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PREPAREDNESS OF COUNTY REFERRAL HEALTH FACILITIES IN IMPLEMENTING ADOLESCENT FRIENDLY HEALTH SERVICES: A CASE OF MAMA LUCY KIBAKI COUNTY REFFERAL HOSPITAL, KENYA

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ABSTRACT: *Background: Health service delivery is a key pillar of health system management. However, there is limited peer reviewed literature on health services to adolescents necessitating assessment of whether the existing health facilities were prepared to implement the adolescent friendly health services. Staff capacity, health resources and health system factors were assessed in regards to health service delivery to adolescent cohort study. Methods: Cross-sectional research design was adopted, census, stratified random sampling and simple random sampling were used to establish study participants. Data was collected using structured questionnaires and focused group discussions for adolescents. Analysis was done using Statistical package for the social science Version 17.0 programme for data analysis and results were presented in tables and graphs. Results: The study established that there is limited adolescent friendly health services implementation in the facility. Even though 107 (73.3%) of the healthcare providers referred to the adolescent health services offered at the facility as friendly. Health workers capacity was limited in regards to adolescent friendly health service delivery. On the other hand 212 (100%) adolescents recommended specific health resources to be incorporated within the health system to improve the services rendered to them. Conclusion: The link between health care resources and adolescent health is not well understood by health workers and managers leading to inadequacy of services specific to adolescents. Laborious awareness drives to sensitize county referral health facilities to make a significant investment in the health system that supports adolescent friendly health service implementation. Similar studies need to be done in other county referral health facilities to generate more supportive evidence.*

KEYWORDS: Adolescent friendly Health Services, Health resources, Preparedness, Staff Capacity.

INTRODUCTION

Health systems have been defined in various ways. The most widely-used definition is from the World Health Report 2000, which defines health systems functionally as "all the activities whose primary purpose is to promote, restore or maintain health." (WHO, 2000). These activities are often grouped into six pillars or "building blocks", namely 1) service delivery, 2) health workforce, 3) health information systems, 4) medical products, vaccines and technologies, 5) health systems financing and 6) leadership and governance (Cassels, 1995). Health systems have also been defined at least in part in terms of contributing actors. The Tallinn Charter from the 2008 WHO European Ministerial Conference on Health Systems defines health systems as the "ensemble all public and private organizations, institutions and resources mandated to improve, maintain or restore health" which "encompass both personal

and population services, as well as activities to influence the policies and actions of other sectors to address the social, environmental and economic determinants of health (Roemer, 1991).

Health service delivery is a key pillar of the health system management. Service delivery is the chief function of a health system (WHO, 2003). WHO (2003) acknowledges that a strong, well functioning and sustainable health system is that which has the capacity to efficiently deliver and maintain health care services by ensuring adequate staff capacity, health system and health resources (WHO, 2002).

Access to health care services by adolescents has been a challenge globally and especially in developing countries. This is attributed to insufficient health resources and inadequate health care professional's capacity to deliver these services (USAID, 2008). A skilled, knowledgeable, well trained and competent health professional is desirable to yield positive delivery health service delivery outcome. The question however is how prepared an existing health care professionals to deliver adolescent friendly health services [AFHS] (Lederman, 2001).

Sinclair (2007) assert that , health care professionals have an important role to play in enabling an environment that looks after adolescents by helping them overcome their challenges and reaching out to their full potential. On the other hand, Farralley (2010) argues that where adolescents who were looked after by specialists' their health improved. Therefore the need to have health staff that have knowledge, skills, training, attitudes and values to undertake health care service delivery to adolescents.

In Europe, a study targeting the capacity of health professionals to deliver AFHS depicted that countries that promoted capacity building positively impacted adolescent health (WHO, 2010). Education Scotland Capacity (ESC) established frameworks that aimed at equipping health care professionals to deliver health services to adolescents (USAID, 2012).

In Africa, WHO has noted the low utilization of health services by adolescents and attribute this to inadequate capacity of health workers, insufficient resources as well as health system factors. Nevertheless, WHO in collaboration with health ministries in several countries have endeavored to boost health workers capacity for example in Tanzania programs have been designed to fit adolescents and their health challenges (Rubona, 2001).

In Kenya a study carried out by (Kamau,2006) demonstrated that despite the Ministry of Health (MOH) introducing the Kenya Essential Package for Health (KEPH) Programme that targets the needs to adolescents, there is still inadequate preparedness of health facilities for the implementation of adolescent friendly services. Moreover in Nairobi County there is limited information available on the capacity of health workers, health resources and health system factors for adolescents' health service delivery. Consequently this study aims at assessing the preparedness of County Referral Health facilities in implementing adolescent friendly health services with Mama Lucy Kibaki County Referral Hospital as the case study.

Brief History of Mama Lucy Kibaki Hospital in Nairobi County, Kenya

Mama Lucy Kibaki Hospital is a government county referral hospital situated in Eastern part of Nairobi County. The institution is a key development which aims to decentralize and expand health services for Nairobi County residents including the adolescent. It is the

Government's efforts to strengthen the health system by providing accessible health services to all Kenyans.

Problem statement

Majority of county health care facilities are lacking qualified staff and sufficient health care amenities to deliver AFHS thus questioning their preparedness in implementing adolescent friendly health services. This is according to a survey done by the Ministry of Health (MOH), Kenya in 2008. WHO asserts that staff capacity and health resources are vital for the implementation of AFHS and therefore the obvious need to assess county health facilities in relation to health service delivery to adolescents.

METHOD

Research Design

The report adopted a cross-sectional design. Orodho (2003) States that cross-sectional design is good because it provides a snapshot of the exposed variables (staff capacity and health resources) across a wide population without manipulating or influencing the study population in any way. Cross-section design was also used because it can produce multiple outcomes and various exposures/variables can be studied at a given point in time.

Target Population

The study was conducted among the managers, health care professionals and Adolescents who seek for health care services at Mama Lucy Kibaki Hospital. The study also targeted the 452 adolescents who visit the health facility every month to seek for health services. The distribution of the population is shown in Table 1.

Table 1: Target Population

Source: Author (2014).

Category	Population N (%)
Managers	10 (1.4%)
Health care professionals	231 (33.3%)
Adolescents	452 (65.3%)
TOTAL	693 (100%)

Study Site

The study was carried out at Mama Lucy Kibaki hospital. The health facility is located within Eastern Part of Nairobi County. The location was appropriate as it provides monthly health care services to about 452 adolescents, hence was instrumental in providing appropriate information on the same.

Sample size

The researcher used Yamane's formula (1967) to arrive at the sample size for the health care professionals and adolescents. On the other hand census was used to sample all the managers. Calculation below illustrates how the sample size was arrived at.

Sampling Techniques

The researcher used stratified random sampling to select the employees at Mama Lucy Kibaki Hospital and the adolescents who seek health care services at MLKH selected from both in and out patient using simple random sampling. On the other hand the managers were sampled using census.

Instrumentation

The data collection instruments used was structured questionnaires for the health workers, in-depth interviews for the managers and focused group discussions for the adolescents.

Methods of data collection

The study employed the following instruments which were carefully designed, pretested and revised before final data collection. 1. Self-administered structured questionnaires to collect data from the health workers 2. Self- administer questionnaire and focused group discussion with partial assistance from research assistants for adolescents who needed clarification. Adolescents were selected from both in and out-patient and represented a mixture of male and female and in-school and out-of-school. 3. Self-administered in-depth questionnaires and an Interview guide for the managers. On the other hand secondary data were collected from government documents including Mama Lucy Kibaki Hospital health records journals and books. Information from these sources was used during literature review and for discussion.

Analysis

Completed instruments were assembled, edited, coded and interpreted in relation to the research objectives. Quantitative data was analyzed using SPSS Version 17.0 programme for data analysis. Demographic data was be presented and summarized using descriptive statistics, including frequencies, percentages and stratified by gender and age. Tables have been used to summarize the frequencies of basic demographic and education characteristics of study participants included in the sample. On the other hand graphs have been used to present qualitative data. A significance level at p value = or less than 0.05 has been used for statistical testing.

Ethical Consideration

Permission to conduct the study was sought from the Scientific and Ethical Research Committee (SERC) of Kenya Methodist University, Nairobi County Health Operational Research Technical Working group as well as from Training and Research Committee of Mama Lucy Kibaki Hospital. The researcher assured the respondents utmost approval by getting Informed consent from the study participants above 18 years. Adolescents who were under 18 years old were asked for their assent to be involved in the study. Confidentiality was maintained throughout the study. Respondents did not receive any incentives to participate in this study and no participant was forced to answer questions they did not wish to answer.

Data analysis and Interpretation

Completed instruments were assembled, edited, coded and interpreted in relation to the research objectives. Quantitative data was analyzed using SPSS Version 17.0 programme for data analysis. Demographic data was be presented and summarized using descriptive statistics, including frequencies, percentages and stratified by gender and age. Tables have been used to summarize the frequencies of basic demographic and education characteristics of study participants included in the sample. On the other hand graphs have been used to present qualitative data. A significance level at p value = or less than 0.05 has been used for statistical testing.

RESULTS AND DISCUSSION

Demographic Characteristics of Adolescents

Most of the adolescents interviewed, 156 (73.6%) were female while 56 (26.4%) were male. Out of a total of 212, 61 (28.8%) adolescents were within the age group of 11-15 years while 151 (71.2%) were within the age group 15-19 years. Also, majority of the adolescents interviewed, 181 (85.4%) were in school while 31 (14.6%) were not schooling. Of the 85.4 % in school, 38 (20.8%) were in primary schools, 68 (37.3%) in secondary and 76 (42.0%) were in college/university. 82 (38.7%) of the respondents were in an opposite sex relationship, 38 (17.9%) were married. Only 92 (43.4%) of the respondents were not involved in any opposite sex relationship indicating that the adolescents are in the process of transition from childhood to adulthood.

Table 2: Demographic Characteristics of Adolescents

Socio-Demographic Data		Respondent
Adolescents		n (%)
Gender	Female	156 (73.6%)
	Male	56 (26.4%)
Age (Years)	10 to 15	61 (28.8%)
	16 to 20	151 (71.2%)
Education Level	Primary	38 (20.8%)
	Secondary	68 (37.3%)
	College/University	76 (42%)
Relationship	In Relationship	82 (38.7%)
	Not in relationship	92 (43.4%)
	Married	38 (17.9%)

This findings confirms the conclusion of Kipchumba (2012) which indicated that Socio cultural norms and judgmental attitude of adults have left adolescents to explore their sexuality on their own.

Demographic characteristics of Health care workers

Among the health care providers interviewed, majority were nursing officers comprising of, 101 (69.2%) staff. The others were 18 (12.4%) clinical officers, 14 (9.6%) medical officers, 3

(2.1%) radiographers, 2 (1.4%) social workers, 7 (4.8%) records clerks/officers and 1 (0.7%) pharmacist.

More than half 96 (65.8%) job the health care providers interviewed were female; while male were 50 (34.2%). Of the health care providers interviewed,16 (11%) were aged 21-25 years, 69 (47.3%) aged 25-35 years, 47 (32.2%) were under 35-45 age group, 11 (7.5%) were in the age group 45-55 and 2 (1.4%) were officers aged above 55 ,only one officer was under the age of 20 years .

Majority of the healthcare providers were diploma holders, 93 (63.7), higher diploma holders were 28 (19.2%), bachelor degree holders 19 (13.0%), certificate holders were 4 (2.7%) while postgraduate holders were only 2 (1.4%).

More than three quarters 119 (81.5%) of health care providers interviewed were married, 25 (17.1%) were single and 2 (1.4%) were widowed. However, most of the respondents 66 (45.2%) had 1-2 years of experience, 41 (28.1%) had 2-3 years of experience, 34 (23.3%) had worked in the hospital for less than a year and 5 (3.4%) had been offering healthcare services for a period 3-5 years.

The facility has 101 (69.2%) nursing staffs, 18 (12.4%) clinical officers, 14(9.6%) medical officers, while 13 (8.8%) comprise of other carders of health care providers according to the minimum criteria recommended. However, the facility has only one social worker and three data clerks. These characteristics are presented in table 3 below;

Table 3: Demographic Characteristics of Health care providers

Socio-Demographic Data of Healthcare providers		
Gender	Female	50 (34.2%)
	Male	96 (65.8%)
Age (Years)	< 20 years	1 (0.7%)
	21-25 years	16 (11%)
	25-35 years	69 (47.3%)
	35-45 years	47(32.2%)
	45-55 years	11(7.5%)
	55 + years	2 (1.4%)
Education Level	Certificate	4 (2.7%)
	Diploma	93 (63.7%)
	Higher Diploma	28 (19.2%)
	Bachelor Degree	19 (13.0%)
	Post graduate Degree	2 (1.4%)
Service Duration	< 1 year	34 (23.3%)
	1-2 years	66 (45.2%)
	2-3 years	41 (28.1%)
	3-5 years	5 (3.4%)
Job Designation	Nursing Officers	101 (69.2%)
	Clinical Officers	18 (12.4%)
	Medical Officers	14 (9.6%)
	Other carders	13 (8.8%)

This indicates that the health workers in the hospital are more experienced and have acquired adequate skills in their service delivery. This conforms to WHO (2003) guidelines that services providers are to be technically competent, experienced and motivated to provide services to adolescents as per their need/s.

Staff Capacity in Preparedness for Implementing Adolescent Friendly Health Services

Training

The study found that for the facility to offers effective health services to adolescents, there is need to train staff on adolescent health however 143 (98%) of the staff indicated that they have never been trained specifically on adolescent health issues. Nonetheless, apart from the general training they received in college 3 (2%) had received some training on adolescent health. Consequently in terms of the most useful topics for further training suggested by the healthcare providers, 127 (87%) stated that training on "substance use and misuse" would be very useful. 105 (72%) of all respondents stated that they felt it would be very useful for them to have training on "legal framework" issues (such as consent and confidentiality) and More than half 85(58%) considered training on "communication and consultation" with young people to be very useful. However, here were some notable variations by profession. 101(100%) of nursing staff stated that "legal framework" training would be very useful for them. Whilst this was the case for only 5 (35%) of doctors and 4 (33%) of general hospital health professionals. The health care provider identified learning need topics as indicated in Table 4 below;

Table 4: Learning Needs topics regarding Adolescent Health Care suggested by health workers

TOPIC	RESPONSE
Legal framework	105 (72%)
Substance abuse	127 (87%)
Communication and consultation with adolescents	85 (58%)
Mental Health	26 (18%)
Common medical problems and symptoms	34 (23%)
Sexual and reproductive health	45 (31%)
Chronic conditions and transition care	60 (41%)

Healthcare providers felt that training needs to be flexible in order to take into account training already completed and to accommodate the different learning needs of staff with a range of knowledge and experience levels. WHO (2012) affirm that providers who are trained to work competently and sensitively with adolescents are often considered the single most important condition for establishing adolescent friendly services.

Skills

The study results have demonstrated that 124 (84.9%) healthcare providers communication with the patients is not proficient. However, 22 (15.1%) of the respondents reported that their communication is proficient enough for friendly health service delivery. Health care providers interviewed, 48 (33%) stated that not all staff were competent at various skills .However, 5 (60%) managers felt that some staff who had been in service a long time could

do with training to refresh their skills in a number of areas such as how to communicate effectively with adolescents .Three (40%) managers believe that skills possessed by staff offering services to adult clients were largely transferable to child and adolescent services. However, it was also felt by 143 (98%) healthcare providers that it would be valuable for staff to have specific training on working with adolescents to improve communication skills. This is particularly useful during the transition to adulthood in adolescents with chronic illnesses .Therefore 110 (75%) of the healthcare providers felt that equipping the staff delivering these services with the necessary skills and competencies to deliver age appropriate care to adolescents is key to achieving service improvement. Lederman (2003) asserts that staff should have good interpersonal communication skills and be able to interact freely with young people, put them at ease, and encourage them to share their needs and concerns freely.

Knowledge

Majority 89 (61%) health care providers established that adolescent health services are not being effectively implemented. This is not surprising considering very few health have no clear knowledge on how adolescent health should be implemented. Almost all 130 (89%) health care providers who commented on this question expressed uncertainty about the extent of their knowledge. More than half 82(56%) stated that they may only work with an adolescent patient for a limited period of time and are therefore not able to fully observe or get to know an adolescent patient. Responses included awareness of some basic factors but not others such as social issues and mental health issues. 54 (37%) confirmed that they are not able to observe a young person's behavior and would refer if there was a complicated issue rather than make decisions themselves. Almost two thirds 107 (73%) health care providers noted that they do not have the necessary knowledge. Several respondents 140 (96%) pointed out that they would like to receive training especially in communication. One of the health care providers emphasized this point as quoted that "*you have to communicate to them on their level" and "you have to make sure you don't patronize them for them not to shy off".* 142 (97%) of respondents agreed or strongly agreed with this statement.

Gender

More than half 99(68%) health care providers commented on this question and expressed the importance of behavior as a form of nonverbal communication for adolescents – One nurse was quoted that "*sometimes, they are trying to tell you something but at times they hold back if they are not comfortable with the gender of the health care provider especially if of opposite sex".* On the other hand 151(71%) adolescents also reported that privacy and confidentiality are extremely important to them when making decisions about whether or not to seek reproductive health services because "*The female nurses always talk loudly and some of them like shouting therefore I am afraid that a they will share with a relative my sickness, I prefer a male doctor".* However adolescents were generally forthcoming in speaking about sexual intercourse. Nonetheless 165 (78%) were exposed regarding the use of alternative expressions when talking about sexual activity in the presence of parents or strangers for example , " *cleaning a gun* " or "*putting Colgate on a toothbrush"(* Colgate refers to the semen and the toothbrush to the female genitals)

Kipchumba (2012) illustrated that some service providers do not have the required competencies to offer health services. Testing the relationship between health workers/staff's competency and implementation of adolescent friendly health services, the study results

indicated that there is a significant influence of the staff's level of competence and experience in the service provision and the level of AFHS implementation in the hospital

Findings from focused group discussion

All Adolescents generally felt that the current outpatient and inpatient setting must be separated from the adult services. One adolescent client was quoted saying that "the *adolescent services need to be separated from the other service areas*". Among the adolescents who felt that the services offered at the facility were not pleasant 198 (93.5%) recommended that the emergency management services should be efficient and availed to the adolescents while all 212 (100%) recommended general health check-up services to be improved. 177 (83.3%) adolescents indicated that there is need to establish a mental health concerns department as well as the STI services for the adolescents. Additionally, 184 (86.7%) recommended for inclusion of the nutrition/obesity services while 191 (90%) felt that the HIV testing should be established for the adolescents in the hospital. However, only 78 (36.7%) of these adolescents indicated that the facility should incorporate abortion services which 134 (63.3%) were not supporting. WHO (2010) explains that unsafe abortion is a global problem and accounts for one in eight maternal deaths in some countries, but contributing at least 13 percent to the global maternal mortality rates.

Assessing Health Resources

The link between health care resources and population health are not well understood. However, it is needless to argue that stock of assets and their composition, as inputs to the production of health, are important elements in the performance of health systems as results illustrate.

Physical Resources

Almost three quarters, 107 (73.3%) of the healthcare providers referred to the adolescent health services offered at the facility as friendly. Nonetheless, 39 (26.7%) indicated these services as unfriendly as there was no special room for adolescents to be attended.

Almost all 128 (88%) health care providers recorded their discomfort in offering certain specific services to adolescents such as reproductive health. Though according to 64 (44%) health care providers affirmed that the facility has adequate health resources to meet the adolescents' needs.

Tilahun et al., (2010) supports this in their study in Ethiopia on health workers attitude toward sexual and reproductive health services for unmarried youth which expresses that some health workers were setting up penal rules and regulations against premarital sex.

Information Resources

According to 131 (89.7%) healthcare providers there are no relevant materials for them or for adolescents to read. Some 78 (37%) adolescents said that they prefer to learn about sensitive issues on their own, using written or audiovisual materials, because their discomfort level can be too great to retain information during a face-to-face session. Such material can be used while clients are waiting to be seen. Some materials should be available to take home for later review, particularly if the topics are complicated (such as symptoms of STDs). One adolescent suggested as quoted "Kuna *maugonjwa zingine tungependa kujua vile tunaweza*

zuia kama saratani au kuzuia mimba lakini tuna shindwa kuuliza daktari "(There are some diseases like cancer or even how to prevent pregnancy but we are afraid to ask the doctor).

This shows that the hospital is not fully equipped with information resources to offer quality services to the adolescents.

Medical Logistics

Both during needs assessment and the facility assessments, the basic equipment in the facility and laboratories were in working condition. However, the hospital is in need of specific adolescent equipments such as small sized specula to provide cervical cancer screening. The only serious shortcoming was that the supply of drugs and expendables was irregular, as reported by 117 (80%) health care providers. Unavailable right size condom have significant implications for adolescent friendly health services , given that increasing condom use is one of its key goals to help adolescents prevent unwanted pregnancy and STI/HIV. One doctor suggested that to effectively achieve availability of the needed supplies and services, the hospital should order supplies in good enough time, involve multiple actors in the supply chain management as well that the supply should be done by the government certified agencies.

In this study we can argue that resources are crucial components of health system. However, there is little systematic evidence on the impact of investments decisions on the performance of health.

Health System Factors that can be put in Place to Support the Preparedness of Implementing Adolescent Friendly Health Services

To perform efficiently health systems require the combination of a large number of properly balanced physical and technical resource inputs. Policy makers must address a number of questions as shown in the results below:

Management support

Similar to the responses from health practitioners, all 8(100%) managers highlighted the following areas as priority competency areas for training and development: legal and ethical frameworks around caring for young people; Communication and consultation skills with young people; Chronic conditions and transition care; and mental health in adolescents. Of these competency areas, 2 (25%) managers believe the most important areas for training and development were the legal and ethical framework with communication and consultation with adolescents. One manager working at outpatient setting identified substance use and misuse, weight and shape in adolescence as being other key areas for training and development.

When discussing the best formats for learning for their staff, all 8 (100%) managers felt that learning techniques were highly individual and a mixed method approach to delivery involving a mixture of job shadowing/on the job learning and e-learning would be the most appropriate format of delivery. However, it is interesting to note that other staff groups appear more frequently to think the identified areas are not very relevant to them, for example the hospital staff working with adults. This may be true in some instances but it may also be that some staff groups do not realize the relevance even though it may be relevant. This may

also indicate an inappropriate reliance on others to take responsibility for aspects of adolescent care that staff find challenging.

Health workers attitude

Provider attitude was cited by 159 (75%) of adolescents' as a barrier to accessing health services. More than half 82 (56%) providers confirmed this by reporting that they are often uncomfortable addressing the problems of adolescents. In addition, 50 (34%) providers had their own personal bias against providing adolescents with certain services like contraception or felt that adolescents should not be sexually active, thus hindering services to adolescents.

The adolescents illustrated that, the health workers rarely called the patients by their names as only 81 (38.2%) had ever been called by their names. However 16 (7.5%) indicated that the health workers sometimes called them by their names. Despite these sentiments, 177 (83.6%) adolescents reported that health workers listened carefully to them when visiting the hospital. 181 (85.3%) of the adolescents also indicated that, the health workers explained things to them in an understandable way. Nevertheless 20 (9.4%) indicating that this was done sometimes but not always while 11 (5.2%) felt that the health workers did not explain things in an understandable manner. 84 (39.6%) of the respondents also felt that the health workers gave them sufficient time to ask questions regarding their health problems as 162 (76.4%) of them responded. According to 182 (85.8%) adolescents indicated that they liked the way they were served. On the other hand, 163 (76.9%) of adolescents indicated that they received service from health care providers who did not introduce themselves before attending them. Even though only 49 (23.1%) had visited the facility before. Table 5 below illustrates health workers attitude.

Table 5: Health workers attitude in Service Delivery to adolescents

	Yes	No	Sometimes
	n (%)	n (%)	n (%)
Staff introduced self	49 (23.1%)	149 (70.3%)	14 (6.6%)
Called Patient by Name	81(38.2%)	115 (54.3%)	16 (7.5%)
H/W Listened Carefully	177 (83.5%)	16 (7.5%)	19 (9.0%)
H/W explained things understandable	181(85.4%)	11 (5.2%)	20 (9.4%)
H/W granted opportunity for response	162 (76.4%)	34 (16%)	16 (7.5%)
Respondent treated to satisfaction	182 (85.8%)	17(8%)	13 (6.1%)
Respondent feels free with H/W	171 (80.7%)	30 (14.2%)	11 (5.2%)
Respondent felt confidential	171 (80.7%)	28 (13.2%)	13 (6.1%)
Had interrupted talks by other staff	71 (33.5%)	116 (54.7%)	25 (11.8%)
Sex of H/W an issue to respondent	43 (20.3%)	158 (74.5)	11 (5.2%)
H/W informed client about sickness	120 (56.6%)	84 (39.6%)	(3.8%)

Hartline and Ferrel (1993) describe service quality as an attitude, perception or belief held about the manner in which service is delivered, which manner is itself reflected in the service encounters employees make with clients. Since how employees deliver services to clients is part and parcel of service quality, it is needless to mention that employee held values affect the quality of the delivered services (Victor, 1999; Grossman, 1999).

Health facility organization

The adolescents were asked if they had ever sought for AFHS but did not get them, 116 (54.8%) adolescents indicated that they actually did not get the services. Those who sought but did not get the services were asked to state the reasons that made them miss the services. To address the challenges experienced by the adolescents in accessing friendly health services, adolescents were asked over their feeling and areas of improvement in health facility organization to make service the provision friendly. Majority 113 (53.3%) felt that the queues were too long. While those who had no money for services were 56 (26.4%). In addition, 27 (12.7%) found neighbors and felt ashamed. 133 (62.7%) adolescents interviewed at exit from the hospital said they desire not to mix with adults, and they would feel more comfortable if they were attended to in a separate room.

Adolescents viewed labeled service rooms as a barrier, since they did not want to enter a room that was labeled "*family planning*" or "STI *clinic*, (Sexually Transmitted Infection). Furthermore, adolescents reported that they would rather self-treat an STI than be seen at a clinic seeking treatment. In the contrary 139 (95%) healthcare providers indicated that the waiting area was in good condition. Only 7 (5%) of the healthcare providers felt that the environment was not conducive for adolescents to stay while waiting for the services.

Table 6: Summary of adolescent responses on health facility organization

SERVICE AREA	n (%)
Long queues	113 (53.3%)
No money for service	56 (26.4%)
Found neighbors	27 (12.7 %)
No pleased with services	131 (61.8%)
Separate room	133 (62.7%)

These results were in line with WHO (2004) guidelines on Provision of good quality health services to the adolescents through favorable policy environment and improved service provision

Suggestions for Service Improvement

The study also revealed similar results which indicated that most of the adolescents advocated for the following services to enhance implementation of friendly adolescents' healthcare services; removal of service fee charged to seek health services 142 (67%), set up a separate room for adolescents 144 (67.9%), minimizing waiting time for adolescents 154 (72.6%), convenience in working hours 144 (67.9%), improvement on privacy 122 (57.5%) as well as provision of information materials for the adolescents to read while on the waiting bay which will create much knowledge on their understanding of adolescence. Also, 100 (47.2%) of the respondents felt that the staff at the hospital should be trained on offering friendly services to the adolescents. A summary of these results is provided in Figure 7 below:

Table 7: Suggestions by adolescent for service improvement

SERVICE AREA	Yes N (%)	No N (%)
Eliminate service fee	142 (67%)	70(33%)
Set up separate room for adolescents'	144 (67.9%)	68 (32.1%)
Friendly staff	178 (83.9%)	34 (16.1%)
Shorter waiting time	154 (72.6%)	58 (27.4%)
Convenient working hours (Evenings and weekend)	144 (67.9%)	68 (32.1%)
Improve on privacy	122 (57.5%)	90 (42.5%
Provide information material	133 (62.7%)	79 (37.3%)

Thus the findings show that Adolescents may find it difficult to obtain health services if the working hours coincide with times when they are busy with study, work or other activities this is according to Guidelines for Provision of Youth Friendly Services (2005).

CONCLUSION AND RECOMMENDATIONS

Summary of Findings

Age, sex, staff competence and level of education had significant influence on implementation of adolescent friendly health services while resource availability showed significant relationship to effective and efficient service provision.

Physical environment factors corresponding to adolescent needs were clear communication, being listened to and being treated to satisfaction had significant relationship to implementation of adolescent friendly health services.

Health system factors significant were mainly infrastructure like separate consultation room for adolescent, convenient working hours, waiting time and elimination of service fee which led the adolescents missing services.

Conclusions

The study found that staff capacity in preparedness for implementing adolescent friendly health services at Mama Lucy Kibaki Hospital was not adequate in terms of knowledge and skills in offering the following services; adolescent reproductive health, communication with adolescents, adolescent referral, counseling skills, and mental health substance abuse as well as the general adolescent health.

The hospital is not fully equipped with facilities to offer quality services to the adolescents. Health care providers need to have technical competence in working with adolescents in general, in the 'adolescent-specific' aspects of providing health promotion, preventive, curative and rehabilitative services, as well as in interpersonal relations and communication. Technically competent and empathetic staff needs a system of ongoing support. An adolescent -friendly approach should include repeated training sessions to refresh the skills of

current staff as well as developing new skills for new staff. Training and peer review sessions should cover everyone from doctors to the receptionist and cleaner

Availability of health resources on preparedness in implementing adolescent friendly health services was not sufficient. The hospital lacks relevant materials for the adolescents to read while waiting to see the health workers. However, despite this, there are plenty of supplies of relevant requirements of the hospital to meet the needs of the adolescents which include; condoms, oral pills, emergency contraception and injectable.

The hospital has limited (poor) communication systems regarding resource procurement, it lacks special sections for services provision, poor time management in the supply chain as well as poor supply chain management. By focusing on the adolescent, rather than the symptom, providers can discover underlying concerns. Technical skills and a sympathetic professional approach should be combined with a non-judgmental approach.

Special room for attending adolescents in the hospital, improvement in emergency management services, adolescent reproductive health program as well as the inclusion of the nutrition/obesity services.

The physical environment and procedures in the hospital are not always appealing to patients (adolescents).Negative response/attitude by health workers, long waiting time, lack of private rooms and interruption by other health workers while seeking medical advice from a health care provider are some of the factors affecting the friendlier services and would prefer seeking the hospital services again.

To enhance implementation of adolescent friendly health services; the hospital has to facilitate the removal of service charges to seek health services, set up a separate room for adolescents, minimize waiting time for adolescents, convenience in working hours, improvement of privacy as well as provision of information materials for the adolescents to read while on the waiting bay which create much knowledge on their understanding of adolescence.

Recommendations

This section presents some suggestions on how the problem under study could be solved. These are policy and implementation recommendations and areas for further study.

1. Service Delivery Points (SDPs) should use resources within their reach to make their facilities more adolescent friendly. Where practicable, separate times should be allocated for servicing the adolescents within existing facilities. Consideration can be given for afternoons and weekends to enhance privacy.

2. Adoption of AFHS may not be entirely successful without proper training and education of the health care providers on adolescent health. Institutionalize such training programmes for national level reach and impact.

3. Without space (whether a room/ private corner or separate building), the service may never be adolescent friendly as many other issues revolve around this: Privacy, Confidentiality, Adolescent participation, Staff motivation, Stigma and Judgement.

4. Participatory adolescent information materials on health issues should be developed and be available at the service delivery points to complement services. Materials that can be

taken away are also needed, so that adolescents can learn on their own. In addition, job aids that will assist providers in rendering services to the adolescents are also needed.

5. In line with devolution, County Health Management Teams should consider inclusion of adolescent friendly health care in their plans of operations for sustainability. Monitoring systems and supportive supervision of AFHS delivery should be strengthened at the county level.
6. By focusing on the adolescent, rather than the symptom, providers can discover underlying concerns. Technical skills and a sympathetic professional approach should be combined with a non-judgmental approach.
7. Engage Adolescents , their families, communities,religious Leaders, and Involve Adolescents in decision-making roles at every level ; in Design,Implementation and Evaluation

Further Studies

Similar studies need to be done in other county referral hospitals to generate more supportive evidence.

A comparative study between private and public hospitals to gauge the implementation of adolescent friendly health services to inform policy formulation and adjustment.

Studies should also be conducted to assess the barriers to implementation of adolescent friendly health services in both public and private health facilities.

It would also be important to find out if religion is associated with adoption of AFHS by health workers and what recommendations the government can get from the study findings

Conflict of Interest

The authors declare that there are no conflicts of interest

Authors' Contributions: PAO devised the adolescent study, developed the cohort, analysed the data and wrote the paper.WMT and MA assisted with analysis and interpretation. EMK assisted with peer review and interpreting the study. All authors approved the final manuscript.

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