REPORT

BASELINE SURVEY ON KNOWLEDGE, ATTITUDES AND PRACTICES OF YOUNG ADOLESCENTS' SEXUAL AND REPRODUCTIVE HEALTH AND RIGHTS IN KILIFI COUNTY, KENYA

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BY

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	-	Acquired Immuno-Deficiency Syndrome
AIHD	-	African Institute for Health and Development
ARH&D	-	Adolescent Reproductive Health and Development Policy
ASRH	-	Adolescent Sexual and Reproductive Health
BHP	-	Bayer Health Pharmaceutical
CHW	-	Community Health Worker
DSW	-	Deutsche Stiftung Weltbevoelkerung
ERC	-	Ethical Review Committee
GoK	-	Government of Kenya
HC	-	Health Centre
HINARI	-	Health InterNetwork Access to Research Initiative
HIV	-	Human Immuno-deficiency Virus
IFC	-	International Finance Corporation
KDHS	-	Kenya Demographic Health Survey
KNBS	-	Kenya National Bureau of Statistics
KNH	-	Kenyatta National Hospital
LQAS	-	Lot Quality Assurance Sampling
PASW	-	Predictive Analytics Software
PI	-	Principal Investigator
PTA	-	Parents-Teachers Association
SPSS	-	Statistical Package for Social Sciences
SRH	-	Sexual and Reproductive Health
SRHR	-	Sexual Reproductive Health and Rights
STIs	-	Sexual Transmitted Infections
UNFPA	-	United Nations Population Fund
UON	-	University of Nairobi
VCT	-	Voluntary Counselling and Testing
Y2Y	-	Youth-to-Youth Initiative
YA	-	Young Adolescent
YAP	-	YAs Project
YEC	-	Youth Empowerment Centre

EXECUTIVE SUMMARY

Background: A young adolescent (YA) is a person aged between 10 and 14 years who is in the process of developing from a child into an adult. The YAs are in a period of dramatic intellectual, physical, psychological and social transformation. This group represents a unique sub-group of adolescents undergoing rapid physical, cognitive and emotional changes related to puberty. During this period, YAs develop a greater awareness of their social sphere, increase their ability to think logically and concretely, feel greater self-consciousness, and tend to depend less on parents and more on friends.

DSW[1] in close collaboration with Bayer HealthCare Pharmaceuticals (BHP) implemented a four-year pilot intervention (2009 to 2012) in partnership with selected districts and schools in Masindi, Tororo and Wakiso Districts in Uganda. An evaluation conducted in 2011 showed that the holistic approach of addressing a whole school setting – including students, teachers, parents and the surrounding community was highly effective. The organization, in partnership with BHP, is in the process of building on and expanding this experience by employing a similar approach in Kenya's Coast Region.

Objectives: The baseline survey was conducted to establish SRH knowledge, attitudes, practices and behaviour of YAs in primary school and how these are related to their health and well-being. Specifically, the study sought to: (i) collect data on knowledge, attitudes and practices of YAs (10-14 years) towards sexual and reproductive health (SRH) with regard information and services; (ii) assess community leaders, teachers and parents' opinions and perceptions on health information and service delivery to YAs in the target communities; and (iii) document the type and quality of youth friendly services provided by the healthcare system to YAs in the target communities.

Methods: The cross-sectional survey was conducted in two sub-Counties (Rabai and Kilifi South) of Kilifi County on the coastal region of Kenya. The study adopted a Lot Quality Assurance Sampling (LQAS) approach that allows the study team to utilize a small sample to generate baseline indicators. Nine primary schools in the two sites made up a lot. In total, 171 interviewer-based questionnaires were administered to pupils; 171 to parents, 38 to teachers, 19 to health workers and 19 to community leaders. The data have been processed and analysed by the use of the Statistical Package for Social Sciences (SPSS).

[1]Deutsche Stiftung Weltbevoelkerung (DSW) is an international development and advocacy organization that empowers young people and communities in low- and middle-income countries by addressing the issues of population dynamics and by improving health as a way to achieve sustainable development. With headquarters in Hannover, Germany, DSW maintains four country offices in Ethiopia, Kenya, Tanzania and Uganda. DSW has been implementing adolescent sexual and reproductive health and rights programmes in East Africa for over ten years in both rural and urban settings.

Key results: The results show major gaps in SRHR knowledge, attitudes, practices and perceptions of the pupils, parents, teachers and community leaders. It is evident that there is lack of open communication about SRH between pupils on the one hand, and parents and health workers on the other. Although the YAs know about HIV/AIDS, their level of knowledge is limited. Further, although parents acknowledge that YAs need SRH information, some feel that they are too young and that such information could influence them negatively and/or confuse them. Most of the health workers in the study sites have been trained on youth friendly service provision however the key gap relates to the fact that 10-14 year olds are not the key targets for such services.

Conclusions: There is an overall poor knowledge of HIV/AIDS, sexually transmitted infections (STIs), pregnancy and family planning (FP) among the YAs, and an inconsistency in open communication about SRH issues by the adults around them. Knowledge and awareness of children's rights is high, although some rights, such as the right to play and to healthcare, need more attention.

Recommendations:
The recommendations are made at three levels: policy; programmatic; and research.

(i) Programmatic:

a. The YAP Kenya team should design activities and develop/adopt SRHR toolkits that would provide information to the YAs on SRHR using multi-pronged approaches including working with teachers, parents and through peer support networks.
b. Facilitate mechanisms in schools where parents and teachers discuss SRHR issues of the YAs on a regular basis. Use of parents-teachers association (PTA) meetings to address SRHR could be negotiated with the schools.
c. Create linkages between the schools and the health facilities through facilitating the healthcare providers to interact with the YAs on a regular.
d. Support and/or strength Youth2Youth (Y2Y) clubs through which the youth would be facilitated to access accurate SRHR information.
e. Organize community dialogue sessions that would create 'safe spaces' for adults to share their concerns on YAs' SRHR and generate measures to address their key concerns.

(ii) Policy:

a. Engage with the Kilifi County Government as it designs its policies to ensure that the SRHR needs of the youth are included.
b. Engage with the County Government of Kilifi to ensure that youth development remains high on its development agenda.

(iii) Research:

a. Assess the effects of the differential perceptions towards the type of information girls and boys require and receive on SRH outcomes.

b. Examine the existing strategies of peer support and how they complement or are at variance with community approaches to YA SRHR.
c. Assess the determinants of early sexual debut and early pregnancies among the YAs in Kilifi County.

Baseline indicators at a glance

Indicator	Description	Proportion/ Measure (%)
PUPILS		
Pupils' comprehensive knowledge of SRH	• Heard of HIV/AIDS • Can explain at least two ways of HIV transmission and protection	14.6
Pupils' comprehensive understanding of family planning	• Explains FP correctly • Wants to begin having children at age 20 years and above • Wants up to a maximum of 4 children • Able to indicate at least three recommended FP methods	9.9
Knowledge about pregnancy prevention	• Names two methods on how a girl can prevent getting pregnant • Names two methods on how a boy can prevent himself from impregnating a girl	0.6
Open communication with parents on SRH	• Get information about HIV/AIDS, STIs and FP from parents/guardians • Talk about SRH with parents/guardians either always or sometimes • Openly tells parents/guardians about attraction to opposite sex • Would ask parents/guardians for advice if he/she suspected infection with STI	4.7
Open discussion with teachers	• Discusses SRH with teachers • Discusses with teachers at least one SRH topic	27.5
Knowledge and communication about children's rights	• Knowledge and communication about children's rights • Can name 2 or more children's rights • Discussion of children's rights with teachers	67.5 51.5 33.3
Level of sanitary towel access by girls	• Level of sanitary towel access by girls • Knowledge of girls missing school during menstruation	60.2 40.9
Gender based issues	• Level of autonomy in decision making by girls	32.7
TEACHERS		
Teachers comprehensive understanding of SRH	• Teaches YAs 10-14 years • Reproductive health and HIV/AIDS are part of the teaching curriculum • Discusses health information with pupils • A minimum 4 RH topics discussed with pupils	13.2
Use of youth friendly communication	• Method of communicating youth friendly information to pupils	26.3

methods	• Time spent per week to discuss health topics with pupils	
Communication about reproductive health to parents	• Level of discussion of health information with parents • Type of reproductive health topics discussed with parents	26.3
Cooperation with health centres	• Level of co-operation by schools and health centres • Referral places by teachers to pupils for SRH information	7.9
Understanding and awareness of importance of life skills	• Level of awareness of teachers on life skills • Types of life skills taught to pupils • Perception on the importance of life skills to pupils	92.1
Understanding and discussion of children's rights	• Knows about children's rights • Discusses children rights with pupils	92.1

PARENTS		
Parents' comprehensive understanding of SRH	• Acknowledges that children need SRH information • A minimum of 4 RH topics listed as needed by children • No difference between SRH information given to boys and girls	25.7
Parents' open communication with children	• Talk to his/her children once a month • Discuss at least four SRH topics at least once a month with the children • Children 10-14 years need to know their HIV status	18.1
Understanding of importance of life skills	• Level of knowledge on different forms of life skills	79.2
Knowledge and communication about children's rights	• Knowledge about children's rights • Names at least three children's rights • Discusses children's rights with children	47.9
COMMUNITY LEADERS		
Comprehensive understanding of RH	• Children between 10-14 years need SRH information • Refer YAs to health facility to get specific information on SRH • No difference between the information given to girls and boys • Mentions at least one SRH problem as one of the typical health problems of children age 10-14 years	0.0
Community is aware and involved in ASRH topics	• Mentions at least one SRH topic as priority topic to be discussed concerning young people in the community • Enumerates the role the communities play in promoting YAs' reproductive health to include protection, counselling, information sharing or supervision • Community supports school health programming in ways other than meetings	42.1
Knowledge and communication about children's rights	• Level of awareness of children's rights • Level of discussion on children's rights with Youths in the community • Level of discussion of children rights with YA	94.7 81 74

HEALTH WORKERS		
HC closely cooperating with schools	• Cooperate with primary schools regarding RH information services • Have school outreach programmes • Visit schools at least once a month	47
HC offers VCT to YAs	• HC has a high demand for VCT • HC promotes VCT for clients aged 10-14 years • More than 10 YAs aged 10-14 years seek counselling, testing and receive results in a month on average • HC encourages parents/guardians to come with their children for VCT	42

1.0 INTRODUCTION

1.1 Background

A young adolescent (YA) is a person aged 10 to 14 years who is in the process of developing from a child into an adult (UNFPA, 2006). The YAs are in a period of dramatic intellectual, physical, psychological and social transformation from childhood to adulthood (Abrams, 2006, Bearinger *et al.*, 2007). This group represents a unique sub-group of adolescents undergoing rapid physical, cognitive and emotional changes related to puberty. During this period, YAs develop a greater awareness of their social sphere, increase their ability to think logically and concretely, feel greater self-consciousness, and tend to depend less on parents and more on friends. The YAs start to feel peer pressure to conform – it is notable that early adolescence is the peak time when peer pressure rules. At this stage, they form values and make decisions that will impact them either positively or negatively for the rest of their lives (Patton and Viner, 2007, Resnick and Bowes, 2007).

While this fact is often neglected, it is also at this age that many YAs first engage in sexual activity. Sexual and reproductive health and rights (SRHR) information and services are therefore crucial for YAs (Kleinert, 2007). Many YAs lack knowledge about the physical changes happening in their bodies and need reassurance and support to deal with them (UNFPA, 2006). However, their parents/guardians and other adults are usually unprepared to deal with such changes. In most African societies, topics on sexuality are considered a taboo and parents lack the skills or time to communicate effectively about them with their YAs (Erulkar *et al.*, 2004, Abajobir and Seme, 2014, Herman *et al.*, 2013). The traditional system of sharing information on sexuality, through grandparents and other kin, is currently weak or non-existent. In schools, where YAs spend most of their time, teachers who should provide SRHR education are constrained in terms of skills and time, and typically focus on those subjects that are examinable. Consequently, YAs often do not have adequate support from their social surroundings or appropriate information, access to youth-friendly health services, protection, and decision-making power or the life skills needed to handle SRHR issues (Brown, 2007). In a nutshell, YAs are vulnerable to unintended pregnancies, contracting HIV as well as other STIs, and sexual abuse (Varga, 2003, UNFPA, 2013).

It is critical to address the SRH issues of YAs, not only from a human rights perspective, but also because YAs have the potential to be a positive force in society, now and for the future. Focusing on individuals while they are still in adolescence would allow them to adopt risk-avoiding and responsible attitudes and health behaviour and, in the long-term, the burden of disease in later life would be reduced, and they would be better equipped to contribute positively to society.

YAs in Kenya are at great risk for new HIV infections, risky sexual behaviour, unplanned pregnancies, birth-related complications and sexual abuse. The Kenya Demographic and Health Survey (KDHS 2008/9)[2] indicates that 11% of adolescent girls and 22% of adolescent boys have had their sexual debut by age 15 (KNBS and ICF Macro, 2010). The

[2]This is the most recent national DHS for the country. The Kenya National Bureau of Statistics and its partners were in the process of working on the KDHS report for 2014 at the time of finalizing this report.

situation is complicated by sexual violation whereby about 22.2% of girls aged 15-19 years who participated in the KDHS 2008/9 reported that their first sexual intercourse was forced mainly by perpetrators known to them. According to Nairobi Women Hospital, 55% of those sexually violated are girls aged 0-15 years (Ruto, 2009). This not only has adverse health impacts but it affects other sectors such as education where teenage pregnancy contributes to school drop-out.

Kilifi is the eighth most populated County in Kenya with a total population of more than one million people (Kenya Population Census Report, 2010). School drop-out rates as high as 26% have been reported, with early pregnancies and marriages being cited as a serious problem (National Coordinating Agency for Population and Development, 2005). The authority over children exhibited at home is extended to the schools and some teachers use their positions to sexually abuse children under their care. In Kilifi, the Children's District Office reports that most of the defilement cases involve girls of aged 12-16 years (Mwangi, 2012). Other challenges in the County include low retention in school, early and unwanted pregnancies and vulnerability to HIV/AIDS, all of which trap YAs, especially girls, in a cycle of poverty.

1.2 Rationale

DSW in close collaboration with Bayer HealthCare Pharmaceuticals (BHP) developed the innovative Young Adolescents Project (YAP) in Uganda to create a supportive environment to improve SRHR education for YAs in primary schools. The four-year pilot intervention was implemented between 2009 and 2012 in close partnership with selected districts and schools, working with students, teachers and parents and guardians from primary schools in Masindi, Tororo and Wakiso Districts. An evaluation conducted in 2011 showed that the holistic approach of addressing a whole school setting – including students, teachers, parents and the surrounding community was highly effective.

The DSW, in partnership with BHP, is in the process of building on and expanding this experience in Kenya's Coast Region. The organization has been working in Kenya since 2003, and it has been active in the Coastal Region since 2006. During this time, it has established sustainable networks of Youth-to-Youth (Y2Y) clubs and Youth Empowerment Centres (YECs). In Kilifi, DSW has 22 youth clubs, four well-equipped YECs, and a mobile voluntary counselling and testing (VCT)/Youth Truck that supports SRHR awareness and service delivery activities among young people within the community.

Given the similarities of experiences and challenges facing young people in Kenya and Uganda, the proposed YAP Kenya will build on DSW's experiences in Uganda and draw important lessons in the course of implementation. YAP Kenya will replicate identified good practices, such as all-inclusive dialogue and involvement of various stakeholders in the design and implementation of the project; addressing cultural barriers to parent-child communication on issues of sexuality; supplementing peer education by building the capacity of teachers; ensuring steady and correct flow of SRHR and HIV/AIDS information; and being flexible and adaptive to the needs of the target groups and the cultural, behavioural and environmental contexts.

To expand on the lessons from YAP Uganda, YAP Kenya will include additional components specific to the Kenyan context, such as educating YAs, parents, teachers and communities on the Children's Act (2001), the Sexual Offences Act (2006) and relevant provisions of the Constitution of Kenya (2010), particularly the Bill of Rights Part II on 'Safeguards for the Rights and Welfare of the Children'. These frameworks will enlighten the stakeholders on what is expected of them and will go a long way in addressing some of the SRHR issues that YAs are currently confronted with.

The design of YAP takes into cognizance the need to mitigate some of the challenges faced during implementation in Uganda. These included environmental, cultural and economic factors as well as the unrealistic high expectations from stakeholders and frequent staff changes within key government offices in the districts. YAP Kenya will at the initial stages engage with senior government officials of Education and Public Health in Kilifi County to negotiate for limited transfer of officers engaged in the project for continuity and agree on clear partnership arrangements to manage expectations.

1.3 Study questions

In order to increase the understanding of the current situation and needs, a baseline survey was conducted to establish SRH knowledge, attitudes, practices and behaviour of YAs in school and how these are related to their health and well-being. As part of the project design, the data collected would help in developing indicators to be used to monitor project implementation and assess the outcomes.

The baseline survey was guided by three key research questions:

1. What are YAs' knowledge, attitudes and practices towards SRH information and services?
2. What are community leaders, teachers and parents' opinions and perceptions on health information and service delivery to YAs in the targeted communities?
3. What is the quality of youth friendly services provided by the healthcare system to YAs in the target communities?

1.4 Specific objectives

The specific objectives of the survey were to:

1. Collect data on knowledge, attitudes and practices of YAs (10-14 years) towards SRH with regard to ASRH information and services;
2. Assess community leaders, teachers and parents' opinions and perceptions on health information and service delivery to YAs in the target communities; and
3. Document the key types and quality of youth friendly services provided by health sector to YAs in the target communities.

2.0 METHODS

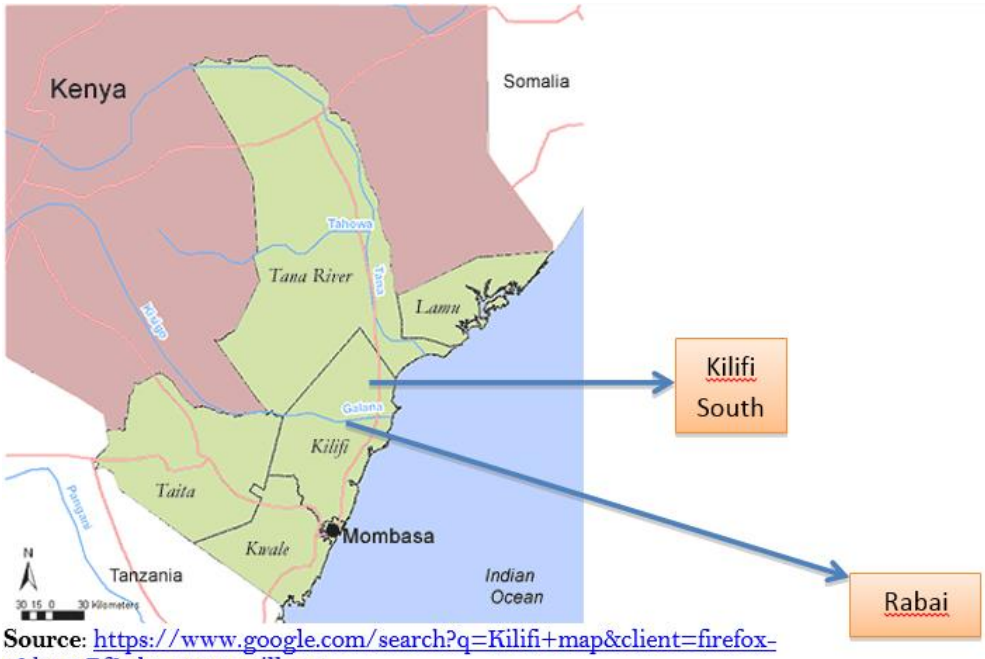
2.1 Study Design

This was a cross-sectional survey conducted by use of interviewer-based questionnaires. The tools used for data collection in YAP Uganda were reviewed and customized to the Kenyan context. Given the need for generalizable data, the participants were randomly selected as further described below.

2.2 Study area description

This study was conducted in Kilifi County, which is located on the coastal region of Kenya. It lies between 2º 20' and 40' South, and 39º 5' and 40º 14' East, covering an area of 15,500 km². The County comprises the former Kilifi and Malindi districts. It borders Tana River County to the North, Taita Taveta to the West, Kwale to the South West, Mombasa to the South and the Indian Ocean to the East. The County has a population of 1,134,856 (Kenya National Population Census, 2009). Administratively, Kilifi County has six districts (sub-Counties) namely: Malindi; Magarini; Ganze; Rabai; Kaloleni; and Kilifi South. The study was conducted in Rabai and Kilifi South sub-Counties.

Figure 1: A Map showing Kilifi County



Source: https://www.google.com/search?q=Kilifi+map&client=firefox-a&hs=zBf&rls=org.mozilla:en-

2.3 Study population

The study was conducted in three locations namely Rabai, Junju and Mtwapa. Other than targeting community members in these locations, the study targeted pupils and teachers from nine primary schools. The selected primary schools in Rabai sub-County were: Msumarini, Bodoi, Vipingo, Mtomondoni, Mtwapa and Mtepeni while in Kaloleni sub-County, the study was carried out in three schools - Benyoka, Lugwe and Kailo. The schools are within the geographical areas where DSW Kenya runs its interventions with young people. A summary of the population per school is presented in Table 1.

Table 1: List of targeted primary schools and their population distribution in Kilifi County

School	Total Pop.	Sub-County
Bodoi	571	Kilifi south
Benyoka	1,132	Rabai
Kailo	470	Rabai
Lugwe	789	Rabai
Msumarini	520	Kilifi south
Mtepeni	1024	Kilifi south
Mtomodoni	2,255	Kilifi south
Mtwapa	1594	Kilifi south
Vipingo	1218	Kilifi south

Source: Kilifi County Education Office (2013)

Health service providers from the existing five government health facilities were identified as summarized in Table 2.

Table 2: List of health facilities in Kilifi County

Health Facility	Sub-County
Msumarini Dispensary	Kilifi South
Vipingo Health Centre	Kilifi South
Mtepeni Dispensary	Kilifi South
Mtwapa Health Centre	Kilifi South
Rabai Health Centre	Rabai

Source: Kilifi County Health Office (2014)

2.4 Inclusion/exclusion criteria

Nine schools were targeted in locations where DSW runs its SRH interventions. The data were collected from the pupils aged 10-14 years, their parents/guardians and teachers. To ensure comprehensive collection of data and to allow for an integrated intervention with support the schools, health facilities and communities, leaders from Rabai and Kilifi sub-Counties and service providers from the five health facilities were also interviewed.

2.5 Sample size determination

The study sample size was determined based on Lot Quality Assurance Sampling (LQAS) approach. The selected schools made up the nine different units in order to generate project indicators. In total, five different groups of respondents were identified and attached to each unit. These were pupils, parents, teachers, community leaders and health workers. Thus, a total of 171 pupils, 171 parents, 38 teachers (19 per sub-County), 19 health providers and 19 community leaders were targeted as respondents, as shown in Table 3.

Table 3: Number of Respondents per study unit

School	Pupils	Parents	Teachers	Health providers	Community leaders
Kilfi South					
1	19	19	19	13	13
2	19	19			
3	19	19			
4	19	19			
5	19	19			
6	19	19			
Rabai					
7	19	19	19	6	6
8	19	19			
9	19	19			
Total	**171**	**171**	**38**	**19**	**19**

2.6 Sampling method

The LQAS methodology was used for the baseline survey in order to ensure comparability of the YAP Uganda and YAP Kenya project indicators, outputs and outcomes. To select the study respondents, a complete list of each group of respondents was compiled, allocated random numbers and the required sample selected using a table of random numbers as shown in Table 4.[3]

Table 4: Number of respondents per target group and school settings

School	Pupils		Parents		Teachers		Health workers		Community	
	M	F	M	F	M	F	M	F	M	F
Rabai Sub-County										
Benyoka	12	7	5	14	7	12	2	4	5	3
Kailo	12	7	4	15						
Lugwe	10	9	5	14						
Kilifi South Sub-County										
Bodoi	9	10	11	8	6	13	2	6	7	4
Msumarini	8	11	3	16						
Mtepeni	9	10	3	16						
Mtomondoni	10	9	7	12						
Mtwapa	11	8	3	16						
Vipingo	4	15	2	16						

The YAs interviewed were spread across all primary school grades (classes) and the distribution is shown in Table 5.

[3]There were no cases and controls for this survey. The project will adopt a pre and post-survey approach to assessing the project outcomes.

Table 5: Number of YAs interviewed by age and class

	Class of respondent								
Age	1	2	3	4	5	6	7	8	Total
10	4	7	5	7	2	0	0	0	25
11	1	1	1	15	5	3	0	0	26
12	0	1	5	12	14	11	1	0	44
13	0	1	1	4	14	12	4	0	36
14	0	0	1	2	3	17	10	7	40
Total	5	10	13	40	38	43	15	7	171

Among the health workers interviewed, 11 were nurses, 1 clinical officer, 3 community health workers (CHWs), 1 records officer, 1 pharmacist, 1 medical laboratory technician and 1 volunteer. Community leaders included 10 village elders, 2 school committee members, 2 religious leaders, 3 community-based organization (CBO) leaders, 1 business woman and 1 Assistant Chief.

2.7 Recruitment and consenting procedures

The DSW project team in Mombasa had held sensitization meetings with school heads and education officials on the proposed activities (including the study) prior to the initiation of the data collection exercise. The participants in the sensitization meetings included the local administrators, school management committees and health management committees. Data were only collected from participants upon getting their consent. The study respondents were taken through an informed consent/assent process, which allowed them to decide whether to participate in the study or not.

The investigators trained research assistants on the consenting procedures as part of the fieldwork training. The consent explanation had been outlined in the consent form and included the contact information of the Principal Investigator (PI) and the Chairperson of Kenyatta National Hospital (KNH) and University of Nairobi (KNH/UON) in case of a need for clarification.[4]

Mwanjazi Mohammed interviewir young boy during the pre-test

As part of getting informed consent, the study team presented written consent explanations to the potential study participants. The consent explanation and review process was done in private with each participant so as to provide any clarification prior to participating in the study. The explanations were in a language that the participants understood well with a view to reviewing the form before signing. The consent explanation had been translated into Kiswahili for ease of understanding among those who could not understand English. In addition, the PI made deliberate efforts to include research assistants who understood the local languages in the study team to ensure effective communication during recruitment of study participants. The research assistants ensured that each participant was given time to consider whether or not to participate in the research without coercion. For those

[4]This inclusion was based on the requirements for acquiring the ethical approval.

who were unable to read and write, the research assistants took them through the explanations in a language they understood best and thereafter allowed them (if they consented) to consent using a thumbprint.

Further to this, the research assistants informed parents/guardians as legal representatives of pupils below the age of 18 about consenting procedures for their YAs so that they could give assent. Consent to participate in the study was voluntary. A consent explanation form for YAs under 18 years had also been prepared in English and translated into Kiswahili together with an assent form that was signed by the parent/guardian of the child. Those who gave the consent were provided with a form upon which they signed or put a thumbprint. In the event of any discomfort, a respondent was free to stop the session at any point. Similarly, parents consenting their YAs to participate in the study assented by signing an assent form. The form was also signed by a witness as proof that informed consent had been sought and approved by the parent/guardian.

2.8 Data collection tools

Desk review: This was undertaken to review published and gray literature on young people's sexuality in Kenya and globally. The materials reviewed were gathered through online searches (AIHD has access to the Health InterNetwork Access to Research Initiative (HINARI), relevant government departments and development partners.

YAs: An interviewer-based questionnaire was administered to the pupils aged 10-14 years. The data variables included knowledge of HIV/AIDS, perception of risk, preventive measures, existing and preferred sources and methods of information, as well as life skills.

School teachers: An interviewer-based questionnaire was used with home science/science/guidance and counselling teachers in the nine primary schools.

Community leaders: This target group included parents, health workers as well as community leaders. The data gathered focused on existing challenges and possible support mechanisms to enhance the SRHR of the YAs. Issues discussed included access to health information, sex education in schools, parent-child-communication, as well as on existing and potential SRH services for YAs.

The data collection tools were pre-tested in one primary school, which was not involved in the baseline survey, then necessary adjustments were made on the procedures and data collection tools before embarking on the fieldwork. Eight research assistants were selected from DSW youth clubs within the study areas based on their experience in interviewing and knowledge of the predominant local languages and community settings. They were trained over a 3-day period on the approach and interviewing skills.

2.9 Quality assurance procedures

The DSW office recruited and assembled research assistants for training. The training, led by the lead consultant, covered the study objectives and approach to provide the research assistants with an overview of the project and data collection processes. The

areas covered during the training included ethical considerations and consenting procedures. The training was participatory and incorporated role-plays to ensure that the research assistants internalized the data collection processes.

The research team was divided into two groups, each with a supervisor. The teams agreed on work schedules every morning and in the evening the supervisors reviewed all the data collection sheets. The DSW team also visited the research team during the data collection period to monitor the process and ensure the integrity of the process and data collected.

2.10 Data collection instruments

The instruments used for data collection were interviewer-based questionnaires and these are attached in Annex 1.

2.11 Ethical considerations

The survey aimed at meeting high ethical standards and to create conditions that would produce high quality data. Great care was taken to provide honest and clear information about the objectives of the study and how the results would be used. The PI sought ethical approval from the KNH/UON-ERC before the implementation of the study. The principle of informed consent was further applied in all areas of the study. The anonymity of the respondents was assured throughout the study.

Before holding sessions with the respondents, the study team would give a detailed explanation about the study. Assent was sought from parents/guardians of YAs by signing an assent form. The form had been translated into Kiswahili for ease of understanding. For people aged above 18 years, they were provided with a consent form to read and sign as proof of their permission to participate in the study. The consent form had also been translated into Kiswahili.

Part of the study questions entailed discussing issues related to SRH, which might cause discomfort among the participants. To mitigate this during data collection, the study team ensured that female research assistants interviewed girls and women and vice versa. In addition, the respondents were free not to answer any question they were not comfortable with (consent and assent forms are attached in Annex 2).

The study team informed the respondents that they would not benefit directly and/or immediately from the study results. The benefits were to be accrued by the school children because the results would inform DSW in its interventions.

2.12 Data management and statistical analysis

For analysis purposes, the answers to open-ended questions were coded as correct or incorrect and summaries compiled (e.g. correct answers to questions 1, 2 and 4) to assess the situation of parent-child and teacher-pupil communication, comprehensive knowledge of FP, cooperation between HCs and schools, as well as the comprehensiveness of the SRH knowledge of respondents.

Data were entered in MS excel and analysed using Predictive Analysis Software (PASW)/SPSS version 20. Responses to questions with multiple answers were treated as distinct Yes/No variables, and multiple response analyses conducted. Where required, new variables were created merging correct/incorrect multiple responses, for example, where a minimum number of correct answers were expected (e.g. mentioning at least 3 children's rights, or a minimum of 4 SRH topics).

The collected information was translated into the LQAS evaluation system (see Table 6) and summaries were compiled into result tables per school, sub-County and target group. Analysis was done based on responses from each target group. Additional data analysis was conducted through multiple response analysis and tables of frequencies by cases have been generated.

Table 6: Criteria for analysis of questions

PUPILS' Summaries	**Criteria - Correct answer to questions:**
Comprehensive understanding of HIV/AIDS	*Have you ever heard about HIV/AIDS?* Correct = yes *How can one contract HIV?* Correct = indicated all ways of transmission (blood, semen, breast milk) *How have you or other people been able to protect yourselves?* Correct = more than 1 method mentioned
Correct understanding of family planning	*What do you understand by the term "family planning "?* Correct = Correct definition *At what age would you like to begin having children?* Correct = 20 years and above *How many children do you want to have?* Correct = 0-4 *What family planning methods do you know?* Correct = 3 recommended methods
Correct understanding of pregnancy prevention	*How can a girl prevent pregnancy?* Correct = min. 2 methods *How can a boy prevent himself from impregnating a girl?* Correct = min. 2 methods
Open communication with parent	*Who would you ask for advice if you suspected that you have contracted a STI?* Correct = Parent *From whom would you get information about HIV/AIDS, STIs and family planning?* Correct = Parent *Would you openly tell your parents about attraction to the opposite sex and how you feel about them yourself?* Correct = Yes
Open communication with teacher	*Who would you ask for advice if you suspected that you have contracted an STI?* Correct = Teacher *From whom would you get information about HIV/AIDS, STIs and family planning?* Correct = Teacher *Do you discuss reproductive health issues with your teachers?* Correct = Yes
Knowledge and Communication about Children's Rights	*Knowledge and communication about children's rights* *Can name 2 or more children's rights* *Discusses children's rights with teachers*
Level of Sanitary towel access by girls	*Level of sanitary towel access by girls* *Girls missing school during menstruation*
Gender based	*Level of autonomy in decision making by girls* *Ratio of girls to boys in schools*
PARENTS' Summaries	**Criteria - Correct answer to questions**
Comprehensive understanding of reproductive health	*Which health information do you think children between 10-14 years need?* Correct = Minimum 4 RH topics *Should there be a difference between the information given to girls and boys?* Correct= No
Open communication	*How often do you talk about health to your children (10-14)?* Correct = Minimum

with child	once/month *Which health topics including reproductive health do you discuss with your children (10-14 years)?* Correct =4 RH topics *Do children between 10-14 years need to know their HIV/AIDS status?* Correct = Yes
Understanding and awareness of importance of life skills	*Level of knowledge on different forms of life skills*
Knowledge and communication about Children's Rights	*Knowledge about children's rights* *Names at least three children's rights* *Discusses children's rights with children*
TEACHERS' Summaries	**Criteria - Correct answer to questions:**
Comprehensive understanding of RH	*Are you teaching younger adolescents 10-14 years?* Correct = Yes *Are reproductive health and HIV/AIDS part of the teaching curriculum?* Correct = Yes *Do you discuss health information with pupils?* Correct = Yes *What kind of health information do you give to pupils?* Correct = Minimum of 4 RH topics
Youth friendly ways of communicating	*What methods are you using to pass health information to pupils?* Correct = Youth friendly methods *How much time do you usually spend per week to discuss health topics with pupils?* Correct = Minimum 1-2 hours
Good parents involvement	*Do you also discuss health topics with parents?* Correct = Yes *What kind of health information do you discuss with parents?* Correct = RH information *How do you get to parents?* Correct = Individual meetings
Cooperation between schools and pupils accessing RH information from HC	*Where do you think pupils (10-14 years) usually get reproductive health information?* Correct = Health centre *Where would you refer pupils to get specific information on SRH?* Correct = Health centre *If you refer pupils to health centres, do you get feedback on how the young people were received?* Correct= Yes
Understanding and awareness of importance of life skills	*Level of awareness of teachers on life skills* *Types of life skills taught to pupils* *Perceptions on the importance of life skills to pupils*
Children's rights	*Knows about children's rights* *Level of discussion of children rights with pupils*
COMMUNITY LEADERS' Summaries	**Criteria - Correct answer to questions:**
Comprehensive understanding of RH	*What health information do children between 10-14 years need?* Correct = min. 4 RH topics *Where would you refer children to get specific information on RH?* Correct = HC *Should there be a difference between the information given to girls and the information given to boys?* Correct = no *What are typical health problems of children age 10-14 years in your community?* Correct = min. 1 SRH problem
Community is aware and involved in ASRH topics	*What are priority topics to be discussed concerning young people in your community?* Correct = Minimum 1 RH topic *What is the role of communities in promoting YAs' reproductive health?* Correct = Protection, counselling, information sharing or supervision *How does the community support school health programming?* Correct = Any support apart from meetings
Knowledge and communication about	*Level of awareness of children's rights* *Level of discussion on children's rights with YAs in the community*

children's rights	
HEALTH WORKERS' Summaries	**Criteria - Correct answer to questions:**
HC is providing children of 10-14 yrs. with RH services	*Which reproductive health services do the clients (10-14 years) usually seek?* Correct = RH services *What topics do you discuss in schools?* Correct = SRH topics
HC is closely cooperating with schools	*Do you cooperate with primary schools regarding reproductive health information services?* Correct = Yes *Do you have school outreach programmes?* Correct = Yes *How often do you visit schools?* Correct = Minimum once a month
HC offers VCT to YAs	*Does the HC have a high demand for VCT?* Correct = Yes *Does the HC promote VCT for clients of 10-14 yrs?* Correct = Yes *How many YAs aged 10-14 years seek counselling, testing and receive results in a month on average?* Correct = >10/month *Does the HC encourage parents/guardians to come with their children for VCT?* Correct = Yes

2.13 Study Limitations

Some of the YAs were unable to express themselves well on issues of sexuality due to several factors including culture, embarrassment or fear. In fact, some of the younger pupils (age 10-11) were quite hesitant during the interviews. Similarly, due to cultural and other reasons, in some cases the community members showed discomfort while discussing matters on sexuality. To counter these challenges, the study team:

i. Undertook sensitization with the communities to foster an understanding of the study objectives;
ii. Provided privacy for the respondents to ensure that they did not feel exposed to other people during the interview process;
iii. Had interviewers interviewing respondents of the same gender;
iv. Reassured and constantly reaffirmed the respondents of their anonymity in the research process;
v. Handled each respondent, especially the YAs, with a lot of patience; and
vi. Recruited, trained and used research assistants from the local areas.

3.0 RESULTS

This chapter is divided into five sections: section 1 presents the results from the pupils' questionnaire; section 2 on parents; section 3 on teachers; the fourth section is on community leaders; and section 5 is on health workers.

3.1 Pupils

3.1.1 Pupils' comprehensive knowledge of SRH

A summary of "correct" answers to three criteria (respondents had heard of HIV/AIDS and were able to explain at least two ways of transmission and protection) was compiled to assess whether the pupils had a comprehensive understanding of HIV/AIDS. Only 14 pupils out of 57 (24.56%) in Rabai and 11 pupils out of 114 (9.64%) from Kilifi South had comprehensive knowledge on HIV/AIDS.

3.1.2 Knowledge about Family Planning

Pupils were asked their understanding of the term 'family planning'. Spacing children was mentioned by 7.6% of all adolescents, delaying childbirth by 4.7% and preventing pregnancy by 5.8%. They were also asked the age at which they would like to start having children and as indicated in Table 7 the majority of the YAs indicated preference for having children when at the age range of 20-30 years.

Table 7: Age range at which adolescents would like to start having children

Age range	Number	Percentage
15 -19 years	10	5.9
20 – 25 years	49	28.7
26 – 30 years	49	28.7
31+ years	35	20.4
Don't know	28	16.3
Total	171	100

In terms of the preferred number of children, 1.8% wanted no children, 28.8% wanted 1-2 children, 36.8% wanted 3-4 children, 22.8% wanted 5-6 children and 3.5% wanted 7+ children.

The YAs were also asked what family planning methods they knew. Multiple response analysis indicates that over 80% of them did not know any FP method as shown in Table 8.

Table 8: Family planning methods known by children (multiple responses)

FP method	N	Percent	Percent of Cases
Oral pill	6	3.4%	3.6%
Injectables	20	11.5%	12.1%
Condom	5	2.9%	3.0%
Don't know	143	82.2%	86.7%
Total	174	100.0%	

It is notable that 84.8% of adolescents did not know why some people do not consider FP, while 7.6% thought it was because of fear, 3.4% felt it was because of religion,

another 3.4% felt it was because of love for many children, while 0.7% thought people do not plan families because of culture.

In summary, there is poor comprehensive understanding of FP (8.77% in Rabai and 10.5% in Kilifi South). That is respondents who were able to explained the term FP correctly, wanted to begin having children at 20 years and above, wanted up to a maximum of 4 children and were able to indicate at least three recommended FP methods, as shown in Table 9.

Table 9: YAs' understanding of FP

Sub-County and school	Yes	No	LQAS decision rule <50%	Total		
Rabai						
Benyoka	1	18	7	19	Rabai	8.77%
Kailo	3	16	7	19		
Lugwe	1	18	7	19		
Kilifi South						
Bodoi	1	18	7	19		
Msumarini	4	15	7	19		
Mtepeni	4	15	7	19	Kilifi South	10.5%
Mtomondoni	1	18	7	19		
Mtwapa	1	18	7	19		
Vipingo	1	17	7	19		

3.1.3 Knowledge about pregnancy prevention

Comprehensive understanding of pregnancy prevention entailed the pupils being able to indicate two methods of pregnancy prevention for girls and boys. Only one 13 year old in class 7 from Kailo had comprehensive knowledge of pregnancy prevention as per this definition. Tables 10 and 11 illustrate the responses by sub-County on: a) how a boy can prevent impregnating a girl; and b) how a girl can prevent pregnancy.

Table 10: How a boy can prevent impregnating a girl by sub-County

Sub-County	Abstinence	Condom use	Don't know	Total
Rabai	24(49.0%)	9(25.7%)	24(31.6%)	57
Kilifi South	25(51.0%)	26(74.3%)	52(68.4%)	103
Total	**49(30.6%)**	**35(21.9%)**	**76 (47.5%)**	**160 (100.0%)**

Percentages and totals are based on responses

Table 11: How a girl can prevent pregnancy by sub-County

Sub-County	Abstinence	Condom use	Emergency Pills	Don't know	Total
Rabai	24(96%)	6(75%)	1(50%)	12(75%)	43(84.3%)
Kilifi South	1(4.0%)	2(25%)	1(50%)	4(25%)	8(15.7%)
Total	**25(49%)**	**8(15.7%)**	**2(3.9%)**	**16(31.4%)**	**51(100.0%)**

Percentages and totals are based on responses

The results clearly indicate poor knowledge of pregnancy prevention methods, with the most preferred method being abstinence for both boys and girls and some condom use for boys.

3.1.4. Communication about SRH with parents

About two-thirds (62%) of YAs would seek advice from the mother or father if they suspected they had a STI. Other potential sources of advice for YAs in cases of suspected infection with STI included health workers (38.8%), teachers (3.5%) and siblings (7.0%).

About one-third (30.57%) of YAs would reportedly seek information on HIV/AIDS from a parent/guardian, 44.4% from health workers and 17.62 % from teachers. Other sources of information on HIV/AIDS included siblings, peers and radio (all at less than 8%).

Even though many adolescents would ask for advice from parents in case of suspected STI, 69% of them reported that they would not openly tell their parents about attraction to the opposite sex and only 15% always talked to their parents about SRH.

Open communication with parents was a combination of 'Yes' responses by pupils who would get information about HIV/AIDS, STIs and FP from parents/guardians, talk about SRH with parents/guardians either always or sometimes, openly tell parents/guardians about attraction to the opposite sex, and would ask parents/guardians for advice if they suspected an infection with STI. Only 8 pupils out of a total of 171, openly communicated with parents/guardians as indicated in Table 12.

Table 12: Pupils' open communication with parents by school and sub-County

Sub-County and school	Yes	No	LQAS decision rule <50%	Total		
Rabai						
Benyoka	0	19	7	19		
Kailo	1	18	7	19	Rabai	**1.75%**
Lugwe	0	19	7	19		
Kilifi South						
Bodoi	1	18	7	19		
Msumarini	0	19	7	19		
Mtepeni	1	18	7	19	Kilifi	6.14%
Mtomondoni	2	17	7	19	South	
Mtwapa	1	18	7	19		
Vipingo	2	17	7	19		

3.1.5 Communication with teachers on SRH

Slightly over two-fifths (44.4%) of the pupils indicated that they discussed SRH with teachers. A multiple response analysis indicates that early sex and STI/HIV/AIDS are the most frequently discussed topics as shown in Table 13.

Table 13: Topics teachers discuss with pupils (multiple responses)

	Sub-county		
SRH topic	**Rabai**	**Kilifi South**	**Total**
Early sex	12(46.2%)	14(53.8%)	26(28.3%)
Puberty	5(45.5%)	6(54.5%)	11(12.0%)
Menstruation	2(40.0%)	5(50.0%)	10(10.9%)
Relationships	6(66.7%)	3(60.0%)	5(5.4%)
Pregnancy	5(50.0%)	3(33.3%)	9(9.8%)
How to be	1(25.0%)	3(75.0%)	4(4.3%)

man/woman			
STI/HIV	11(40.7%)	16(59.3%)	27(29.3%)
Total	42	50	92 (100.0%)

Open communication with teachers was defined as a combination of 'Yes' to discussing SRH issues with teachers and 'Yes' to discussing with teachers at least one SRH topic. Three schools (Kailo, Mtomondoni and Msumarini) reached the LQAS threshold level in open communication with teachers as indicated in the Table 14. However, combined data indicates that both sub-Counties did not meet the LQAS decision rule.

Table 14: Open discussion with teachers by school and sub-County

Sub-County and school	Yes	No	LQAS decision rule <50%	Total		
Rabai						
Benyoka	5	14	7	19	Rabai	31.57%
Kailo	7	12	7	19		
Lugwe	6	13	7	19		
Kilifi South						
Bodoi	5	14	7	19		
Msumarini	8	11	7	19		
Mtepeni	1	18	7	19	Kilifi South	25.43%
Mtomondoni	7	10	7	19		
Mtwapa	2	16	7	19		
Vipingo	6	17	7	19		

3.1.6 Children's rights

About two-thirds (67.8%) of the YAs knew about children's rights, and of these, 51.5% could name at least two children's rights and 33.3% reportedly discussed rights with teachers. The most frequently mentioned rights were food (42.1%), education (56.7%) and shelter (31.6%), while the least mentioned was play (7%), as indicated in Table 15, which presents multiple responses when pupils were asked to name children's rights.

Table 15: Rights by school and sub-County (multiple responses)

Sub-County	Play	Food	Education	Shelter	Clothing	Health	Life	Total
Rabai	4 (33.3%)	24 (33.3%)	33 (34.0%)	18 (33.3%)	14 (31.8%)	15 (44.1%)	6 (66.7%)	114
Kilifi South	8 (66.7%)	48 (66.7%)	64 (66.0%)	36 (66.7%)	30 (68.2%)	19 (55.9%)	3 (33.3%)	208
Total	12 (3.7%)	72 (22.4%)	97 (30.1%)	54 (16.8%)	44 (13.7%)	34 (10.6%)	9 (2.8%)	322 (100)

Percentages and totals based on responses

3.1.7 Level of sanitary access by girls

About two-thirds (60.2%) of all pupils indicated that girls have access to sanitary towels in school, while 26.9% did not know. Table 16 indicates that a larger proportion of pupils from Kilifi South sub-County reportedly had more access to sanitary towels than those from Rabai.

Table 16: Girls' access to sanitary pads by school and county

Sub-County and school	Yes	No	Don't know
Rabai sub-County			
Benyoka	9(47.4%)	3(15.8%)	7(36.8%)
Kailo	10(52.6%)	5(26.3%)	4(21.1%)
Lugwe	8(42.1%)	0(0.0%)	11(57.9%)
Total sub-County	***27 (26.2%)***	***8(36.4%)***	***22(47.8%)***
Kilifi South sub-County			
Bodoi	10(52.6%)	8(42.1%)	1(5.3%)
Msumarini	15(78.9%)	3(15.8%)	1(5.3%)
Mtepeni	11(57.9%)	1(5.3%)	7(36.8%)
Mtomondoni	15(78.9%)	0(0.0%)	4(21.1%)
Mtwapa	13(68.4%)	0(0.0%)	6(31.6%)
Vipingo	12(63.2%)	2(10.5%)	5(26.3%)
Total sub-County	***76 (73.8%)***	***14(63.6%)***	***24(52.2%)***
Total	103(60.2%)	22(12.9%)	46(26.9%)

The YAs who indicated that girls have access to sanitary towels were further asked about the source(s) of these towels. Slightly over four-fifths (82.5%) of the YAs indicated that girls get sanitary towels from school, while 12.6% reported that these are accessed from shops. A small proportion (4.9%) did not know where girls accessed the sanitary towels from, and about 2% indicated that these were sourced from home. A high proportion of the YAs (79%) from Kilifi South indicated that the sanitary towels were sourced through schools, while in Rabai this proportion was 21.2%. Table 17 indicates sources of sanitary towels by sub-County.

Table 17: Reported sources of sanitary towels by sub-county

Sub-County	School	Home	Shops	Don't know
Rabai	67(78.8%)	1(50%)	7(53.8%)	2(40%)
Kilifi	18(21.2%)	1(50%)	6(46.2%)	3(60%)
Total	85(100)	2(100)	13(100)	5(100)

The YAs who stated that girls did not have access to sanitary towels in school also did not know what girls used when menstruating.

Over half (59.1%, 101/171) of YAs did not think that girls missed school when menstruating. Those 54 YAs who thought that girls missed school when menstruating said that they missed school because of fear or lack of access to sanitary towels, being teased by boys while 26% did not know (Table 18).

Table 18: Why girls miss school when menstruating by sub-county

Sub-County	Fear	No sanitary towel	Teased by boys	Don't know
Rabai	10(66.7%)	12(60.0%)	3(60.0%)	10(71.4%)
Kilifi	5(33.3%)	8(40.0%)	2(40.0%)	4(28.6%)
Total	15(100.0%)	20(100.0%)	5(100.0%)	14(100.0%)

3.1.8 Gender based issues

The YAs were asked whether girls were allowed to make decisions at home and about one-third (32.7%) of YA agreed that girls were allowed to make decisions. Table 19 below indicates who makes decisions for the girls who were reportedly not allowed to make decisions.

Table 19: Who makes decisions for girls by Sub-county

	Both father and mother	don't know	Father/Male guardian	Mother/Female guardian	Older family members	Older siblings	Other	Total
Rabai	1(2.6%)	1(2.6%)	16(42.1%)	17(44.7%)	1(2.6%)	1(2.6%)	1(2.6%)	38(100.0%)
Kilifi South	6(7.5%)	0(0.0%)	43(53.8%)	24(30.0%)	3(3.8%)	4(5.0%)	0(0.0%)	80(100.0%)
Total	7	1	59	41	4	5	1	118

3.2 Parents

3.2.1 Information regarding access to adequate SRH information and comprehensive understanding of SRH

Parents were asked whether children aged 10-14 years old require SRH information, and 164 (95.9%), agreed that their YAs need such information. A multiple response analysis indicates that hygiene, HIV/AIDS and early sex were the most frequently reported topics as summarized in Table 20.

Table 20: The SRH topics that children should be given by parents by sub-County (multiple responses)

	Sub-County		
SRH topic	**Rabai**	**Kilifi South**	**Total**
Early sex	11(25.0%)	33(75.0%)	44
Puberty	14(41.2%)	20(58.8%)	34
Menstruation	12(38.7%)	19(61.3%)	31
Hygiene	18(27.3%)	48(72.7%)	66
Pregnancy	11(35.5%)	20(64.5%)	31
HIV/AIDS	18(27.7%)	47(72.3%)	65
Nutrition	17(34.7%)	32(65.3%)	49
Substance abuse	3(25.0%)	13(75.0%)	16
Peer pressure	6(42.8%)	8(57.2%)	14
Sanitation	0(0.0%)	2(100.0%)	2
Total	110(31.25%)	242(68.75)	352

Percentages and totals are based on responses

Comprehensive understanding of SRH for parents was defined as agreeing that children needed SRH information, a minimum of four SRH topics mentioned, and no difference between SRH information given to boys and girls. Table 21 indicates that parents from both Rabai and Kilifi South sub-Counties had poor comprehensive understanding of SRH needs for YAs.

Table 21: Parents/guardians comprehensive understanding of SRH needs for YAs by school and sub-County

Sub-County and school	**Yes**	**No**	**LQAS decision rule <50%**	**Total**		
Rabai						
Benyoka	3	16	7	19	Rabai	17.54%

Kailo	5	14	7	19		
Lugwe	2	17	7	19		
Kilifi South						
Bodoi	6	13	7	19		
Msumarini	8	11	7	19		
Mtepeni	6	13	7	19	Kilifi South	29.8%
Mtomondoni	5	14	7	19		
Mtwapa	3	15	7	19		
Vipingo	6	13	7	19		

3.2.2 Open communication between parents and their children

For parents/guardians reportedly talk to their children about health frequently as indicated in Table 22.

Table 22: Frequency of parental discussions of SRH issues with their children

Frequency of discussion with YAs	Frequency	Percent
All the time	62	36.3
Sometimes	69	40.4
On a need basis	12	7.0
Never	28	16.4
Total	171	100.0

Results for 'all the time' and 'sometimes' talk to their children about SRH were merged to get a proportion for 'once a month', and the merged data indicate that 76.6% of parents talk about health with their YAs at least once a month. Open communication with YAs was defined as talking to YAs once a month, discussing at least four SRH topics at least once a month and response of "Yes" to whether YAs 10-14 years needed to know their HIV status. Table 23 indicates that only 19% and 17% of the parents/guardians in Rabai and Kilifi South respectively openly communicate with their YAs about SRH issues.

Table 23: Open parent pupil communication by school and Sub-County

Sub-County and school	Yes	No	LQAS decision rule <50%	Total		
Rabai						
Benyoka	8	11	7	19	Rabai	19.2%
Kailo	3	16	7	19		
Lugwe	0	19	7	19		
Kilifi South						
Bodoi	2	17	7	19		
Msumarini	1	18	7	19		
Mtepeni	5	14	7	19	Kilifi South	17.5%
Mtomondoni	4	15	7	19		
Mtwapa	0	19	7	19		
Vipingo	8	11	7	19		

3.2.3 Understanding and awareness of importance of life skills

Seventy-nine percent (79.2%) of the parents/guardians felt that there were life skills that could help their YAs live a healthy life. The most frequent responses to types of life skills were prevention of diseases, hygiene and relationships, as illustrated in Table 24.

Table 24: Life skills YAs need to live a healthy life

Life skills	Frequency	Percent
Prevention of disease	51	33.8%
Hygiene	44	29.1%
Sanitation	12	7.9%
Relationships	34	22.5%
Don't know	10	6.6%
Total	151	100.0

One-fifth of the parents (20%) who did not think YAs 10-14 years needed life skills said they were too young (37.5%) and that they would get confused (37.5%).

3.2.4 Knowledge and communication about children's rights

Almost four-fifths (76%) of the parents/guardians reportedly knew about children's rights and 61.4% discussed these rights with their YAs. A multiple response analysis indicated that the most common rights mentioned had to do with immediate survival and included food (22.8), education (25.5), shelter (10.9), clothing (13.6%) and health (14.1%).

Comprehensive understanding of YAs' rights was computed as knowing about children's rights, naming at least three children's rights and discussing rights with the YAs. Almost half of the parents in Kilifi South had comprehensive understanding of children's rights as indicated in Table 25.

Table 25: Comprehensive understanding of children's rights by school and Sub-County (multiple responses)

Sub-County and schools	Yes	No	LQAS decision rule <50%	Total		
Rabai						
Benyoka	8	11	7	19	Rabai	45.6%
Kailo	8	11	7	19		
Lugwe	10	9	7	19		
Kilifi South						
Bodoi	7	12	7	19		
Msumarini	9	10	7	19		
Mtepeni	8	11	7	19	Kilifi South	49.12%
Mtomondoni	13	6	7	19		
Mtwapa	9	10	7	19		
Vipingo	10	9	7	19		

3.3 Teachers

3.3.1 SRH and HIV/AIDS dissemination in schools

All teachers interviewed taught adolescents 10-14 years. It is notable that SRH and HIV/AIDS were taught as part of the school curriculum. Almost all the teachers (94.7%) discussed health information with pupils. Hygiene (22%) and HIV/AIDS (21%) were the most discussed topics based on multiple response analysis.

3.3.2 Comprehensive Understanding and discussion of SRH with pupils

Teachers were asked which topics they taught pupils including early sex, puberty, menstruation, hygiene, pregnancy, HIV/AIDS, nutrition, substance abuse, peer pressure, and sanitation. Only 5 teachers of the 38 interviewed mentioned at least four SRH topics that they discussed with pupils (1 each from Benyoka, Bodoi and Lugwe, and 2 from Mtepeni), translating to only 15.7% in Rabai and 10.5% in Kilifi South who had comprehensive discussion of SRH with the YAs. (Are you teaching younger adolescents 10-14 years? Correct = yes; Is reproductive health and HIV/AIDS part of the teaching curriculum? Correct = yes; Are you discussing health information with pupils? Correct = yes; What kind of health information do you give to pupils? Correct = min. 4 RH topics). The results are summarized in Table 26.

Table 26: Teachers' comprehensive knowledge of SRH sub-County

Sub-County and school	Yes	No	LQAS decision rule <50%	Total	
Rabai	3	16	7	19	15.7%
Kilifi South	2	18	7	19	10.5%

3.3.3 Use of youth friendly communication methods

The common methods of passing health information to pupils included discussions and lecturing. Multiple response analysis indicates that teachers used discussions in 50.8% of cases and lecturing in 27.1% of the cases. Cross-tabulation of multiple responses by school indicates use of discussions ranging from 66.7% to 100%. Teachers were considered to be using youth friendly communication methods if they spent a minimum of 1-2 hours weekly discussing health topics with pupils using youth friendly methods. Ten (10) out of the 38 teachers interviewed (26.3%) used youth friendly communication approaches.

3.3.4 Communication about reproductive health with parents

Almost two-fifths (37%) of the teachers in Rabai and 58% of those in Kilifi South reportedly discussed health topics with parents. Discussions with parents were conducted through meetings by 73.7% of teachers in Rabai and 47.4% of the teachers in Kilifi South. Good communication with parents was based on discussing health topics and getting parents to discuss SRH during meetings. Slightly over one-quarter (26.3%) of all teachers had good communication with parents. However, as indicated in Table 27 almost half the teachers in Kilifi South had good communication with parents, while less than a quarter of those in Rabai had good communication with parents.

Table 27: Communication about SRH with parents

Sub-County	Yes	No	LQAS decision rule <50%	Total		
Rabai	4	15	7	19	Rabai	21.05%
Kilifi South	6	13	7	19	Kilifi South	31.58%

3.3.5 Cooperation between schools and health workers in accessing SRH information

Teachers were asked where they would refer pupils to get health information and 37% of the teachers from both sub-Counties said they would refer pupils to health workers.

Teachers were also asked where they thought pupils usually got SRH information and only 10.5% (from both areas) thought pupils usually got SRH information from health workers. When teachers referred pupils to health facilities, they expected to get feedback from the pupils. About four-fifths (79%) of teachers from Rabai and 68% from Kilifi South reportedly got feedback from the pupils they referred to health workers. Good cooperation was defined as pupils getting SRH information from health workers, teachers referring pupils to health workers to get specific information on SRH and getting feedback when they referred pupils to health facilities. Table 28 shows that there is poor cooperation between the schools and health facilities with respect to SRH.

Table 28: Cooperation between schools and health workers

Sub-County	Yes	No	LQAS decision rule <50%	Total		
Rabai	2	17	7	19	Rabai	10.5%
Kilifi South	1	18	7	19	Kilifi South	5.3%

3.3.6 Information regarding life skills

All teachers in Kilifi South and 89.5% in Rabai were aware of life skills education. A similar proportion in Rabai and 94.7% in Kilifi South thought life skills were very important. Comprehensive understanding of life skills was taken as being aware of life skills, teaching at least one life skill in school and agreeing that life skills are very important. A total of 92.1% of teachers had comprehensive understanding of life skills as indicated in the table below.

Table 29: Comprehensive understanding of life skills by Sub-County

Sub-County	Yes	No	LQAS decision rule <50%	Total		
Rabai	16	3	7	19	Rabai	84.2%
Kilifi South	19	0	7	19	Kilifi South	100%

Table 30 indicates the skills taught in school and how teachers impart life skills to YAs.

Table 30: Multiple responses on life skills taught in schools by sub-County

Sub-County	None	Prevention of Disease	Hygiene	Sanitation	Relationships	Don't know	Total
Rabai	3(20.0%)	7(46.7%)	6(40.0%)	2(13.3%)	1(6.7%)	3(20.0%)	22
Kilifi South	2(14.3%)	5(35.7%)	5(35.7%)	3(21.4%)	7(50.0%)	1(7.1%)	23
Total	5(17.2%)	12(41.4%)	11(37.9%)	5(17.2%)	8(27.6%)	4(13.8%)	45(100.0%)

Percentages and totals are based on respondents/cases

Table 31: How teachers help pupils acquire life skills by sub-County (multiple responses)

Sub-County	Teaching negotiation skills	Building self confidence	Teaching about risks	Don't know	Total
Rabai	12 (85.7%)	4(28.6%)	2(14.3%)	1(7.1%)	19
Kilifi South	13(86.7%)	7(46.7%)	5(33.3%)	0(0.0%)	25
Total	25(86.2%)	11(37.9%)	7(24.1%)	1(3.4%)	44(100.0%)

Percentages and totals are based on responses

3.3.7 Knowledge and communication about children rights

All teachers knew about children's rights, and reportedly discussed rights with the pupils from Rabai – 95% and Kilifi South - 90%. The most commonly mentioned rights included food, education and shelter (Table 32).

Table 32: Teachers listing of children's rights (multiple responses)

Right	N	Percent
Play	3	2.2%
Food	29	20.9%
Education	34	24.5%
Shelter	27	19.4%
Clothing	17	12.2%
Health	19	13.7%
Life	10	7.2%
Total	139	100.0%

Similar to the parents, the right to play and life were the least mentioned by the teachers. Comprehensive understanding of children's rights was calculated as 'Yes' responses to both knowledge of children's rights and discussing children's rights with pupils. A total of 35 teachers (18 from Rabai and 17 from Kilifi South) had comprehensive understanding of children's rights, translating to 92.1%.

Table 33: Teachers comprehensive understanding of children's rights by Sub-County

Sub-County and school	Yes	No	LQAS decision rule <50%	Total	
Rabai	18	1	7	19	94.7%
Kilifi South	17	2	7	19	89.47%

3.3.8 Level of sanitary access by girls

Teachers were asked the ratio of boys to girls in their respective schools and the table below summaries their combined responses, which indicates that about 45% of all teachers thought there were more boys than girls in their schools.

Table 34: Teachers responses on proportion of boys to girls in their schools

Response	Frequency	Percent
Don't know	1	2.6
Equal number of boys and girls	5	13.2
More boys than girls	17	44.7
More girls than boys	15	39.5
Total	38	100.0

Table 35 presents disaggregated responses on the proportions of boys to girls in schools. It shows that a larger proportion of teachers in Kilifi South thought there were more boys than girls while in Rabai teachers felt there were more girls than boys.

Table 35:Teachers responses on proportion of boys to girls in their schools by Sub-County

	Rabai		Kilifi South		
Response	**Frequency**	**Percent**	**Frequency**	**Percent**	**Totals**
Don't know	1	5.3	0	0.0	1
Equal number of boys and girls	1	5.3	4	21.1	5
More boys than girls	6	31.6	11	57.8	17
More girls than boys	11	57.8	4	21.1	15
Total	19	100	19	100	38

Teachers were also asked whether they thought girls in their schools accessed sanitary pads when menstruating and a total of 30 teachers (78.9%) from all schools thought girls had access to the sanitary pads. Cross-tabulations revealed that 68.4% of teachers in Rabai and 89.5% of those from Kilifi South thought girls accessed pads when menstruating. Table 36 summarizes multiple responses on where the 30 teachers who said girls had access to pads got the pads.

Table 36: Teachers responses on sources of sanitary pads (multiple responses)

Source of sanitary pads	**Frequency**	**Percent**
School	25	83.3
Home	2	6.7
Shops	1	3.3
Donations from NGO	2	6.7
Government of Kenya	4	13.3
Totals	34	113.3

On whether girls missed school during menstruation a large proportion of teachers (78.9%), agreed that girls missed school mainly due to lack of sanitary towels (53.3% in Rabai and 46.6% in Kilifi South).

3.4 Community leaders

3.4.1. Comprehensive understanding of YAs SRH

Comprehensive approach to SRH was taken to be a mention of a minimum of four SRH information and service needs of YAs, referring YAs to health workers to get specific SRH information and services, no difference between information given to girls and boys, and at least one SRH issue listed as a typical health problem facing YAs aged 10-14 years. None of the community leaders had a comprehensive approach to the SRH needs of the YAs. The responses to individual questions within the ambit of 'comprehensive understanding of SRH' are shown in Table 37.

Table 37: Responses to individual questions under 'comprehensive understanding of adolescent SRH

Response category	**Yes**	**No**	**Total**
Mentioned at least 4 RH issues as health information needs	1 (5.3%)	18(94.7%)	19 (100.00%)
Would refer children to health facility to get SRH information	11 (57.9%)	8(42.1%)	19 (100.00%)
SRH issue as a typical health problem for 10-14yr olds	4(21.1%)	15(78.9%)	19 (100.00%)
Should there be a difference between information given to boys and to girls	7(36.8%)	12(63.2%)	19 (100.00%)

3.4.2. Community awareness and support for YAs' SRH

Good community awareness and support for SRH was taken to mean discussing at least one SRH issue concerning young people, the community promoting YA SRH through protection, counselling, information sharing or supervision and supporting school health programming through finance, information sharing or counselling. Slightly less than half of community leaders (42.1%) reportedly carried out good community awareness and support for YA.

3.4.3. Knowledge and communication about children's rights

Almost all the community leaders (94.7%) knew about children's rights that included food (78.9%), education (84.6%), shelter (47.7%), clothing (37%), health (42.1%), and life (21.1%). Of the interviewed community leaders, 27.2% mentioned at least three children's rights and 81% reported that they discussed children's rights with the youth in their communities. Another 74% of the community leaders reportedly discussed children's rights with YAs.

3.5 Health workers

3.5.1. Information about clients between 10-14 years

The health workers interviewed had served an average of 63.4 months in their respective stations and received between 4 and 1200 young clients (10-14 years) per month (on average 221), 53% of whom were unaccompanied. Those who are accompanied to the health facilities usually went with their mothers/female guardians (47.4%). The services sought by the 10-14 year olds are listed in Table 38.

Table 38: Services sought by 10-14 year olds (multiple responses)

Service	N	Percent
Hygiene	1	2.1%
Nutrition	2	4.3%
FP	3	6.4%
Information on SRH	4	8.5%
Menstruation problems	6	12.8%
STI	6	12.8%
HIVAIDS treatment	7	14.9%
Pregnancy	9	19.1%
VCT	9	19.1%
Total	47	100.0%

Slightly over four-fifths (84%) of the health workers indicated that they cooperated with schools regarding SRH information and services, and mainly on health education/talks (79%), treatment (37%), and counselling (32%). Those who did not cooperate with schools reported 'no time' and 'lack of mandate' as the main reasons.

About nine out of ten (89.5%) of the health workers reportedly had school outreach programmes, conducted mostly once a month (65%), during which the topics discussed are listed in Table 39.

Table 39: Topics discussed during outreach to schools (multiple responses)

Topic	N	Percent
Early sex	11	17.7%
Puberty	5	8.1%
Menstruation	4	6.5%
Hygiene	10	16.1%
Pregnancy	13	21.0%
HIV/AIDS	11	17.7%
Nutrition	6	9.7%
Substance abuse	2	3.2%
Total	62	100.0%

For the purposes of this study, good cooperation between health facilities and schools was determined by cooperating with schools in SRH information and services, having school outreach programmes and visiting schools at least once a month. Only 47% of health workers/facilities reported good cooperation with schools, hence falling below the LQAS cut-off of 50%.

3.5.2 Information regarding youth friendly services

Almost all (95%) of health workers interviewed stated that their health facilities offered youth friendly services. Table 40 indicates the average monthly clientele falling between 10-14 years visited the health facilities.

Table 40: Monthly average number of adolescents (10-14 years) seeking youth services

Number of clients	N	Percent
20-49	10	55.6
50-99	2	11.1
100+	6	33.3
Total	18	100.0

Half of the health workers whose facilities offered youth friendly services *did not* offer specific services for adolescents 10-14 years old. Of the remaining health workers who offered youth friendly services and catered for youth 10-14 years old, 37.5% offered services that included general SRH information, STI, menstruation, hygiene, pregnancy, HIV/AIDS screening and treatment, nutrition and substance abuse. An eighth (12.5%) of the respondents reported that the health facilities offered VCT and immunisation services.

3.5.3 Information regarding VCT services

Slightly over four-fifths (84%) of health workers reported that their facilities had a high demand for VCT. The main VCT clients were young adults 25-34 years (47%) and adolescents 10-18 years (32%), and these clients were mainly women (79%). Over two-thirds (68%) of the health providers stated that their facilities encouraged parents/guardians to receive VCT services with their YAs so that they would know their status (46.2%), to facilitate disclosure (38.5%), and to ensure continuum of care (15.4%). About 42% of health facilities offered VCT to YAs according to the LQAS parameters cited earlier.

3.5.4 Health workers' training in youth friendly services

Most (89.5%) of the health workers had reportedly received training in youth friendly service provision. Slightly over one-fifth (23.5%) of health workers did not know when they were trained in the provision of these services, 35% in the last six months, 5.9% in the last 12 months and 35.3% over 12 months prior to the survey. Table 41 indicates the main topics that were reportedly covered during training in youth friendly service provision.

Table 41: Main topics covered during health workers' training in service provision (multiple responses)

Topics covered	N	Percent	Percent of Cases
Counselling	10	33.3%	83.3%
Offering youth friendly services	8	26.7%	66.7%
Dealing with young people	7	23.3%	58.3%
Health needs of the youth	5	16.1%	55.6%
Total	30	100.0%	

3.5.5 Health workers' understanding of children's rights

All health workers were reportedly aware of children's rights. Among the most frequently mentioned examples of rights were food, education and health, as indicated in Table 42.

Table 42: List of children's rights health workers knew (multiple responses)

Right	N	Percent
Education	16	24.6%
Food	13	20.0%
Health	12	18.5%
Clothing	9	13.8%
Shelter	6	9.2%
Life	6	9.2%
Play	3	4.6%
Total	65	100.0%

It is notable that only 5 out of the 19 health workers (26.3%) could mention three or more of the children's rights. Slightly over two-thirds (68%) of health workers also reportedly discussed children's rights with YAs.

4.0 DISCUSSION

This study sought to address three objectives: (i) collect data on knowledge, attitudes and practices of YAs (10-14 years) in relation to ASRH information and services; (ii) assess community leaders, teachers and parents' opinions and perceptions on health information and service delivery to YAs in the target communities; and (iii) document the type and quality of youth friendly services provided by healthcare service providers to YAs in the target communities. This discussion is outlined based on these objectives.

Knowledge, attitudes and practices of YAs in relation to ASRH information and services: The results show that almost all the pupils had heard about HIV/AIDS, with the highest proportion in Mtomondoni and Lugwe (94.7%) and the lowest in Bodoi (78.9%). The largest proportion of those who had heard of HIV/AIDS said that it kills (56.6%). The information on HIV/AIDS was mainly received from school, and the least ranked source for information was the media (5.6%) followed by health facilities (7.7%). The high levels of knowledge on HIV/AIDS is a characteristic of the Kenyan population, which could be illustrative of the fact that the prevention campaigns have been effective in ensuring that even young people know about HIV/AIDS. The KDHS 2008/9 placed knowledge at 69-93% among both men and women aged 15-49 years with varying knowledge on prevention methods.

The depth of knowledge on HIV/AIDS was found to be rather shallow among the YAs. Taken together, responses where adolescents were expected to have heard of HIV/AIDS and be able to name at least two ways of transmission and two ways of prevention, the proportion of those with such knowledge was reportedly low. At individual level, only 29% of all pupils were able to state three correct ways through which HIV is contracted (blood, semen, mother to child). Further, only few pupils (4.7%) could name four of the main measures of preventing HIV infection. Individual measures of HIV prevention included abstinence (50.8%) and not sharing sharp objects (41.3%).

The pupils in the two sub-Counties exhibited generally limited knowledge on FP. About 82% of all YAs interviewed did not know any FP method, and of those who knew any method, the most commonly mentioned were injectables (11.5%), oral pills (3.4%) and condoms (2.9%). This is reflective of the limited access to information for this age group (UNFPA, 2013, Bearinger et al., 2007, Abajobir and Seme, 2014). Slightly over three quarters (76%) of all YAs reported that they would like to begin having children when they attain the age of 20 years and above, and of these 65.6% would like to have between 0 and 4 children. These results are indicative of the fact that if facilitated, the YAs would be willing to use FP in future to delay pregnancy and/or limit the number of children.

The perception of the pupils towards pregnancy prevention is reflective of the lack of SRH knowledge among this age group. The main way reported of preventing a girl from becoming pregnant was through abstinence (49%). Only 3% of all pupils named at least two ways a girl could prevent pregnancy. This is a serious challenge more so given the early sexual debut among Kenyan youth (KNBS and ICF Macro, 2010) and the high levels of teenage pregnancies in Kilifi County. The KDHS 2008/9 (KNBS and ICF Macro, 2010) reports that 40% of adolescent girls without any education are either pregnant or are

already mothers. In addition, 18% of women aged 15-19 years are mothers or they are pregnant at any given time.

The KDHS 2008/9 reports that most people access SRH information from the radio (KNBS and ICF Macro, 2010). However, this study shows that many YAs get information from their parents (62%) if they suspect they have a STI, and 34.5% would seek information on HIV/AIDS from a parent/guardian. However, a majority (69%) of the YAs would not openly tell their parents about attraction to the opposite sex, and only 15% always talked to their parents/guardians about SRH. The contradiction in these results could be due to the fact that the YAs may feel that they would be considered too young to engage in sexual relations however when they have a medical issue it would have to be sorted out by their parents/guardians. This clearly illustrates that parents/guardians have a key role to play in the SRH of the YAs, especially the targeted age group.

Children's rights are espoused in the Children's Act (2001) and in the Constitution of Kenya (2010). Although most of the children know their rights, the most frequently mentioned rights were food, education and shelter, while the least mentioned was play. The little attention paid to 'play' was also evidenced in the responses by the parents, teachers and community leaders. It is therefore critical that YAP Kenya focuses on the rights of children to ensure that all the parties (children, parents, teachers, health providers and community members) understand these rights and put measures in place to ensure that all children enjoy their rights.

Community leaders, teachers and parents' opinions and perceptions on health information and service delivery to YAs in the target communities: Culture seems to shape the views of teachers, parents and community leaders towards access to SRH information and services for YAs. Most parents, when asked what topics the YAs should be taught, identified HIV/AIDS and early pregnancy. Early sex was infrequently cited even though HIV infection and early pregnancy are consequences of early and unprotected sex. There seems to be more openness among the parents in Kilifi South compared to Rabai. It is probable that this could be due do the fact that Kilifi South is nearer Mombasa City compared to Rabai and that it is more mixed (ethnically). The perceptions of parents in both sub-Counties was however below the threshold set through the LQAS implying that the DSW team will need to find ways of engaging with the parents on these issues.

In terms of life skills, most parents appreciate the role of sex education in the lives of the YAs. However, some felt that the YAs were too young and that such information may confuse them. This is not indeed peculiar to this group. Several studies indicate the reluctance of parents to have their YAs at this age given SRH information for fear that it will sensitize them to sexual matters (Herman *et al.,* 2013). Although the right to information is ingrained in the Children's Act (2001), it was not one of those mentioned by parents. They tended to focus on the basic needs - food, shelter, education and health.

Although teachers considered that they were important sources of SRH information to the pupils, they did not rank as highly among the YAs. This could be due to the fact that

they discuss a limited range of topics (hygiene, HIV/AIDS and sanitation). The main mode of information dissemination used by the teachers is through discussions and lectures. However, when subjected to the LQAS analysis, only a small proportion used youth friendly communication strategies to communicate with the YAs. Youth friendly communication strategies would include theatre, debates and small discussion groups. There is thus a need to design programmes in the schools to ensure effective teacher-pupil interactions on SRHR.

Teachers' interactions with parents were reported to be through meetings, presumably called by the school administration to address issues related to the life of the pupils. However, these interactions fell short of the threshold – 21% in Rabai and 47.2% in Kilifi South. Poor linkages between health providers and teachers were reflected in the minimal cooperation in both sub-Counties.

Although the parents, community leaders and teachers know children's rights, the right to play was the least mentioned by all the respondents. This could be due to the fact that 'playing' is not considered a key factor in a child's life with most parents and teachers emphasizing educational attainment as opposed to 'wasting time playing'.

The community leaders had very low appreciation of young people's SRH needs. They instead preferred that the children were referred to health facilities to access the appropriate care. Segmentation of service provision is not unique to this community. There is evidence that in some societies parents expect the schools to talk to girls about menstruation while the health workers are supposed to manage all health-related matters (Resnick and Bowes, 2007).

Type and quality of youth friendly services provided by healthcare providers to YAs in target communities: The need for youth friendly health services was recognized in the early 1990s when it became apparent that young people were not seeking services because of the way in which they were handled when they visited health facilities (Kleinert, 2007). Many organizations (including national and international NGOs) therefore invested in training and equipping health facilities to be 'youth friendly'. These efforts were evident from the health facilities visited as part of this study. Almost all the health providers indicated that they had been trained in the provision of youth friendly services.

What was clear from the interviews with the health providers was the fact that there are no specific services offered to YAs aged 10-14 years. This could be due to several factors, key of which is the fact that they are not defined under 'reproductive age', which starts from age 15 years yet they are no longer children. The structure of health service delivery in Kenya tends to focus on under-five children, people of reproductive health (15+ years) and mothers. The age group 10-14 years could be generally considered to be the 'missing age' in health service provision.

The health facilities however fell short in the linkages with schools, which was reported to be mainly through infrequent health talks and education sessions. The health providers that did not work with schools cited time limitations and lack of mandates.

The fact that a different ministry from health manages the education sector could be a key factor in this.

It is notable that the Adolescent Reproductive Health and Development Policy (ARH&D): Plan of Action (2002-2015) identifies four key action points: (i) advocacy: improved policy environment for effective implementation of adolescent reproductive health and development programmes; (ii) health awareness and behaviour change communication: empowered young people able to develop, adopt and sustain healthy attitudes and behaviours towards RH and development; (iii) access to and utilization of sustainable youth-friendly services: quality and sustainable youth-friendly RH and development services provided; and (iv) management: capacities of the key national coordinating agencies for effective management of the ARH&D programme enhanced. Three of the four strategies are of relevance to YAP Kenya given the key gaps noted in this study. As the YAP Kenya programme team prepares to launch its activities in Kilifi County, it is critical that it draws reference from the existing policy commitments to advocate with policy makers and service providers to factor in the SRHR needs of the YAs.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The baseline results clearly indicate general and specific gaps that need to be addressed in order to ensure YAs take full advantage of SRHR information and services. Notable is the fact that none of the lots reached the LQAS cut-off points on the SRHR issues raised by the study. Comprehensive knowledge on HIV/AIDS was also notably poor and in terms of children's rights, there was a gap in recognition of the 'higher order' rights that go beyond survival including the right to life, play and identity.

Parents also have some knowledge of elements of SRHR that comprise HIV/AIDS, open communication, life skills and children's rights. However, linkages between these elements and how these relate to overall adolescent SRH are lacking and require strengthening. The life skills that YAs need to live a healthy life go beyond disease prevention, relationships and hygiene and the linkage between the complete set of requisite life skills and adolescent SRH needs emphasis. While parents agree that there should be no difference between what male and female YAs are taught, the specific elements of what these YAs should be taught beyond HIV/AIDS, early sex, puberty, and hygiene and nutrition needs attention.

The frequency of discussion of SRH issues between teachers and pupils was found to be low based on the range of issues that they reportedly discussed with the YAs. The linkages between the teachers and health providers were also weak, yet these are critical to addressing the SRHR concerns of the YAs. Furthermore, there is a need to strengthen communication between the community and health facilities with respect to SRHR, as well as improve comprehensive understanding of HIV/AIDS in order to trigger community support for YAP Kenya.

5.2 Recommendations

The recommendations are made at three levels: policy; programmatic; and research.

(i) Programmatic:

a. The YAP Kenya team should design activities and develop/adopt SRHR toolkits that would provide information to the YAs on SRHR using multi-pronged approaches including working with teachers, parents and through peer support networks.
b. Facilitate mechanisms in schools where parents and teachers discuss the SRHR issues of the YAs. Use of PTA meetings to address SRHR could be negotiated with the schools.
c. Create linkages between the schools and the health facilities through facilitating the health providers to interact with the YAs on a regular basis in the form of talks, debates, theatre and in small discussion groups.
d. Support and/or strength Y2Y clubs through which the youth would be facilitated to access accurate SRHR information.
e. Organize community dialogue sessions that would create 'safe spaces' for adults (parents and community leaders) to share their concerns on the SRHR needs of the YAs and generate measures to address these concerns.

(ii) Policy:

a. Engage with the Kilifi County Government as it designs its policies to ensure that the SRHR needs of the youth are included.
b. Engage with the County Government to ensure that youth development remains high on its development agenda. This would require the YAP Kenya team identifies the County Executive Committee members responsible for youth matters (health, education, social welfare, gender) and engage with them on regular basis.

(iii) Research:

a. Assess the effects of the differential perceptions towards the type of information girls and boys require and receive on SRH outcomes.
b. Examine the existing strategies of peer support and how they complement or are at variance with community approaches to YA SRHR.
c. Assess the determinants of early sexual debut and early pregnancies among the YAs in Kilifi County.

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Annexes

Annex 1: Data collection instruments
Annex 2: Consent and assent forms