have rinsed them in water (Ndebele rural woman)".

4.2.4 Concerns

There is a general perception amongst people that used products carry diseases and thus should be handled with care. Exposed pads found littering in the streets were identified as a major cause for concern especially for children who like playing in rubbish dumps. People also strongly feel that they might get AIDS if exposed to menstruation blood.

"I really think that people should not throw them anyhow because we have this AIDS epidemic and I am afraid that if children find them and they were used by a person who has the virus they can be infected by that. (Rural Female North West)".

Men in particular were concerned about the manner in which protection was being disposed of in their homes.

"You find them all over even under the bed you do get them and you find that children get to see that, and you worry that children are going to play with them (Rural Male Free State)".

"And when you think of the way they dispose them it's not right at all. You sometimes find them in the yard, like they would dig up hole and put it in there and when you are tilling your garden you come across that (Peri-urban Male Kwazulu-Natal)".

"When they do washing they go to the river and sometimes and sometimes you find that they are menstruating and when time comes for them to change they will change and take the one that is dirty and toss it into the river and down the river stream that pad travels. Think that other people down the stream are using that water so you see there is still a problem on how these pads are disposed off because some of the families are using water which is contaminated with dirt of other people (Peri-urban Male Kwazulu-Natal)".



People with waterborne toilets were concerned about toilets blocking due to the flushing of pads down the toilets. This concern tended however, to be restricted to blockage in their own homes, where it became their own responsibility to handle.

"At my mother's house if there is a blockage at home I normally say to them that there is someone who is flushing pads down the toilet. That is the only thing that I can think of that is causing blockage (Urban Male Northern Cape)".

"You know like other people – like after they have finished using it they put it in the toilet and flush it, but what happens, the only time you see it is when there's problem and it's blocked, and so someone comes to fix it, that person will tell you that this is a problem, this is what happened, someone threw a pad there (Urban Male Western Cape)".

4.2.5 Education

The need for education around menstruation was emphasised by black groups (African, Coloured and Indians). Some in the groups associated the inappropriate disposal behaviour of menstruation protection with the belief that menstruation is dirty and that when menstruating, a woman is unclean. It was felt that as a result of this notion, many girls are afraid to speak up when they start to menstruate and thus dispose protection anyhow to avoid being seen. The problem of inappropriate disposal was experienced particularly in schools where protection can be seen lying around in grounds or openly in toilets.

"Its quiet difficult, I think their mothers could address that. They need to sit down with their daughters and tell them about hygiene. That they are not supposed to throw their pads anywhere other than a toilet... (Rural Male, Northwest)".

"... children should be educated when they are starting to menstruate. I say that because with me when I started to menstruate I was beaten up and they made me think I was dirty (Zulu Female, Urban KzN)".



The groups felt that there should be education emphasising that menstruation is a normal biological cycle for all women, and that there is nothing wrong with it. The women also felt that education about menstruation should begin very early when girls start going to school.

"We should not wait until they are doing standard five in higher primary. They need to be told when they are still at primary level. Remember that people are not the same. There are those who start very early and there are those who start late (Zulu Female, Urban, KZN)".

"We really need to educate our children about it because as it is children are afraid to talk about it because they are afraid of the reaction they will get from us. Remember this is something foreign to them so they think that it's their fault that they are having this blood coming out of them (Zulu Female, Urban KZN)".

There was also a strong sentiment that parents particularly mothers, should be responsible for educating their own children about this issue.

But then now, because you know it should be your responsibility (parent) to educate them about the facts of life. You should not live it to people who will insult them like they did to us (Zulu female KZN)

Other parents did mention that they would welcome the subject being taught in schools provided they were consulted about the content to be taught to their children.

4.2.6 Summary of the disposal of waste generated during menstruation

It emerged that the most commonly used and preferred type of menstruation protection are pads. Although there were a considerable number of those who preferred tampons, there were those who were using other products. Other protection used included tissues, toilet papers, newspapers, cloths, pantyhose and panties. The choice of protection was influenced more by affordability than anything else. Those using other products such as newspapers were doing so because they could not afford pads.



In addition, such products were also used in case of emergencies when pads were not available.

The type of infrastructure had a direct bearing on the manner in which women were disposing of used menstruation protection than cultural and religious beliefs. The research found that women disposed of protection differently depending on the type of toilets they had. For instance, women in rural areas with no services and infrastructure, would burn their protection at home and will flush it down the toilet when visiting places where there are waterborne toilets.

Our analysis reveals that the general method of disposing of menstruation protection is by throwing it inside the toilet. Women with waterborne toilets preferred flushing it down the toilet and those with pit latrines preferred putting it inside the toilet. However, there were those with waterborne toilets that preferred putting them in dustbins because of fear of blocking the toilet.

Menstruation is associated with privacy and being unclean and this has a noticeable impact on how protection is disposed as well. For instance, women adhering to these beliefs, when menstruating, would try to conceal their condition as much as possible so that no one other than them can tell that they are having their periods.

The need for education around the disposal of menstruation protection was identified. It was suggested that education should start at an early age and should take place both at school and at home. Parents should be primarily responsible for the education, but the education system should also get involved in consultation with parents. It was mentioned that it should be emphasised that menstruation is a normal biological cycle for females so as to enable young girls to speak up when they start to menstruate.

It was felt that since religion and culture associate menstruation with being unclean, young girls were afraid to speak up when they first get their periods thinking that they have done something wrong. Thus the need to emphasise that menstruation is normal phase that every woman has to go through.

Another suggestion was made that education around menstruation should also emphasise personal hygiene and taking care of the environment. It is apparent that some women prefer rinsing blood from protection with water before they dispose of it.



In some areas this water is thrown in rivers and in streets where it contaminates clean water used by other people.

4.3 Condoms

4.3.1 Usage and reasons

Generally, the use of condoms was associated with unfaithfulness. This perception was raised in all our groups when respondents were asked about the use of condoms and reasons for usage. The perception cut across all religious and cultural groups and was mentioned by both sexes. There is a belief that when you are in a committed relationship, either married or otherwise, then you do not need to use condoms. This belief seems to be based on the notion that people who are committed to each other trust each other to act responsibly.

"I have never used it on my wife, it's only with my extramarital lover (Rural Male Ndebele, MP)".

"They are used if you think that your partner is dishonest (Rural Male, Swati, MP)".

"Most people think that when you want to use a condom it means you are now looking for an extra marital affair, it means you now want to cuckold your husband (Peri-urban Woman Zulu, KzN)".

"Some people think that if you want him to use a condom it means that you are unfaithful (Urban African Female GT)".

Although the use of condoms was generally discouraged, some nevertheless encouraged it as a form of contraception.

"We don't always use it. Only if your wife will have complications if she gets married (Moslem Male NC)".

"Sometimes people don't want any more children and the woman cannot take contraceptives (Peri-urban Coloured Female NC)".



"I have to make sure that he uses it because if he doesn't, I may get pregnant (Urban African Female GT)".

"I think that its fine to use a condom because some children are born out of marriage and that some people just want to have fun and not be responsible (Jewish Female, GT)".

Furthermore, the use of condoms was encouraged for those who are not ready to commit themselves to one partner such as the youth and single couples. This opinion was expressed mainly as a concern because of prevalence of sexual diseases. Condom usage was seen as a form of protection for such people.

"I hate condoms , but if you have to practice safe sex before marriage its ok (Jewish Female GT)".

There was also a strong sentiment in groups that given the high incidences of HIV/AIDS and other sexually transmitted diseases the use of condoms should be encouraged to minimise the spread of these diseases.

"You know condoms are really a problem for us, but I know that they are a necessity because of the diseases that we are experiencing these days, then I would say they are good when it comes to that. (Urban Zulu Female, KzN)".

"In the first place condoms were used for family planning. At the moment we use it to prevent the spread of diseases (Urban Coloured Moslem Male, NC)".

4.3.2 Disposal and reasons

4.3.2.1 How condoms are disposed of

It emerged from the groups that the common practice to dispose of condoms is by flushing them down the toilet, put in pit latrines or rubbish bins. The condom is normally wrapped first before being disposed of. In the case of waterborne toilets this is primarily done to prevent them from coming back. In other situations they are wrapped for privacy.



"To get rid of it I flush it. For me that's the right way to do it (Urban Male, NC)".

"If I had used a condom I would flush it because I believe that's the only way to really get rid of it (Urban Coloured Moslem Male, NC)".

"After using it I wrap it up and throw it in the loo (pit latrine) (Rural Male NW)".

"I would just look for a small plastic bag put it inside then toss it into the garbage bin (Peri-urban Male, KzN)".

The condoms that are normally found in the streets were attributed to overflowing rubbish bins and blockages of sewerage systems caused by lack of or poor waste and sanitation management service on the part of local government. In addition, dogs spilling over house dustbins were also cited as one reason why condoms get to be found in open public spaces.

"Yes, if you walk down the road they are lying there. There's a place opposite Homelite where young people put up shanties. Then they go up there and have sex or they use it as a dumping ground for condoms. The Council has no say over the area because they gave it to people. There is no place to dump garbage or anything (Urban Male, NC)".

Furthermore, condoms in streets were also blamed on those finding themselves in compromising situations and need to be disposed of immediately.

"I think it is just to get rid of it. You don't want evidence (Peri-urban Female, NC)".

"No. He is not going to leave it in his car. His wife is also using the car. So if you were using it in the car you just throw it out of the window. Sometimes just in town or wherever (Urban Male, NC)".



4.3.2.2 Who in the couple is responsible for disposing a condom

The groups were split on who in the couple should be responsible for disposing of the condom. There were those who felt that it should be the men's responsibility as he is the one that wears the condom. It should be noted that the groups spoke mainly about the male as opposed to female condoms.

"The man is the main person. He is responsible for the disposal of the condom. It's his mess - it's his sperm, so he must just wrap the condom and throw it somewhere (Urban Male Northern Cape)".

"I think that because I am the one who was wearing it I should be the one to take it out and dispose off of it (Peri-urban Male KzN)".

"I was the one who was wearing it so I am the one who is supposed to throw it away (Rural Male, North West)".

"The guy... It is on him... it is his responsibility (Hindu Female)".

"I refuse to take that, I mean this is his dirt, he is the one who is supposed to throw it away (Rural Female KzN)".

Equally, there were those that felt strongly that the responsibility of disposing of the condom should lie with both in a couple. Those expressing this sentiment were mostly single people not living with their partners and they felt that if intercourse takes place at a woman's house she should dispose and visa versa.

"The onus lies with people if they're educated properly, women and men. If a woman brought it then it is her responsibility to dispose of it. If it's the guy then he can do it (Urban Male NC)".

"I believe that when I am at home I should be the one to dispose of it, but if I am visiting my girlfriend she should be the one to dispose of it because she is the one who knows how they dispose of their garbage (Peri-urban Zulu Male, KzN)".



African respondents tended to feel that women should be responsible for the disposal of condoms as they are traditionally responsible for cleaning. Both men and women alike expressed this feeling. The belief is that cleaning is a woman's responsibility and thus the responsibility of disposal should be theirs.

"I believe that it should be a woman because men are not people who are capable of cleaning after themselves. They never worry themselves about housework, its always been me who is looking after the home (African Female Peri-urban KzN)".

"Since I am the one who is going to be left when he goes to work, I am the one who will have to clean (African Female Urban Gauteng)".

African males particularly those with strong African traditional beliefs preferred disposing off their own condoms because of fear of witchcraft. Those adhering to such a belief were suspicious of women whom they thought might bewitch them if they let them dispose off condoms.

"It is because I do not trust women because they might take the condom to their grandmothers so that they can bewitch the husband with those sperms that are contained in the condom (Rural Male, Venda NP)".

"I throw it away in the toilet even when I was with my extramarital lover because I am scared that I may get bewitched (Rural Male, Ndebele MP)".

"Like me, I'm talking about myself, I would be very uncomfortable throwing away my sperms, I don't know whether I'm driven by superstition because I'm a black person... I feel that there could be someone watching me who could take it and use it against me perhaps for bad luck. You find that all the time I try to make sure that I must dispose it so that no one can see it (Xhosa Male, WC)".

Even though not expressed by many respondents, there were those who felt that the location of the toilet influences who should dispose the condom. For example those with outside toilets said that men should be responsible regardless as women would be



afraid to go out in the dark. Particularly those living in peri-urban and African urban areas where toilets were mostly outside the house expressed this view.

4.3.3 Concerns associated with disposal of used condoms

There is a general perception the same as with menstruation protection that used condoms if not disposed with care can cause illnesses. This perception was raised in all the groups' discussion and was listed as a serious concern. People are particularly concerned that they might get illnesses from condoms that are disposed of carelessly in open spaces. Respondents are worried that unsuspecting children playing in streets might access these condoms and thus be infected with serious diseases such as AIDS. Thus, some respondents said that they were particularly conscious of this fact when disposing condoms.

"What if you just leave it lying there or in the bin and you child picks it up or someone else's child? What if you have AIDS and a child plays with it on a dump or something and they don't know what it is. I just rather flush it (Female, Urban, NC)".

"I don't use a bin because if you do that that would be a mess. I mean we have kids who like to dig in the garbage area and when you throw it there they would take it out... It could be children sometimes they would think that it's a balloon and then blow it. You can't know if they can be infected by that or not, that is why I believe that the toilet is the safest place for a person to dispose off a condom (Male, Peri-urban, KzN)".

"We find them lying around in the streets and children playing with them. And that worries me because I am thinking what would happen if a person who was using it is (HIV) positive, don't you think that that child is going to be infected as well".

There was also a man in North West who was concerned that his livestock might also be infected with HIV. This man felt strongly about this and no one in that group seemed to highlight that it was impossible for animals to contract AIDS.



" You find them under the trees and I think those who leave them there are those who have illicit affairs and that is dangerous because we have goats and they eat that and then find that we have to eat that goat as well. It could happen that it's a female goat and it gets pregnant with a human sperm then have strange offspring. Sometimes that person could be affected with AIDS and when you eat that goat might find that you get affected as well (Rural Male, NW)".

Those with waterborne toilets listed the blockages of toilets as a serious concern. Some said they were aware that flushing condoms was not an appropriate behaviour but felt that it is the best way to dispose of it.

" People don't really think about it but if you think about it properly, if you flush it can cause problems too. It can cause blockages in the sewage system. And if it builds up then you will find condoms washing out into the street. (Male Urban, NC)".

Even though not widely expressed, there were those who were concerned at the impact of inappropriately disposed condoms on the environment. These respondents were concerned that such condoms if not properly handled in time might contaminate rivers and underground water.

4.3.4 Religious and Cultural Taboos

There were no religious or cultural taboos found that directly influences the disposal of condoms. However religious and cultural beliefs on the use of condoms influenced people's thinking and behaviour around condoms.

4.3.4.1 Religious Influences

What was evident is that religions discourage the use of condoms for unmarried couples, as they do not encourage pre-marital sex and others such as the Catholic Church and Judaism do not believe in contraception.



"Talking about religion, in our church unmarried couples are not really allowed to use it because they are not supposed to have sexual relationships before they get married (Christian Female, NC)".

"According to the Jewish religion they do not use condoms (Jewish Female, GT)".

"... I mean husband and wife (good) right (ja) is supposed to be safe sex, it will always be safe sex (ja). The word condom does not exist in Hinduism, because there is no need for it (Hindu leader)".

Even though most religions discourage the use of condoms, the respondents belonging to different religious organisations did encourage them under certain circumstances. They strongly believed that the youth, singles and those having illicit affairs should use them to prevent unwanted pregnancies and diseases such as AIDS and other STDs.

"From a Jewish religious perspective I don't believe in it because it's like you are killing a potential life. That is, people actually shouldn't have sex before marriage but if you do being a Jewish guy or girl I think it's better to use a condom because there are diseases and pregnancy (Jewish Female, GT)".

"Okay and who uses it, so it's sexual protection, protection against AIDS, protection against pregnancy, protection against sexual diseases (Christian Female, NC)".

"People who have extra marital affairs should use condoms so as to protect themselves from AIDS and unwanted pregnancies (Christian Female NW)".

The Islamic male groups on the other hand emphasised that condoms should be used as a contraceptive for married couples only especially those with wives who can't bear children for health reasons. It should be noted here that the Islamic leader interviewed told our research team that Islam does not condone the use of condoms



"Yes. In our religion it's wrong... We don't always use it. Only if your wife will have complications if she gets pregnant (Islam Male)".

Even though religious leaders did not condone the use of condoms. Those religions that do realise the need for use of condoms also do not have policies around their disposal per se, rather, emphasis is put on personal hygiene and that people should be discreet in their practice especially when disposing used condoms. Some of them made suggestions on how condoms should be disposed.

"... To follow the tradition of the Prophet. To bury them, if we want to prevent the many contagious diseases (Islam)".

"In cases where members are using condoms they should wrap them safely and throw them into the bin (urban areas). Rural people must burn them (Catholic)".

The Hindu leader recommended that used condoms should be burned. Before they can be burned, users should first rinse them off. He further suggested that they should be treated as medical waste and should have special containers where they could be put in public places and later the municipality should burn them.

4.3.4.2 Cultural Taboos and superstitions around condom usage

There is a lot of superstitions and lack of trust around the use of condoms by Africans in rural areas especially amongst male respondents. The perception is that traditionally people have survived worse diseases without any Western medicine influence and thus they can survive current prevalent diseases such as AIDS. This people believed in the power of traditional medicines, which they testified that it can protect them from any illnesses. The belief is that anyone who has gone through initiation school will never get sick. They were suspicious of condoms and view them as interfering with their way of life.



"So when it comes to culture we know that after having sex in the morning you have to wake up and cleanse yourself. What I mean is that either I use an anus syringe or induce vomiting with African medicine, medicine that I know were used by our fore father because they told us that if we use that you wont get these illnesses that comes from sleeping with women (Zulu Male, KZN)".

Some partners both men and women reject the use of condoms for several reasons. Some claim that condoms break marriages and others said they do not get maximum sexual satisfaction when using it. Still others expressed concern that they have had experiences where condoms broke when they were making love and thus were weary of using them again as they were not entirely sure that it will protect them.

"You know concerning a condom is not an easy thing to use because you find that when you try to use it your partner would totally reject it and say she does not want to use it. The reason being that they are afraid it will break... That did happen to me I don't know why is that, we were busy having sex when we were through we discovered that it was torn (Male, KZN)".

Some respondents did not want to discuss this subject at all. They felt that sex is a private and personal matter between two people, which should not be discussed with strangers. The research team found that it is still a taboo to talk openly about sex amongst black people especially Africans living in rural areas. Only a few groups which were constituted mainly of young people were outspoken particularly those in urban townships such as Alexandra in Gauteng and Umlazi in Kwazulu-Natal.

4.3.5 Education

Just as with menstruation, respondents lamented the lack of adequate and appropriate education around the use of condoms. People lamented the fact that education and awareness campaigns emphasised usage and reasons for use and did not address the acceptable and hygienic disposal of these products. A need for such education was highly emphasised.



"The only thing they tell you about a condom is that it protects against diseases and pregnancy further than that nothing is being said... So you see they really need to educate people more about it because you do come across people who don't know anything about it. And again they need to educate people that when they are through with it they have to throw it in a safe area where children won't find it (Urban Female , KZN)".

It was also strongly felt that parents should be consulted about what their children are taught at schools. They felt that parents should have a say on the content of the subject matter. They complained that children normally come with condoms given to them at schools without prior agreement or consultation with their parents.

"One time at school there were nurse who came and taught us about protection and they gave us samples. I just took mine and put them in my uniform's pocket, and when my mother was doing laundry she found them. You could have heard her the way she went on about that, she said we were not being taught morals at school and when I tried to explain she just did not want to hear what I was saying. She thought I am going to use them, she even phoned the school to castigate them about telling us about condoms. (Urban Female, KzN)".

There were also strong feeling that religious organisations should also be consulted about the subject of condoms. They were seen as playing a crucial and influential role in the lives of the majority of South Africans. Some lamented that the policies and positions of some of these organisations were being misunderstood by many and thus not taken seriously enough. The Islamic groups in particular felt that the doctrine of their churches were being misinterpreted. For instance according to Islam sex is only allowed in marriage and premarital sex is totally discouraged. However according to respondents belonging to this faith, this is usually read to mean that the religion discourages the use of condoms altogether, which is not true.



"In our religion it gets said that you can use a condom for contraceptive purposes but not always, as you have to have family too.[It also gets used] only if your wife will have complications if she gets pregnant. Some people are sensitive to contraceptives. This thing about educating people. They don't educate them properly... Why don't they have things like that in churches? Maybe the churches do not get approached. I haven't heard of one church that has been approached (Moslem Male, NC)".

4.3.6 Summary on the issue of condoms

Although this was not a study on HIV/AIDS, what emerged during the research process was that people are concerned about being infected with HIV. The people were concerned about the possibility of being infected if they come into contact with condoms used by infected people in public places. People were particularly concerned with unassuming children who like playing with garbage in nearby garbage dumps and with dustbins in their homes.

Our respondents did not approve of condoms being disposed off in streets or in open spaces. No one wanted to take responsibility for condoms found in streets. Respondents attributed that to insufficient waste management and to dogs spilling over dustbins.

As talking openly about sex is still a taboo amongst certain religions and cultures, this has an impact in the manner in which condoms are disposed. For instance, condoms found in streets are also attributed to people who find themselves in compromising situations and need to dispose quickly without being seen. This could be an unmarried couple that do not want to be seen by others or young people who are afraid of being seen by parents.

Even though the majority of the groups constituted people who belonged to religious organizations that discourage the use of condoms, respondents encourage their usage under certain circumstances. The general feeling was that in light of the serious diseases that are prevalent in our society today, the use of condoms should be encouraged.



There was a general recognition amongst the groups that some conventional contraceptive methods approved by religious organizations do not necessarily work for all and that some couples have no other way but to resort to condoms.

The need for proper education around condoms was highlighted. There was a general feeling that education and awareness campaigns around the issue of condoms should go beyond usage and reasons for use. Education materials should also focus on the acceptable and hygienic disposal of condoms as well. The reason why condoms were found in the streets was also attributed to the fact that there is no proper information available on how used condoms should be handled.

It was strongly felt that government should begin engaging with religious and traditional leaders around this subject. This was seen as an important stakeholder that can play a major role in getting to change people's behaviour. For most people, their religious and cultural beliefs are the reality of their daily lives and anything contrary to that is viewed with suspicion. Thus, it is important to involve the leaders of such people to also dispel the myths and superstitions that have no religious or cultural basis at all.



5 AREAS OF POSSIBLE INTERVENTION

As discussed at the beginning of the report, the levels of infrastructure had more bearing on the disposal of waste generated during menstruation and sexual activities than culture, gender and religion. It is also the finding of this research that in some instances, the behaviour was largely based on ignorance. Majority of the people were not aware of the negative impact of their behaviour on the infrastructure, services and the environment. Thus, the possible intervention should be on educating the public about the appropriate behaviour of handling and disposing this type of waste. There are several ways in which this can be implemented:

- ⇒ In schools this could be taught as part of a lifeskills learning area.
- ⇒ Religious and cultural organisations to ensure that people's beliefs are not being offended.
- ⇒ Through partnerships with local NGOs and CBOs. Research has shown that people respond positively to people that they know and are used to.
- ⇒ Radio is another vehicle that can be used for education of this nature as it is the form of media that is most accessible to majority of people both in terms of reach and addressing the issue of literacy.
- ⇒ Other forms of media such as newspapers and television could also be used.

5.1 Menstruation

As far as menstrual waste is concerned, possible interventions will depend on the type of menstruation protection used, type of infrastructure available and the attitude of women. The attitudes of women are viewed as fairly consistent despite the other variables. As a result areas of possible intervention are split.

5.1.1 Water borne sanitation

In this case the first option that one must consider is whether the item can be flushed down the toilet. If this is possible a cheap and effective solution would be achieved.



5.1.1.1 Tampons

When tampons are used as a method of menstrual protection these can be flushed down the toilet. They are smaller in size than other protection methods and hence, it is unlikely that blockages will occur. On reaching the sewage works they will take longer to decompose than faeces, urine and toilet paper but they will degrade at a reasonable rate due to the fact that they are made of natural fibres.

This should be an effective method of disposal despite the numbers of people using the toilet.

5.1.1.2 Sanitary Towels

Sanitary towels should not be flushed down the toilet. They are normally substantially larger in size than tampons and they may cause blockage. Blockage is most likely to occur in the U-bend of the toilet that the item is being flushed down. This is usually the smallest bore through which sewage has to pass and also the most difficult in terms of corners. It is unlikely that blockage will occur later in the sewer system as pipes are generally substantially larger.

Another problem with flushing sanitary towels down toilets is the fact that they normally contain a plastic shield. This shield will not decompose for many years and hence will not decompose in the retention periods found in sewage treatment works. When raw sewage enters a sewage works it travels through a screening process. This removes any large items that may have been mixed with the sewage, from the flow. The screens also remove smaller items and it is at this stage that the plastic is normally removed. The screens are cleaned regularly and the screenings buried on site. The more sanitary towels that are flushed down the toilet the more screenings that need to be dealt with. There is also a chance that the small pieces of plastic will get through this screening process and enter the treatment works. As they do not break down they are likely to occur in the sewage sludge and hence the plastic may pollute the environment when this sludge is reaches its final disposal point. Where raw sewage is simply deposited at sea, these items will pollute the environment.



5.1.1.2.1 Disposal of sanitary towels in an institutional environment

Where there will be a large number of people using the toilets, such as in a school, public building, factory, offices etc, it is advisable to develop a special system for dealing with this waste. The solution used will depend on the finances and services available in the given location. If the property is in a developed urban area they may be companies that specifically deal with such waste. These companies provide bins to be placed, inside the toilet cubicle, adjacent to the toilets in which women will place their menstrual waste. They will come and empty the bins on a regular basis and take the waste away and dispose of it either by incineration or at a designated landfill. This ensures that the waste is disposed of conveniently in a discrete and hygienic manner. The only issue that this system does not address is the traditional beliefs that state that a witchdoctor can use your menstrual waste to cast spells against you. However, in this system it will be impossible to tell which item was deposited by any particular woman.

If finances do not allow this method to be used (or the number of women using the system is very small) and a municipal solid waste service collection service is provided, it is advisable to provide a bin adjacent to the toilet. Ideally the bin will be lined with a plastic bag and have a lid (operated by a foot pedal). The bin should be emptied once a week, or more often, depending on fullness. When it is emptied the bag should be tied securely and disposed of with the other 'household' waste. Ideally emptying of the bin should occur either on the day of or the day before collection. This will minimize the time that the waste is stored on the premises.

If no waste collection service is available the waste should be burned or buried.

If it is not possible to provide a bin of any sort it is advisable to provide opaque plastic or paper bags so that users can wrap their own waste and carry it with them to dispose of it themselves. In very poor areas it is sufficient to provide old shopping bags etc.

5.1.1.2.2 Disposal of sanitary towels in a home environment

In the home environment it is rarely economically viable to use a specific sanitary waste disposal service. In this case a bin may be provided adjacent to the toilet or each individual will dispose of waste themselves. The items should be wrapped and deposited with the household waste.



Where no waste collection service is provided the household is likely use either burning or burial, or a combination of these methods. Of these two options the former is preferred as the plastic contained within the STs will not decompose easily so the plastic may be dug up years later. Although, burning of waste will cause some air pollution, these items will be disposed of with minimal embarrassment.

5.1.1.3 Cloths

In areas where water borne sewerage is in operation there also must be a good water supply. Usually a sink or tap is provided near to the toilet for handwashing and this can be used to wash the cloths. Soap or detergent should be used and the user of the cloth should do the washing. It is thought that, in most cases the drying of these cloths will occur within the home environment. It will be hard to provide a discrete and safe drying venue in the public context and so people should be encouraged to do this activity at home.

5.1.1.4 Newspaper / toilet paper

Toilet paper should just be flushed away but newspaper, which is both stronger and more bulky should be treated as sanitary towels.

5.1.2 Bucket Latrines

The waste collected from bucket latrines is normally treated in the sewage works, along with waste from fully waterborne sanitation, however in this case the waste does not have to negotiate a u-bend. Therefore there will not be the problems with blockages that were mentioned when discussing flush toilets. The main worry that people mentioned in the in-depth interviews was the overflowing of the buckets. However, this problem is likely to be due to inadequate collections and not due to the disposal of menstrual waste into the buckets.

It is suggested that those recommendations outlined for fully water borne sanitation be adopted.

5.1.3 Dry on-site sanitation – Pit Latrines

In the case of pit latrines all types of sanitary protection can be disposed of in the latrine. This will provide a discrete and effective way of disposing of these articles. No-one will be in contact with the items after disposal and they are hidden from view.

There are, however, a few issues with this method of disposal:



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- Does the pit fill up much more quickly?
- Will there be any problems if the pit is excavated after it has been filled?

Addressing the first issue one must first approximate the volume of waste generated.



Box 1 :- Volume of waste created

Sanitary Towels are generally the largest form of sanitary protection.

Hence, assuming pad dimensions of 0.15m by 0.06m by 0.015m and assuming that the average woman will use up to 6 per day, menstruating for 4 days a month.

$$0.15 \times 0.015 \times 0.06 \times 6 \times 4 \times 12 = 0.039\text{m}^3$$

However, the pad will degrade naturally in the pit and substantially reduce in volume over time. Therefore assume a 60% reduction in volume.

$$\text{Total volume contained within pit / year} = 0.4 \times 0.039 = 0.0156\text{m}^3$$

Typical pit dimensions = 1.2m x 0.9m x 2m deep

Hence, the average woman will fill the pit by,

$$0.0156 / (1.2 \times 0.9) = 0.014\text{m per year with sanitary protection.}$$

Assume 8 people use each pit latrine (average number of people per household in rural areas in S.Africa). 4 will be women and only 3 (or less) will be menstruating.

Box 1 demonstrates that the use of a pit latrine as a disposal option for menstrual waste does alter its life. However, it is felt that this is still the best way to dispose of these wastes as it is discrete and convenient and ensures that the waste will not come into contact with a third party

Addressing the second issue, it is possible that the contents of the pit will be dug up at some point in the future (must be up to 2 years after the last use of the pit), maybe in order to re-use the pit. In this case the waste will be perfectly safe but the only issue is that the plastic portion of the sanitary towels will not have decomposed. This will be unsightly if the material is to be used as a soil conditioner and there could be problems if animals tried to eat this plastic. However, it is thought that this risk is low compared to other problems relating to the disposal of sanitary waste.



5.1.4 Dry on-site sanitation – other

Other types of dry on-site sanitation, such as composting toilets and urine diversion should mainly be treated as water borne sanitation except tampons should not be disposed of in the toilet. This is due to the fact that any menstrual waste will affect the end product of a soil conditioner etc and will degrade at a different rate to the faecal waste.

5.1.5 Wet on-site sanitation

In this case one can treat all types of wet, on-site sanitation the same way as they all rely on a septic tank or similar. A septic tank works in two ways by the separation of solids and by anaerobic digestion. The better the digestion is working the longer the period is between emptying. In the case of plastics etc. no digestion of these materials will take place within the tank and hence if plastics are added to the tank it will fill up quicker. There may also be problems of blockages. Therefore it is advised that the guidelines developed for waterborne sanitation systems be followed.

5.2 Condoms

There are several factors that needs to be considered in designing possible intervention with regards to the disposal of waste generated during sexual activities. These include: 1) the nature of the waste, 2) the hazards presented by the waste, 3) location at which the waste is generated, and 4) public attitudes towards the waste. It is thus difficult to form a recommendation for the disposal of used condoms taking into consideration all the above points. Although it is important to ensure that these waste do not end up lying on the ground or in direct contact with third parties, it is also important that any recommendation will actually be carried out.

However, it is recommended that after use the condom is wrapped, preferably in a plastic or paper bag, and thrown away with the waste (i.e. either collected, burnt or buried). If the household has pit latrine this should be used for disposal. In cases where people are worried about witchdoctors getting hold of these items they should burn them on their own property.

People expressed concern that the used condoms found in the street were those that had been disposed of with the waste, however, this points to a need to improve solid waste disposal practices rather than a need for a special condom disposal service! The



application of the above recommendation should be coupled with an education campaign about the risks of used condoms and the need to dispose of these items responsibly. Without this education any recommendation is unlikely to work.



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6 APPENDIX I

DISCUSSION GUIDE WOMEN'S GROUPS

1. INTRODUCTION

Thank you all for coming. My name is and I am working for a company called Social Surveys.

We are going to have a sensitive discussion dealing with things we don't usually talk about, i.e materials generated during menstruating and sexual intercourse. However as we are all women together it shouldn't be a problem.

There are no right and wrong answers; people have their own opinions so if you disagree with something I say or with what anybody else in the group says, please feel free to say what you think - this will make the discussion more interesting, and we value everybody's opinion.

Everything said in this discussion will be treated as confidential by the researchers. That means that nobody will be identified in person - we are not interested in who said what. So your names will never be linked to what you have said. When we report on the findings, we will make sure that everybody remains anonymous.

I am going to record our discussions. Please note that it is only for research purposes - only researchers will listen to the tapes, and nobody will be able to identify you by name on the tape. I have to record the discussion so that I can remember what was said afterwards and I don't have to spend time taking notes here. I will get the discussion going by asking you general questions about yourselves:

Please will each of you introduce yourselves, tell us where you live and who you live with.



2. INFRASTRUCTURE

- ⇒ The implications of the disposal of menstruation waste and used condoms on different types of toilets
 - ⇒ The implication of different disposal methods on the infrastructure
1. a. Lets start off by talking about the type of areas you each live in and the type of houses in those areas.
(Probe: formal, informal, land tenure – ownership / renting etc.)
 - b. What about the levels of infrastructure in your area?
(Probe different types of infrastructure, i.e water services, electricity, roads, etc.).
(What services are available, and problems experienced with infrastructure)
 2. Now lets talk more specifically about the types of toilets you have
(Probe: different types of toilets)
(Probe: ratio of people to toilets, in your home, problems they may experience, are their toilet working, how many of them are not working, what causes the problems)
 3. Do you have garbage removal services in your home?
(Probe if not what is done with garbage, if yes how frequently do they collect it.)
(Probe: what problems do people experience with garbage removal
(Probe: Tell me more..., what do you mean..., why)



Part 1 MENSTRUATION PROTECTION

3.USAGE

“We have spoken about toilets and garbage services, we now would like to speak about menstruation. We know this is a very sensitive topic, but please do not be shy because we won't reveal your identity. We want you to be open in what we are about to discuss”

1. Tell me about the menstruation protection you use?
(Probe – pads, tampons, tissues, toilet paper, cloth etc)
(Probe why do they use those products)
(Are different types of protection used at different times and are they disposed of differently?)

NOTE: Display different products and ask respondents to show what they use

2. Thinking about your home situation, how do you dispose used menstruation materials?
(Probe: tell me more ... why do you dispose them in that way)
(What problems do you experience? – probe around problems and implications of that particular means of disposal)
(What do other family members feel about the way you dispose these materials?)
3. Thinking about other places outside your home where you might have to dispose these materials, lets identify those and discuss what you would do in that situation.
(Probe: work, school, church, temple, mosque, friends house, public places)
(Probe: How do you dispose in those situations)
(Probe: What are the implications)
(Probe: What problems do you experience in disposing materials in any of these places)
4. What do other people (friends, colleagues, neighbours etc.) do with used menstruation products?
(Probe: Where and how do they dispose them?)
(How do they feel about that?)
(Probe: tell me more..., what do you mean...)



4. CULTURE & RELIGION

1. Different cultures and religions approach these issues differently.

Are there any particular cultural or religious beliefs that impact on the use and or disposal of used menstruation products protection?

(Discuss)

(Probe; are there things you are supposed to do and things you are not supposed to do)

Note: Discuss in detail cultural and religious taboos of particular group. Probe thoroughly bearing in mind the sensitivity of the topic. And do not question their beliefs

5. GENERAL

Thinking now more generally about the community or areas where you live.

Are there any other problems that we have not discussed regarding the disposal menstruation materials?

(Probe: tell me more..., what do you mean...)



Part 2 CONDOMS

6.USAGE

We have been speaking about menstruation protection. We are now going to discuss condoms. Again, we are aware that this is a very personal matter, but we would like you to be open and honest about what we are about the use of condoms.

1. Thinking about the use of condoms, let's talk about different circumstances in which people use condoms, and might need to dispose of them.
(Probe - underage, singles, unmarried couples, married couples, dating young couple, illicit couples, prostitute, homosexual couples)
2. Thinking about the different situations we spoke about, where do people dispose used condoms in these circumstances
(Probe - What are the implications of such disposal?)
3. Who in the couple is usually responsible, if any for using a condom? And who is responsible for disposing the condom?
(Probe - tell me more..., why)

7.CULTURE & RELIGION

1. Once again, different cultures and religious groups deal with this subject differently, are there any beliefs that impact on the disposal of condoms / What about taboos)
(Discuss)
(Probe about particular beliefs, what are those, do they adhere to them)

8.GENERAL

Thinking more generally about the community or area in which you live, are there any other problems that you can think of that relates to the disposal of condoms.

[Close interview]



7 APPENDIX II

DISCUSSION GUIDE MEN'S GROUPS

1. INTRODUCTION

Thank you all for coming. My name is and I am working for a company called Social Surveys.

We are going to have a sensitive discussion dealing with things we don't usually talk about, i.e materials generated during menstruating and sexual intercourse. However, I think that together we can be able to handle this topic.

There are no right and wrong answers; people have their own opinions so if you disagree with something I say or with what anybody else in the group says, please feel free to say what you think - this will make the discussion more interesting, and we value everybody's opinion.

Everything said in this discussion will be treated as confidential by the researchers. That means that nobody will be identified in person - we are not interested in who said what. So your names will never be linked to what you have said. When we report on the findings, we will make sure that everybody remains anonymous.

I am going to record our discussions. Please note that it is only for research purposes - only researchers will listen to the tapes, and nobody will be able to identify you by name on the tape. I have to record the discussion so that I can remember what was said afterwards and I don't have to spend time taking notes here. I will get the discussion going by asking you general questions about yourselves. Please will each of you introduce yourselves, tell us where you live and who you live with.



2. INFRASTRUCTURE

The implications of the disposal of menstruation waste and used condoms on different types of toilets

The implication of different disposal methods on the infrastructure

1. a. Lets start off by talking about the type of areas you each live in and the type of houses in those areas.
(Probe: formal, informal, land tenure)
 - b. What about the levels of infrastructure in your area?
(Probe different types of infrastructure, i.e water services, electricity, roads, etc.).
What services are available, and problems experienced with infrastructure)
2. Now lets talk more specifically about the types of toilets you have
(Probe: different types of toilets)
(Probe: ratio of people to toilets, in your home, problems they may experience, are their toilet working, how many of them are not working, what causes the problems)
3. Do you have garbage removal services in your home,
(Probe if not what is done with garbage, if yes how frequently do they collect it.)
(Probe: what problems do people experience with garbage removal
(Probe: Tell me more..., what do you mean..., why)



Part 1 CONDOMS

3.USAGE

We have spoken about toilets and garbage services, we now would like to speak about condoms. We are aware that this is a very sensitive and personal issue, but we would like you to be open and honest in our discussion.

1. Thinking about the use of condoms, let's talk about different circumstances in which people use condoms, and might need to dispose of them.

(Probe _ underage, singles, unmarried couples, married couples, dating young couple, illicit couples, prostitute, homosexual couples)

1. Thinking about the different situations we spoke about, where do people dispose used condoms in these circumstances?

(Probe _ What are the implications of such disposal?)

2. Who in the couple is responsible if any for using a condom? And who is responsible for disposing it?

(Probe _ tell me more_, why)

4.CULTURE & RELIGION

1. Different cultures and religions deal with this subject differently, are there any beliefs that impact on the use and disposal of condoms / What are the taboos?

(Discuss)

(Probe about particular beliefs, what are those, do they adhere to them?)

(Probe: tell me more_, what do you mean_)

Note: Discuss in detail cultural and religious taboos of particular group. Probe thoroughly bearing in mind the sensitivity of the topic. And do not question their beliefs

5.GENERAL

Thinking more generally about the community or area in which you live, are there any other problems that you can think of that relates to the disposal of condoms.



Part 2 MENSTRUATION PRODUCTS

6.USAGE

We have been speaking about condoms. We are now going to discuss menstruation protection. We know this is a subject that men usually do not talk about, but we would like to hear your feelings about it as all of you have relations with women in one form or another?

1. Tell me about the menstruation protection that women use (it could be wife, girlfriend, sister, mother, aunt, friend) use?
(Probe – pads, tampons, tissues, toilet paper, cloth etc)
(Probe – do you know why they use that protection) (Tell me more...)
2. Thinking about your home situation, how do women in your household dispose of those menstruation materials?
(What problems do you experience with the disposal? – probe around problems and implications of that particular means of disposal)
(Does it bother you? Do you speak to the women in your home about how they dispose these materials?)
(What do other family members feel about the way they dispose these materials?) (Do you talk about this subject at all in your home)
3. Thinking about other places outside your home where these materials have to be disposed, lets identify those and discuss what women would do in those situation.
(Probe: work, school, church, temple mosque, friends house, public places)
(Probe: How do they dispose in those situations)
(Probe: What are the implications:)
4. What do other men you know say about this matter?
(Probe: How do they feel about that, tell me more...)



7. CULTURE & RELIGION

1. Once again, different cultures and religions approach these issues differently, are there any particular cultural or religious beliefs that you know of that impact on the disposal of used menstruation materials?

(Discuss)

(Probe: are there things that women are supposed to do and things that they are not supposed to do)

[close interview]



8 APPENDIX III

The interviewer will introduce himself to the relevant religious leader and provide some explanation about the project (*to undertake research into the hygienic and acceptable disposal of waste generated during menstruation and sexual activities*). Inform the informant that the research is conducted on behalf of National Sanitation Co-ordination Council, NaSCO, which is the executive arm of the National Sanitation Task Team comprising of government departments of Health, Education, Housing, Water Affairs and Forestry and Environmental Affairs and Tourism.

Thereafter, explain the purpose of the interview (to explore the religious doctrine of a particular religion concerning the disposal of materials generated during menstruation and sexual intercourse).

The interview will then tell the informant that he would like to explore his organisation's (this could be Catholicism, Anglicanism, Islam, etc.) doctrine on this particular issue and for suggestions on the acceptable and hygienic way of disposing these materials.

The interview schedule is unstructured allowing the interviewer to explore and probe relevant issues for the different religious organisations.



INFORMATION ABOUT THE ORGANISATION

- a. Could you please give us some information about your organisation (Catholic Church, Anglican, Methodist, CAIC, ZCC).

(Probe: What is your membership in SA? Female / Male / Youth membership? Cultural diversity _ language and racial groups)

DISPOSAL OF MATERIALS GENERATED DURING MENSTRUATION

1. Thinking about menstruation and the practices around how menstruation is approached, is there any beliefs or practices that your organisation encourages or discourages?
2. What about the disposal of products used during menstruation, what is your church / organisation response to this? Are there different practices that are encouraged or discouraged?

Probes:

Explore in detail

What are the beliefs?

On what are these beliefs based? (Verses in the bible / Koran / or any other traditions)

What positive aspects can be identified

Delineate problems from within the church – given different cultures of members

Are ministers aware of this doctrine?

How is the doctrine taught to members in congregations?

3. What practices would you personally encourage as a leader around menstruation?
4. What problems do you personally see regarding the disposal of materials generated during menstruation?
What do you think is the best way of dealing with these problems?



3.DISPOSAL OF MATERIALS GENERATED DURING SEXUAL INTERCOURSE

- a. Thinking about condoms and the practices around how condoms are approached, is there any beliefs or practices that your organisation encourages or discourages?
- b. What about the disposal of condoms, what is your church / organisation response to this? Are there different practices that are encouraged or discouraged?

Probes:

Explore in detail

What are the beliefs?

On what are these beliefs based? (Verses in the bible / Koran / or any other traditions)

What positive aspects can be identified

Delineate problems from within the church – given different cultures of members

Are ministers aware of this doctrine?

How is the doctrine taught to members in congregations?

- c. What practices would you personally encourage as a leader around condoms?
- d. What problems do you personally see regarding the disposal of condoms?
- e. What do you think is the best way of dealing with these problems?

{Note: BE CAREFUL WITH THE LANGUAGE HERE AS MOST RELIGIONS ARE AGAINST CASUAL SEX, THUS THE USE OF CONDOMS MIGHT OFFEND ORTHODOX RELIGIONS}



4. SUGGESTIONS ON SOCIALLY ACCEPTABLE SYSTEM

- a. Could you make any suggestions on the socially acceptable and hygienic practices for safe disposal of these materials? (Probe: *How should these be implemented and by whom? What method should be used to implement such practices?*)
- b. Is there any other thing that we have missed that you feel is important for this research?

Thank you very much for your contribution in this research.

Close interview



9 APPENDIX IV

The interviewer will introduce him or herself to the relevant official and provide some explanation about the purpose of the project (to undertake research into the hygienic and acceptable disposal of materials generated during menstruation and sexual intercourse).

The interviewer will inform the informant that the research is conducted on behalf of the National Sanitation Co-ordinating Council (NaSCO), which is the executive arm of the National Sanitation Task Team comprising of government departments of Health, Education, Housing, Water Affairs and Forestry, Environmental Affairs and Tourism and other stakeholders such as Mvula Trust.

Thereafter the interviewer will explain the purpose of the interview – to explore the current problems that local government experiences around issues of sanitation in general and in the disposal of sanitary pads and condoms. The interviewer will also let the informant know that we would welcome suggestions on the acceptable and hygienic way of disposing these materials.

INFRASTRUCTURE

- a. Let us start off by talking about the area that falls under your municipality and the type of houses in your area? (*Probe: formal / informal, land tenure*)
- b. What about the levels of infrastructure in your area? (*Probe: different types of infrastructure, i.e water services, electricity, roads, etc.*)
- c. Do you have garbage removal services in your area? (*Probe: How frequently is it collected? What problems does the local authority experience with garbage removal? Do people pay for the service and how well do they pay?*)
- d. Lets talk more specifically about the types of toilets people use in your area?

Probe

Different types of toilets – pits, flushable, bucket, etc

Problems experienced with the type of toilets

Are toilets working, what causes them not to work

