

**INFLUENCE OF SANITARY TOWELS ON GIRL CHILD  
PERFORMANCE IN PRIMARY SCHOOL: A CASE OF THE  
GIRL CHILD IN TANA RIVER DISTRICT**

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**BY  
OLOO SUSAN LIDIA**

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**A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT  
OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS  
DEGREE IN PROJECT PLANNING AND MANAGEMENT OF THE  
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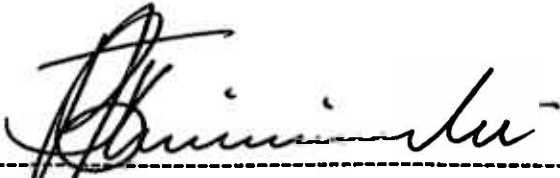
## DECLARATION

I declare that this is my original work and has not been submitted to any other institution or University therein for the purpose of examination or otherwise

SIGNATURE----------Date-----10/9/2010-----

**OLOO SUSAN LIDIA**  
**REG.NO.L50/71322/2009**

This research project report has been submitted for examination with our approval as University supervisors.

SIGNATURE:----------DATE-----10/9/2010-----

**MR.JOHN BOSCO KISIMBII**  
**Lecturer, Department of Extramural Studies**  
**University of Nairobi**

SIGNATURE----------DATE-----13/09/2010-----

**DR. MOSES OTIENO**  
**Lecturer, Department of Extramural Studies**  
**University of Nairobi.**

## **DEDICATION**

**Dedicated to my daughters Charleen Daisy and Shirley Wandera**

## **ACKNOWLEDGEMENT**

I thank God for the grace to have been able to present this work. I also owe immense gratitude to Mr. John Bosco Kisimbii and Dr. Moses Otieno who took their time to appreciate this work and contribute to its improvement and eventual outcome. Their guidance has enabled me to grow academically not only in knowledge but also in skills and attitude. My heartfelt gratitude to my Husband Patrick Barasa for his financial and moral support. I thank my sister, Evelyn Oloo, for the continuous moral and spiritual support she has given. I also acknowledge the help and constant encouragement I received from my siblings, professional colleagues, friends and respondents who willingly agreed to be interviewed and also share their thoughts and experiences on the subject matter of this study. Sincere gratitude also goes to Roselyn Muteru for her technical assistance in editing the project report and Sheikh Maro for assisting in administering the questionnaire.

Though he may not be here today, I thank my late father, Mr. Thomas Oloo, for always believing in my potential and heartening me to always strive for the best.

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## **ABBREVIATIONS AND ACRONYMS**

<b>GCN</b>	:	<b>The Girl Child Network</b>
<b>FAWE</b>	:	<b>The Forum for African Women Educationist</b>
<b>FAWE U</b>	:	<b>FAWE Uganda</b>
<b>WHO</b>	:	<b>World Health organisation</b>
<b>GOK</b>	:	<b>Government of Kenya</b>
<b>NGO</b>	:	<b>Non Governmental Organisation</b>
<b>EFA</b>	:	<b>Education For All</b>
<b>UNICEF</b>	:	<b>United Nations International Children Emergence Fund</b>
<b>MDG</b>	:	<b>Millenium Development Goals</b>
<b>HIV</b>	:	<b>Human Imuno Deficiency Virus</b>
<b>AIDS</b>	:	<b>Acquired Immunodeficiency Syndrome</b>

## **ABSTRACT**

The purpose of this study was to investigate the relationship between availability of sanitary towels and their influence on the performance of the girl child in primary schools and come up with possible ways of providing sanitary pads to girls in school as a key component towards not only overcoming the girls poor performance in examinations in primary school in Kenya but the way to reduce high rates of absenteeism, low self esteem in girl child and poor performance in extra-curriculum activities.

This research was conducted in six zones in Tana River District. The sample for the study comprised of one hundred and twenty girls. The data was obtained from self administered questionnaires to the girls.

A pilot test was conducted with twenty girls from Tana Delta District and this contributed to the improvement of the research items in questionnaires. The data collected was analysed using descriptive statistics measures, namely frequency distribution and percentages.

The study revealed that girls in primary school lack sanitary pads. This affects their performance in examination, extra curriculum activities and social life in school. It established that girls have low self esteem, absent from school at least four days in a month, they shy from participating in sports and clubs, incur abdominal pain and cramps and hence cannot concentrate in their class work. This has greatly contributed to the poor performance of the girls in the district in academic.

The researcher recommended several ways through which girls in primary school can be provided with sanitary towels.

The government should allocate a vote head from free primary education fund to cater for sanitary towels to all girls who have started menstruation in primary school or Introduction Affordable Pads.

All NGO'S operating in primary school in Kenya to include a component of sanitary towels provision to girls in order to help improve girl child attendance in school. They should also assist in building toilets and providing water by drilling.

# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the study**

A menstrual pad is worn during a woman's period to absorb her menstrual flow. It is worn externally, between the vulva and a woman's undergarment, unlike tampons which are worn inside the vagina. Menstrual pads are made from a range of materials, differing depending on style, country of origin, and brand. Brands include Kotex, Always, Lilets and Stayfree (schueller J.Family life Education.2006).

Through the ages women have used different forms of menstrual protection. Menstrual pads have been mentioned as early as the 10th century, in the Suda, where Hypatia, who lived in the 4th century AD, was said to have thrown one of her used menstrual rags at an admirer in an attempt to turn him off. The Museum of Menstruation has articles and photos of some early forms of menstrual protection, including among other things knitted pads and menstrual aprons. Women often used strips of folded old cloth (rags) to catch their menstrual flow, which is why the term "on the rag" is used to refer to menstruation.

Disposable menstrual pads grew from Benjamin Franklins' invention designed to save soldiers with buckshot wounds, but appear to have been first commercially available from around 1888 with the Southall's pad. The first commercially available American disposable napkins were Lister's Towels created by Johnson & Johnson in 1896. Disposable pads had their start with nurses using their wood pulp bandages to catch their menstrual flow, creating a pad that was made from easily obtainable materials and inexpensive enough to throw away after use. Kotex's first advertisement for products made with this wood pulp appeared in 1921. Several of the first disposable pad manufacturers were also manufacturers

of bandages, which could give an indication of what these products were like.

Until disposable sanitary pads were created, cloth or reusable pads were widely used to collect menstrual blood. Women often used a variety of home-made menstrual pads which they crafted from various fabrics, leftover scraps, grass, or other absorbent materials, to collect menstrual blood. Many probably used nothing at all. Even after disposable pads were commercially available, for several years they were too expensive for many women to afford. When they could be afforded, women were allowed to place money in a box so that they would not have to speak to the clerk and take a box of Kotex pads from the counter themselves. It took several years for disposable menstrual pads to become commonplace. However, they are now used nearly exclusively in most of the industrialized world.

The first of the disposable pads were generally in the form of a cotton wool or similar fibrous rectangle covered with an absorbent liner. The liner ends were extended front and back so as to fit through loops in a special girdle or belt worn beneath undergarments. This design was notorious for slipping either forward or back of the intended position.

Later an adhesive strip was placed on the bottom of the pad for attachment to the saddle of the panties, and this became a favoured method with women. The belted sanitary napkin quickly became unavailable after the mid-eighties.

The design and materials used to make pads also changed through the 1980s to today. With earlier materials not being as absorbent and effective, and early pads being up to two centimeters thick, leaks were a major problem. Some variations introduced were quilting of the lining, adding "wings" and reducing the thickness of the pad by utilizing products

such as sphagnum and polyacrylate superabsorbent gels derived from petroleum. The materials used to manufacture most pads are derived from the petroleum industry and forestry. The absorbent core, made from chlorine bleached wood pulp, could be reduced to make slimmer products with the addition of polyacrylate gels which sucks up the liquid quickly and holds it in a suspension under pressure. The remaining materials are mostly derived from the petroleum industry; the cover stock used is polypropylene non woven, with the leak proof barrier made from polyethylene film. The extraction, production and manufacture of these plastics contributes Nitrogen oxide, sulphur dioxide and Carbon dioxide - ozone depleting gases; human toxins that lead to cancer and birth defects as well as chemicals that cause the acidification of trees. The high plastic content of these products ensures they remain in our environment for centuries as they are neither biodegradable nor recyclable. Disposal of used sanitary products by flushing out into the oceans of the world, incinerating or depositing in landfill creates various pollutants including dioxins deposited in the sea through sewerage waste and air pollution from incinerators.

Cloth menstrual pads made a comeback around the 1970s, with their popularity increasing in the late 80s and early 90s. Some popular reasons why women choose to switch to cloth menstrual pads include the following: comfort, savings over time, environmental impact, and health reasons.

There are many styles of cloth menstrual pads available today. Popular styles of cloth menstrual pads include all-in-one, or AIO pads, in which the absorbent layer is sewn inside the pad, 'inserts on top' style pads, which have absorbent layers that can be secured on top of the pad as needed, envelope or pocket style pads, which have absorbent layers that can be inserted inside the pad as needed, and a foldable style, in which the pad folds around the absorbent layers. Cloth menstrual pads can have



waterproof lining, which provides more leak protection but may also be less breathable.

In underdeveloped countries, reusable or makeshift pads are still used to collect menstrual blood. Rags, soil, and mud are also reportedly used for collecting menstrual flow.

Despite the Kenyan government's abolition of user fees, more than 800,000 children continue to miss out on an education, particularly girls. A CEF partner, the Girl Child Network (GCN), investigated why girls were still out of school despite free education. A key finding pointed to something that no policy maker had previously identified. During menstruation, girls refused to go to school because there were no appropriate or adequate sanitation facilities. Because of the high cost of sanitary towels, girls from poor families continue to use unhygienic sponges; mattresses, tissue paper and even leaves— and most avoid school all together during their menstrual period.

The study indicated that, “a girl absent from school due to menses for four days in a month of 28 days loses 288 lessons in a calendar year – that is 192 hours of missed learning due to absence from school.”The CEF/GCN initiative became a major campaign dubbed the”sanitary towels campaign”, targeting policy makers and the general public to raise awareness and demand action. The campaign was widely aired in the national media, resulting in the Ministry of Finance agreeing to cancel the 16% VAT on sanitary pads. The private sector also stepped in and distributed free sanitary pads to 500,000 school-going girls to improve their attendance. The media and public debate helped to de-stigmatise the issue and helped girls break their silence on other sexual and reproductive health issues. GCN mentored school girls on sexual maturation and their rights, as well as helping demystify the use of sanitary towels in communities that had previously refused to stock them in shops.GCN

lobbied the government to allocate budget for provision of sanitary towels to girls in schools, successfully gaining an allocation of Ksh 165,000 (about US\$2,300) for 2007/2008. The Ministry of Education (MoE) felt compelled to formulate a gender policy in education to address the issues raised. The policy is now in place. In partnership with the MoE, GCN produced materials addressing factors that hinder girls performance and retention in schools. GCN worked with communities to build girl-friendly latrines in 25 schools. The MoE has taken this up as an example of best practice in promoting gender parity in education and GCN has used the success of the sanitary towel campaign to influence others in Zambia, Uganda and Ethiopia to do the same. (Mwendwa et al 2008 p.20)

### **Tana River District**

The Tana River District was carved out in 2007 from the mega district that used to enjoin it to the Tana Delta District and Bura District. The district has retained with the former District headquarter but without Bura and the delta that is a common use area for the communities inhabiting the area. However, the new Tana River Districts remained with important natural resources and high biodiversity hotspots that can be used for socio-economic development of the residents. Of great importance are wildlife areas of conservation concern including the Kora, Arawale and the Tana Primate National Reserves. These areas are of international conservation importance due to the unique biological diversity they harbour including the hunter's heartbeast (Hirola), Tana River Red Colobus monkey and the Tana River Crested Mangabey among others.

Tana River is one of the least populated districts in Kenya with a total population of about 250,000 mostly concentrated along the river and the small urban centers. The population in Tana River District is not static; there is great infiltration of outsiders especially the nomads from the

neighboring districts are settling in the district in search for pasture and water for their livestock.

Tana River district is inhabited by various ethnic groups. The main ones include the Pokomo, Orma, Wardei, Somalis, Malakote, Munyoyaya, Wata, Bajuni and Miji Kenda. They are engaged in various economic activities. The Pokomo, Munyoyaya, Malakote and Miji Kenda for instance, are involved in farming activities, while the Orma, Wardei and Somalis are mainly cattle keepers. Most of the villages are found along the River Tana where farming is favourable. The pastoralists are mainly found in the hinterland and live in manyattas concentrated around watering points like dams, wells and boreholes and pasture.

The poverty level in Tana River is very high. It is estimated that 72% of the total district population live below poverty line (GOK-1997). Droughts, coupled with conflicts are partly responsible for the high poverty incidence. Most of the poor people depend on relief food. The main economic activities of the district are small-scale subsistence agriculture along Tana River, nomadic livestock activities in the rangeland and fishing along the river and coastal strip. There were two major irrigation schemes i.e. Bura and Hola but they collapsed in early 1980's though construction work to revive them has started.

Tana River District is ranked 40 of the 45 poorest districts in Kenya. 72% of the total population lives below the poverty line according to the 1997 poverty survey. (GOK-1997) More than three-quarters of the district population are unable to afford the minimum human basic needs and services including food, clothing, shelter, education, health services, water and sanitation. The 72% of the population rated as absolute poor translates to about 108,000 people of a possible population, out of which 36.3% are females and men contribute to 36.0%.

The major cause of poverty in the district is due to poor governance in the country. There is inequality in distribution of resources that has resulted to development in other district in expense of the other. This has been compounded by poor political will and corruption.

Women and children are the most affected. The high illiteracy rate is a major contributor to the poverty situation in the district. Others are women not participating in decision-making, incidents of diseases like malaria, typhoid and HIV/AIDS, and the lack of credit facilities. Bangale Division has the highest poverty level followed by Madogo, Bura, Wenje and Galole.

The larger Tana River district has a total of 77 public primary schools and 10 secondary schools. The District's total school enrolment is 15,395 pupils (8,839 boys 6,556 girls) for ECD. 20,748 children( 11,470 boys and 9,278 girls ) in primary and 2,376 students (1,356 boys and 1,020 girls) in secondary. There was 40.5 % increase in enrolment from 2002 to 2003 and 18.2% increase from 2003 to 2004, mainly due to the start of free primary education. The annual increase leveled off from 2005 to date, growing at less than 10% per annum. secondary school enrolment has increased at a lower rate, the highest being 12% (from 1744 students 2002 to 1954 in 2003) between 2002 and 2003 while the lowest at 0.6%(from 2363 students in 2006 to 2376 in 2007) between 2006 and 2009 enrolment of girls is lower than that of boys at primary school(44% girls ,56 % boys ) and secondary school(42.9% girls,57.1% boys ) efforts should continue to encourage girls education.

Daily attendance in Bura, Madogo / Bangale and Galole divisions are stable while in Garsen / Tarasaa and Kipini divisions, a slight fluctuation in attendance. The reduced attendance in term one 2009 was attributed to pupils opting to engage in activities to supplement household food sources. Some of the activities identified included fishing and mangoes

harvesting. The relatively high and stable attendance in the district is attributed to free primary education and school meals programme.

Tana River district is one of the districts where pupils perform poorly in the national examination in the country. The schools are poorly equipped with inadequate teaching staffs. Some of the outdated cultures still exists in some communities. This has more negative effects to the girl child, these includes female circumcision, belief that when girls are educated they become prostitutes, forced marriage at a tender age and doubling school work and house chores.

**Table 1.1 Annual Mean Scores For Tana River District by Gender**

YEAR	STD 1		STD 2		STD 3		STD 4		STD 5		STD 6		STD 7		STD 8	
	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
2009																
Galole Central	80	85	90	91	94	80	94	50	92	50	70	40	70	45	65	40
Galole North	80	81	90	91	88	87	89	60	50	44	70	50	70	50	73	32
Galole south	80	83	91	92	90	84	90	50	45	49	79	45	87	49	75	46
Galole North	70	80	95	90	91	86	91	40	50	40	89	40	70	55	70	50
Bura North	90	85	90	96	90	90	95	54	45	47	85	54	75	35	62	43
Bura south	95	95	93	97	90	82	94	55	50	42	79	59	80	40	44	43
Madogo	70	80	90	90	90	85	99	50	45	45	80	54	82	22	55	40
YEAR	STD 1		STD 2		STD 3		STD 4		STD 5		STD 6		STD 7		STD 8	
2008	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Galole Central	90	92	90	80	91	90	80	40	70	43	80	50	80	50	65	40
Galole North	98	97	94	90	80	90	80	57	73	52	84	50	74	45	68	34
Galole south	90	93	95	98	90	90	82	68	76	50	86	52	78	50	74	40
Bura North	92	90	89	80	90	89	89	67	77	47	70	54	85	45	63	54
Bura south	80	91	80	90	89	90	85	60	89	50	76	44	82	40	60	40
Madogo	97	97	80	87	90	87	88	78	80	45	77	64	80	43	58	39
YEAR	STD 1		STD 2		STD 3		STD 4		STD 5		STD 6		STD 7		STD 8	
2007	B	G	B	G	B	G	B	G	B	G	B	G	B	G	B	G
Galole central	92	91	90	80	91	90	85	50	70	53	80	50	70	60	68	46
Galole North	95	90	94	90	80	90	88	57	73	42	84	50	74	65	69	44
Galole south	91	93	95	98	90	80	89	58	76	50	86	52	78	50	54	45
Bura North	98	92	89	80	90	89	84	47	77	57	70	54	85	45	63	50
Bura south	88	90	80	90	89	60	88	60	89	50	76	44	82	40	57	44
Madogo	93	90	80	87	90	76	82	58	80	45	77	54	80	43	55	35

Source :Tana River District Education Education office 2010.

## **1.2 Statement of the Problem**

Despite the Kenyan government's abolition of user fees, more than 800,000 children continue to miss out on education, particularly girls. A key finding by Mwendwa et al 2008 points to something that no policy maker has previously identified. During menstruation, girls refuse to go to school because there are no appropriate or adequate sanitation facilities. Because of the high cost of sanitary towels, girls from poor families continue to use unhygienic sponges, mattresses, tissue paper and even leaves and most avoid school all together during their menstrual period. (Mwendwa et al 2008)

Research conducted by a non-governmental organization, the Forum of African Women Educationist (FAWE) in 2004, reveals that the lack of sanitary pads, coupled with other factors like the absence of water or separate toilet facilities for Girls in Many schools, is responsible for drop out rate. Despite tax waivers introduced to reduce the cost of sanitary pads, finding money to buy each month is a challenge for many grown women, never mind pre-teen girls.

Another survey undertaken by Girl Child Network (GCN) on gender equity and equality in free primary Education in Kenya in 2004 revealed that girls' attendance and performance in school was adversely affected by the lack of sanitary wear, as well as other cultural factors. It is in this revelation of lack of sanitary protection that discourages girls to attend school , this brings us to realization that a girl who remains at home for four days each month losses a total of 36 learning days and lower her self-esteem, militates girls retention and transition rates

This study therefore aimed at investigating availability of sanitary pads and their influence on girls' child performance in primary school.

### **1.3 Purpose of the Study**

The purpose of this study was to investigate the relationship between availability of sanitary towels and performance of the girl child in primary schools and came up with possible recommendation of addressing the problem.

### **1.4 Objective of the Study**

The study was guided by the following objectives:

1. To investigate the relationship between availability of sanitary towels and performance of the girl child in primary school.
2. To explore the influence of sanitary facilities on performance of the girl child in primary school.
3. To establish the influence of Government and NGO'S in provision of sanitary towels on girls performance
4. To determine the influence of school management interventions in sanitary towel provision and their effect on performance of girls.

### **1.5 Reserach Questions**

1. The study sought to answer the following questions:
2. How does availability of sanitary towels influence the performance of girl child in primary school ?
3. To what extend does availability of sanitary facilities effect the girl child performance in primary schools?
4. In which ways does the government and NGO'S assist in the provision of sanitary towels ?
5. How does the school management committe ensuring that girls get sanitary towels

## **1.6 Significance of the Study**

The study would help make the girl child feel positive in life and caring for the needs of the less destitute children in the society thus providing them with the essential commodity.

It will help the Government and Non – Governmental Organization come up with Programmes which will enhance and educate the general public of how important these sanitary towels are to the girl child.

Make major contribution to the literature that currently exist on effects of menstrual cycle on girl child performance in school

The local community may use the information to understand the impact of sanitary towels and reduce these conflicts on the girl child's life.

## **1.7 Delimitation of the Study**

The girls had very high hopes when they were involved in interviews concerning sanitary towels hence expected to be given some. Some girls viewed the study as an appraisal and therefore not responding objectively. However the questionnaires item were designed in such way that they counter check previous responses given.

## **1.8 Limitations of the Study**

Key limitations of the study included limited time and resources for actual field study where the researcher was required to make several visits to participating schools to administer the questionnaires.

To be able to address the issue of time constraint the researcher had to work during weekends and some time work late at night to complete the report

## **1.9 Assumption of the Study**

The researcher had the following assumptions, that girls have difficulty accessing sanitary towels. Lack of sanitary towels impacts negatively on girl child performance in school and the information given by the



respondents will assist the researcher in investigation of availability of sanitary towels and their influence to girl child performance in primary school

### **1.10 Definition of Significant Terms**

**Menstruation-** Menstruation is a woman's monthly bleeding. Every month, a woman's body prepares for pregnancy. If no pregnancy occurs, the uterus sheds its lining. The menstrual blood is partly blood and partly tissue from inside the uterus, or womb. It passes out of the body through the vagina. Periods usually start around age 12 and continue until menopause, at about age 51.

**Dysmenorrhea** - is a medical condition characterized by severe uterine pain during menstruation. While most women experience minor pain during menstruation, dysmenorrhea is diagnosed when the pain is so severe as to limit normal activities, or require medication.

**Sanitary pads-** A sanitary napkin, sanitary towel, sanitary pad, Maxi pad (U.S.), menstrual pad, or pad is an absorbent item worn by a woman while she is menstruating, recovering from vaginal surgery, for lochia (post birth bleeding), abortion, or any other situation where it is necessary to absorb a flow of blood from a woman's vagina.

**Menarche** - is a term referring to the first menstrual period.

### **1.11 Organization of the Study**

In Chapter one the study presents the background of the study, outlining the problem statement and significant of the study. The chapter further states the objective that guide the study in assessing availability of sanitary towels and their influence on girls child performance in primary school which acted as a guide for the research. In chapter two the study present a

review of Literature with particular focus on the influence of sanitary towels on girl child performance in school. The chapter provide an in depth analysis of development of sanitary towels,types of sanitary towels and how they enhance girls confidence.

Chapter three examines the reseach design,location of the study,population,sample size,data collection and data analysis procedures that were used during the study.Chapter four presents the findings of the study and the analysis from the data collected from girls in Tana River District. It also contains discussion on the reliability and the Validity of research instruments.

In chapter five the study presents and discusses briefly the summary of findings of the study and further gives recommendations and makes suggestions of the relevant research.A brief conclusion is also given in this chapter.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter highlights related literature written by different authors on the impacts or effects lack of proper sanitary towels in developing countries and their effect on a girl child performance in examinations and co-curriculum activities in primary schools.

#### **2.2 Development and origin of sanitary towels**

Known as sanitary pads, sanitary towels or maxi pads, sanitary napkins form an important part of the gynecological hygiene of every woman. A sanitary napkin is a form of a porous item that has the capability of soaking the flow of blood. Hence, menstruating women wear them during their periods. Some women also prefer using them while recovering from vaginal surgeries, childbirth or abortion. Today, there are different varieties of disposable sanitary pads available in the market, ranging from ultra-thin panty liners to oversized maternity pads. From reusable 'rags' to disposable 'napkins', menstrual pads have indeed come a long way. Read in further to get some interesting background information on them.

If we trail back to history, we will see that women have used a variety of menstrual protection, over the years. The 'Museum of Menstruation', located on the suburbs of Washington DC, offers some interesting insights. Some of the most common forms of protection were grass, rabbit skins, sponges, rags, menstrual aprons, homemade knitted pads or other kinds of absorbents. However, disposable sanitary pads started to be available in the markets only around the year 1895. (schueller J.Family life Education.2006).

Disposable pads owe their origin to nurses, who first came up with the idea of holding the flow of menstrual blood with the help of available wood pulp bandages in the hospital. The manufacturers of bandages borrowed the idea and produced pads made from handy products that were inexpensive enough to be disposed. Slowly, other manufactures joined the line. However, their prices were sky-high, which made them exclusive toiletries of rich women.

The first sanitary pads were in the form of a cotton wool or similar stringy rectangular structure, sheathed with an absorbent liner. The pad was shaped in such a way, so that it could be easily attached to a special girdle or belt. However, due to its inconvenience, the girdle gave way to an adhesive strip on the bottom of the pad for proper attachment to the undergarment. Soon, belted sanitary napkins became outmoded and stick-on pads became popular.

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Today, sanitary napkins are available in a wide variety of patterns, designed taking into consideration both comfort and style. Some major innovations include quilting of the lining, introduction of 'wings', fragrant pads, introduction of panty liners and reduction of pad thickness. Nowadays, most women even have their own standard sanitary brands. Besides, most brands come in very nominal prices, which have made sanitary napkins a commonplace household item.

### **2.3 Types of menstrual pads**

There are two main types of sanitary towels, disposable menstrual towels and reusable cloth menstrual towels. The type of menstrual towel used determines the comfort of the user.

## **1. Disposable menstrual pads**

There are several different types of disposable menstrual pads:

Panty Liner - Designed to absorb daily vaginal discharge, light menstrual flow, "spotting", slight urinary incontinence, or as a backup for tampon use, Ultra-thin - A very compact (thin) pad, which may be as absorbent as a Regular or Maxi/Super pad but with less bulk, Regular - A middle range absorbency pad, Maxi / Super - A larger absorbency pad, useful for the start of the menstrual cycle when menstruation is often heaviest, Night - A longer pad to allow for more protection while the wearer is lying down, with absorbency suitable for overnight use and Maternity - These are usually slightly longer than a maxi/Super pad and are designed to be worn to absorb lochia (bleeding that occurs after childbirth).

The shape, absorbency and lengths may vary depending on manufacturer, but usually range from the short slender panty liner to the larger and longer overnight. Long pads are offered for extra protection or for larger women whose woman's undergarments might not be completely protected by regular length pads, and also for overnight use.

Other options are often offered in a manufacturer's line of pads, such as wings or tabs that wrap around the sides of the woman's underwear to add additional leak protection and help secure the pad in place. Deodorant is also added to some pads, which is designed to cover menstrual odor with a light fragrance. There is even panty liners specifically designed to be worn with a thong/G-string.

## **2.Reusable cloth menstrual pad**

Alternatively, women can use a washable or reusable cloth menstrual pad. These are made from a number of types of fabric — most often cotton flannel, or hemp (which is highly absorbent and not as bulky as cotton).

Most styles have wings that secure around the underpants, but some are just held in place (without wings) between the body and the underpants. Some (particularly the older styles) are available in belted styles. Washable menstrual pads do not need to be disposed of after use and therefore offer a more economical alternative for women. Many women report that washable products are as comfortable as or more comfortable than disposable ones and are just as effective a form of protection. They are considered especially comfortable during the post-partum period, when the woman may have a very sensitive vulva. Also called "mama cloth", reusable menstrual pads can be found on a number of websites, or can be easily made at home (instructions are available online). Washable pads are often advertised in feminist publications such as Bitch magazine. They have become a popular alternative among some groups of women, (e.g. feminists, environmentalists and mothers who use cloth nappies/diapers) and are also gaining in popularity among more mainstream women, because they are allergen-, chemical- and perfume-free, and can be more comfortable for women who suffer from irritations from using disposable pads.

#### **2.4 Uses of menstrual sanitary pads**

Menstrual pads are worn to absorb menstrual discharge (and thereby protect clothing and furnishings). They are usually individually wrapped so they are easier and more discreet to carry in a purse or bag. This wrapper may be used to wrap the soiled pads before disposing of them in appropriate receptacles. Some women prefer to wrap the pads with toilet paper instead of (or as well as) using the wrapper. Menstrual pads (of any type) are not flushed down the toilet, as they can cause blockages. In the West, public toilets almost always include a purpose-made receptacle in which to place soiled pads. In First Aid, they make excellent dressings for heavy bleeding if gauze is unavailable or inadequate due to their high absorbency.

For years, women have been involved in important roles in various professional fields including management, medicine, industry, and others. Therefore, they require special care, particularly regarding medical and psychological attention, to perform these tasks. This assumption is based on medical evidence regarding menstrual period and its effects on women. Since the discomfort of the menstrual pain may affect the daily and professional activities of most women, they need to be more concerned about their health during their health during their menstrual period.

Most females experience some degree of pain and discomfort during menstrual period, which can impact on their daily activities, and disturb their productivity at home or at their workplace. During menstruation, they should consult a doctor and take medications to relieve their pain and other relevant symptoms of dysmenorrhea. By definition, dysmenorrhea is a painful period or menstruation cramping, which may be accompanied by other symptoms, such as nausea, vomiting, diarrhea, headache, weakness and or fainting. It is reported to be the most common reason for females to visit a doctor in gynecology centers. A majority of women would have experienced some degree of menstrual cramping especially in the first years of their reproductive life. According to reports, the prevalence of dysmenorrhea is very high; at least 50% of women experience this problem during their reproductive years. This problem not only causes discomfort in approximately one-fifth of the female population, but also causes many social, physical, psychological and economic problems for women all around the world. The results of recent studies showed nearly 10% of females with dysmenorrhea experienced an absence rate of 1 to 3 days per month from work or were unable to perform their regular daily tasks due to severe pain. Dysmenorrhea is considered the main cause of absence from school, among young female students.

In addition to the subject of dysmenorrhea, pubertal hygiene is rarely discussed at home or in schools in most parts of the world, especially in

the regions where the current study has been conducted. This problem is observed particularly in traditional and poorly educated families, which could be mainly due to cultural restrictions, preventing sufficient information from reaching young girls. The combination of Eastern traditional culture and negative attitudes of school officials has had a strong impact on the discussion of the lack of sex education and related issues for youngsters in schools, in the mass media, and within families, especially in the rural areas of the globe. This has prevented the flow of accurate and sufficient information regarding pubertal hygiene and has often led to superstitious perceptions and beliefs about dysmenorrhea and menstrual hygiene in the rural areas. ( Mohammad Poureslami PhD and Farzaneh Osati-Ashtiani PhD Department of Community and Preventive Medicine, Department of Immunology and Microbiology, Iran University of Medical Sciences, Tehran Iran)

Although more than one-third of the Kenyan population consists of females who are under 25 years of age for whom the issue of menstrual hygiene is very important this subject has not been given priority for further investigation. This has resulted in only a few studies focused on this issue to date.

Traditionally the Inuit used rabbit and caribou skins. They were held in place with their pants. Cloth sanitary napkins first became available in Nunavut in the late 1950s.

A papyrus sanitary pad has been developed in Uganda for the rural poor, targeted at primary school girls who might otherwise be prevented from attending school during menstruation.

## **2.5 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).

## **2.6 Understanding of puberty, menstruation and reproductive health**

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).

## **2.7 African myths associated with menstruation**

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 infibulations, multiple health risks exist such as the potential for haemorrhage, shock, and life-threatening septicemia 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).

## **2.8 Discomfort during menstruation**

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’.

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.

## **2.9 Parents’ attitudes and culture**

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).

#### **2.10 Adolescent girl's participation in school**

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 2.

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 households.

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". 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 – 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.

### **2.11 Challenges to physical management of menstruation in low in-come settings**

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 RightsWatch2003; Lloyd, Mensch and Clark 2000).

## **2.12 Disabled girls and menstruation**

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 (Rousso 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.

### **2.13 Sanitary facilities**

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).

## **2.14 School Curriculum**

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 curriculum 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 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.



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 sanitation. 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. 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.

Education for girls can be 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)

## 2.16 Conceptual Framework

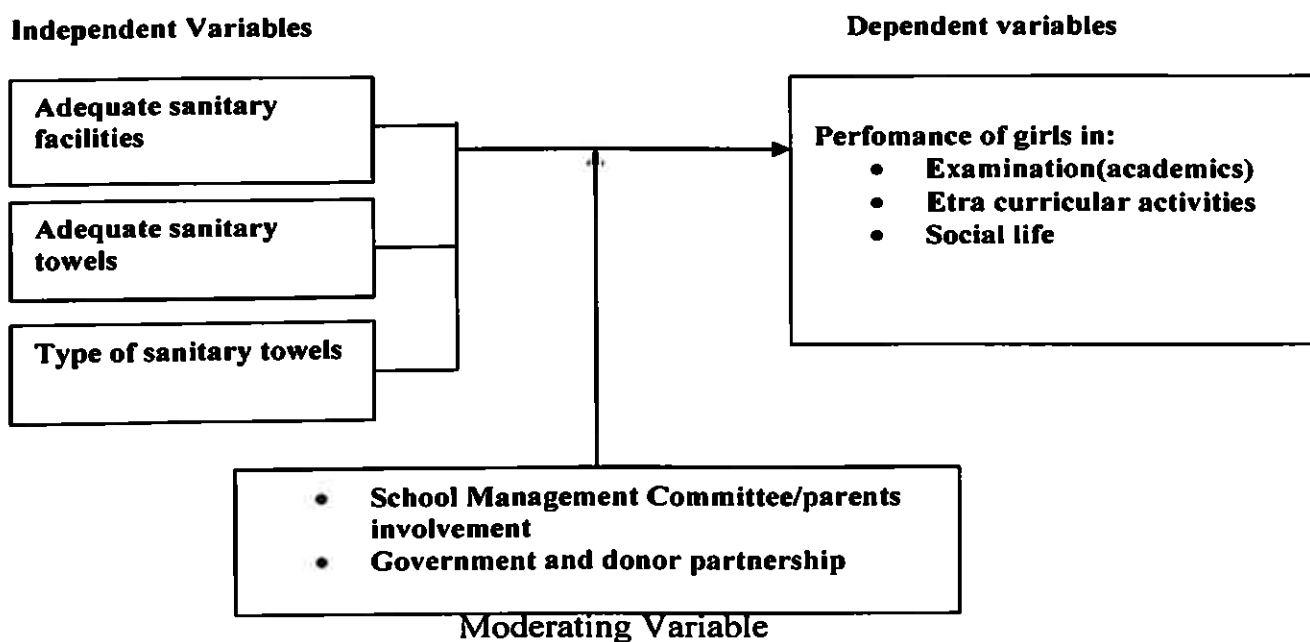


Figure 2.1

Conceptual framework for the effect of lack of sanitary towels and their effects on girl child in primary schools (source: self 2010)

The independent Variable of the study was adequate sanitary facilities, adequate sanitary towels and how they influence girl child performance in primary schools and the type of sanitary towel used by the girls and how they enhance their confidence thus raising their self esteem and performance in school.

The moderating variable was school management committee/parents involvement, Government and Donor partnership in the provision of sanitary towels and sanitary facilities to girl child in primary school. Most NGOs and Government tend to ignore this issue while addressing issues that affect performance. The Government in its efforts to provide free primary education has been able to provide stationary and food to school children but forgot to allocate some money for buying sanitary towels to girls.

The dependent variable was performance of girl child in Examination (academics), Extra curricular activities and social life. The poor performance of girls in primary school in examination and extra curriculum activities can be attributed to lack of sanitary towels, lack of sanitary facilities and lack of role models who are mainly female teachers. This problem, unfortunately, has not yet been addressed seriously in terms of its mental, social, health and impact on performance in examination and co-curriculum activities.

The following processes are crucial for the successful implementation of appropriate improvement in girl child performance in relation with having effective sanitary towels.

- a) Introduction of Affordable Pads: Because of the high cost of sanitary towels, girls from poor families continue to use unhygienic sponges, mattresses, tissue paper and even leaves and most avoid school all together during their menstrual period and therefore there is need to examine how the government can come up with a better and affordable structure in its budget to offer the girl child from a less privileged family.
- b) Introduction and implementation of girl child education on physiological development in the formal curriculum: formulate a gender policy in education to address the issues raised and create a

project plan for implementation and furthermore a need for the establishment of a comprehensive school health education program with strong familial input and strategies that address the components of puberty education.

- c) Consultations: Health education providers should be able to come up with appropriate methods and strategies to empower and educate young girls to adopt necessary life skills that have a positive influence on their lifestyle.
- d) Provision of Appropriate Diet: It is necessary to educate young girls about nutrition, appropriate diet, personal hygiene, physical activity, and taking medications under a physician's supervision during their menstrual period.

Effective management and implementation of the above will overallly contribute to reduced absenteeism, high self esteem, improved school performance and increased productivity which translates to improved economic development.

## **2.17 Summary of Literature Review**

The available evidence on influence of sanitary towels to girl child performance in primary school is promising. While research and evaluation will help clarify what constitutes influence of sanitary towels to girl child performance, utilizing the existing knowledge of girl child experiences can help move towards developing a more substantial body of knowledge and eventually evidence and how this relates to girl child performance in school. This can facilitate the monitoring and evaluation of girls performance in examination and extra curricular activities.

There are no standard or widely accepted approaches to assessment of influence of sanitary towels on girl child performance. Many challenges to measurement exist, and whether to apply core indicators across different situations is uncertain. In addition, cultural difference, some retrogressive

cultural practices and african myths associated with menstruation may differ from one community to another and this may make girls to decline sharing their experiences.

This literature review found detailed account of the extend to which girls are particularly marginalised for example 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. 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.

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.

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.

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.

The literature review provides typical challenges that girl child faces in management of menstrual flow which translates to absentism, lack concentration and poor performance of girl child in academics, extra – curricular activities and social life.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter examines the research design, location of the study, population, sampling procedure, sample size, instruments, data collection and data analysis procedures that were used in the study. It also contains a discussion on the reliability and validity of the research instruments.

#### **3.2 Research Design**

The study was a survey meant to investigate the relationship between lack of sanitary towels and their effect on girl child performance in primary schools. According to Mugenda and Mugenda (1999), a survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables under study. This research design typically employed questionnaires and interviews in order to determine the opinions, attitudes, preferences and perceptions of persons of interest to the research (Borg, 1987). This design was therefore regarded appropriate to the study. The researcher gathered information and an attempt was made to explain the problem as found in the field. The study focused on what participants said and did, and methods they used to protect themselves during menstruation and the sanitary facilities from where they changed. This enabled the study to reach an understanding on how the availability of sanitary towels influence girl child performance in primary school. The study collected relevant information

girls who had already started menstruation and were aware of methods used to protect themselves from soiling their garments.

### 3.3 Target Population

The target population for the study was Tana River District public primary schools. The schools were drawn from all the six zones to ensure some kind of equal representations thus reducing bias in variable under study. The subject for the study were girls drawn from the resulting sample of the zones.

Girls were the primary focus group in this study as they are the ones affected by availability of sanitary towels and know methods used to protect themselves from soiling their clothes during menstruation and the kind of sanitary facilities the use when changing used towels and how they dispose them off.

Table 3.1 Zones in Tana River District and total number of schools and girls

Name of Zones	Number of Schools	Number of girls
1. Galole central	20	3500
2. Galole south	17	2000
3. Galole North	10	700
4. Bura North	11	2000
5. Bura South	10	278
6. madogo	9	800
TOTAL	77	9,278

Source: Tana River District Education Office 2010.



### 3.4 Sample size and sampling procedure

A sample size of 120 girls was selected from the 9,278 girls in public primary schools in Tana River District. Simple random sampling was used to select 120 girls from a total population of 9278 girls in Tana River District. The determination of this sample size followed the recommendation made by Nkapa (1997) that for the populations, which run in thousands the sample size should be in the range of 5% to 20%, but for populations that run in hundreds the sample size should be 50%. Since the total population of girls is 9278, its 5% is 464 girls. This sample was scaled down to 120 girls due to diversity of the schools in the district therefore the selected sample size was considered appropriate for the study.

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Table 3.2 population and sample size

Name of zones	Number of schools	Number of girls	Number of girls sampled
Galole central	20	3500	45
Galole south	17	2000	26
Galole North	10	700	9
Bura North	11	2000	26
Bura south	10	278	4
Madogo	9	800	10
Total	77	9278	120

Source: Tana River District Education Office 2010.

### 3.5 Data collection instruments

The mode of data collection that was primarily used was questionnaires. One kind of questionnaire was designed. This was meant to collect information from the girls. A backward design was used to determine appropriate items for the

study questionnaires which entailed referring to the interplay between the key variables. Reference was done to the operational definition of variables .

### **3.6 Reliability and Validity**

#### **3.6.1 Reliability of research Instruments**

Reliability is the extent to which results are consistent over time and accurate representation of the total population under study can be reproduced under a similar methodology. The reliability of instruments was assessed by means of internal consistency and test retest coefficient. The organisation had some similarity to the study organisation and ensured that the expected results were reliable. The results obtained from pilot study were used to test the reliability of the instruments.

#### **3.6.2 Validity of research Instruments**

Validity determine whether the research truly measures that which is intended to measure.

A pilot study was carried out in Tana Delta District. This district had some similarity to the study district to ensure that the expected results would be valid. The researcher consulted to check the content validity of the questionnaires before the administration of the instruments. The results obtained from the pilot study were thus used to test the reliability of the instruments.

### **3.7 Data Collection Procedure**

The researcher visited the schools to explain to the head teachers the details of the study and what it entails for the study to be conducted in their schools. The researcher thus booked appointments with them and set schedules to administer the questionnaires. All Zones approached were supportive and cooperative during the exercise. In collaboration with the school heads and teachers questionnaires were administered with high levels of success. There was minimal loss or non-refund of

questionnaires. With the assistance of the school, the researcher collected the questionnaires and prepared them for analysis.

### 3.8 Data Presentation and Analysis Techniques

The data was entered, cleaned and validated using statistical package for social scientists and stata. Results were presented through summary statistics and tabulations. In some instances figures are used as illustrative devices. Qualitative information was analysed in view of the thematic categories in the instrument. It was then tabulated to find the correlation between lack of sanitary towels and its effect on the performance of girl child in examination and extra-curriculum activities.

### 3.9 Operationalizational definition of variables

Variable	Instrument used	indicator	Tools of analysis	scale
<b><u>Indipendent</u></b> <b><u>Varriable</u></b> -Adequate sanitary facilities	Questionnaire	-Toilet : pupil ratio -Number of toilets in the school -Availability of water -Physical condition of the toilets	-Tables and percentages	Nominal
-Availability of sanitary towels	Questionnaire	-Number of girls who have sanitary pads -Number of girls missing school due to lack of sanitary towels -Number of girls who use old clothes for protection -Number of girls who do not	Table and percentages	Nominal

-Type of sanitary towel	Questionnaire	use anything at all -Number of girls using disposable sanitary towels -Number of girls using old clothes.	Tables and percentages	Nominal
<b><u>Moderating variables</u></b>				
Government/ Donor partnership	Questionnaire	-Support from donor -Frequency of donation	Table and percentage	Nominal
-School management committee and parents involvement	Questionnaire	-Support from parents -Frequency of donation	Table and percentages	Nominal
<b><u>Dependent Variable</u></b>				
-Improved girls performance in examination	Questionnaire	-KCPE results for 2001 to 2009 -Comparative drop out rates between boys and girls -Comparative enrolment of boys and girls	Tables and percentages	Nominal
-Improved				

participation of girls in co-curriculum activities	Questionnaire	-Number of girls participating in sports ,drama and music festivals		Nominal
Participation in social life	Questionnaire	-Number of girls taking part in manual work at school.  -Number of girls helping in house hold chores	Table and percentages	Nominal

## **CHAPTER FOUR**

### **DATA PRESENTATION ANALYSIS AND INTERPRETATION**

#### **4.1 Introduction**

This chapter presents the finding of the study and the analysis from the data collected from the five zones in Tana River District. The operational definitions of the variables found in chapter three guided the formulation of the questionnaires items which subsequently addressed the study objectives. Three major themes addressing the influence of sanitary towels on girl child performance in primary school were addressed by the study.

The analysis and discussion in this chapter focuses on these themes. The themes that emerged from the study included the relationship between availability of sanitary towels and girl child performance in primary schools, influence of sanitary facilities on the girl child performance in primary school and the influence of government, NGOs and school management committees in provision of sanitary towels to girl child in primary school. After validation, questionnaires were used for gathering data. Simple percentages were used for the data analysis. The findings are presented in tabulations that clearly show the varying percentages

#### **4.2 Respondent Age**

The respondents were sampled from the age of ten years to seventeen years old. This age bracket was considered appropriate because menarche begins at the age of nine years and therefore these girls were assumed to have started menstruation.

#### **4.3 Occupation of the Respondent**

All the respondents were primary school girls from standard four to eight drawn from six zones in Tana River District. School girls were chosen

mainly because they are the ones whose performance in school is influenced by the availability of sanitary towel.

**Table 4.1: Respondent rate**

Age	Frequency	Percent
10	6	5.0
11	2	1.7
12	15	12.5
13	34	28.3
14	42	35.0
15	15	12.5
16	5	4.2
17	1	.8
<b>Total</b>	<b>120</b>	<b>100.0</b>

The researcher conducted a survey of 120 girls in 6 zones in Tana River District. The questionnaires were completed and returned by 120 girls (100% response rate )

**Table 4.2: Distribution of Respondent by Class**

Class	Frequency	percent
4	1	0.8
5	19	15.8
6	29	24.2
7	56	46.7
8	15	12.5
<b>Total</b>	<b>120</b>	<b>100.0</b>

The respondents were sampled from class four to eight because girls in the selected classes have started experiencing menstrual cycle. Lower primary was deliberately left out because they have not started menstruation.

#### 4.4 Data through interviews

These are the results of the responses from the girls that the researcher interviewed.

**Table 4.3: The reasons for missing school during menstruation**

Reason	Frequency	percent
No answer	8	6.7
Worried about leaks	24	20.0
Do not have sanitary towels	34	28.3
Pain or cramps	45	37.5
sick	9	7.5
<b>Total</b>	<b>120</b>	<b>100.0</b>

Respondents were asked the reason why they miss school during menstruation. Thirty seven point five percent (37.5%) indicated that they miss school due to cramps or pain, twenty eight point three percent (28.3%) indicated that they miss school because they do not have sanitary pads, twenty percent (20%) said they were worried of leaks, seven point five percent (7.5%) said that they miss school during menstruation because they are sick while six point seven percent (6.7%) did not answer this question. This indicates that those who did not answer this question had never missed school during menstruation or were simply concealing information. From the high percent that say they miss school due to cramps or pain, do not have sanitary pads or are worried about leaks. It is evident that girls miss school during menstruation because of cramps, they are worried about leaks and do not have sanitary towels.

**Table 4.4: Reasons for staying away from school during menstruation.**

Reason	Frequency	percent
Did not answer	14	11.7
Colleagues laugh at me	31	25.8
Lack of sanitary towels	31	25.8
Pain and sickness hence cannot concentrate	44	36.7
<b>Total</b>	<b>120</b>	<b>100.0</b>



The results from table 4.5 shows that some of the reasons why girls miss school during menstruation were pain and sickness, lack of sanitary pads and being laughed at by their colleagues. one hundred and twenty girls gave reasons why they miss school during menstruation. Pain and sickness (36.7%) major reason for missing school among girls while lack of sanitary pads and being laughed at by colleagues accounts for (25.8%) each for the reason why girls miss school during menstruation.

**Table 4.5: Are there activities that girl are prevented from participating during menstrual period**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
Yes	33	27.5
No	84	70.0
No answer	3	2.5
<b>Total</b>	<b>120</b>	<b>100.0</b>

Table 4.5 shows that twenty seven point five percent ( 27.5%) of the respondents revealed that girls are prevented from participating in some activities during menstruation and seventy percent (70.0%) said that they were not prevented from taking part in activities at school during menstruation while two point five percent( 2.5%) declined to respond to the question whether they are prevented from participating in activities during menstruation or not .The evidence from table 2.5 shows that despite pain and sickness, lack of sanitary towels and being laughed at by colleagues, girls are not prevented from participating in activities during menstruation.

**Table 4.6: Name activities you are prevented from participating during menstruation.**

<b>Activity</b>	<b>Frequency</b>	<b>Percent</b>
No answer	78	65.0
Athletics	6	5.0
Drama	1	0.8
Football and athletics	13	10.8
Netball	6	5.0
None	2	1.7
P.E	4	3.3
Volleyball	1	0.8
Working	4	3.3
<b>Total</b>	<b>120</b>	<b>100.0</b>

Students were told to state some activities that they are prevented from participating during menstruation. Five percent (5.0%) said athletics, zero point eight percent (0.8%) said drama, ten point eight (10.8%) said football, three point three percent (3.3%) said foot ball and athletics, zero point eight percent (0.8%) said netball, one point seven percent said (1.7%) said none, three point three percent (3.3%) said P.E, zero point eight percent (0.8%) said volley ball while three point three percent said walking. The total number of respondents was thirty five percent (35%) while seventy eight percent (78%) decline to respond to this question. The study findings from the table 4.7 shows that the majority of girls in primary school take part in activities like sports during menstruation while a few are prevented from participating in athletics, drama, football,

**Table 4.7: Do you think menstruation affects your performance in academics**

<b>Responses</b>	<b>Frequency</b>	<b>percent</b>
No answer	1	0.8
Yes	53	44.2
No	46	38.3
Not sure	20	16.7
<b>Total</b>	<b>120</b>	<b>100.0</b>

Responses to the question on whether menstruation affects girl child performance in continuous assessment test and end term examination indicated that forty four point two percent (44.2% ) admitted that menstruation affects their performance in examination ,thirty eight point three percent (38.3%) said that menstruation does not affect their performance in examination while sixteen point seven percent (16.7 %) said were not sure. zero point nine percent( 0.9% ) did not respond to this question. according to the information given in the table 2.8 ,where girls were asked whether menstruation affects their performance in examination shows that a big percentage of forty four point two percent( 44.2% ) of girls admits their performance in examination is affected by menstruation ,thirty eight point three percent (38.3%) denied that menstruation does not affect their performance in examination while sixteen point seven percent (16.7%) said were not sure if menstruation affects their performance in examination. For those who were not sure the reason could be that they were not able to relate the relationship between missing school during menstruation and scoring low grades in examination due to lessons missed when absent from school.

**Table 4.8: Please state a reason why menstruation affects your performance**

<b>Reason</b>	<b>Frequency</b>	<b>percentage</b>
No answer	36	30.0
Fear humiliation	8	6.7
Fear leakage	18	15.0
Feel sick	12	10.0
Feel sick ,lack concentration	1	0.8
I use pain killer	2	1.7
Its natural	1	0.8
Its not a disease	2	1.7
Lack concentration	26	21.7
Lack concentration in class	1	0.8
Lack of pads	1	0.8
Lack pads,headache,abdominal pain	1	0.8
Not yet received periods	4	3.3
Stay at home	2	1.7
<b>Total</b>	<b>120</b>	<b>100.0</b>

Twenty one point seven percent (21.7 %) of the girls said that they don't perform well in examination due to lack of concentration during menstruation, fifteen percent (15%) said they fear leakage ,ten percent (10%) said they feel sick, six point seven percent (6.7%) said they fear humiliation, four point two percent (4.2%) said they miss school ,three point three percent(3.3%) said they have not started menstruation, one point seven percent (1.7%) said they stay at home, zero point eight percent (0.8%) said they did not perform well in examination due to lack of pads, headache and abdominal pain, another zero point eight percent (0.8%) said they lack pads while thirty percent (30% ) did not respond. This reveals that poor performance in examination by girl child in primary school is attributed to the fact that they stay at home during menstruation due to lack of pads, fear of humiliation, cramps or abdominal pain, fear of accidental leakages and lack of concentration thus missing lessons.

**Table 4.9: Are you aware of sanitary pads**

<b>Responses</b>	<b>Frequency</b>	<b>percent</b>
No answer	2	1.7
Yes	107	89.2
No	11	9.2
<b>Total</b>	<b>120</b>	<b>100.0</b>

Respondents were asked whether they were aware of sanitary towels eighty nine point two percent (89.2%) admitted that they were aware of sanitary pads .Nine point two percent (9.2%) denied that they were not aware of sanitary pads while one point seven percent (1.7%) did not respond to this question. The study findings from the table 4.10 show that Majority of the girls are aware of sanitary towels.

**Table 4.10: Name some of the brands of sanitary towels that you are aware of**

<b>Brands</b>	<b>Frequency</b>	<b>Percent</b>
No answer	15	12.5
Always and cotton wool	99	82.5
Always	5	4.2
Inner wear	1	0.8
<b>Total</b>	<b>120</b>	<b>100.0</b>

Girls were asked to name some of brands of sanitary towels that they were aware of eighty two point five percent (82.5%) said they were aware of always and cotton wool brand, five percent (5%) said they were aware of always only, zero point eight percent (0.8%) said were aware of inner wear while twelve point five percent (12.5%) did not respond this question. The research findings show that girls in Tana River District are aware of two brands of sanitary towels, always and cotton wool. The zero point eight percent that said were aware of inner wear seem not to understand what sanitary towels are.

**Table.4.11: Have you ever used sanitary pads before**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
No answer	5	4.2
Yes	81	67.5
No	34	28.3
<b>Total</b>	<b>120</b>	<b>100.0</b>

When asked whether they have ever used sanitary towels sixty seven point five percent (67.5 %) answered yes, twenty eight point three percent (28.3%) said no while four point two percent (4.2%) did not answer. The research findings shows that majority of girls have used sanitary towels.

**Table.4.12: How effective is sanitary towels.**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
No answer	41	34.2
Prevent leakage	79	65.8
<b>Total</b>	<b>120</b>	<b>100.0</b>

Girls were asked how effective sanitary towels are .sixty five point eight percent (65.8%) admitted that sanitary towels prevents leakage while thirty four point two percent (34.2%) declined to respond to this question .From the information given in the table 4.13 the results revealed that sanitary towels are effective in preventing leakage.

**Table 4.13: where do you change the pads**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>
No answer	8	6.7
At school	15	12.5
At home	97	80.8
<b>Total</b>	<b>120</b>	<b>100.0</b>

When asked where they change their sanitary pads from, eighty percent (80.0%) said they change at home, twelve percent (12.0%) said they change at school while six point seven percent (6.7%) did not respond to this question .The study findings according to table 4.14 indicated that girls in primary school do change their sanitary towels at home .

**Table 4.14: Please give reason as to why you do not change the pads at school rather than at home**

Response	Frequency	Percent
No answer	29	24.2
Feel ashamed to do so	20	16.7
Lack of water to wash at school	56	46.7
No where to change it	13	10.8
School is not the place for that	2	1.7
<b>Total</b>	<b>120</b>	<b>100.0</b>

Girls were asked to give reason why they prefer changing pads at home, according to table 4.15 .the study show that out 120 girls interviewed sixteen point two percent (16.2%) said are ashamed to do so at school, forty six point seven (46.7%) said girls do not change pads at school due to lack of water at school, ten point eight percent (10.8%) do not change at school because they have no where to change, one point seven percent (1.7%) said school is no place for changing while twenty four point two percent (24.2%) declined to answer this question. This shows that there are many reasons why girls do not change their sanitary towels at school this is as a result of lack of water at school, lack of sanitary facilities at school, some are ashamed to change at school while some believe that school is no place to change sanitary towels this could be because of lack of water and privacy.

**Table 4.15: Do you think the government and NGO'S are doing enough to help in provision of sanitary pads**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
No answer	5	4.2
Yes	46	38.3
No	64	53.3
Not sure	5	4.2
<b>Total</b>	<b>120</b>	<b>100.0</b>

In attempt to know whether the government of Kenya and NGO's have made any effort to provide sanitary towels to school girls .This research indicates that fifty three point three percent (55.3 %) had never received any sanitary towels from the government or NGOs, thirty seven point five percent (37.5%) admitted that they had received sanitary towels from the government and NGOs, four point two (4.2%) declined to respond to this question while zero point eight percent (0.8%) were not sure.

**Table 4.16: Reasons why the government and NGOs do not provide sanitary pads.**

<b>Responses</b>	<b>Frequency</b>	<b>Percent</b>
No answer	16	13.3
Government not capable of supplying pads to schools	6	5.0
Government has ignored girls problems	28	23.3
Never heard of government supplying pads	32	26.7
Yes it has helped	38	31.7
<b>Total</b>	<b>120</b>	<b>100.0</b>

On being asked the reasons why they had not received sanitary towels from the government out of 120 girls that the researcher interviewed five point zero percent (5.0%) said that the government is not capable of supplying pads to school, twenty three point three percent (23.3%) said that the government has ignored girls, twenty six point seven percent(26.7%) said they have never had government supplying pads to girls, thirty one point seven percent(31.7%) said the government has



helped in supplying sanitary towels to school while thirteen point three(13.3%) declined to respond to this question. These findings revealed that the government and NGOs have not taken up the responsibility of supplying sanitary towels to school girls in primary school.

**Table 4.17: Do you think if every girl child in school had access to sanitary pads it would enhance performance**

Responses	Frequency	Percent
No answer	9	7.5
Yes	90	75.0
No	21	17.5
<b>Total</b>	<b>120</b>	<b>100.0</b>

When asked if every girl child had access to sanitary pads would it enhance performance seventy five percent( 75.0%) said yes ,seventeen point five percent (17.5%) said no while seven point five percent (7.5%) declined to answer this question. The study findings according to table 2.17 indicates that if every girl in school had access to sanitary pads it would enhance their performance. This could be due to reduced absenteeism and improved confidence , high self esteem and concentration during lessons.

**Table 4.18: Please suggest a reason why you think access to sanitary pas will enhance girls performance in school.**

Response	Frequency	Percent
No answer	31	25.8
No fear of leakage and improved school attendance	84	70.0
No fear	5	4.2
<b>Total</b>	<b>120</b>	<b>100.0</b>

On being asked why they think sanitary pads when available will enhance the performance of girls in examination and co-curriculum activities. seventy percent (70.0%) of the respondents said. if sanitary pads are made available to girls it will enhance their performance in examination and co-

curriculum activities because they will not have fear of leakages and school attendance will improve hence concentrate in class. four point two percent (4.2%) said it will enhance performance because girls will not have fear of leakage or being laughed at by colleagues and hence concentrate in class during lesson at the time of menstruation. twenty five point eight percent (25.8%) of the respondents declined to answer this question. Table 4.19 revealed that if pads are made available to girls in primary school they will improve in their performance in examination and co-curriculum activities because they will not have fear of leakage or being laughed at by colleagues and hence concentrate in class.

#### **4.5 Qualitative analysis on the effect of lack of sanitary towels and their effect on girl child performance in primary school**

The researcher conducted interview. Below is the responses which focused on the objectives of the study, Some of the respondents said that availability of sanitary towels had positive influence on girl child performance in examination and co-curriculum activities while others indicated that lack of sanitary towels had no influence on girl child performance in examination and co-curriculum activities in primary school. Respondents to this were girls in primary schools.

##### **4.5.1 Performance in examination**

Respondents indicated that lack of sanitary towels has negative impact on girls' performance. They said that lack of sanitary towels leads to poor performance in academics and class work as a result of absenteeism from class and school ,disruption of learning time caused by time lost when going back home to change soiled sanitary towel, low concentration in class caused by drowsiness, low abdominal cramp and pain caused by contraction of the uterus lining during menstruation .They stay at home to avoid their colleagues laughing at them when they soil their dresses due

lack of sanitary pads, There is no sanitary facility where they can change the soiled sanitary towels and in some cases where schools have sanitary facilities they lack water. This leads to failure to do assignments in good time thus leading to poor performance in examination. At same time girls argued that lack of sanitary pads make them feel shy thus having low self esteem all the time.

On contrary, some respondents argued that despite lack of sanitary towels they still take part in class work and examination .In support of this they said Menstruation is not a disease, some use pain killers to reduce pain caused by cramps. And some use leaves, tissue paper, old sponges and old clothes to absorb the menstrual flow thus being able to carry on with their day to day work at school.

#### **4.5.2 Performance in extra curriculum activities**

Contributing to there being no relationship between lack of sanitary towels and girl child performance in extra curriculum activities, the respondent urged that menstruation doesn't only come during games time or at the time of competition in sports sometimes they do compete when they are not menstruating and in cases where it happens during sports and they don't have sanitary pads they use old clothes for protection and go on with their participation in sports.

However, respondents noted that lack of sanitary towels to girls in primary school has negatively impacted on their performance in extra-curriculum activities because when using old clothes or sponges for protection during menstruation one cannot jump to catch the ball or run during sports for the fear of dropping down their soiled and untidy sanitary towels. Some urged that lack of pain killers to reduce cramps and pain prevent them from participating in games at school. In cases where boys came to the field to cheer them they feel embarrassed when their colleagues laugh at them on

noticing that they have dropped their used pads in the field as they jump, kick the ball or run.

#### **4.5.3 Participation in social life**

Respondents did not cite any case where they actively participate in social life when they don't have sufficient sanitary towels to absorb the menstrual flow. They only gave an array of negative impacts which include. Other members of the family looking at them as being dirty and not fit to handled food or mixed with others, having sever cramps to an extent that they cannot do any duty assigned and as a result of using dirty and unhygienic old clothes for protection they opens up a channel for diseases for example fungal infection and virginatis.

#### **4.5.4 Government and Donor partnership**

The findings from the interview indicated that the Government and NGOs have not taken up any role in providing sanitary towels or coming up with strategies that will ensure that girls are able to access this essential commodity when in need.

#### **4.5.5 School management committee and parents involvement.**

Parents especially those who live below poverty line consider providing sanitary towels to their daughters as a luxury and therefore give priority to buying food stuffs instead.

#### **4.5.6 Sanitary towels**

The findings from the interviews indicated that most girls can not afford to buy sanitary towels and therefore opt to remain at home during menses to avoid embarrassment from Male teachers and boys, this leads increased rates of absenteeism and lack of concentration in class. However there are

few girls who manage to get old pieces of clothes or sponges and use for protection but risk being laughed at in case of accidental leaks.

#### **4.5.7 Sanitary facilities at school**

The findings from the interviews indicated that where girls are able or determined to attend school throughout menstruation, the insufficient facilities and sanitary protection may create discomfort for girls in the classroom and an inability to participate.

#### **4.5.8 The type of sanitary towels**

The research findings indicated that the confidence of the girl child is influenced by the type of sanitary towel used for example girls who use always feel more secure than the one using old pieces of clothes, sponges and papers.

The increased confidence in turn increases the girls self esteem thus being able to concentrate in class.

### **4.6 Summary**

This chapter entails the findings of the study which are guided by the objective of the study. The researcher has put the findings in the tables explaining and interpreting the findings according to the variables. The chapter also includes the findings from the discussions.

This findings from this study showed that The government and the Donors have not assisted in providing sanitary towels to girls, parents do not provide this essential commodity to their girl child, most school lack adequate sanitary facilities and where they are available they lack water. Girls who cannot afford sanitary towels remain at home during menstruation thus missing lessons. This has led to high rates of absenteeism in teenage girls and lack of concentration during menses. The study focused on primary school girls between the age of ten to seventeen years who are mainly from class four to seven.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS.**

#### **5.1 Introduction**

In this chapter the researcher presents and discusses briefly the summary of the findings of the study and further gives recommendations and makes suggestions of the future relevant research. A brief conclusion is also given in this chapter

#### **5.2 Summary of findings**

The study had set out to assess the availability of sanitary towels and their influence on girl child performance in primary school. The aspects that were earmarked for the study were the relationship between availability of sanitary towels and girl child performance in primary schools, influence of sanitary facilities on the girl child performance in primary school and the influence of government, NGOs and school management committees in provision of sanitary towels to girl child in primary school.

##### **5.2.1 Performance in examination.**

The study found that a big percent of 37.5% missed school due to pain or cramps while 28.3 % missed school because they do not have sanitary towels and 20.0% missed school because they were worried of leaks. Lack of sanitary towels has negative impact on girl's performance it leads to poor performance in academics and class work as a result of absenteeism from class and school, disruption of learning time caused by time lost when going back home to change soiled sanitary towel, low concentration in class caused by drowsiness, low abdominal cramp and pain caused by contraction of the uterus lining during menstruation. Girls stay at home to

avoid their colleagues laughing at them when they soil their dresses due lack of sanitary pads, There is no sanitary facility where they can change the soiled sanitary towels and in cases where schools have sanitary facilities they lack water. This leads to failure to do assignments in good time thus leading to poor performance in examination. At same time lack of sanitary pads make them feel shy thus having low self esteem all the time.

### **5.2.2 Performance in extra curriculum activities**

Other findings included performance of girls in the extra curriculum activities where 27.5% of girls said they are prevented from taking part in activities at school during menstruation while 70.0% said they continue to participate in sports and other activities despite challenges experienced during menses. Contributing to there being no relationship between lack of sanitary towels and girl child performance in extra curriculum activities, the respondent urged that menstruation doesn't only come during games time or at the time of competition in sports sometimes they do compete when they are not menstruating and in cases where it happens during sports and they don't have sanitary pads they use old clothes for protection and go on with their participation in sports.

However, respondents noted that lack of sanitary towels to girls in primary school has negatively impacted on their performance in extra-curriculum activities because when using old clothes or sponges for protection during menstruation one cannot jump to catch the ball or run during sports for the fear of dropping down their soiled and untidy sanitary towels. Some urged that lack of pain killers to reduce cramps and pain prevent them from participating in games at school. In cases where boys came to the field to cheer them they feel embarrassed when their colleagues laugh at them on noticing that they have dropped their used pads in the field as they jump, kick the ball or run.

### **5.2.3 Participation in social life**

In girl child participation in social life 80.5% of Respondents did not cite any case where they actively participate in social life when they don't have sufficient sanitary towels to absorb the menstrual flow. They only gave an array of negative impacts which include. Other members of the family looking at them as being dirty and not fit to handled food or mixed with others, having sever cramps to an extent that they cannot do any duty assigned and as a result of using dirty and unhygienic old clothes for protection they opens up a channel for diseases for example fungal infection and virginitis.

### **5.2.4 Government and Donor partnership**

In the role of Government and NGOs providing sanitary towels and sanitary facilities to girls 53.3 % of the respondents have never received any sanitary towels from the Government or NGOs running programs in their school. A further 38.3% agreed that they received sanitary towels from The Government and NGOs. This could be a few lucky schools who were sponsored by Girl Child Network findings from the interview indicated that the Government and NGOs have not taken up any role in providing sanitary towels or coming up with strategies that will ensure that girls are able to access this essential commodity when in need.

### **5.2.5 School management committee and parents involvement.**

The findings from the study found that Parents especially those who live below poverty line 80.0% do not provide sanitary towels to their girls they consider providing sanitary towels to their daughters as a luxury and therefore give priority to buying food stuffs instead.



### **5.2.6 Sanitary towels.**

The findings indicated that when sanitary towels are provided to girls it will enhance their performance in school with 75.0 % Of the girls saying that it will enhance their confidence, concentration in class and lower absenteeism rates. Further findings found that most girls can not afford to buy sanitary towels and therefore opt to remain at home during menses to avoid embarrassment from Male teachers and boys; this leads increased rates of absenteeism and lack of concentration in class. However there are few girls who manage to get old pieces of clothes or sponges and use for protection but risk being laughed at incase they leak.

### **5.2.7 Sanitary facilities at school**

The findigs from the interviews indicated that 80.0% change their used sanitary towels at home while 15.0% said they change at school .where girls are able or determined to attend school throughout menstruation, the insufficient facilities and sanitary protection may create discomfort for girls in the classroom and an inability to participate.

### **5.2.8 The type of saniatry towels**

The resarch findings indicated that the confidence of the girl child is influecd by the type of sanitary towel used for example girls who use always feel more secure than the one using old pieces of clothes, sponges and papers.

The increased confidence in turn increases the girls self esteem thus being able to concentrate in class.

## **5.3 Discussion of findings**

This section relates the findings of the study with the literature that the researcher had reviewed .The discussions are guided by the objectives of the study .

### **5.3.1 Performance in examination**

The findings of the study suggest a relationship between availability of sanitary towels and girl child performance in primary schools. Similarly availability of sanitary towels is expected to increase the girl child attendance and concentration.

lack of sanitary towels has negative impact on girl's performance it leads to poor performance in academics and class work as a result of absenteeism from class and school ,disruption of learning time caused by time lost when going back home to change soiled sanitary towel, low concentration in class caused by drowsiness, low abdominal cramp and pain caused by contraction of the uterus lining during menstruation .Girls stay at home to avoid their colleagues laughing at them when they soil their dresses due lack of sanitary pads, There is no sanitary facility where they can change the soiled sanitary towels and in cases where schools have sanitary facilities they lack water. This leads to failure to do assignments in good time thus leading to poor performance in examination. At same time lack of sanitary pads make them feel shy thus having low self esteem all the time. This agrees with the findings of (world Bank 2005) which noted that poor performance of girls in school is caused by absenteeism from class and school during menses due to lack of sanitary towels.

### **5.3.2 Performance in extra curriculum activities**

The performance of girls in extra curriculum activities is affected by lack of sanitary towels. Girls said they are prevented from taking part in activities at school during menstruation while some said they continue to participate in sports and other activities despite challenges experienced during menses. Contributing to there being no relationship between lack of sanitary towels and girl child performance in extra curriculum activities, the respondent urged that menstruation doesn't only come during games

time or at the time of competition in sports sometimes they do compete when they are not menstruating and in cases where it happens during sports and they don't have sanitary pads they use old clothes for protection and go on with their participation in sports.

However, respondents noted that lack of sanitary towels to girls in primary school has negatively impacted on their performance in extra-curriculum activities because when using old clothes or sponges for protection during menstruation one cannot jump to catch the ball or run during sports for the fear of dropping down their soiled and untidy sanitary towels. Some urged that lack of pain killers to reduce cramps and pain prevent them from participating in games at school. In cases where boys came to the field to cheer them they feel embarrassed when their colleagues laugh at them on noticing that they have dropped their used pads in the field as they jump, kick the ball or run. This agrees with the findings of (FAWE 2003) which noted that Girls who lack sanitary towels shy off taking part in sports due to fear of dropping their soiled pads.

### **5.3.3 Participation in social life**

Respondents did not cite any case where they actively participate in social life when they don't have sufficient sanitary towels to absorb the menstrual flow. They only gave an array of negative impacts which include. Other members of the family looking at them as being dirty and not fit to handled food or mixed with others, having sever cramps to an extent that they cannot do any duty assigned and as a result of using dirty and unhygienic old clothes for protection they opens up a channel for diseases for example fungal infection and virginitis. This agrees with the findings of (Bista 2004) Which revealed that in Nepal women are not allowed to participate in public activities during menses.

### **5.3.4 Government and Donor partnership**

In the role of Government and NGOs providing sanitary towels and sanitary facilities to girls the respondents said they have never received any sanitary towels from the Government or NGOs running programs in their school. While some agreed that they received sanitary towels from The Government and NGOs. This could be a few lucky schools who were sponsored by Girl Child Network findings from the interview indicated that the Government and NGOs have not taken up any role in providing sanitary towels or coming up with strategies that will ensure that girls are able to access this essential commodity when in need.

### **5.3.5 School management committee and parents involvement.**

The school management committee and parents involvement is vital in influencing decision making and restructuring of policy issues in the implementation of free primary education. This findings from the study found that Parents especially those who live below poverty line do not provide sanitary towels to their girls they consider providing sanitary towels to their daughters as a luxury and therefore give priority to buying food stuffs instead.

### **5.3.6 Availability of Sanitary towels.**

The findings indicated that when sanitary towels are provided to girls it will enhance their performance in school with due to enhance confidence, concentration in class and lower absenteeism rates. Further findings found that most girls can not afford to buy sanitary towels and therefore opt to remain at home during menses to avoid embarrassment from Male teachers and boys; this leads increased rates of absenteeism and lack of concentration in class. However there are few girls who manage to get old pieces of clothes or sponges and use for protection but risk being laughed at incase they leak.

### **5.3.7 Sanitary facilities at school**

The findings from the interviews indicated that girls change their used sanitary towels at home while some said they change at school. Where girls are able or determined to attend school throughout menstruation, the insufficient facilities and sanitary protection may create discomfort for girls in the classroom and an inability to participate.

### **5.3.8 The type of sanitary towels**

The research findings indicated that the confidence of the girl child is influenced by the type of sanitary towel used for example girls who use always feel more secure than the one using old pieces of clothes, sponges and papers.

The increased confidence in turn increases the girls self esteem thus being able to concentrate in class.

## **5.4. Conclusions**

This section gives a brief of conclusions of the findings guided by the objectives of the study

### **5.4.1 Performance of the girl child in examination (academic), extra curriculum activities and social life**

The study found that lack of sanitary towels is a major factor that has negatively impacted on the girl child performance in examination, extra curriculum activities, social life, school attendance, retention and transition rates. This is evident by the declining academic performance of girls in the district as observed in drastic drop in the schools mean score of girls from standard four to seven as seen in table 1.1 (Tana River District Education office 2010). The study has highlighted the impact of lack of sanitary towels to girls in primary school (on academic, sports, class work

and in social life).The study has also established that the most materials used by girls to absorb menstrual flow during menstruation is old clothes, tissue paper ,leaves and old sponges.This findings agrees with those of (GOK 2007) which indicated that between 2006 and 2009 enrolment of girls in Tana River District was lower than that of boys at primary school (44% girls ,56 % boys ) and secondary school (42.9% girls,57.1% boys ) and .those of International Rescue Committee (Rhodes, Walker and Martor 1998) study of primary schools in Guinea, which revealed that 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).

#### **5.4.2 Government, Donor, School Management Committee and Parent Partnership**

The results of this findings found that The Government and Donor do not provide any support or try to influence other people to come up with ways of providing sanitary towels to girls in school. The school management committee who are entrusted in ensuring that all children access basic need to ensure that they concentrates in their studies to improve their performance in school,despite this they have ignored their responsibility and girl child contue to miss school during menstruation and this affect their performance due to increased rates of absentism.Lack of concentration due to fear of accidental leaks.

### **5.4.3 Availability of Sanitary Towels and Sanitary Facilities influence on girl child performance**

The findings of the study found that the lack of sanitary pads, coupled with other factors like the absence of water or separate toilet facilities for Girls in primary schools in Tana River District, is responsible for increased rates of absenteeism, low concentration in class which translates to poor performance in academics. Despite tax waivers introduced to reduce the cost of sanitary pads, finding money to buy each month is a challenge for many girls.

### **5.4.4 The type sanitary towel**

The research found that confidence of the girls during menses is highly influenced by the type of sanitary towel used by girl; they said that they feel confident when using always as compared to the time when they fail to get always and results to old clothes for protection.

## **5.5 Recommendations**

The researcher recommends several ways through which girls in primary school can be provided with sanitary towels.

The governments role in providing sanitary towels to girls in primary school is very crucial, it should first and foremost come up with policies that are geared towards alleviating poverty and un employment to give parents an economic power to be able to provide basic needs to their girl child.this can be done through reviewing sectors such as agricultural and small and micro finance business in order to increas their income.

Second the government should allocate a vote head from free primary education fund to cater for sanitary towels to all girls who have started menstruation in primary school.

Third the government to Introduction Affordable Pads, Because of the high cost of sanitary towels, girls from poor families continue to use unhygienic sponges, mattresses, tissue paper and even leaves and most avoid school all together during their menstrual period and therefore there is need to examine how the government can come up with a better and affordable structure in its budget to offer the girl child from a less privileged family with sanitary pads.

And last the government should think of Introduction and implementation of girl child education on physiological development in the formal curriculum, formulate a gender policy in education to address the issues raised and create a project plan for implementation and furthermore a need for the establishment of a comprehensive school health education program with strong familial input and strategies that address the components of puberty education.

All NGO`S operating in primary school in kenya to include a component of sanitary towels provision to girls in order to help improve girl child attenadance in school.They should also assist in building toilets and providing water by drilling bore holes.

Parents to take up their responsibilty in providing basic needs to their girl child especially saniatry towels during their menstruation period.They should also provide pain killers to reduce the pain caused by cramps.

The primary school administration should creat awarenes on need to observe proper sanitation in school especially the sanitary facilities so that they remain accessible to girls

The teacher on duty should inspect the toilet atleast twice a day to ensure that toilets are kept clean.



Primary schools should introduce more clubs and start implementation of girl child education on physiological development .

Formulate a gender policy in education to address the issues raised and create a project plan for implementation and furthermore a need for the establishment of a comprehensive school health education program with strong familial input and strategies that address the components of puberty education.

Health education providers should be able to come up with appropriate methods and strategies to empower and educate young girls to adopt necessary life skills that have a positive influence on their lifestyle.

It is necessary to educate young girls about nutrition, appropriate diet, personal hygiene, physical activity, and taking medications under a physician's supervision during their menstrual period.

Effective management and implementation of the above will overallly contribute to reduced absenteeism, high self esteem, improved school performance and increased productivity which translates to improved economic development.

#### **5.6 Suggested areas for further Research**

Further research could be carried out to establish the reason why Government ,NGO`S and parents do not provide sanitary towels to girls in school even when they are aware of the negative impact arising from lack of sanitary towels.

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**Annex: 1**

**LETTER OF TRANSIMITAL OF DATA COLLECTION INSTRUMENTS**

Dear Sir/Madam

My name is Susan Oloo currently working for Kenya Girl Guides Association, Coast Region.

I am pursuing a master of art course in project planning and management at the University of Nairobi. In the partial fulfillment of the requirements for the course I am to submit a research report .Its for this purpose therefore ,that I propose to carry out a study in public primary schools in Tana River District.

The purpose of the study is to investigate the relationship between availability of sanitary towels and perfomance of the girl child in primary schools and came up with possible reccomendation of addressing the problem.

It is anticipated that findings from the study will be essential in furthering the argument for providing girls with basic sanitary needs as a possible and viable solution to girl's structural and cultural violence in Kenya and as a panacea for better performance in examination, co-curriculum activities and other duties in social life. It will also help campaign to dispel silence around menstruation and advocate for affordable sanitary pads to be made available in local markets across the country.

For this purpose I kindly request you to fill the attached questionnaire as honestly and objectively as possible .this will help me in the identification of the gaps for corrective action.

All information provided will be treated in strict confidence and will only be used for the purpose of analysis for the study.

Thank you for your support

Yours faithfully

Susan Oloo



**INTERVIEW GUIDE**  
**Please provide the following information**

**Age**-----

**District** ----- **school**----- **class**-----

**Occupation**-----

1. What are the typical reasons for missing school during menstruation?

- a) Worried about leaks.
- b) Do not have sanitary pads.
- c) Cramps or pain.
- d) Sick.

2. Please give a reason for your response or answer for the question 1 above.

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3. Are there activities that you are prevented from participating during the menstrual period?

- (a) Yes
- (b) No

4. If yes, please state some of them form your answer to the question 3 above.

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5. Do you think menstruation affects your performance in exams?

- (a) Yes
- (b) No
- (c) Not sure

**6. Please state a reason as to your answer in five above**

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**7. Are you aware of sanitary pads?**

- a) Yes
- b) No

**8. If yes, please name some of the brands that you are aware of.**

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**9. Have you ever used sanitary pads before?**

- a) Yes
- b) No.

**10. If Yes how effective are they to you during menstrual flow?**

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**11. How long have you using these sanitary towels?(please indicate)**

- 1. 2-4 years
- 2. 5-8 years
- 3. 9-12 years
- 4. 13 + (specify)

**12. Do you like them?**

- (a) Yes
- (b) No

**13. What was your first impression of pads?**

- a) Attractive
- b) Might leak
- c) Didn't like them
- d) Effective.
- e) Eager to try.

14. Please give a reason for the above answer in 12.

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15. Have you found any difficulties using pads?

- a) Yes
- b) No.
- c) Not sure.

16. How many pads do you need to stop the flow?

- a) 8 or more.
- b) 7 - 5 pads.
- c) 4 - 2 pads
- d) Not sure.

17. How many times do you change your menstrual pads in a day?

- a) 5 - 6 times a day
- b) 3 - 4 times a day
- c) 1 - 2 times a day.
- d) Once daily.

18. Where do you change the pads from?

- a) At school
- b) At home

19. Please give reason as to why you do not change the pads at school rather than at home.

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20. Would you still continue using pads even after completion of school?

- a) Yes
- b) No.
- c) Not sure.

21. Do you think the government is doing enough to help in the provision of sanitary pads?

- a) Yes
- b) No
- c) Not sure

22. Please give a reason for the above.

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23. Do you think if every girl child in school had access to sanitary pads it would enhance performance?

- (a) Yes
- (b) No

24. Please suggest a reason for the above answer.

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UNIVERSITY OF KENYA  
Nairobi