



Understanding factors that influence use of E&M platforms for SRHR information and services among youths in Nairobi, Kenya

Final Report



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The Access, Services and Knowledge (ASK) programme is a three-year programme (from 2013 to 2015) funded by the Dutch Ministry of Foreign Affairs with the aim of improving the SRHR of young people (10 – 24 yrs.), including underserved groups. The programme which is a joint effort of eight organizations comprising of Rutgers (lead), Simavi, Amref Flying Doctors, CHOICE for Youth and Sexuality, dance4life, Stop AIDS Now!, the International Planned Parenthood Federation (IPPF), and Child Helpline International (CHI) is implemented in 7 countries, namely Ethiopia, Ghana, Indonesia, Kenya, Pakistan, Senegal, and Uganda. Operations research (OR) was identified as an integral part of activities in the ASK programme. The aim was to enhance the performance of the program, improve outcomes, assess feasibility of new strategies and/or assess or improve the programme Theory of Change.

Table of Contents

Table of Contents	2
List of abbreviations	3
Acknowledgement	4
Executive summary.....	5
Introduction and Background	8
Study rationale	10
Specific objectives:	10
Research questions:.....	11
Study Location	11
Methodology	12
Study design	12
Data collection and management	12
Sample size and sampling procedure	12
a) Online survey.....	12
b) Focus Group Discussions	14
c) Key informant interviews	14
d) Case story	14
e) Google Analytics	14
Study Findings	15
a) Participation of youth in development phase of youth4life website	15
b) Young people’s perception and attitudes towards web and mobile based platforms as sources of SRHR information and services.....	16
c) Perceptions and attitudes of young people towards the website	23
d) Uptake of services due to Youth4Life website	27
e) Barriers and enablers to using web based platforms	28
Summary of findings.....	28
Conclusion	31
Recommendations.....	31
Annex 1: online Survey tool	32

List of abbreviations

AA	Africa Alive
AIDS	Acquired Immune Deficiency Syndrome
ASK	Access, Services and Knowledge
CSE	Comprehensive Sexuality Education
FGD	Focus Group Discussion
HIV	Human Immunodeficiency Virus
IDI	In-depth interviews
IEC	Information, Education and Communication (materials)
SMS	Short Message Service
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health and Rights
OR	Operational Research
YFS	Youth-Friendly Services

Acknowledgement

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We express thanks to the research assistants who conducted the data collection exercise and for the many young people who participated in this study as respondents for their invaluable contribution. We hope these findings will inform current and future programs seeking to address young people's sexual and reproductive health and rights needs in Kenya.

Executive summary

AA and Nairobiits are collaboratively implementing a web-based programme-*Youth4life*-that seeks to enhance adolescent capacities for making informed decisions and choices about accessing sexual reproductive health and rights (SRHR) information. The programme, which includes web-based and mobile platform, was launched in October 2014. *Youth4life* provides a wide range of information about SRHR and other health topics and a mapping of youth friendly services to link the adolescents to services.

Using the internet and web-based platforms to provide young people with SRH information and link them to services is still a new phenomenon in Kenya. Not much is known about the viability and efficacy of these approaches particularly for young people and the impact on actual behaviour change in accessing information and services and improving the quality of their lives. This study was conducted to establish the factors that determine the feasibility and viability of web and mobile based platforms as direct channels for accessing and using of SRHR information and services by 15-24 years old young people in Nairobi, Kenya.

The specific objectives of the study were:

- To understand young people's perceptions and attitude towards web and mobile based platforms as sources of SRHR information and services;
- To explore the inhibiting and promoting factors in utilisation of a web and mobile based platforms as sources of SRHR information and services for 15-24 year old young people;
- To understand the motivations to using different web and mobile based platforms for accessing SRHR information and services by different groups of young people aged 15-24years.

The study utilized a mixed methods approach to collect information from 15-24 year olds living in Nairobi and who are beneficiaries of the ASK programme. The methodology included an online survey, in which 328 youths participated and google analytics generated from use of the Youth4life platform. Further data was collected through key informant interviews (with implementers of the programme) and focus-group discussions.

The key findings:

a) Perceptions about accessibility of the youth4life website:

Results from Google analytics used to monitor traffic to the youth4Life website revealed that the site receives relatively heavy traffic, mostly from Kenya. In November 2014 to February 2015 (the first 5 months after the launch), there were a total of 19,425 users who at various points within the period visited the site. Of these, 76.9% were new visitors or were visiting the site for the first time and 23.1% were returning users. The site was ranked high by the respondents in terms of usability – majority felt free to post queries on the site and to ask personal questions. However, some reported that the site is “*difficult to find [website]*” and “*feeling ashamed being seen visiting the website.*”

b) Perceptions about the usefulness of the SRHR information to the young people: The results show that most youths visiting the online portals sought information on sexual health checks, STIs, relationships with boyfriends/girlfriends or partners, HIV and AIDS, sexuality health checks. When asked whether they intended to visit the site again in the future, 92.8%

of respondents reported they would visit the website again with 96 % of them reporting they would recommend the site to their friends.

c) Youth4life website as a source for SRHR info: 62.8% of the respondents for the online survey reported that they got their SRHR information from dedicated websites, closely followed by social media. This is corroborated by qualitative data which reported that many young people get information from the internet. However, when the respondents in the online survey were asked more specific questions regarding the youth4Life website and whether they use it, it emerged that – 2 months after the launch of the website – nearly half of them (46.3% (n=144)) were first time visitors to the website while 30.5% (n=95), 18.0% (n=56) and 5.1% (n=16) had visited the site 2 or 3 times, more than 5 times and 4 or 5 times before respectively.

Of the respondents who knew of the website, 80.7% (n=251) had learned about it from interaction with Nairobi4Life, with the remaining 19.3% (n=60) having received the information from Dance4Life, friend or Google and other internet search engines among other sources. The survey results show that among those who indicated they had sought information from the site; over half reported to read information on the section on sexual health (51.5%) and life skills (51.8%). The least read section was the forum (13.4%) and section on growing up (23.6%)

d) Usefulness of SRHR messages delivered through youth4life website: The results show that the users believe the website provides accurate and reliable information unlike other channels like radio and TV broadcasts. They observed that the information on the website seemed to have been verified for correctness before uploading.

e) Uptake of services due to Youth4Life website: The survey respondents were asked if they had visited any of the clinics listed on the website in the past 1 month. About 19.9% (46) had visited the clinics but not because they were informed about them via this website. Only 9.5% (22) had visited the clinics after learning about them from the youth4life website.

f) Viability of internet-based platforms for communicating SRHR information and services to young people: Data from the focus group discussions identified challenges youth face in accessing SRH information through the youth4life website, which include:

- Inhibiting costs to access internet
- Poor mobile network connections interrupting network connections
- Inadequate time to surf for information on the site given other competing demands at home and work
- Many youth still not aware of the website
- Lack of provision for youth with disabilities and illiterate to be able to access site

Qualitative data also identified the factors attracting young people to use web-based platforms. These include:

- platforms are considered trendy and digital,
- web based platforms are much faster and reliable to do things and get information,
- web based platforms are easy and comfortable to use
- web based platforms offer anonymous, confidential and non-judgemental service “even if you download anything, nobody can know”,

- web based platforms offers variety of information on different topics within a short period saving time,
- they are interactive and offers real-time updates and opportunity to participate in the discourse of the day,
- they are user friendly with no interruption and censorship of information.

Recommendations

In the light of these findings, it is recommended that the AA and Nairobi's should:

1. Step up mobilization especially at the community level to reach younger adolescents 15-19 year targeted by the project through:
 - a. Creating more face book groups to share and promote the website
 - b. Giving bonus points as incentives for participation on youth4life website
 - c. Running articles in newspapers and magazines about the youth4life website
 - d. Promote the youth4life website through community outreaches
 - e. Consider using mobile cyber cafes during community outreach.
2. Build in additional options such as voice add-ons and using sign language videos to cater deaf and blind youth.
3. Build in call-ins within the website to facilitate and strengthen referrals for services.
4. make the youth4life website accessible on all types of phones with different operating systems such as Symbian, iOS, Android
5. Provide the youth4life platforms on CDs that can be distributed in low income settlements where access to internet is limited.
6. Minimize costs of accessing internet by: creating free Wi-Fi hotspots with built in firewalls restrict access only to youth4life website within a radius of every 10km of study sites; and supporting an offline app which can be updated every time with internet access
7. Minimize restriction on participation on youth4life platforms such as the forum by removing the requirement to register in order to make any posting.

Introduction and Background

The Access, Knowledge and Services (ASK) programme is a 3-year programme (2013-2015) funded by the Dutch Ministry of Foreign Affairs. The programme aims to enhance uptake of Sexual Reproductive Health (SRH) services among young people aged between 10-24 years, including underserved groups. In Kenya, the programme is implemented by 15 partners comprising of Africa Alive (AA), Centre for the Study of Adolescence (CSA), Clinton Health Access Initiative (CHAI), Child Line Kenya (CLK), Family Health Options Kenya (FHOK), Great Lakes University of Kisumu (GLUK), Maximizing facts on AIDS (MAXFACTA), Nairobits Trust, Network of Adolescence and Youth of Africa (NAYA), National Empowerment Network of People Living with HIV/AIDS in Kenya (NEPHAK), UNESCO, Women Fighting AIDS in Kenya (WOFAK), Kisumu Education and Medical Trust (KMET), Adventist Development Services (ADS) and the World Starts With Me Alumni Youth Advocacy Network (WAYAN).

The Alliance partners bring complementarity/synergy, supplementing government efforts in striving to realise the MDGs 4, 5, 6 and 8. It is the Kenya country representative in HIFA2015 - (Healthcare Information for All in the year 2015) global campaign. The ASK programme is non – discriminatory and currently puts great efforts to reach all including persons with disabilities with SRHR/FP information and services.

ASK program is guided by the Theory of Change (TOC). TOC provides a specific and measurable description of a social change initiative that forms the basis for strategic planning, on-going decision-making and evaluation. It provides a roadmap for interventions on what needs to be achieved. The theory of change provides a causal pathway specifying what is needed for goals to be achieved, and articulates underlying assumptions which can be tested and measured.



Figure 1.1: Theory of change as applied by ASK Alliance programme

In 2014, the SRHR Alliance conducted a baseline survey for the ASK program to provide benchmark information for measuring indicators. The Kenya ASK baseline survey found that young people aged 10-24 years have varied sources of information with the main sources reported as (i) schools (ii) peers and friends (iii) social media (iv) health facilities and (v) community health workers.¹ Teachers in schools provide counselling and health talks; the educational curriculum was reported to provide information in school based subjects while social media and web based platforms were mentioned by young people mainly in the urban areas as key source of information.²

There is growing momentum and enthusiasm to capitalize on the rapid spread of telecommunications infrastructure and uptake of mobile phones and services in low and middle income countries to support the achievement of global, national, county, and individual level health priorities.³ Use of internet based approaches is increasingly prominent in health information delivery to increase knowledge and linkage to services. Despite being limited in scale, web based and mobile applications are creating new pathways for sharing health-related information and learning in the most remote and resource-poor settings.⁴

The increasing dependence on evidence for developing interventions and for programming is critical in ensuring that programs are more targeted and conform better to the needs of the population they are meant to serve. The ASK Program in Kenya seeks to improve young people's sexual and reproductive health and rights (SRHR) using strategies that allow young people to directly access both Information and services. Two of these organizations Africa Alive (AA)⁵ and Nairobis Trust⁶ have partnered in ASK to implement web based platforms for improving SRHR information and services among young people aged 15-24 year in Nairobi County. These platforms will support tailored interventions developed with a strong collaboration with the target group, which is "*built by the target group and built for the target group.*" Fundamental in ASK is the direct access to information and linkage to SRHR services whenever necessary away from using traditional intermediaries such as teachers, peer educators and community health workers among others.

¹SRHR Alliance 2014; Draft Access Service and Knowledge Baseline Survey

²ibid

³Earth Institute. Barriers and Gaps Affecting mHealth in Low and Middle Income Countries: A Policy White Paper. Washington, D.C.: mHealth Alliance, 2010.

⁴Vital Wave Consulting. mHealth for Development: The Opportunity of Mobile Technology for Healthcare in the Developing World. Washington, D.C. and Berkshire, UK: UN Foundation-Vodafone Foundation Partnership, 2009.

⁵**Africa Alive!** Is a youth-serving organization started in 1998 with a vision to build and empower a healthier HIV/AIDS free generation of African youth. *Africa Alive* seeks to promote positive behaviour change among young people through advocacy, empowerment, partnership and resource/community mobilization. The organization promotes the full participation of young people at every level of programme implementation using audience and message strategy of edutainment (entertainment education).

⁶**Nairobis Trust** is a not-for profit organization registered in 1999 and based in Nairobi working toward changing the lives of vulnerable (15 to 24 year old youth in Kenya by improving their access to productive employment as well as their ability to cope with their social environment through creativity and innovation. Nairobis provides these youth with training in multimedia, entrepreneurship, reproductive health and rights (SRHR) and life skills in order to enhance their confidence and self-esteem as well as their chances for gainful employment. Since inception, Nairobis has provided more than 6,500 youth from disadvantaged backgrounds with multimedia, SRHR, entrepreneurship and life skills. Over 60% of these are gainfully employed both formally and informally. Nairobis works closely with community based organizations in reaching and training youth. This involves partnering with the CBOs to set up information centres within their premises to ensure ease of access to the training by the youth and community ownership in the larger context.

Through the project, a generic database has been set up containing SRHR information and clinics providing youth friendly service in Nairobi. Three dynamic applications are built to make the information accessible to the target groups through website, social media integration and mobile application utility. These platforms were launched in November 2014. AA and Nairobiits are seeking to enhance individual adolescent capacities for making informed decisions and choices about accessing available SRHR information and linking them to services through these interventions. The web-based and mobile platforms developed with technical assistance from the Dutch Vodafone funded *World of Difference* team- contain a wide range of information about SRHR and other health topics and a mapping of youth friendly services on Google maps with full contact information.

These platforms seek to:

- 1.increase young people's access to comprehensive SRHR information
- 2.increase young people's access to youth-friendly SRH services
- 3.increase dialogue around SRHR topics

Study rationale

Working through internet and web based platform in reaching young people with SRH information and services is still a new phenomenon in Kenya. Like the advent of e- and m-health approaches in provision of health information in a variety of ways, using web based interventions and platforms in reaching young people with information and guiding them to selected youth friendly service centres in Kenya is new. Not much is known about the viability and efficacy of these approaches particularly for young people and the impact on actual behaviour change in accessing information and services and improving the quality of their lives.

The assumption behind this initiative is that since access to web based platforms and information can be extremely exciting for young people exploring the boundaries of knowledge beyond the traditional indirect teacher centered, CHW or peer educator approaches they are used to, the outreach from these platforms could greatly expand the access to health information and services for this category of individuals. Yet the contexts and mechanisms of how these direct approaches and interventions enable young people to access direct information and services have not been fully explored. This research study seeks to understand young people's perceptions and use of these platforms in order to generate information critical for decision making on the web based and mobile platforms for providing direct SRHR information and services. This research study strengthens the evidence base needed in assessing acceptability; feasibility and efficacy of these approaches in increasing direct access to information and services by young people aged 15-24 in Nairobi.

Specific objectives:

- To understand young people's perceptions and attitude towards web and mobile based platforms as sources of SRHR information and services;
- To explore the inhibiting and promoting factors in utilisation of a web and mobile based platforms as sources of SRHR information and services for 15-24 year old young people;

- To understand the motivations to using different web and mobile based platforms for accessing SRHR information and services by different groups of young people aged 15-24years;

Research questions:

1. What are the perceptions and attitudes of young people (users) towards the website as a source of SRHR information (accessibility, user friendliness, affordability, usefulness)?
2. Who utilizes what SRHR information (motivation, different topics, information needs, use of plain text, info graphics, videos, forum etc.) and what are the information gaps?
3. To what extent do web-based and mobile SRHR platforms contribute to actual uptake of SRHR services?

Study Location

Nairobi County is one of the 47 counties of Kenya and the capital city. The county has 17 constituencies and experiences one of the most rapid growths in urban centres. This isn't likely to slow down any time soon due to the fact that the population in Kenya increases by an average of about 3% i.e. 1 million each year. Nairobi is the most populous city in Eastern Africa, with a current estimated population of about 3 million.⁷

According to the 2009 Census, in the administrative area of Nairobi, cover 696 km² (269 sq mi).⁸ Nairobi is the central business and economic hub in the country. The social and demographic profile of Nairobi's is varied, with rich suburban populations contrasting the lifestyles of the majority of the poor populations housed in low income settlements and among the largest slums in Africa such as Kibera and Mathare. Low income settlements have poor infrastructural developments, poor access to basic social amenities including food and health services. They present with poor reproductive health indicators such as maternal and neonatal health. In Nairobi, nearly 10 percent of adults—more than 320,000 people in total—are living with HIV.

By the time they turn 15, more than 20 percent of young people have engaged in sex with low condom usage⁹. Substantial fractions of the populations of Nairobi face important barriers to health, notably limited access to health services, especially for youth and vulnerable women. Health indicators between suburban populations and the low income settlements in Nairobi are very different with women and young people most vulnerable. The population in low income settlements has poorer health outcomes with fewer public health facilities serving large numbers of residents.

⁷ <http://en.wikipedia.org/wiki/Nairobi>

⁸ [Population distribution by province/district and sex: 1979-199 censuses](#)". Kenya Central Bureau of Statistics

⁹ <http://www.pathfinder.org/our-work/projects/aphiplus-nairobi-coast-kenya.html>

Methodology

Study design

This study utilized mixed methods research design. The procedure used both quantitative (online survey using Survey Monkey) and qualitative research methods in collecting and analysing phenomenon to understand the research problem. The study targeted young people aged 15-24 years old in Nairobi County where AA and Nairobits are implementing the ASK program. This research study mainly targeted the beneficiaries of ASK program who are in and out of school and the young people aged 15-24 years old and have access to internet in Nairobi county. The research study also targeted implementers of the ASK Program who are mainly peer educators and youth groups supporting awareness creation and linkages to SRH information and services.

Data collection and management

Qualitative data for this study was collected by a team of experienced research assistants recruited from Africa Alive and Nairobits. To eliminate any issues around bias, the research team were trained on research ethics, including community entry, interviewing techniques, obtaining informed consent and assuring confidentiality. For the online survey, informed consent information appeared first and respondents had to agree in order to proceed with the questions. Information discouraging repeat taking of the survey was posted to explain that only a one-time participation was required.

For the FGDS those participants under 18 years were recruited during mobilization with their parents asked to give permission for their participation by signing an informed consent form on their behalf. The participants then assented to participating in the study. Older participants (over 18 years) gave their own consent to participate in the study. The study was approved by Amref Ethics and Review Committee.

Sample size and sampling procedure

a) Online survey

A sample size of 400 young people was targeted for the online survey monkey. The actual online survey attracted 328 young people in Nairobi. The sample size was determined based on three factors: the estimated population of young people who may have accessed web based platforms (in this case, maximum variability proportion of 0.5 has been used); the confidence level at 95%; and the margin of error at 5%. The response rate of 80-85% was also considered given that this will be the first time this population (young people accessing a dedicated web based SRHR information by ASK partners) will be surveyed online. The sample size was calculated using the formula below;

$$n = \frac{t^2 \times p(1-p)}{m^2}$$

Where:

n = required sample size

t = confidence level at 95% (standard value of 1.96)

p = Proportion of young people who may have accessed one of the partner's e/m health platform.

m = margin of error at 5% (standard value of 0.05)

Selection procedure for the online survey respondents: Survey invitations were put on the web based platforms (social media page, website and computers with SRHR information) and where possible followed up with a personalised message. The survey monkey was posted on the platform for respondents to access. The survey being web based essentially made it target only young people with access to either phones or computers used to access the survey, therefore resulting in a possible bias towards young people with access to internet and gadgets to enable such access. Moreover, Nairobis and Africa Alive asked their beneficiaries to fill in the questionnaire. As such, it has created a potential bias as the results will largely reflect views of the so-called "inner circle" of young people affiliated to Africa Alive and Nairobis.

Rate of response from the online survey of respondents: A total of 328 participants filled in the online survey. Yet, not all questions were answered, as shown in Table 1.

Table 1 Rate of response for the demographic characteristics of the online survey

Characteristics	Frequency of Response	% response
Gender	281	86
Age	288	88
Marital Status	279	85
Highest Level of Education Completed	276	84
Religion	271	83
Who do you live with?	275	84

Table 2 Socio-Demographic Characteristics of participants

Socio Demographic Characteristics:	Proportion (%)	Number (n)
Sex (n=280)		
Male	56.1	157
Female	43.9	123
Age in years (n=280)		
10-19	26.8	75
20-24	73.2	205
Marital Status (n=279)		
Single	72.4	202
Dating/Engaged/Married	27.6	77
Highest Level of Education completed (n=276)		
Secondary	62.3	172
Post Secondary	37.7	104

Background information of study participants: Over half of the respondents who attempted the online survey were males (56.1%, n=157) with youths aged 15-24 years who undertook the survey accounting for 93.5% (n=262) of all the visitors to the site. Most of those who visited the site were single (72.4%, n=202) with the other 27.6% (77) being in a relationship (dating, engaged or married). As for the highest level of education completed, majority of the young people (62.3%, n=172) had complete secondary level. See table 2 for more detailed information.

b) Focus Group Discussions

A total of 8 focus group discussions were conducted with users (segregated by sex - male/female- in 5 year age groups). Recruitment of young people who participated in the FGD as was done in Nairobi in localities where Africa Alive and Nairobiits work. Mobilization of those who participated in the discussions was through online invitations posted on the web platforms and through youth groups that support community outreach throughout Nairobi. To maximise on interactions and sharing during the FGDS, each comprised of 8 participants. A structured FGD guide with questions on different thematic topics was administered during the discussions with the moderating probing for additional information. The FGDs were used to explore out the acceptability, challenges, perceptions and attitudes of the young people towards using the website and telephone to access SRH information.

c) Key informant interviews

Four KII were conducted with the implementers and managers of the web-based platforms (Two from Nairobiits and two from Africa Alive). These managers have been involved in the design and setting up of the web-based platforms. They are also involved in coordinating mobilisation, development of the platforms of young people in Nairobi. On the platforms, they will be involved in moderating forum discussions, providing correct answers to queries on the platforms on SRHR issues. The interviews explored practicality of using the platforms, perception on the use, gaps and lessons learnt in using web-based platforms to increase young people's direct access to information and services.

d) Case story

One case story was conducted to explore the experience of young people in setting up the platforms, experiences in using the platforms and how that has influenced their knowledge, perceptions, and utilization of web based platforms. Selection of the young people in case study category was based on their length of time and exposure to the project. Those exposed longest to the project and involved in the design, development and rollout of the web-based platforms were selected.

e) Google Analytics

Google analytics account to monitor traffic to the youth4Life website was set up to provide a summary of the performance of the websites. The anticipation was that the account provides a summary of total visitors aggregated by status of the visit (whether a visitor or a return visitor), the average time spent by a visitor on the site, country from where the site was being accessed, number of page views and sessions, medium of access and service providers among other issues. The account also provides a peek into what period the traffic is high and what time the traffic to the Youth4Life website is low. This information is useful in understanding the performance of the website and by extension provide an opportunity for

tailoring targeted content based on various attributes of visitors to the site. The account was run by the Youth4Life web manager.

Data Analysis Strategy: For analysis of the qualitative data collected in the study, coding framework was developed through preliminary scheming through 2 out of the 8 focus group discussion transcripts, 1 out of the 4 KII transcripts, a case story transcript and forum discussion comments as well as the topic guides used to collect the data. A final thematic framework was then developed after review of the data and the research question. It is this thematic framework that was then used for the initial coding before more themes were developed in the course of coding. For quantitative data, the survey monkey data was downloaded in excel file format from where it was cleaned and then imported into SPSS version 20 for analysis. Data was coded and basic univariate analysis of the data conducted together with bivariate analysis mainly logistic regression analysis to show the influence of various factors on E &M platforms for SRH information and services among 15-24 year olds in Nairobi. Quantitative analysis was also based on the results of the Google analytics used to monitor the Youth4Life website.

Study Findings

This study examined factors that determine the feasibility, viability and efficacy of using web and mobile based platforms for improving direct access and use of SRHR information and services by 15-24 years old young people. This section describes the findings from the study.

a) Participation of youth in development phase of youth4life website

The youth4life website and platforms was developed using a methodology referred to as “scrum”- build first, fill first and learn from it. The development process involved a small group of young people but the process of reviewing the site involved more young people as was clear from across the FGDs and the KIIs.

“We were only shown the website and told to see the design and suggest improvements. But none of us participated in the original development.” **FGD Participant Mukuru Kwa Ruben, Nairobi**

“Scrum, is a kind of project methodology to create IT tools and the methodology is about you have short periods of building so we have two weeks, we use two weeks periods, every two weeks we build something we share it and then everybody can say something about it, then you continue in the next week”. **Implementer KII Nairobi**

The young people interviewed across the FGDs felt that the Youth4life website was developed and designed in a catchy way and focussed on youth sexual and life issues thus mirroring the overall life of the youth. The site is according to them was engaging and appealing.

“As the name suggests youth4life uses pictures the youth love to see. It interests them and they get information...very appealing. One can identify with the youth on the site”- **FGD participant Mukuru Kwa Ruben**

Involvement of young people in the process of developing the site was meant to enhance acceptance, attractiveness, and dynamism in content to ensure young people identify with the information.

“Well, we did this to make it as attractive as possible for them. We created a lot of dynamic contents, it’s direct to explain the text. We built a lot of animated videos, which most of the young people say they really loved, because they wanted to watch animated videos. We also created info graphics which is also a way of making it interesting for the young people, short documentaries showing the examples on the process of getting tested for HIV in a clinic, and in a role play we follow a young girl and we show how the process (clinic) goes. We also created professional photographs to make it more interesting for young people.” **KII Implementer Nairobi**

Wider involvement of young people in youth groups would have been better. According to key informant interviews, the implementation of the project should employ different strategies that will ensure more youth to talk about the platforms. Focus group discussions with young people suggest the need to add more features like football, relevant youth advertisements and applications on fashion and music in order to capture more youth interests.

“The website is good but you see it relies on one thing which is SRH, no other activities like football. Put apps to attract them, and that would be encouraging because youths like things like that”. **Male FGD Participant, Kibera**

“other than putting things like football, you see you also target what most youths like doing like fashion, what’s trending, what’s happening, and you orient it to things youths like most music, and then they get attracted to it”-**Female FGD Participant, Kibera**

The focused group discussions also suggested inclusion of applications that can help the blind and deaf to also access information on the site:

“I have a problem .what about youth who are blind and deaf; they lack the advantages to access the website”-FGD Participant Mukuru Kwa Reuben

b) Young people’s perception and attitudes towards web and mobile based platforms as sources of SRHR information and services

Above, we shortly described how the website was developed. Next, we firstly discuss the needs of young people in accessing different types of SRHR information, and the sources they prefer to get this information from. After that, the report presents the utilization of the youth4life website and the perceptions of young people about the accessibility and usefulness of the website. The uptake of services is discussed afterwards and the section ends with a description of the barriers and enabling factors accessing the website.

i. SRHR Information and service needs of the young people

The online survey results revealed that at some point in their lives, many of the participants had required information regarding some of the following SRHR; relationships with boyfriend/girlfriend or partner (54.7%, n=176), HIV and AIDS (47.8%, n=154), sexual health checks (47.5%, n=153), sexuality (46.0%, n=148), contraceptives (42.5%, n=137), sexual intercourse (41.0%, n=132) and others such as emergency contraceptives, pregnancy and giving birth and puberty among others. On the specific information needs of the young people by gender from the online survey, it was revealed that for males, the information needs in order of priority were the need for information regarding relationships with girlfriends (55.4%), HIV and AIDs (49.0%), Sexuality (47.1%), Sexual transmitted

infections (43.9%), Sexual health checks, Contraceptives and Sexual intercourse each 42.7%, Emergency Contraception (24.8%), pregnancy and giving birth (17.8%) and puberty (16.6%). For females, the information needs in the order of priority was such that information was sought regarding Sexual health checks (52.8%), Sexual transmitted infections (49.6%), Relationships with boyfriend/girlfriend/partner (48.8%), HIV and AIDS (45.5%), Contraceptives (43.9%), Sexuality (42.3%), Pregnancy and giving birth (35.8%), Sexual intercourse (34.1%), Emergency contraception (28.5%) and finally information about Puberty (24.4%). Important to note is that information regarding STIs, sexual health checks and puberty were sought after by females more than males as is shown in table 3 below.

Table 3. Priority information needs specific to gender of online survey respondents

<i>Information Needs</i>	<i>Male (%)</i>	<i>Priority</i>	<i>Female (%)</i>	<i>Priority</i>	<i>Total (%)</i>
Relationships with partner	55.4	1	48.8	3	54.7% (176)
HIV and AIDS	49	2	45.5	4	47.8% (154)
Sexuality	47.1	3	42.3	6	47.5% (153)
Sexual Transmitted Infections	43.9	4	49.6	2	46.3% (149)
Sexual health checks	42.7	5	52.8	1	46% (148)
Contraceptives	42.7	6	43.9	5	42.5% (137)
Sexual intercourse	42.7	7	34.1	8	41% (132)
Emergency contraception	24.8	8	28.5	9	26.1% (84)
Pregnancy and giving birth	17.8	9	35.8	7	25.5% (82)
Puberty	16.6	10	24.4	10	21.1% (68)

Source Online survey

Majority of the respondents across the FGDs cited that problems affecting the youth included pregnancy, drug abuse, school drop-out, poverty, abortion and unemployment as the problems affecting youth. These problems affecting youth are attributed to lack of knowledge on key SRH issues, peer pressure and poverty. Similarly, poor parent-child communication, poor parental guidance, poverty, negative media influence and dress codes were also highlighted by most youth as the cause for SRH related problems.

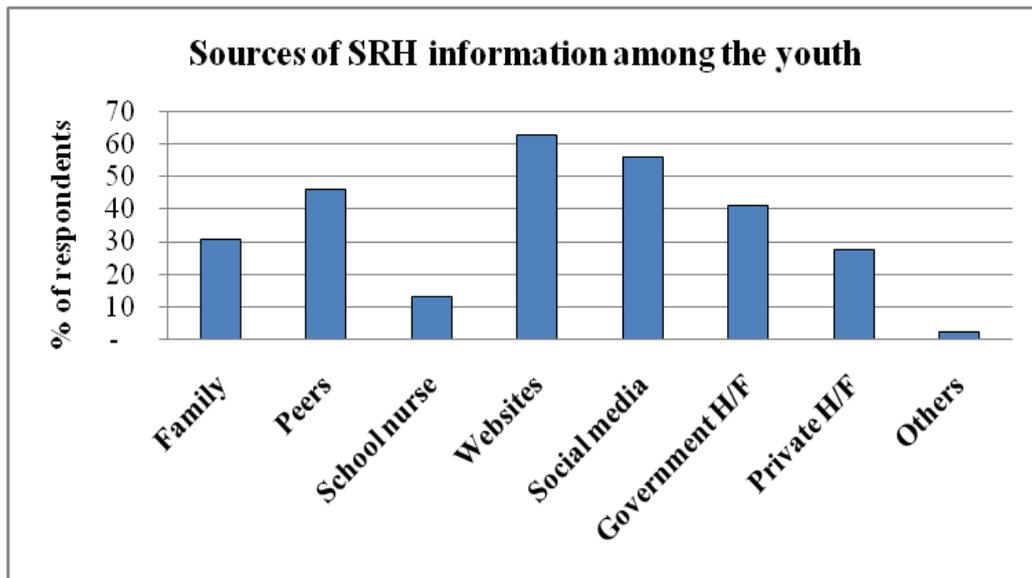
“Ignorance is a problem. This day’s most youth are brighter than we used to be. But ignorance of accessing information hinders them. The information is there on the media, hospital but somebody will not go the hospital because it is hard.”-FGD participants Huruma.

“Today it is very difficult to believe anything as goes. We are in so much ignorance yet we are bombarded with information all over. But you see today’s youth are brighter than we used to be. But ignorance of accessing information hinders them. The information is there in the media, hospital, billboards, etc but somebody will not go the hospital because it is hard luck of knowledge/ignorance in as much young people want to adventure so they rely on rumours. We need also need to appreciate that peer pressure is very influential because their friends tell them what to do and they just obey without verifying” – FGD participants, CFK – Kibera.

ii. SRHR information sources for the young people

When respondents for the online survey were asked about their main sources of SRHR information, it was established that 62.8% of them got most of their SRHR information from websites, followed by 56.1% from social media, 46.0% from peers, 41.2% from government health facilities, 30.5% from family, 27.4% from private health facility, 13.1% from school nurse while 2.1% from other sources such as NGO and CBO organized forums as shown in **figure 1** below.

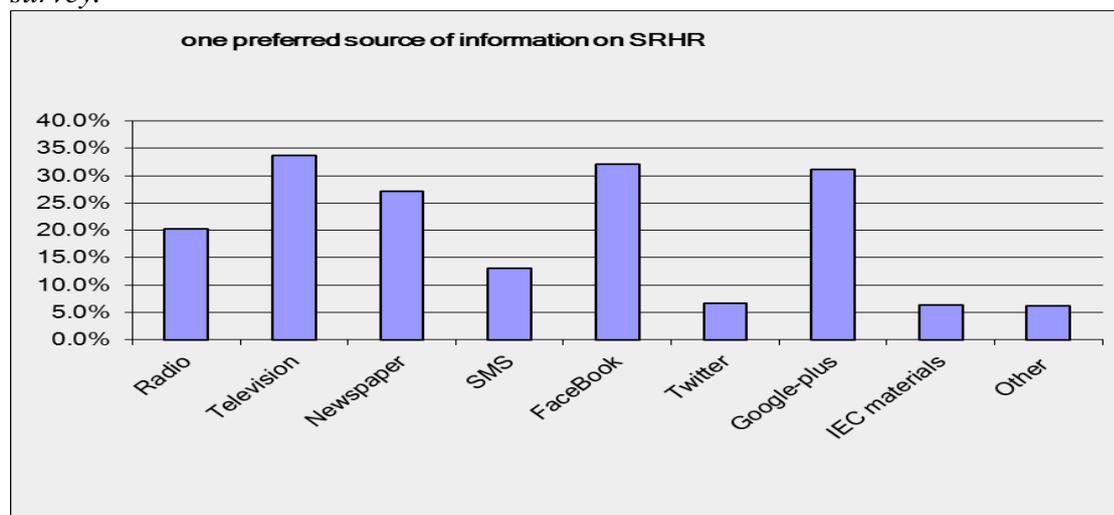
Figure 1 Sources of SRH information for youth in online survey



According to the participants from the online survey, the most preferred sources of information among the youth are the mobile and web based platforms with the internet based social media platforms such as Facebook, Google plus and twitter mentioned as the preferred social media platform to source information from by 32.1%, 31.1% and 6.1% respectively. The other none internet based information sources such as radio, television, newspapers, SMS and IEC materials among other sources were in total preferred by less than 40.0% of the youths included in this study as shown in **figure 4.2** below.

For the young people interviewed in the online survey, one source of information for SRHR was more preferred than the other based on a number of factors. One of the most important factors according to these young people is the ease of access to information using the site (62%) followed by confidentiality with which interaction between the people accessing it and the platform is (31%), the user friendliness of the information source (31.0%), how accurate the information from such a source is among other factors.

Figure 2: Most preferred source of SRHR information for the young people from the online survey.



Source Online survey

This was corroborated by qualitative data which reported that most young people have a variety of information sources including internet, social media, television, radio, community outreach, IEC materials, in school programs, community based organizations and community events. They prefer internet as the most convenient channel to access information on SRH. Other popular channels preferred include: radio, IEC and bill boards.

“Social media particularly in Nairobi is preferred; many young people don’t like reading books. They prefer social media.” (FGD participant, Mukuru Kwa Ruben, Nairobi)

They prefer internet sources for various reasons. First, because they are reliable. Young people do not consider the information from their parents as reliable especially regarding SRHR as well as guidance on sexuality and hence seek for more reliable and direct and easy to access information which they believe is available in the social media. This has been the motivation to use E&M platforms for the implementers, as it is a way to express freely information on adolescent sexuality.

“We can say that of late what works is Internet. It is straight forward. One can go to websites and find the information is the same. But from our parents the information is not reliable. Parents also want to restrict what we can access. What they don’t realise is that we have smart phones with which we can access the internet easily. The messages on social media are creatively presented” – **FGD, Mukuru Kwa Ruben.**

This was confirmed by the key informant interviews with the implementers.

“The E&M platform are designed to deliver content creatively. One, because young people identify with mobile technologies and also web based technologies. This is something they like, ideas integrated with technology. So we decided to use what they nowadays use in most of the times and that is phones and we created content that could be used whether you have a phone or you are using a website through a computer. We created content that young people can use by themselves wherever they are” **Implementer KII- Nairobi.**

“We speak about sex the way it’s supposed to be spoken about, we speak about STIs the way they are supposed to be spoken about and the information is reliable as it provides first-hand information to a young person.” **KII implementer, Nairobi**

The second reason why young people prefer web-based platforms is because it delivers interesting content, it’s interactive, cheap, and fun because of images/illustrations and the information is targeting young people.

Thirdly, key informant interviews with implementers also suggest that most young people prefer to access SRHR information through web-based than other channels like radio, interpersonal and mass media not just because it is *“it’s easy and really cool”*, but equally provides choices, control of what information you want, when you want the information and allows one to ask anonymous questions and get others using the different platforms.

“You want information probably on STIs and you can get information immediately and you can request information about what you want and to your own demand and that’s the difference with mass media when the radio or something about growing up, you don’t have a choice if you want the information or not.” **KII implementer, Nairobi**

Internet platforms are functional, are convenient and offer privacy and confidentiality when accessing. This information helps them seek services from relevant service providers. They also provide clear linkages for referral for additional information and services. Using the internet offers confidentiality and privacy for those seeking information on sexual and reproductive health unlike traditional approaches of using peer educators and health providers as intermediaries to the provision of information.

“Without going through peer educators or not waiting until someone comes with that information, they want a system where they can access this sexual and reproductive health information directly, at their own convenience, at their own privacy, so we looked around and saw an opportunity because we also realized that internet and mobile phones are really penetrating very fast, so we decided to leverage on that and decided on something that will be using technology, will be mobile, will be enabling young people to get direct to access to information.” **(KII implementer, Nairobi)**

iii. Utilization patterns of Youth4Life website among young people

When the respondents in the online survey were asked more specific questions regarding the youth4Life website and its utilization, it was revealed that about 46.3% (n=144) of young people who participated in the online survey (2 months after the launch of the website) were first time visitors to the website while 30.5% (n=95), 18.0% (n=56) and 5.1% (n=16) had visited the site 2 or 3 times, more than 5 times and 4 or 5 times during the some reference point as shown in table 4 below. The Google Analytics data on the traffic to the Youth4Life website during the first 5 months after launch did however reveal that the 76.9% of the visitors to the site were new visitors and the remaining 23.1% of the visitors to the site were return visits. This can be attributed to the fact that Google Analytics data is summary statics of actual visitors in different locations visiting the site. Moreover, it is likely that return visitors are more likely willing to participate in a survey compared to one time (short) visitors. Google analytics for this study were drawn covering five months period.

Table 4 Frequency of visits to the website according to the online survey

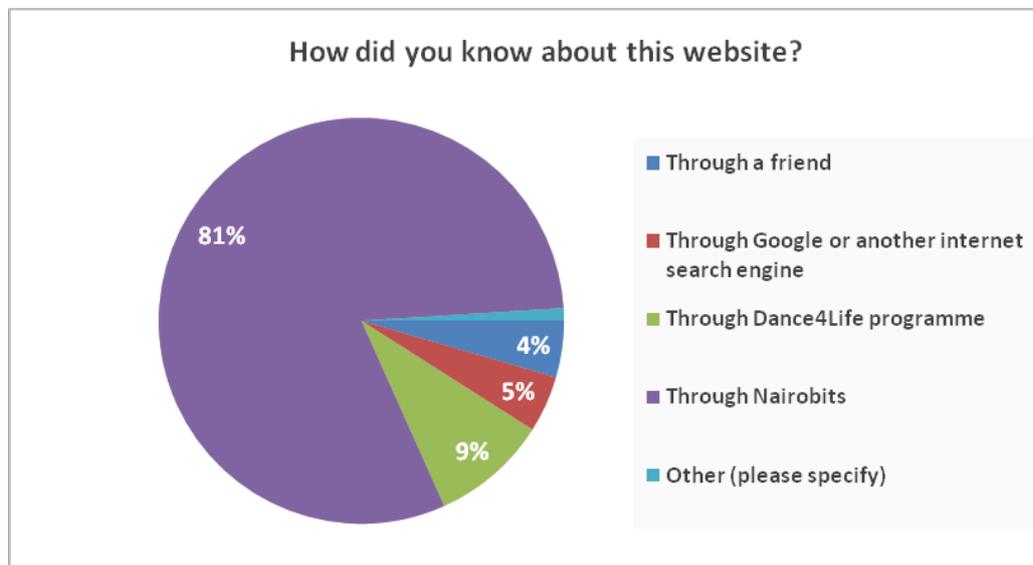
Frequency of visit to the website	%	Count
First Time	46.3	144
2-3 Times	30.5	95
4-5 Times	5.1	16
More than 5 times	18.0	56
Answered question		322

Source Online survey

Results from the Google Analytics on the traffic to the Youth4Life websites revealed that 56.5% of the visits made to the site were through mobile phones and 28.1% of the visits to the site made via computer devices such as desk top computers, laptops or tablets with only 15.4% of the visits made via non mobile or computer devices (devices not identified as using either mobile or computer based platforms). The results from the online survey show a different picture: most (60.4%, n=180) of the participants in the study had visited the youth4life website using either computer/laptop or a tablet, while 25.2% (75) had used a mobile phone to access the same website with 14.4% (43) of the respondents mentioning having used both laptops or computers or tablets and mobile phones to access the site.

On the source of information regarding the site, majority of the respondents (80.7%, n=251) had received information regarding the site from Nairobits with the remaining 19.3% (n=60) of those who answered the survey having received the information from Dance4Life, friend or Google and other internet search engines among other sources as shown in **figure 3** below.

Figure 3 Source of information regarding the website



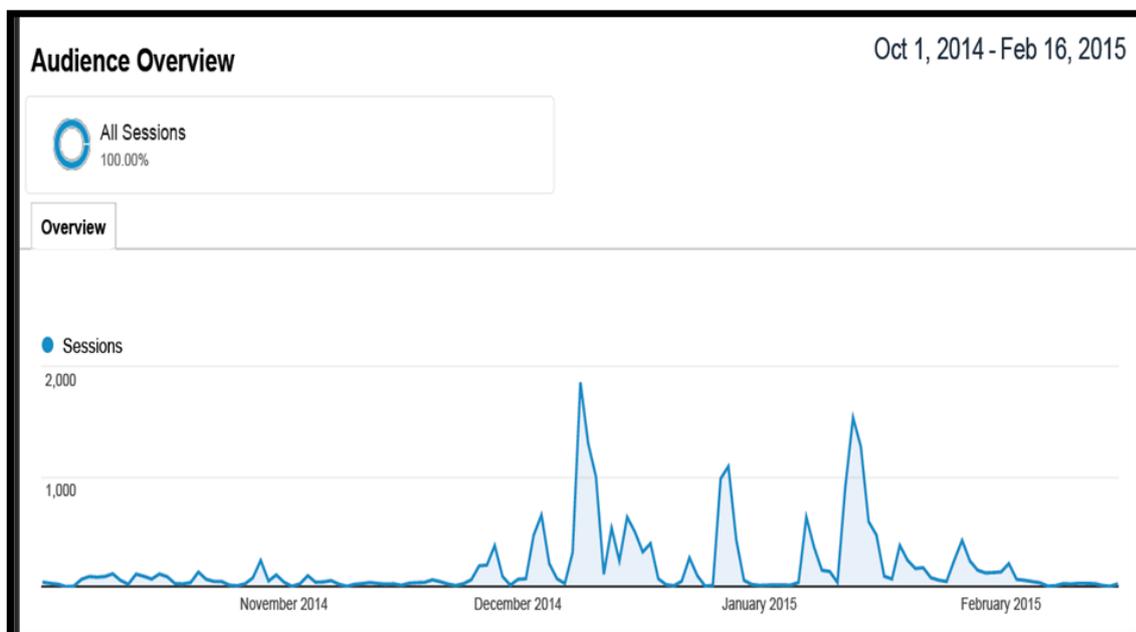
Source: Online survey

It was established from the Google analytics output between the months of November 2014 to February 2015, the period around which this online survey was commissioned, that there had been a total of 19,425 users who at various points within the period visited the site. In total, 54,668 page views had been made from 25,229 sessions with each session lasting averagely 2 minutes and 27 seconds using various devices. In more than 94% (Eng-US (40.92%), Eng-GB (28.64%) and Eng (25.87%)) of the instances of visits to the sites,

English was the language used for interaction with other sessions recording other languages for interaction.

The site had visitors mainly from Kenya (36.0%) with other visitors from countries such as Bangladesh, United States, Germany and India among others. Opera asa service provider was the most used service provider by the visitors to the site during the period. The number of sessions by visitors to the site distributed by month during the study period is as shown in figure 4 below. A lot of traffic to the site was recorded in the month of December with traffic being at the peak around mid month of December when as would be expected, most of the young people, mostly school going had closed school for the December holidays. Across all the months whose data was captured in the Google analytics data from the site, higher traffic was reported either the first weeks of the month or towards the end of the month a period that in many instances coincided with times when many schools may have sent students home for school fees and hence the students had access to computers and mobile devices for internet access.

Figure 4 Number of session by month of visits to the youth4life website



Source: Google analytics

iv. Specific SRHR Information sought by young people

The main reasons for visiting the Youth4Life website according to the youths from the online survey were to seek information on sexual and reproductive health rights (65.5%, n=215) followed by seeking information on specific topics (44.4%, n=147), because they were referred to the site by someone (21.0%, n=69), they were just browsing the internet and they stumbled upon it (3.4%, n=11) and finally the reason that least made them respondents visit the site was established to be prior knowledge about the existence of the site (0.9%, n=3) as shown in table 5 below.

Table 5 Reasons for visiting the Youth4Life website

<i>Reasons for visiting the website</i>	<i>Percent</i>	<i>Count</i>
To seek general information on sexual and reproductive health & rights	65.5%	215
To seek information on specific topics	44.8%	147
Because someone told me to visit the website	21.0%	69
I was just browsing the Internet and came upon it	3.4%	11
Told by friends to check it out	0.9%	3
answered question		311

Source Online survey

The survey results also show that among those who indicated they had sought information from the site; over half reported to read information on the section on sexual health (51.5%) and life skills (51.8%). The least read section was the forum (13.4%) and section on growing up (23.6%) as shown in the **table 6 below**.

Table 6 Frequency of visits to specific sections of the Youth4Life website

<i>Information read on the Youth4life website</i>		
<i>Visited Section of the website</i>	<i>%</i>	<i>Count</i>
Growing up	23.6%	72
Sexuality	47.5%	145
Sexual health	51.5%	157
HIV & AIDS	42.0%	128
Life Skills	51.8%	158
Youth Friendly Clinics	31.1%	95
Forum	13.4%	41
Other	1.3%	4
answered question		305

Source Online survey

Fewer adolescents reported participating in the forum unlike in the qualitative discussion which seemed to suggest a lot of interest in posting and discussing issues in the forum.

c) Perceptions and attitudes of young people towards the website

Young people who participated in the online survey were asked to evaluate usability of the website on a likert scale where statements were made to them and they were required to indicate their level of agreement or lack of it on a scale from 1 to 5 where 1 showed strong agreement while 5 showed strong disagreement of the participants with the statement made regarding the usability and appropriateness of the information provided in the website under study. To get the general feeling of participants regarding the usability of the website, the responses were evaluated based on the mean rating of each of the issues tested and interpreted based on the criteria in table 7 below.

Table 7 Interpretation of the mean Likert scale ratings for the usability of the youth4Life website

Mean Range	Response Mode	Interpretation
1.00 - 1.80	Strongly Agree	Very Satisfactory
1.81 - 2.60	Agree	Satisfactory
2.61 - 3.40	Not Sure	Not Sure
3.41 - 4.20	Disagree	Poor
4.21 - 5.00	Strongly Disagree	Very Poor

Based on criteria above, it was established that generally, the youths considered the messages from the website very trustworthy (mean=1.41±1.46), very youth friendly (mean=1.27±1.68), of very high quality (mean=1.47±1.66), very useful (mean=1.10±1.64), very easily understandable (mean=1.34±1.70), very easy to navigate and find information (mean=1.38±1.63) and finally, the language used very appropriate to young people (mean=1.34±1.72). The participants were however satisfied with the videos used in the website as just attractive to watch as is shown in table 8 below.

Table 8 Mean rating for Youth4Life usability and appropriateness rating

Indicators/Statements	Mean	Std. Deviation	Response	Interpretation
I trust the messages from the website	1.41	1.46	Strongly Agree	Very Satisfactory
The messages are youth friendly	1.27	1.68	Strongly Agree	Very Satisfactory
The videos are attractive to watch	2.08	1.77	Agree	Satisfactory
The information provided on the website is of high quality	1.47	1.66	Strongly Agree	Very Satisfactory
The information provided is useful	1.10	1.64	Strongly Agree	Very Satisfactory
The information provided is understandable	1.34	1.70	Agree	Very Satisfactory
It is easy to navigate and to find information	1.38	1.63	Strongly Agree	Very Satisfactory
The language used is appropriate for young people	1.34	1.72	Strongly Agree	Very Satisfactory

Source Online survey

Moreover, the youths interviewed generally felt very comfortable posting messages on the forum (mean=1.16±0.99), the website according to them was not slow (mean=2.95±0.92), they could also access the internet with relative ease all through the week (mean=1.75±1.13), they felt very comfortable asking personal questions via the website (mean=1.22±1.08), They would not at all feel ashamed when people see that they visit these websites (mean=3.42±0.79) and finally, they felt that they did not have any difficulty finding the website (mean=3.27) as is shown in table 9 below.

Table 9 Mean Perception rating of young people about the Youth4Life website form online survey

Indicators/Statements	Mean	Std. Dev	Response	Interpretation
I feel comfortable to post a message on the forum	1.16	0.99	Strongly Agree	Very True
The website is slow	2.95	0.92	Disagree	Untrue
I can access internet every day	1.75	1.13	Strongly Agree	Very True
I feel comfortable to ask a personal question via the website	1.22	1.08	Strongly Agree	Very True
I would feel ashamed when people see that I visit this website	3.42	0.79	Strongly Disagree	Very Untrue
It is difficult to find the website	3.27	0.86	Disagree	Very Untrue

The young people who participated in this survey rated the website highly at 8.3 out of possible score of ten. When asked about whether they intended to visit the site in the future, 92.8% of respondents reported they would visit the website again with 96 % of them reporting they would recommend the site to their friends.

The FGDs confirm these positive results. Young people believe the website provides accurate and reliable information unlike other channels like radio and TV broadcasts. They observed that the information on the website seemed to have been verified for correctness before uploading. Most of the respondents in the FGDs appreciate the messages contained in the website and were quick to mention several key messages evident in the website on different topic such as drugs and substance abuse, contraceptives, HIV and STIs, Youth friendly referral, relationships, contraceptive use and partners working with youth for life like Nairobi. This clearly shows the level of contact and awareness created by the website.

The participants noted that these messages serve the immediate needs of the young people regarding sexual and reproductive health and rights. Qualitative results from the FGDs also show that young people find the information on the website very appropriate and confidential, something they find difficult to get when they seek for similar information from health clinics or other facilities, and it's confidential. The information received from the website has helped them make informed choices giving them confidence and motivation to always stay safe.

“It broadens the information we have and gives us the morale to protect ourselves, have safe sex”- FGD participants Kibera.

Overall, the FGD reports show that the respondents were happy with the web based information sites on youth4life site. They observed that the language used was appealing to them. It is simple and easy to understand. They however recommended that the language should be able to reach all targeted audiences, including the un-educated including the young people in the slums.

“Nairobi should target people from slum, they should use pictures from slum and enable website be accessed by any phone” Another participant notes that “the language is friendly to learned people. It should cut across the people those who are literate and illiterate” FGD participant Mukuru Kwa Reuben

Key informant interviews with the implementers of the program suggest that awareness about the youth4lifewebsite is still limited among the targeted communities and should be increased to encourage more adolescents and youth to utilize the website.

Table 10 Regression analysis of overall score on perception of young people on the website and socio demographic characteristics of the respondents in the online survey

<i>Variable</i>	<i>B</i>	<i>SE (B)</i>	<i>β</i>	<i>t</i>	<i>p-value</i>
Gender	-0.094	0.062	-0.094	-1.527	0.13
Age	-0.02	0.072	-0.018	-0.282	0.78
Marital Status	0.026	0.069	0.023	0.374	0.71
Highest Level of Education	0.034	0.066	0.033	0.51	0.61

*P<0.05, **p<0.01

To examine the influence of socio demographic factors of the young people on perceptions regarding the website, regression analysis was conducted. This was mainly aimed at determining the effects of the various socio demographic characteristics of the participants (youths) on the perception of the young people on the youth4Life website. It was established, across all the socio demographic characteristics, that none of the models was fit to test such a relationship among the youth: no significant differences were found based on age, sex, marital status, education and religion. This is further elaborated by table 10 above.

Table 11 Gender specific information need for the youths visiting youth4life website

Information necessary	Male (n=19)	Female (n=9)	Transgender (n=1)
Contraceptives	-	1	-
Life Stories	2	1	-
Link to other useful Information	2	1	-
List of Clinics Outside Nairobi	2	-	-
Make the information more picture based	2	-	-
More detailed information	-	1	-
More links to useful information	2	-	-
More topics	-	1	-
Parenting	-	1	-
Pregnancy and giving birth	2	-	-
Relationships	-	1	-
Relationships and Dating	2	-	-
Sex and Sexuality	1	-	1
STIs	-	1	-
Youth Mobilization Activities such as Sports	2	-	-
Life Skills	-	1	-
Drugs and Substance abuse	2	-	-

Despite the positive responses, we also asked whether any information is missing. About 27.1% (29) of the survey participants felt that some information was missing. For those who mentioned need for more information in the website, the specific areas that required more information distributed by gender of the participants are as in **table 11** above. Whereas some

of this information already was available, the participants felt that more information was necessary to be provided and where none existed, addition to be made to the website so that it could be more enriching in terms of information. Also mentioned was the need to use educative pictures on the website to attract more young people, provision for a platform where people could share their stories, provision of more detailed information on some of the already existing information areas in the site, listing of clinics that deal with SRHR issues outside Nairobi and finally provision for other external links for more information. Other important consideration would be use of advertisements, interactive games, and detailed information on SRHR topics on the website including life skills.

d) Uptake of services due to Youth4Life website

The survey investigated SRHR service uptake among young people. In the 6 month preceding the survey, less than half 45.7% (138) of the young people who participated in the survey had visited a clinic for SRHR services. Among these 69.1% went for education on sexual and reproductive health and rights including voluntary counseling and testing for HIV, 30.4% went to get condoms and 26.8% went for treatment and counseling on sexually transmitted infections.

The survey respondents were also asked if they had visited any of the clinics listed on the website in the past 1 month. About 19.9% (46) had visited the clinics but not because they were informed about them via this website. Only 9.5% (22) had visited the clinics after learning about them from the youth4life website. Table 4.9 below show services received at the last visits one month prior to the survey. Over half were seeking education SRHR, 42.5% were seeking VCT for HIV service and 22% went for STI treatment and counseling and 17.6% went for condoms. An overwhelming majority (96%) of the survey respondents reported they would visit one of the youth friendly health clinics listed on the Youth4life website if needed.

Table 12 Services received at the last visit to the health facility

<i>Answer Options</i>	<i>%</i>	<i>Count</i>
Education on sexual and reproductive health and rights	54.2%	83
VCT for HIV	42.5%	65
Treatment for miscarriage/Post-abortion care	2.0%	3
Family planning services	9.8%	15
STI treatment and counseling	22.9%	35
Pregnancy care and delivery	5.9%	9
Vaccination	7.2%	11
Get condoms	17.6%	27
I don't want to answer	2.0%	3
Don't know	6.5%	10
Other (please specify)	3.3%	5
answered question		153

e) *Barriers and enablers to using web based platforms*

Finally, qualitative data identified key barriers to use of web-based platforms. These include:

- Inhibiting costs to access internet with some platforms such as downloading videos more expensive because they burn more data bundles. Although most of the FGD respondents noted that most young people can access the internet, they observed that cost to buy data bundles could be a hindrance though according to these young people from the value they attach to information sought for directly from the website far outweighs the costs involved in accessing it.

“Radios, mass media are indirect channels of receiving information, what we created in the market provides direct (information). We have so many opinion leaders in the community like the pastors for example churches which tell their people not to take their children to hospitals, because Catholics do not accept the use of condoms. This information confuses young people. In this platform we have provided reliable and verified information. Young people get first-hand information that is not corrupted by somebody’s opinion” **KII with implementers, Nairobi**

- Poor mobile network connections that slow internet connections,
- Limited time to surf for information on internet due to other competing home chores,
- Limited access for illiterate youth and those with disabilities,
- Many youth still not aware of the youth for life web based platforms

Qualitative data also identified the factors attracting young people to use web-based platforms. These include:

- platforms are considered trendy and digital,
- web based platforms are much faster and reliable to do things and get information,
- web based platforms are easy and comfortable to use
- web based platforms offer anonymous, confidential and non-judgemental service “even if you download anything, nobody can know”,
- web based platforms offers variety of information on different topics within a short period saving time,
- they are interactive and offers real-time updates and opportunity to participate in the discourse of the day,
- they are user friendly with no interruption and censorship of information.

Summary of findings

This study identified young people’s SRHR needs for information on; relationships, sex and sexuality, contraception, pregnancy and giving birth, STIs, life stories on SRHR, parenting, drug and substance abuse, life skills, and a list of youth friendly clinics outside Nairobi. The study established that main sources of SRHR information among young people to be websites (62.8%), social media (56.1%), peers (46.0%).

The youth4life website and platforms were developed using a methodology referred to as “scrum”- build first, fill first and learn from it. The development process involved a small

group of young people but the process of reviewing the site involved more young people. Involvement of young people in the process of developing the site was meant to enhance acceptance, attractiveness, and dynamism in content to ensure young people identify with the information. Qualitative study results suggest opportunities for wider involvement of different groups of young people.

Young people in this study show acceptance and willingness to visit the youth4life website for information on wide range of topics on sexual health. Majority of the respondents who accessed the information through this website pointed out that it is catchy and focused on youth sexual and life issues thus mirroring the overall life of the youth. Nearly half (46.3% ,n=144) of young people who participated in the online survey were first time visitors to the website while 30.5% (n=95), 18.0% (n=56) and 5.1% (n=16) had visited the site 2 or 3 times, more than 5 times and 4 or 5 times during the some reference point. Given the time the study was conducted, this shows great potential for utilisation of results. The Google Analytics data on the traffic to the Youth4Life website reveals that the 76.9% of the visitors (36% of these from Kenya) to the site were new visitors and the remaining 23.1% of the visitors to the site were return visits.

Results show young people using the different platforms such as Facebook, twitter, short message services, Google plus, videos. Young people's evaluation of usability of the website show highest scores for appropriateness of language and usefulness of the information on the website. Among those who indicated they had sought information from the site; over half reported to read information on the section on sexual health (51.5%) and life skills (51.8%). The least read section was the forum (13.4%) and section on growing up (23.6%). Fewer adolescents reported participating in the forum unlike in the qualitative discussion which seemed to suggest a lot of interest in posting and discussing issues in the forum.

The respondents were asked about their general perceptions about the website. Perceptions of comfort to post messages on the forum, ability to access internet every day and comfort to ask personal questions via the website scored above average.

The young people who participated in this survey rated the website highly at 8.3 out of possible score of ten. When asked about whether they intended to visit the site in the future, 92.8% of respondents reported they would visit the website again with 96 % of them reporting they would recommend the site to their friends. Majority of those who mentioned that they had intentions of visiting had more need for information on relationships (54.8%), HIV and AIDs (48.2%), sexual health check (47.1%), STIs (46.7%), sexuality (44.9%) among other issues.

Data from FGDs with young people show that they believe the website provides accurate and reliable information unlike other channels like radio and TV broadcasts. They observed that the information on the website seemed to have been verified for correctness before uploading. Most of the respondents in the FGDs appreciate the messages contained in the website and were quick to mention several key messages evident in the website on different topic such as drugs and substance abuse, contraceptives, HIV and STIs, Youth friendly referral, relationships, contraceptive use and partners working with youth for life like Nairobis. This clearly shows the level of contact and awareness created by the website.

The participants noted that these messages serve the immediate needs of the young people regarding sexual and reproductive health and rights. Qualitative results from the FGDs also show that young people find the information on the website very appropriate and

confidential, something they find difficult to get when they seek for similar information from health clinics or other facilities, and it's confidential. The information received from the website has helped them make informed choices giving them confidence and motivation to always stay safe.

Overall, the FGD reports show that the respondents were happy with the web based information sites on youth4life site. They observed that the language used was appealing to them. It is simple and easy to understand. Results also show that young people in this study find the youth4 life website as trusted source of information. They indicate that the site provides accurate and verified information on sexual and reproductive health and rights which suits their needs. This is similar to key informant sentiments that the youth4life web-based platform is achieving its goals by providing factual information on a wide range of ASRHR topics. This provides great opportunities for the project to reach more youth in Nairobi through the site. Qualitative data suggests improvements on the site to make it even more dynamic and interactive through inclusion of applications on game such as football, music, fashion and even relevant advertisements targeting young people.

About 19.9% (46) had visited the clinics but not because they were informed about them via this website. Only 9.5% (22) had visited the clinics after learning about them from the youth4life website. Table 4.9 below show services received at the last visits one month prior to the survey. Over half were seeking education SRHR, 42.5% were seeking VCT for HIV service and 22% went for STI treatment and counseling and 17.6% went for condoms. The proportion of those visiting the site is not matched by those seeking services.

Qualitative data suggest that health service provider attitudes, unfriendly service provision, and poor quality of services are major barriers to uptake of services from the public health facilities. Online survey shows that an overwhelming majority (96%) of them would be willing to seek for services if needed from the health clinics mapped on the website. This is encouraging pointing to the need to work closely with the mapped health facilities to increase access and provision of quality youth friendliness services. Although the majority of respondents in this survey indicated willingness to use health facilities mapped within the catchment areas, suggestion from the qualitative data show that young people would prefer to use health facilities far from where they stay and suggested inclusion of facilities on the outskirts of Nairobi

Qualitative data identified the following barriers to utilisation of the website: Inhibiting costs to access internet; Poor mobile network connections interrupting network connections; Inadequate time to surf for information on the site given other competing demands at home and work; Many youth still not aware of the website; and, Lack of provision for youth with disabilities and illiterate to be able to access site.

What attracts youth on the to the internet platforms is the preference to use modern technology especially the use of social media for information. They are considered trendy and digital. Most of them felt that these platforms are interactive and meet the needs of the youth with information at a minimal cost, which far outweighs the other conventional approaches like attending hospital clinic for information. Other factors identified to enhance utilisation of the web-based platforms: much faster and reliable to do things and get information; and comfortable to use; anonymous, confidential and non-judgemental; offer variety of information on different topics within a short period saving time; offers real-time updates and opportunity to participate in the discourse of the day; are user friendly with no interruption and censorship of information. Key informant interviews with the implementers of the program illustrate the potential to reach wider audience with time.

In generalizing the findings to other audiences, caution should be exercised due to sampling bias in recruiting respondents mainly from implementing organisation (Nairobi and Africa Alive) networks and catchment areas.

Conclusion

This study established the high acceptance and willingness to use the Youth4life website for accessing SRHR information and services. Its suitability for use by young people is demonstrated in their views of the site as trendy, attractive, convenient, confidential, interactive, affordable and easy to access. The different platforms available through the website motivate young people to use the website. Use of dynamic and interactive presentation of information – picture, videos, text, forums, social media links, and provision of accurate and factual information and the attractive of the site given involvement of young people in its development were found to be motivating considerations for using the youth4lifewebsite. Study confirmed that web-based platforms are good in promoting direct access of SRHR information among young people aged 15-24 years.

Although uptake of services is limited, study results show enormous potential in creating awareness about the available youth friendly clinics and willingness to use the services when need arises.

Recommendations

In the light of these findings, it is recommended that the AA and Nairobi should:

1. Step up mobilization especially at the community level to reach younger adolescents 15-19 year targeted by the project through:
 - a. Creating more face book groups to share and promote the website
 - b. Giving bonus points as incentives for participation on youth4life website
 - c. Running articles in newspapers and magazines about the youth4life website
 - d. Promote the youth4life website through community outreaches
 - e. Consider using mobile cyber cafes during community outreach.
2. Build in additional options such as voice add-ons and using sign language videos to cater deaf and blind youth.
3. Build in call-ins within the website to facilitate and strengthen referrals for services.
4. make the youth4life website accessible on all types of phones with different operating systems such as Symbian, iOS, Android
5. Provide the youth4life platforms on CDs that can be distributed in low income settlements where access to internet is limited.
6. Minimize costs of accessing internet by: creating free Wi-Fi hotspots with built in firewalls restrict access only to youth4life website within a radius of every 10km of study sites; and supporting an offline app which can be updated every time with internet access
7. Minimize restriction on participation on youth4life platforms such as the forum by removing the requirement to register in order to make any posting.

Annex 1: online Survey tool

Survey website youth4life.co.ke

Hello, we would like to know your opinion about this website. Please help us improve this website by filling out this questionnaire. It will take approximately 10-15 minutes.

All your answers remain anonymous and there is no penalty if you refuse to answer any of the questions.

1. Have you ever needed information on any of the following? (Select as many options as applies to you)
 - Puberty
 - Relationship with your boyfriend or girlfriend or partner
 - Sexuality
 - Sexual health checks
 - Contraceptives
 - Emergency contraception
 - Pregnancy and giving birth
 - Sexual intercourse
 - Sexual transmitted infections
 - HIV and AIDS
 - Other, specify.....

2. Where would you get information on the above topics? (Select as many options as applies to you)
 - Family
 - Peers
 - School nurse
 - Websites
 - Social media
 - Government health facility
 - Private health facility

- Other, specify.....
3. Name your one preferred source of sexual and reproductive health and rights information.
- Radio
 - Television
 - Newspaper
 - SMS
 - Face book
 - Twitter
 - Google-plus
 - IEC materials
 - Others (specify, Type your answer here)_____
4. Why do you prefer the source you have identified? (refer to Q 3)
- It is anonymous
 - It is confidential
 - It is easily accessible
 - It is friendly
 - The information given is accurate
 - Other (specify, Type your answer here)_____
5. In the past month, how many times have you visited this website (through a computer or mobile phone)?
- This is my first visit
 - 2 or 3 times
 - 4 or 5 times
 - More than 5 times
6. Did you visit this website via a computer or a mobile phone?
- Computer/laptop/tablet

- Mobile phone
 - Both
7. How did you know about this website?
- Through a friend
 - Through Google or another internet search engine
 - Through Dance4Life programme
 - Through Nairobis
 - Other, specify and Type your answer here
8. Why did you visit this website? (Tick all that apply)
- To seek general information on sexual and reproductive health and rights
 - To seek information on specific topics
 - Because someone told me to visit the website
 - I was just browsing the Internet and came upon it
 - Other, specify....
9. What information did you read on the website? (tick all that apply).
- The section about Growing up
 - The section about Sexuality
 - The section about Sexual health
 - The section about HIV & AIDS
 - The section about Life Skills
 - Information about Youth Friendly Clinics
 - Forum
 - Other, specify

10. To what extent do you agree or disagree with the following statements?

	Completely disagree	Disagree	Neutral	Agree	Completely agree	Don't know
I trust the messages from the website	<input type="radio"/>					
The messages are youth friendly	<input type="radio"/>					
The videos are attractive to watch	<input type="radio"/>					
The information provided on the website is of high quality	<input type="radio"/>					
The information provided is useful	<input type="radio"/>					
The information provided is understandable	<input type="radio"/>					
It is easy to navigate and to find information	<input type="radio"/>					
The language used is appropriate for young people	<input type="radio"/>					

11. In the past 6 months, have you visited a clinic for any service related to sexual or reproductive health?

- No (go to question 16)
- Yes

12. Which service(s) did you receive? Please tick all that apply.

- Education on sexual and reproductive health and rights Voluntary counselling and testing for HIV
- Miscarriage
- Post-abortion care services
- Family planning services
- Treatment and counselling on sexually transmitted infections
- Pregnancy care and delivery
- Vaccination
- Get condoms
- Other (specify) _____

- I don't want to answer
- Don't know

13. On the website, there is a list of youth friendly clinics in Nairobi. In the past 1 month, have you visited any of these clinics?

- No (go to question 16)
- Yes, but not because I was informed about them via this website
- Yes, because I found the clinic via this website

14. Which health centre did you visit?

Type your answer here

15. Which service(s) did you receive? Please tick all that apply.

- Education on sexual and reproductive health and rights
- VCT for HIV
- Treatment for miscarriage/Post-abortion care
- Family planning services
- STI treatment and counseling
- Pregnancy care and delivery
- Vaccination
- Get condoms
- Other (specify) _____
- I don't want to answer
- Don't know

16. (If answered 'no' to question 11 or 13): Would you visit one of the youth friendly health clinics listed on this website, if needed?

- No
- Yes

Please explain your answer; Type your answer here

17. To what extent do you agree or disagree with the following statements?

	Completely disagree	Disagree	Neutral	Agree	Completely agree	Don't know
I feel comfortable to post a message on the forum	<input type="radio"/>					
The website is slow	<input type="radio"/>					
I can access internet every day	<input type="radio"/>					
I feel comfortable to ask a personal question via the website	<input type="radio"/>					
I would feel ashamed when people see that I visit this website	<input type="radio"/>					
It is difficult to find the website	<input type="radio"/>					

18. Do you think you will visit the website again?

- No
- Maybe
- Yes

Please explain your answer....

19. Would you recommend the website to your friends?

- No
- Maybe
- Yes

Please explain your answer....

20. Is there any information you feel is missing on this website? If yes, please type your answer here.....

21. How can this website be improved to attract more youth?

22. How would you rate this website, on a scale from 1 (very poor) to 10 (perfect)?

1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

23. Have you ever heard about Dance4Life?

- No (Jump to Qn 26)

- Yes

24. Have you ever heard about NairobiBits?

- No (Jump to Qn 26)
- Yes

25. List any three Dance4Life activities that you have ever participated in:

Type your answers here:

26. List any three NairobiBits activities that you have ever participated in:

Type your answers here:

Finally, we would like to ask some general questions.

27. What is your sex?

- Male
- Female
- Transgender

28. How old are you? (Indicate age-bracket)

- 10-14 years
- 15-19 years
- 20-24 years
- Over 24 years

29. What is your marital status?

- Single
- Dating
- Engaged
- Married
- Divorced/separated
- Other, specify

30. What is your religion/denomination?

- Catholic
- Protestant or Pentecostal
- Muslim
- African Tradition
- Atheist
- Other, specify

31. Are you living in Nairobi county?

- No --> which county do you live in?....
- Yes --> In which constituency?

32. Who do you live with?

- My parent(s)
- My spouse (and children)
- In school/college
- With a friend
- Other, specify

33. What is the highest level of education you completed?

- No formal education
- Primary school. Class:....
- Secondary school. Form:
- College/university
- Vocational training

Thank you very much!