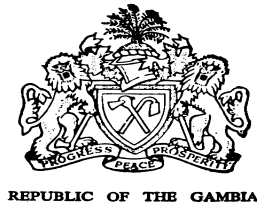


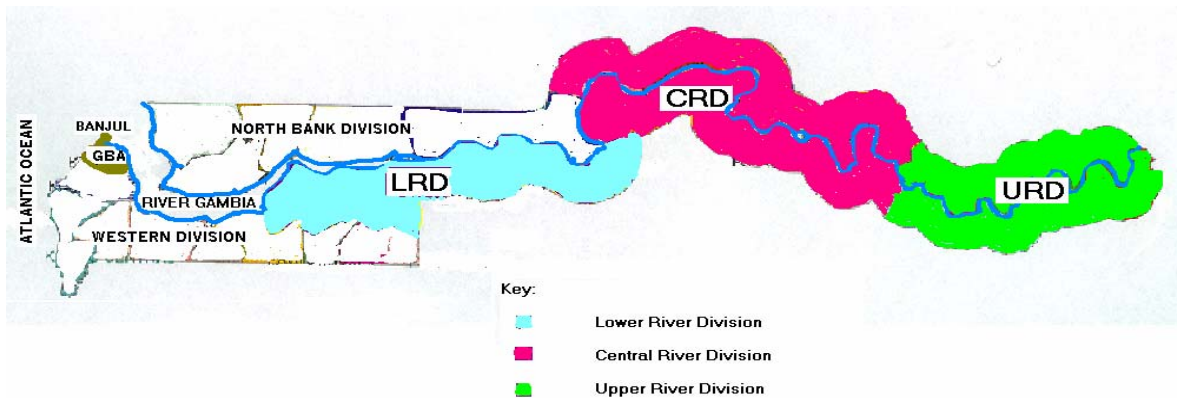
The Republic of The Gambia



Department of State for Health Reproductive and Child health Program Unit

In collaboration with

UNFPA and WHO



Situational Analysis of Obstetric Fistula In The Gambia

Report

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List Of Abbreviations

ANC	Antenatal care
BEOC	Basic Emergency Obstetric Care
CBO	Community Based Organization
CEmOC	Comprehensive Emergency Obstetric Care
CHN	Community Health Nurse
CPD	Cephalo Pelvic Disproportion
C/S	Caesarean Section
DHT	Divisional Health Teams
DoSH	Department of State for Health
EA	Enumeration Area
EmOC	Emergency Obstetric Care
FGM	Female Genital Mutilation
FGD	Focus Group Discussion
FP	Family Planning
GAMCOTRAP	
GFPA	Gambian Family planning Agency
HC	Health Center
HH	House Hold
HTP	Harm full Traditional Practices
IEC	Information Education Communication
MIS	Management information system
NGO	Non Governmental Organizations
OBS/GYN	Obstetrician Gynecologist
OF	Obstetric Fistula
OPD	Out Patient Department
Parity	Number of deliveries by a woman
RCH	Reproductive and Child Health
RH	Reproductive Heal
RVF	Recto Vaginal Fistula
SEN	State Enrolled Nurse

SRN	State Registered Nurse
TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Initiative Children Education Fund
VVF	Vesico Vaginal Fistula

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EXECUTIVE SUMMARY

Introduction

The Gambia is located on Western Africa, bordering the Atlantic Ocean on the west and with Senegal on the North, South and East. The river Gambia runs through the length of the country dividing it in to two parts. Infra structure like roads and electricity are under developed, In addition there are several river crossing points with limited number of vessels to cross. In terms of health administration the country is divided in to six health divisions.

Women comprise 51% of the population among which 23.3% are women of 15-49 years. Crude birth rate and death rates are 46² and 19³ respectively. The population being 95% Muslim practice polygamy. In addition Female Genital Mutilation, wife inheritance and early marriage are practiced widely. Though the 2001 maternal mortality survey showed a decline in maternal mortality ratio, it has remained unacceptably high (730/100,000 live births), with unacceptably high 54.9 perinatal mortality.

The health care system is decentralized since the government adopted the Alma Ata declaration in 1980. There are several policies designed and adopted to improve reproductive health status of women, and several activities were started. However none of these activities are being implemented currently due to lack of resources. Maternal and child health services are provided through a three tier health care delivery system. There are 4CEmOC and 8BEmOC health facilities in the Gambia and skilled attendance at delivery is 54%. However the unmet need for EMOC ranged from 3.5% to 31%.

For the last 5 years a guest team has been providing obstetric fistula repair services. Since its start the numbers of cases who come for fistula repair have increased greatly. For these reason a call has been made to End Fistula in The Gambia and the DoSH in collaboration with UNFPA and WHO commissioned the situational analysis of obstetric fistula in the Gambia. The situational analysis included a house hold survey to identify the magnitude of fistula, Evaluation of availability and quality of EmOC facilities and assessment of awareness of communities of obstetric fistulae and the associated socio cultural factors which contribute to occurrence of fistula with specific objectives to :

- Establish the magnitude of Obstetric Fistula in the Gambia
- Assess current capacities of health facilities to treat fistula patients
- Assess socio-cultural factors contributing to fistula occurrence.
- Assess health seeking behavior in relation to pregnancy and its complication(obstetric fistula)
- Establish availability of essential obstetric services
- Assess the availability of appropriate drugs, supplies, equipment, facilities, transport and radio/telephone communication for obstetric emergencies.
- And to make recommendations on prevention and management of obstetric fistulae.

The house hold survey covered 5,000 house holds in all the urban and rural areas of The Gambia, based on the Sampled EAs and House holds using the PPS and CSS methodologies. The facility study included all health institutions where delivery care is provided and selected those which qualify as BEmOC and CEmOC facilities for further analysis. The study had qualitative and quantitative components. Fistula patients, key informants, rural and urban focus groups TBAs and traditional healers were included in the survey.

Key Findings

A total of 4958 house holds were visited and 12116 women were included in the study. The prevalence of fistula was found to be 0.5/1000 women in reproductive age group, making the number of fistula cases in The Gambia 197. Decision making power of women to go to health institution during labor was found to be very low at 20.1% while the authority was found mostly to be in the hands of their husbands (42%) and then mother in-laws (16%). Among women who had ever been pregnant, 8281(96.9%) had ANC follow up. However only 1.7% to 20% of these women know the warning/danger signs of complications in pregnancy.

The age range at first marriage for the fistula patients is 14-26, the mode being 15 years and the mean 16.7 years. Parity ranged from primi to para 8, with the highest proportion of fistulae being in primis and para 5. The highest incidence of fistulae 16(80%) were

found to be in rural areas. Among the 20 fistula cases 15(75%) were found to be from the tribe Mandinka. Married women were found to be 14(70%) amongst which some were found to live with their parents (immediate families) while others were living with their husbands and children. However fistula was found to be stigmatizing factor all over The Gambia.

All the three delays were associated with the occurrence of fistula in our fistula patients. Decision making time to go to the hospital ranged from 5 to 40 hours while the labor was prolonged. Lack of vehicle or fuel for transportation, distance from the health institution, or lack of financial means for transportation formed the second delay. Fistula patients had to stay longer in health institutions or secondarily referred from a non functional referral unit.

Fistula repair services were not found in any of the facilities except for RVTH hospital where it has been provided intermittently by a group of guest teams from UK called the UROLINK team. None of the local health professionals have trainings in fistula repair surgeries. RVTH was found to be a favored place for fistula repair surgeries which is provided by a team trained in fistula surgery which is better resourced.

Delivery care takes place in 40 health facilities, out of which 7 were identified as providing CEmOC and 11 BEmOC services. Nevertheless except for RVTH none of these facilities provides services for 24 hours a day through out the year. The reasons for not providing 24 hour services were found to be lack of power supply and several factors associated with shortages and skills of human resources.

Institutional delivery was found to be 89.2% with a range of 25% to 1.76% between health divisions. The proportion of c/s ranged between 1.2% and 17.6% with the met need for obstetric complications being less than 15% in all health divisions. Maternal and perinatal mortality were found to be very high 556/100,000 and 55/1000 respectively.

The referral system lacked, telephone/radio transmitter for communication. No feed back mechanism exists in the system and the number of ambulances and allocated fuel is insufficient to make the referral system functional. Shortage of human resources is acute that some of the institutions are running using half of the available hospital beds, and use volunteer workers to substitute trained health workers. This shortage has also affected the three nurse training schools which are striving hard to produce more numbers of

trained nurses and midwives to curb the situation of brain drain. These schools are also suffering from insufficient budget and shortage of teaching aids.

The community uses TBAs and traditional healers to help during pregnancy, child birth and post partum. Among the interviewed TBAs 48(94.1%) use appropriate sterile instruments to attend deliveries. But the knowledge of danger/warning signs of pregnancy was found to be very low among them which contributes to the delay in decision making to go to the hospital. None of the interviewed TBAs use herbs in pregnancy apart for two or three TBAs who use herbs for rubbing on the chest during upper respiratory problems. The traditional healers do not attend labor and delivery, nonetheless women go to them when they encounter difficult labor or due to ailments in pregnancy and child birth which the healers claim to treat with herbal concoctions, holy water or written scripts from the holy Quran.

Not all the traditional healers are aware of the causes of fistula and how to treat it. Neither are they mentioning the option of referring these women to health institutions.

The community acknowledges the severity of stigma to women with fistula provided patients let others know about their condition. This issue was confirmed by the fistula patients who mentioned that they conceal their condition by isolating themselves and taking measures to keep themselves dry and changing frequently. Those who face stigma shared their stories of abandonment and ill-treatment from husbands, neighbors and other family members. The perception of problems in pregnancy and other socio cultural factors contributing to the occurrence of fistula and ill maternal health in general are different in different segments of the society. The belief that "women go to heaven if they die in child birth provided that they are Muslim and married" is something which is deeply rooted in the community which needs to be addressed.

Recommendations

Treatment of Obstetric Fistula

- Establish a center in RVTH for treatment of fistula on continuous basis.
- Prepare training curriculum for training of fistula repair.
- Train a team of master trainers .

- Include social workers and physiotherapists to complete the care package for fistula patients

Primary prevention of obstetric fistula

- Increase promotion and education of women and the community to delay the age of marriage.
- Increase promotion and distribution of contraceptive methods to avoid unwanted and unplanned pregnancy and child birth.
- Enable women to seek health care without seeking authorization from their husbands or other community members.

Secondary prevention of obstetric fistula

- Training of more reproductive health care professionals to make available skilled birth attendants at all levels.
- In service training of available staff in EmOC.
- Strengthening of MIS in all health institutions and divisions.
- Promotion of inter-sectoral collaboration with relevant institutions.
- Encouraging private public partnership in the delivery of all reproductive health care services.
- Promoting community involvement in all Reproductive health activities.
- To promote the continued provision of medically accurate and culturally appropriate reproductive health education both in the schools and community.
- Strengthening economical empowerment of women, specifically in the rural areas to enable them to decide for themselves using programmes of women organizations.
- Awareness creation programmes on HTPs such as FGM, Human rights specifically women and children's' rights, HIV/AIDS and Polygamy
- Encouraging basic social, physical infrastructure development: amongst others roads. electricity, water supply, etc... .
- Advocacy work to sensitize higher officials and policy makers to make available policies and legislations to empower women economically, socially and

politically so that they can enjoy their reproductive health and rights to the fullest.

Tertiary prevention of obstetric fistula

- To give in service training of health professionals in the use of partograph for monitoring of labor and timely identification of obstructed labor. Taking measures to minimize occurrence of fistula when ever obstructed labor is suspected or diagnosed and repair of small fistulae if they occur.

2. Introduction

2.1 Description of the Gambia.

The Gambia is located on Western Africa, bordering the Atlantic Ocean on the west and with Senegal on the North, South and East. The total area of the country is: 10,680 sq km. The river Gambia runs through the length of the country dividing it in to two parts namely the north and south bank. Infra structure like roads and electricity are under developed, In addition there are several river crossing points with limited number of vessels to cross. In terms of health administration the country is divided in to six health divisions: Western Division including the two municipalities, North Bank division (East and West), Lower River division, Upper River Division & Central River Division.¹

The population of The Gambia is 1,360,681², among which 50% lives in the rural areas. However 68% of the population in urban areas is comprised of people aged 15-64³. The Gambia is a densely populated country with population density of 97/square kilo Meter. Fifty one percent of Gambian populations are women. Among these, women in the reproductive age are estimated to be 23.3%. Crude birth and death rates are estimated at 46² and 19³ respectively.

The Population being 95% Muslim, practice polygamy. In addition Female Genital Mutilation, wife inheritance and early marriage are practiced widely.

¹ Evaluation Of The Availability, utilization and quality of obstetric care services in the Gambia(Study conducted by UNFPA The Gambia in collaboration with the department of state for Health and Social Welfare. October 2004.

² Population Census 2003

³ Population census of The Gambia 1993.

2.2 Health Care System.

The Government of The Gambia adopted PHC since the Alma Ata Declaration in 1978. Since then Maternal and child health services were decentralized through out the six health divisions of The Gambia using a **three tier** health care delivery **system**⁴.

The primary level: is represented by the village health services and community health activities which serve 400 people and above. The TBA and Village Health Worker are the personnel for the primary level. They are identified & selected by the community and trained by DoSH and partners to provide services like, giving drugs for malaria, dressing minor wounds, attending normal deliveries and organizing transport if the need for referral arises.

Secondary level: refers to the basic health facilities i.e. major and minor health centers, dispensaries; Doctors, Midwives and Trained nurses are expected to provide services at the secondary level. A minor health center is expected to serve 50,000 people.

The tertiary level comprises of hospitals.

There are 4 public, 1 private and 1 NGO hospitals; Eight public Major health centers, twenty two public and 6 NGO minor health centers; 24 public, 7 private and 14 NGO clinics; 211 public and 1 NGO outreach stations where maternal and child health care services are provided.

Several measures were taken to improve and expand health care services in the country, such as:

- The construction and provision of modified horse driven carts with bed and sitting facilities for use as transportation during obstetric emergencies in the event of transport un-availability
- The construction of wooden and fiber made canoes for use as a river ambulances with diesel-driven engines to facilitate obstetrics emergency referrals when public ferries shutdown in the evening.

- The installation of Radio communication networks in the motor ambulances and at referral health facility level to enhance timely arrival of obstetric referrals.
- The construction of maternity waiting homes at a strategically located referral health facilities for the admission and management of pregnant women with obstetric problems prior to and during delivery
- The establishment of a special cadre of nurse midwives trained in obstetric life saving skills and anaesthetics, respectively to serve in the major health centers in the rural areas in the provision of obstetric emergency services.

Most of these interventions, though demonstrated some positive results couldn't be sustained as a result of financial, technical and socioeconomic barriers⁴.

2.3 Reproductive health indicators

According to the latest Maternal Mortality survey during 2001⁵, in the Gambia maternal mortality ratio has declined but remained unacceptably high (730/100,000 live births), with unacceptably high 54.9, 31.2, 84, 135, and 56 per thousand live births Perinatal, Neonatal, Infant, Under Five and Child mortality Rates respectively. The total fertility rate in The Gambia is 5.4 with the mean age at first birth 16.5 years nationally² and contraceptive Prevalence Rate - 17.5% respectively⁵. Birth at the age 15-19 is 118/1000, Skilled attendance at labour in The Gambia is 54%⁵ while HIV/AIDS prevalence rate is 1.2%. Physicians to population ratio is 4/100,000⁶.

Evaluation of the availability, utilization and quality of obstetric care services in The Gambia ¹ has shown that there are 4 Comprehensive Emergency Obstetric Care and 8 Basic Emergency Obstetric Care delivery institutions available. But it has to be established that this institutions are giving services 24 hours a day 7 days a week.

The same survey identified that births in EMOC facilities in the study ranged from 23.4% to 32.5% which exceeded the 15% minimum in the UN guidelines, while the unmet need

⁴ National reproductive health policy 2001-2006

⁵ Report on the National Survey on Maternal, Perinatal, Neonatal and Infant Mortality and Contraceptive Prevalence- 2001.

⁶ UNFPA state of world population 2005.

for EMOC ranged from 3.5% to 31% where none of the health divisions met the 100% target. C/S rate was also found below the acceptable minimum, ranging from 2.1% to 2.8% with a case fatality rate 5.6% as opposed to the rate of less than 1%.

2.4 Policies in relation to health, population and women

To meet the health needs of the citizenry and to affirm to the commitment to the international conventions which the Government is signatory, the government of The Gambia has adopted several policies including:

- The National Health Policy,
- The National Reproductive Health Policy including adolescent/youth health
- The National HIV/AIDS policy including PMTCT,
- The National policy for the advancement of women
- The national youth policy.
- Human Resource for Health Policy is prepared but not yet endorsed.

These policies are supported by the National Reproductive Health Strategic Plan of Action, The Gambia Road Map to Accelerate the Reduction of Maternal and Newborn Morbidity and Mortality and Guidelines for health professionals use in both private and public health facilities.

2.5 Description of Obstetric Fistula:

Obstetric fistula (OF) is a term used for an abnormal opening between a woman's Vagina and bladder and /or rectum through which her urine and/or feaces continually leak. OF is the result of prolonged and obstructed labour. In addition to their suffering often fistula patients are unable to mix with people due to embarrassment and shame as a result of the constant leakage and soiling with feaces and urine and the smell of it. OF is associated with recurrent infections, infertility, paralysis of the muscles in their lower leg⁷.

⁷ IMPAC-Obstetric Fistula Guiding Principles for clinical management and program development (WHO Department of Making Pregnancy Safer.

Through out the world mainly in sub-Saharan Africa an estimated 2 million young women live with untreated OF. It has also been estimated that between 50,000 and 100,000 new women are affected each year. The incidence of fistula in Africa is estimated to be 124/100,000 live births⁸.

OF is both preventable and treatable disease, the development of which is directly linked to the cause of maternal mortality i.e. obstructed labour. Cessation of harmful traditional practices such as early marriage and female genital mutilation, education of girls, delaying the age of first birth, child spacing, identification and timely management of obstetric complications are crucial steps to prevent obstetric fistula.

Rational:

While Obstetric fistula is a problem which needs the attention of RH care community in The Gambia, the extent of the problem, geographic provenance of these patients and indirect causes are not known for the Gambia. In addition the Capacities of the available health institutions to prevent and treat fistula is not clear.

2.6. Objectives of the needs assessment & Expected Results

Over all objective

The objective of the needs assessment is to make situation analysis of the prevalence of Obstetric Fistula in The Gambia and Develop Project Proposal for "END FISTULA CAMPAIGN".

The specific objectives of the needs assessment is to:

- a. Establish the magnitude of Obstetric Fistula in the Gambia
- b. Assess current capacities of health facilities to treat fistula patients
- c. Socio-cultural factors contributing to fistula occurrence.
- d. Health seeking behavior in relation to pregnancy and its complication(obstetric fistula)
- e. Availability of essential obstetric services

⁸ WHO integrated management of pregnancy and child birth (IMPAC) Obstetric Fistula.

- f. The availability of appropriate drugs, supplies, equipment, facilities, transport and radio/telephone communication for obstetric emergencies.
- g. And to make recommendations on prevention and management of obstetric fistulae.

3. Study Description and Methodology

A combination of quantitative and qualitative study methodologies were used to determine the magnitude of obstetric fistula in the Gambia; to assess the capacity of health facilities for the treatment of obstetric fistula cases and delivery of Basic and Comprehensive EOC care services; and to identify socio-cultural factors contributing to poor maternal health.

3.1 Quantitative

3.2. Study design

A cross-sectional study was conducted nationally and included both quantitative and qualitative components. House to house survey was conducted in all sampled households. All six health divisions and all health facilities in the country were included and those who qualify as EmOC facilities were selected.

3.3 Sampling Techniques

A stratified two stage sampling procedure was used. The first stage was selection of enumeration areas based on probability proportional for the size (PPS) systematic sampling. Based on sample size a total of 325 Enumeration Areas were selected. The 2003 census data base was used with a statistical programme written in SPSS which selected The EAs according to PPS of the EA. Second stage selection was, selection of house holds using circular systematic sampling for selecting the house holds in selected EAs. Seventeen house holds were selected from each EA.

All health institutions and public health administration units were included in the study of each division and an assessment of health care facilities for the provision of

fistula care and treatment, rehabilitation and prevention, and availability and functionality of basic and comprehensive emergency obstetric services. All hospitals (public/private) and Major and Minor health centers and selected Dispensaries were included in the study.

3. 4 Sample size

The incidence of fistula in sub Saharan Africa is estimated to be 0.3%. The average number of deliveries for a woman in The Gambia is 2.5, making the estimated prevalence of fistula 0.75. Assuming a prevalence of fistula (0.75 %), 95% confidence level and a worst acceptable frequency 0.5%, the calculated sample size using stat calc EPI info version 3.3.2 would be about (4561). Calculated sample size multiplied by the number of strata ($4561 \times 2 = 9122$) Adding a contingency of 10% (10034), to get the required number of drop outs. According to the 2006 MICS study on average there are two women per house hold in the Gambia, so to reach the 10034 women about 5000 households were needed to be visited⁹. A total of 5482 households were sampled to be consistent with the numbers of households to be visited in each EA (17HH/EA).

There are 4 public, 1 private and 1 NGO hospitals; 8 public Major health centers; 22 public and 6 NGO minor health centers; 24 public, 7 private and 14 NGO clinics; 211 public and 1 NGO outreach stations where maternal and child health care is delivered.

For the study of health facilities all the above health institutions were visited and facilities with delivery care services were selected for detailed study. Lists of names of traditional birth attendants (TBA) and traditional healers were taken from the health divisions and were interviewed by health care professionals (Mostly midwives) in the teams of household survey. Five or more traditional healers and traditional birth attendants for each major health center were studied. Focus group discussions were conducted with 8-10 women or men in a group, A group of men and women were included from each urban and rural community of each health division except for Banjul where no rural community exists.

⁹UNICEF Sponsored MICS 3 2006 report.

3.5 Qualitative

An assessment of socio cultural factors contributing to obstetric fistula incidence and influencing health-seeking behavior was conducted through a variety of rapid assessment procedures which include;

- 3.2.1 In depth interviews with policy makers, health managers and Traditional birth attendants on the awareness of Obstetric Fistula (OF), its prevention and socio cultural factors contributing to fistula incidence.
- 3.2.2 Focus group discussions with groups of men, women on the awareness of OF, its prevention, socio cultural factors contributing to fistula incidence and the attitude of the family and community to wards fistula patients. In depth interviews to traditional healers were conducted
- 3.2.3 Key informant interviews of Health training institutions and Health managers, Women Groups and NGOs working on womens' issues.

3.6 Ethical consideration

- Information sheet was prepared which explained confidentiality issues, the right to refusal to the interview and the benefits of being included in the study. This information was read to all women with fistula, and consent was obtained from them prior to the initiation of the interview.
- Data were coded before they were entered
- In addition personal identification details were excluded from the final reports.
- Personal identification and address details of fistula patients are provided to RCH unit of DoSH in order to access patients for surgical treatment and /or social rehabilitation programs.
- Permission was given from the DoSH to carry out the survey

3.7 Data Collection

Data was collected from December 7/ 2006 through December 27/ 2006 by two groups of data collectors:

- A group of enumerators consisting 35 people were used for the house hold survey. All enumerators are high school graduates and some have additional trainings in various fields. They were selected based on their knowledge of the locality (Area), knowledge of 3-4 local languages & previous experiences in data collection and conducting of in depth interviews and focus group discussions while working with the department of statistics. Each group of enumerators was consisted of one supervisor, one health care professional and had a mix of men and women. Focus group discussions were led by the supervisors of groups while TBA and traditional healer interviews were conducted by the health care professional in the group.
- A group of health care professionals (Nurse Midwives or community health nurse midwives) who know the health care delivery system of The Gambia and have experience in data collection in health facilities were in charge of data collection for health facilities and health divisions. In order to remove bias data collectors of health facilities and health divisions were assigned in different divisions and facilities from where they work.

All enumerators and supervisors were trained in data collecting techniques by the principal investigator and the three coordinators for 4 days. Enumerators were supervised on site by the supervisors and/or coordinators and submitted the collected data every 2-3 days to the coordinators.

Head of the RCH unit was identified as central level coordinator, while the Principal nursing officer and the senior statistician were coordinating peripherally. Principal Investigator and one of the coordinators were responsible for the entire Key informant interviews and paid visits to all hospitals and selected secondary and primary health care facilities.

3.8. Tools

Standard survey instruments were adapted and modified to country situation for both fistula patients and the study of health facilities and divisions. Geographic panel,

questionnaires for the house hold interview, separate questionnaires for the treated and untreated fistula patients, guide questions for the in-depth interview of Fistula patients and guide questions for traditional healers and focus group discussions in the community were used to collect information. Standard questionnaires were adopted and modified for the assessment of divisional health teams, health facilities and TBAs. All study instruments are annexed.

3.9. Pre-test

Questionnaires were pre-tested in order to check for clarity, applicability and the average length of time it may take to administer and make adjustments. A one day survey of EAs out side of the selected sample was conducted by all the enumerators to test the household instruments. RVTH hospital which was studied by the principal investigator using the study tool prior to the training of enumerators was used for protesting the instrument by the health facility enumerators.

Study instruments were adjusted and clarification was done by the principal investigator and coordinators according to feed back of data collectors.

Data entry clerks, their supervisors and data coders were trained by the principal investigators the statistician and his assistant for three days.

3.10 Data entry and Analysis

Collected data were checked for consistency and completeness by supervisors, coded and entered in to a computer by data entry clerks daily under supervision of coordinators and the principal investigator, using Census and survey program (CS-Pro) version 2.6. After data was double entered, verified, merged and cleaned by computer programmers, it was exported in to Statistical Package for Social Studies (SPSS) version-14 and analyzed.

3.11 Limitation of the Study

- a) The people of the Gambia are used to announcements made by the government for their cooperation to surveyors which are out in the field. Many of health professionals agreed that Obstetric fistula is a reproductive health problem that exists in the Gambia but not of significance. Prior experiences showed that any announcement of availability of services for fistula repairs resulted in over flow of fistula cases from neighboring countries. Due to this fact the usual sensitization of the public via mass media prior to the conduct of the survey was deferred, which resulted in skepticism of the public in responding to the survey. In addition fistula is highly stigmatized in the Gambia which we believed may have resulted in response bias (non response /lying).
- b) Due to short time span of the survey, surveyors were not able to do repetitive call backs to the houses where women were absent.
- c) Discussion of personal reproductive health problems is perceived to be a taboo by the majority of interviewed people.

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4. Results

4.1 The House Hold (HH) survey.

4.1.1 Characteristics of sample population.

- A total of 5482 house holds were sampled out of which 5466 were occupied and 4958 were interviewed. Twelve thousand one hundred sixteen women aged 15-49 were interviewed in these house holds. The distribution of households visited were 44.5% urban and 56.5% rural.

Charts No 1 and No 2 show the distribution of the respondents by their place of residence.

Chart No 1.
Women Aged 15- 49 by place of living

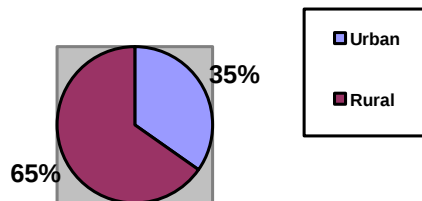
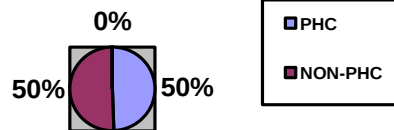


Chart No 2
women aged 15-49 by place of living

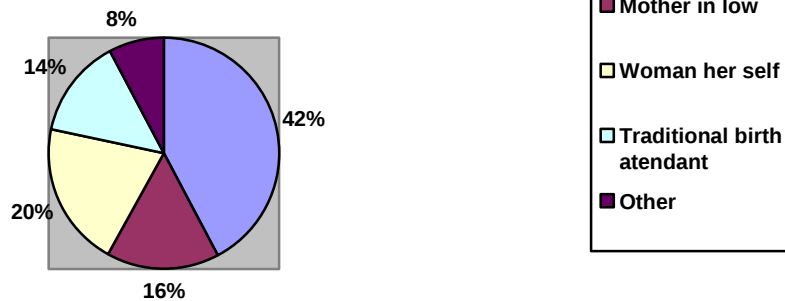


The distribution of the study population is proportional in PHC and Non PHC villages, while their distribution in urban and rural community is in accordance to the distribution of women aged 15-49 in the general population.

Decision Making Authority for a woman in labor to go to health institution

Only 20.1% of women have decision making authority when they needed to go to a health facility during labor. Chart No 3 shows the distribution of decision making power for a laboring woman to go to health institution.

Chart No 3
Decision making authority for a woman in labor to go to health facility



Health seeking behavior of women

All women who had ANC follow up and pregnancy complications which resulted in a still birth and/or abortion in the study population were asked for the place of care during complications.

Among all women (8500) who had ever been pregnant, 8281(96.9%) has had ANC follow up. 8012(94.2%) has had live births while 1173(13.8%) encountered still births and 897(10.6%) of women had encountered abortions. Despite their ANC follow up the utilization of health care services during pregnancy complications by these women was found to be low as only 55% of women with pregnancy complications had used the public health care facilities while 1.5% used the private health care facilities.

Knowledge of danger signs of pregnancy among women who had ANC follow up is very low in all health divisions as shown in table N^o 1.

Table No 1

Percent of women who know warning (Danger) signs of pregnancy to go to health facility among women who had ANC during Pregnancy.

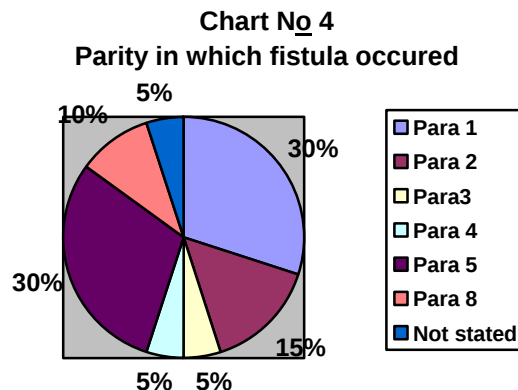
Warning Signs	WD N=3650	LRD N=481	NBDE N=1035	NBDW N=540	CRD N=742	URD N=1833
Heavy vaginal bleeding %	3.9	5.8	11.5	9.8	13.9	11.2
Sever headache/Fits %	29.3	21.6	36.3	35	24.5	27.1
Foul smelling vaginal discharge %	1.3	0.8	2.3	8.3	2.0	3.9
Prolonged labor %	6.5	6.0	7.0	22.2	9.3	10.8
Fever %	23.1	12.5	7.2	11.3	17.8	39.0

4.1.2 Prevalence of fistula.

A total of 20 fistula cases were found during the survey, however only 6 fistula cases were found in HH selected within the frame work of the sample design adopted for the survey. One of the cases whose hospital records show that she has VVF declined from the interview, while another fistula case had traveled to Senegal for repair, therefore only 4 cases were interviewed in the selected HH. The prevalence of obstetric fistula in the Gambia was found to be 0.5/1000 when we use the 6 cases found in the selected HH for calculation. Women aged 15-49 in the Gambia are estimated to be 393911, which make the number of fistula cases in the Gambia about 197. Note: Number of women aged 15-49 in the Gambia is calculated from survey finding of 12116 women in sampled households.

4.1.3 The socio demographic characteristics of fistula patients:

The mean age of fistula patients at first marriage was 16.7 years; however the age range was from 14-26 and the mode 15 years. The number of parity for these women ranged from primi para to para 8, with the highest proportion in the primi para and para 5.



Out of 20 fistula patients 13(65%) are illiterate, 2(5%) had primary level education while 5(25%) were subjected to a local training called Madrassa (?scriptures from the Quran).

The majority of fistula cases 15(75%) are from the tribe of Mandinka and found in the rural community of Western Division, but when fistula occurred they were living in

various parts of the country. Two out of the Twenty (10%) are non Gambian by nationality, how ever one of them is married to a Gambian and she was living around Brikamaba at the time of delivery when fistula occurred.

Table No 2 . Fistula patients by residence (Urban/Rural)

Place of residence	Frequency	Percent
Urban	3	15
Rural	16	80
Not stated	1	5
Total	20	100

The majority 16 (80%) of fistula patients are rural residents while only 3(15%) are urban. Fifty five Percent of fistula cases are farmers, while the remaining are either unemployed or are in service or small market sells.

Marital status and marital position are shown in tables No 3 and No4

Table No 3 Marital status

Marital status	Frequency	percent
Single	2	10
Married	14	70
Widowed	3	15
Divorced	1	5
Total	20	100

Even if many of fistula cases were found to be married legally, several of them live separately from their husbands and with their immediate family. Those who live with their husbands conceal their condition from the rest of the family members by avoiding the smell of urine using pads and frequent washing.

Table No 4

Marital position of fistula patients

Marital position	Frequency	percent
First wife	3	15
Second wife	7	35
Third wife	3	15
Not stated	7	35
Total	20	100

70% of fistula cases are legally married, some of them live with their husbands while others live with their immediate family. Fistula cases are often stigmatized if their condition is known in the family or the community, which makes them conceal their condition even with in the family. As one of fistula cases described" I am the second wife of the three. We all live separately in different houses but in the same compound with our husband. We all share the same cooking. However I am not allowed to cook because of my condition even for my self and my children, so the third wife cooks and brings my and my childrens' share in a bowl" saying that she started to weep.(Fistula patient from Makagui)

Other fistula patients affirm that no one should know that they have a problem as one of them told us "It is not good to let others know that you have a problem, only my husband, my mother and the TBA know about my condition. I do my best to conceal it. I change and wash frequently so that it doesn't smell. I also quickly go away from a group when ever I feel the smell".(Fistula patient from Dampha kunda)

Duration of stay with fistula ranged fro 1-32 years, making the mean 9.15 and the median 10 years.

Table No 5: Duration of stay with obstetric fistula in years

Duration in years	Frequency	Percent
Not stated	3	15
1-5	7	35
6-10	4	20
11-15	3	15
16-20	1	5
21-24	1	5
25-30	1	5
>1	1	5
Total	20	100

Duration of stay in labor ranged from 12 hours to 78 hours with the highest frequency of 48 hours of stay in labor. 30% of them did go to health institution within 5 hours of on set of labor while 35% did stay from 12 to 40 hrs before decision was made to go to a health facility. The means of transportation to the health facility were mainly by Taxi, but horse and donkey carts were also used.

Following the formation of fistula, 65% fistula cases went to the nearest health institution from where 45% were referred to Bansang hospital and 55% to RVTH. Among the remaining 15% of them did deliver in the health institution but they were neither counseled nor treated for their condition or given a referral. So they simply returned to their homes.

4.1.4 Surgical Repair of Obstetric Fistula

Though none of the health institutions provide fistula repair services on a regular basis, intermittent fistula repair services have been available for the last 5 years in the Royal Victoria Teaching Hospital. These services are provided in collaboration with UROLINK team from the University of Aberdeen (UK). which is a group of 7-8 people who do charitable work. The team consisted of surgeons, anesthetists and theater nurses who come with their equipments. According to the Team "Gamtel ward in RVTH is an excellent place for fistula repair".

Prior to the visits of UROLINK team, all the Gynecologists have been engaged in repair of fistula, How ever currently, non of them try to repair fistula on their own due to the fact that" they have over whelming obstetric emergencies to attend to and save lives." They are also discouraged by the out comes (failures) following repair. None of the surgeons or gynecologists in RVTH had fistula repair trainings. As the medical school is young the first batch of 11 doctors only graduated 3 months back.

4.1.5 Experiences of the UROLINK Team (Description by the UROLINK Team)

UROLINK is a Team of 6-8 UK consultant urological surgeons with different sub specialties, 2-3 senior theater nurses and a consultant anaesthetist. The team has been traveling to the Gambia for a number of years and provides a broad range of urological services from 4-8 weeks to both men and women. " Repair of fistula was lead by Mike Bishop (Senior consultant Urological Surgeon)"

Mike's personal experience in RVTH: "Mike Bishop has performed about 100 VVF repairs and the occasional RVF. He has performed many ureteric re-implantations for UVF and 4 Mainz pouches for those deemed incurable by the usual fistula repair techniques. About 20 patients have required surgical correction of stress incontinence using mainly a sling type repair. Given that the team only spends a limited time in the

Gambia every year, follow-up is always a problem but about 75% are dry on discharge. About half of the failures have had severe stress incontinence and about 40% of these have improved with surgical correction. A similar percentage of the fistula re-do's are cured".

The team usually needed to bring with them the following missing equipments.

Sharp Scissors, all suturing materials, ureteric catheters, head lights for emergencies, loops for TURP, sutures, gauze in addition to specialized equipment like the gourget for urethral reconstruction. In addition there is a need for fully tilting theater table for vaginal procedures(Trendelenburg Position).

According to the team "There is a good team which is willing to help in the theatre including the anaesthetists which are credits for RVTH. Exceptionally Gamtel ward has always been excellent. Occasionally understaffing can be a problem. In addition inexperience in caring for patients who have had specialized surgical procedures can also be problematic.

Though it is difficult to guess the Team thinks that about 90% of fistula cases are Gambians from Places up country like Bansang. But they have also repaired fistula cases from the neighboring countries like Senegal, Guinea Conakry and Guinea Bissau. The team believes that "it is difficult to find the true picture accurately even with a survey as many of the unfortunate victims are secretive and itinerant". Their guess is that there is a need for 100 repairs annually to satisfy the demand.

4.1.6 Analysis of Hospital Records of Treated fistula patients

A document, which was given to UNFPA from RVTH hospital shows that more and more people were coming to RVTH hospital each year for the repair of fistula. According to the document in 2003 there were only 9 cases who came for fistula repair, while the figure reached 36 in 2004 and 48 in 2005. However only 35 cards of treated OF cards were provided to the Research team by RVTH hospital for analysis.

Analysis of these cards was difficult due to incomplete documentation and missing parts of the document from the folders.

1. All the cards with repaired fistula have anesthetic and post operative sheets from which the following information is found:
 - The type of fistula
 - The type of anaesthesia
 - Hemoglobin level
2. The more recent the dates on the cards, the more incomplete are the contents in the cards.
3. Out of the 35 cards provided 17 were cards of patients with vesico vaginal fistula. 3 cases of stress incontinence, one case of urge incontinence. Three cases happened to have iatrogenic post hysterectomy urethric fistula.
4. The geographic distribution of these patients : 3 cases are non Gambian (Senegalese) 8 cases from KMC, 5 cases from WD, 4 cases from NBD, and one case from LRD.
5. The parity for the majority is not recorded but two cases of Para 5 and one case of Para 7 and one case of Para 3 are among those with fistula repair.
6. Three of the cases have had C/S for prolonged labor and one of them had ruptured uterus.
7. All of the repairs of fistula cases were done under general anaesthesia.
8. The duration of stay from fistula formation up to first attempt of fistula repair ranged from 15 days up to 12 years. Average length of stay being 4.9 years.
9. The success or failure of the repair could not be identified due to lack of note on discharge and further follow up. However 4 cards showed failure and re repair of obstetric fistula from 1 up to 4 times.
10. Two of the cases had transplant (bypass) surgeries (ilio stomy), re-implant surgery (urethric -bladder anastomosis,) One patient had obliterated vagina due to extensive scarring of perineum.
11. The majority of fistula patients were found to be anaemic with hemoglobin ranging from 4.6 mm.hg to 15.8 mm.hg. The mean hemoglobin is found to be 8.85 mm hg.
 - Post operatively bladder was catheterized for 14 days and removed on 15th day. However there is no information whether or not bladder retraining was done.

- Following fistula repair patients are told to abstain from sexual intercourse for 6 months, avoid pregnancy for one year and need to deliver by C/S.
- Once they are discharged there is no indication in their charts whether or not they have follow up.
- Rehabilitation / reintegration services are non-existent.

4.1.7 Barriers to access fistula repair services.

- Lack of regular surgical repair of fistula, associate with distance of their living areas, and lack of communication facilities such as telephone contacts
- Lack of awareness of treatment of obstetric fistula among lower cadres of health professionals in other health divisions to refer patients to RVTH.
- Transportation and lack of means for transportation (State public transportation is almost not available in the Gambia. High ways are mostly damaged. For these reason private owned transport vehicles seldom go to the remote areas. Private owned vehicles, which go on that direction, require unaffordable fare for transportation).
- There are no hostels or other waiting areas for fistula patients and their escorts to wait for surgery and for escorts while patient stays in the hospital.
- Lack of trained personnel in surgical repair of obstetric fistula.
- Acute shortage of staff in the hospital.
- Insufficient and delayed funding of the hospital from the Government. In addition, donations given to the hospital from partners in government, NGO, Private sector and individuals are in a variety of forms which are mostly in kind and cannot be planned.

4.2 Prevention of Obstetric Fistula

4.2.1 Reproductive health Policy

Prevention of vesico-vaginal and RVF are integral components of National RH policy in the Gambia, nevertheless fistula is not identified as a priority component. Several policy documents supporting reproductive health and rights of women exist in The Gambia. How ever these policies are not supported financially. Various activities which have been

initiated based on policies to strengthen service provision for EmOC are not being implemented now mainly due to lack of resources.

Information gained from the planning unit of DoSH shows that Health budget constitutes 15% of the total fiscal budget of the Government (2,803,312,000 Dalasi) / (\$99584795.73) which for 2005 was estimated to be 432,098,000Dalasi (\$ 15349840.14). However 0.31% of these amount 1,330,646 Dalasi (\$ 47,269.84) is allocated for RCH programmes. Among this budget 99% is used for staff salary. Due to the very small allocation of funds to the unit the RCH programme is heavily dependent on donors Specifically UNFPA and UNICEF and others. Note: Drug procurement and distribution is handled in General but not attached to specific programmes separately which made it difficult to identify the budget for drugs which goes to the RCH.

Health care is highly subsidized in the Gambia so cost to the patient is not perceived as a major barrier in delivering EmOC services, as a woman pays 5 Dalasi for booking and 10 Dalasi for Lab exams and 12 Dalasi for normal delivery which all together are less than \$1. Admission cost for fistula repair is 50 Dalasi (\$1.78). Surgical cost for fistula repair used to be covered by UROLINK team.

4.2.2 Reproductive and Child Health Unit (RCH Unit)

The reproductive and child health unit is one of the 12 Technical program units of DoSH. The unit has 5 staff. Under RCH unit there are 6 Divisional RCH teams. The Divisional RCH teams are responsible for Reproductive and child health programs of the specific divisions. Under each division there are Major health centers, Minor health centers, Dispensaries, clinics and outreach stations. Hospitals are semi autonomous and are directed by board of directors. Hospitals are not available in all health divisions.

Out of all health care facilities, delivery care takes place in 27 minor health centers, RCH units and dispensaries as well as 4 hospitals, 1NGO and 1 private clinic and 8Major health centers in the 6 Health Divisions in the Gambia. All the 6 health divisions and all health facilities providing obstetric care services were visited for the assessment of capacity of health facilities to treat and prevent obstetric fistula.

4.2.3 Secondary prevention of Obstetric Fistula

Fistula can be prevented only when there is a skilled attendant at delivery and timely management of complications. This can be achieved only if skilled attendant at delivery is present at all times with a functional referral system to affordable, accessible and functional comprehensive Emergency obstetric care facilities.

In the Gambia, delivery care takes place in 45 out of the 50 reproductive health care facilities. Out of the 45 facilities 7 were found to be giving comprehensive EmOC services, while 11 are giving Basic EmOC services. Though these facilities do provide CEmOC and BEmOC except for RVTH hospital none of them provide EmOC services for 24 hours 7 days a week through out the year due to shortcomings, which are explained under specific headings.

Table No6: Facilities operating as Comprehensive EmOC

Facility		Population covered	Attended Births	Services available							
Western division				1	2	3	4	5	6	7	8
1	RVTH	1,400,000	4498	p	p	p	p	p	p	p	p
2	Sulayman Junkung	19,234	403	p	p	p	p	p	p	p	p
3	West field clinic	300,000	385	p	p	p	p	p	p	p	p
4	Gambian Family planning Association	300,000	597	p	p	p	p	p	p	p	p
North Bank West Division											
1	Essau health center	48,316	802	p	p	p	p	p	p	p	p
North Bank East											
1	AFPRC(Farafenni Hosp.)	126,786	1404	p	p	p	p	p	p	p	p
Central River Division											
1	Bansang Hospital	126786	894	p	p	p	p	p	p	p	p

Table No 7: Facilities operating as Basic EmOC

Facility		Population covered	Attended Births	Services available							
Western division				1	2	3	4	5	6	7	8
1	Brikama Health center	136633	2889	p	p	p	p	p	P	N	N
2	Gungur	460009	657	p	p	p	p	p	P	N	N
3	Fagi Kunda	162710	2357	p	p	p	p	p	p	N	N
4	Sukuta	50957	1326	p	p	p	p	p	p	N	N
North Bank East Division											
1	Ngayen Sanjally	21357	200	p	p	p	p	p	p	N	N
Lower River Division											
1	Soma Health center	42682	632	p	p	p	p	p	p	N	N
Central River Division											
1	Jahally(NGO)	16,000	72	p	p	p	p	p	p	N	N
2	Kuntair	25470	300	p	p	p	p	p	p	N	N
Upper River Division											
1	Basse Health Center	76949	1133	p	p	p	p	p	P	N	N
2	Garawol	17000	232	p	p	p	p	p	p	N	N
3	Fatato	39893	347	p	p	p	p	p	p	N	N

Keys**1= Administration of Parenteral antibiotics****2= Administration of oxytocic drugs****3= Administration of Parenteral anti convulsants****4= Perform manual removal of placenta****5= Perform evacuation of retained products****6= Perform assisted vaginal Breech delivery****7= Perform blood transfusion****8= Perform C/S****P= services provided****N= Services not provided**

4.2.4 Barriers for provision of EmOC services 24 hours a day 7days a week throughout the year for the CEmOC and the BEmOC facilities.

All institutions as identified in tables 8 and 9 do provide the services indicated in the Key. But only RVTH, which is the tertiary hospital provides services on a continuous basis.

- All the remaining institutions complained that central supply of electricity is intermittent. Due to this fact these institutions are provided with fuel for generators and ambulances from Riders for Health. Nevertheless this supply of fuel is not according to their demand and request but allocated by the supplier based on availability of supplies, which leaves many of the institutions non functional specially at night during the last week of the month. As one of the midwives explained "Electricity is another problem, we get supply from NAWEC from 9AM to 12MD and use the generator from 12PM to 2PM, then again the generator from 6 PM to 1AM and early morning from 5.30AM to 7AM in between which is from 2PM to 6PM and from 1AM to 5.30AM there is no electric power so we use candles. If we use continuously the allocated fuel when the light goes out, it suffices only for one week and we will be left with out electricity for the remaining 3 weeks".
- The majority of doctors working in health care facilities are expatriates, and it is not the hospital management who decides who goes on leave and when. Often when the doctors go on leave they go in a group which leave the hospital with out skilled care provider for a certain duration (for example. In AFPRC hospital both surgeon and gynecologist were on leave for two months during our visit, and in Sulayman Junkung Hospital both the registrars were on leave for two months during our visit. In both cases during the period of vacations these institutions were not functioning as CEmOC facilities). "We do have 1 pediatrician and two general practitioners. We do consult them when ever there is a problem. They do see all patients when they come in the morning before going to OPD. This month all of them have gone home so the nurses are overwhelmed by the work covering for the doctors". (Mid wife Basse health center)

- Staff turn over is very high and often occurs unexpectedly for the facility management, which results in a shortage of one or more health care providers. As a result facilities are forced to underutilize the available beds or are forced to refer patients further for a particular investigation or procedure, (eg. the trained lab technician in GFPA left so, the available Lab. Technologist was in the final week of his training for blood transfusion during our visits, and the facility was forced to use the assistance of RVTH hospital for the service for a month.)
- In many of the institution including RVTH essential equipments like BP apparatus are locked up and unavailable for use on and off. Theft is given as reason for inaccessibility of the available equipments.

Table No8: Proportion of births in facilities operating as Comprehensive EmOC From December 1/2005 to November 30/2006

Facility		Population covered	Estimated births	Attended Births	Proportion
Western division					
1	RVTH	1,400,000	32,200	4498	.14
2	Sulayman Junkung	19,234	442	403	.91
3	West field clinic	300,000	6,900	385	.06
4	Gambian Family planning Agency	300,000	6,900	597	.09
North Bank West Division					
1	Essau health center	48,316	1,111	802	.72
North Bank East					
1	AFPRC(Farafenni Hosp.)	126,786	2916	1404	.48
Central River Division					
1	Bansang Hospital	126786	2916	894	.48

4.2.5 Proportion of births

The total percentage of institutional delivery in the Gambia is 89.2%. However institutional delivery coverage varies from division to division and by type of health care facilities as follows.

Table NQ9: Estimated deliveries, proportion of births in health institutions by the health division From December 1/2005 to November 30/2006

	Facility target population	Estimated deliveries	Total births in the past 12 months in facilities	Proportion of births attended
Western Division	980098	22542	19112	0.71
North Bank Division West	117206	2695	4746	1.76
North Bank Division East	126786	2916	1993	0.68
Lower river Division	84235	1937	944	0.49
Central River Division	210732	4846	2536	0.25
Upper River Division	214895	5567	2394	0.52
Total	1400000	32200	28725	0.89

Table No_10: Proportion of births in Basic EmOC From December 1/2005 to November 30/2006

Facility		Population covered	Estimated births	Attended Births	Proportion of births
Western division					
1	Brikama Health center	136633	3143	2889	.92
2	Gungur	460009	1058	657	.62
3	Fagi Kunda	162710	3742	2357	.63
4	Sukuta	50957	1172	1326	1.13
North Bank East Division					
1	Ngayen Sanjally	21357	491	200	.41
Lower River Division					
1	Soma Health center	42682	982	632	.64
Central River Division					
1	Jahally(NGO)	16,000	368	72	.20
2	Kuntair	25470	586	300	.51
Upper River Division					
1	Basse Health Center	76949	1770	1133	.64
2	Garawol	17000	391	232	.59
3	Fatato	39893	918	347	.38

4.2.6 Proportion of Caesarean section.

C/S rate as a proportion of all deliveries from December 2005 to November 2006 was 17.6% (808/4498) in RVTH, 11.8% (45/385) West field clinic, which exceeded the above limit of 15% while it was 3.2% (13/403) in Suleyman Junkung hospital, 11.4% (102/894) Bansang Hospital, 6.05% (85/1404) in AFPRC hospital, 1.24%(10/802) in Essau health center and 3.85% (23/597) in the Gambian family planning Association.

4.2.7 Met need of direct obstetric complications, maternal and perinatal deaths.

Table No 11: Met need of direct obstetric complications, maternal and perinatal deaths by health institution From December 1/2005 to November 30/2006

Facility name	Estimated births	Estimated Direct obstetric complications	Recorded No of Direct complications	Met need for obstetric complications %	Maternal deaths	Perinatal deaths
Suleman junkung	442	66	20	30	2	17
RVTH	32200	4830	1151	24	82	1172
West field clinic	6900	1035	45	4		
Essau HC	1111	166	27	16	2	45
GFPA	6900	1035	30	02		
Bansang	2916	437	147	33	35	201
AFPRC	2916	437	171	39	10	146

Table No 12

Met need of direct obstetric complications, maternal and perinatal deaths by health division From December 1/2005 to November 30/2006.

Health Division	Estimated births	Estimated complications	Recorded No of Direct complications	Met need for obstetric complications %	Maternal deaths	Perinatal deaths
WD	65887	9883	1457	14	88	1189
NBDE	6108	916	191	21	10	
NBDW	3235	485	27	5.5	4	45
LRD	1937	291	19	6.5	4	
CRD	10062	1509	154	10	37	201
URD	5567	835	42	5.0	7	146

According to Health facility records perinatal mortality rate is found to be 55/1000 for the whole country which was computed using the formula: perinatal deaths/total births*1000. Maternal mortality ratio is found to be 556/100,000 live births computed using the formula of maternal deaths/ number of live births*100,000. Case fatality rates could not be computed as we didn't analyze charts of complicated pregnancies and births.

Analysis of case fatality rate is not done as records of maternal deaths for all institutions were not collected and revised. However in RVTH 76 charts could be retrieved out of 82

maternal deaths which were analyzed. The majority 60(78.94%) of these deaths are referrals from all over the country and mostly delayed. Some are deaths immediately following arrival, while there are cases which have stayed from 4 to 8 hours with out being seen by doctors, or with out intervention due to lack of one thing or another. Medical diagnoses as causes of death are shown in table No15.

Table No 13: Causes of Maternal death in RVTH hospital

Causes of Maternal death in RVTH hospital								
Cause of death	Eclampsia	Obstructed labour	APH	PPH	Sever anemia	Malaria	HIV/AIDS	Undiagnosed
	27(35.5%)	17(22.5%)	11(14.4%)	6(7.9%)	2(2.6%)	2(2.6%)	6(7.9%)	5(6.6%)

Table No 14: Family planning method mix by facility type From December 1/2005 to November 30/2006

	Type of facility								Total	
	Hospital		Major Health center		Minor Health center		Dispensary		Number	%
Method	Number	%	Number	%	Number	%	Number	%	Number	%
O.C.P.	18514	94.5	180	.9	765	3.9	133	.7	19592	100
Injectable	10128	85.6	408	3.4	1059	8.9	242	2.0	11837	100
Condoms	32958	96.9	191	.6	839	2.5	18	.1	34006	100
Diaphragms	0		0		0	0	0	1.6	0	
IUCD/IUD	290	94.5	0	2.0	6	2.0	5		307	100
Implants	0	0	0	0	0	0	0	.0	0	
Spermicide	1734	100	0	0	0	0	0	.0	1734	100
Female steralization	25	100	0			0	0		25	100
Male Steralization	0	0	0	0	0	0	0	0	0	0

Contraceptive distribution is mainly by the Gambian family planning agency which distributes 18309(93.5%) of OCP, 9885(83.5%) Injectables, 32702(96.2%) condoms, 276(89.9%) IUCD, 1734(100%) spermicides, 13(52%) Female sterilization. Public facilities distributed only 1084(5.5%) OCP, 1639(13.8%) Injectable, 1137(3.3%) condoms, 17(5.5%) IUCD and 11(44%) female sterilization. The private facility provided only 19(.2%) injectables, 10(3.3%) IUCD and 1 (4%) female sterilization. None of the

facilities provided subdermal implants, diaphragms, male sterilization nor emergency contraceptives.

4.3 Referral System

Out of the 50 facilities which provides maternal health care services, 28(58.3%) do not have telephone or radio transmitter for communication during emergency while 4(8.3%) do not have ambulance and only 8(16.7%) have 16.7%) have ambulances but these ambulances are not in satisfactory condition. Though ambulances are available in most of the institutions the amount of fuel provided is not satisfactory in 32(66.7%) of them. Even if the thinking of officials in DOSH is that distance from furthest point of the country to Banjul is 3-4 hours, observation of the principal investigator while traveling in the country is that it takes more than 5 hours to reach to URD when river crossings are avoided. Ferries are not easily available at night and there are no other vessels for river crossings. The team had to spend more than 6 hours waiting on the queue for ferry crossing to come back to Banjul.

Table No15: Availability of telephone, in obstetric care facilities.

Telephone Radio Transmitter			
Not Available	Available but not satisfactory	Available and satisfactory	Not applicable
28(58.3%)	9(18.8%)	11(22.9%)	-

Table No16: Availability of ambulance and fuel in obstetric care facilities.

Ambulance/Vehicle for transport of Emergency obstetric cases			
Not Available	Available but not satisfactory	Available and satisfactory	Not applicable
4(8.3%)	8(16.7%)	34(70.8%)	2(4.2%)

Table No17: Availability of fuel in obstetric care facilities.

Fuel for Ambulance or Generator			
Not Available	Available but not satisfactory	Available and satisfactory	Not applicable
5(10.4%)	32(66.7%)	10(20.8%)	1(2.1%)

4.4Health care workers

The ratio of health care workers to population are as follows:

Table No 18: Ratio of health care workers to population

Health care worker	Ratio to population
SRN Midwives	1:28,000
SEN Midwives	1: 13,725
Physicians	1: 12962
Obstetrician Gynecologists	1: 140,000
Surgeons	1: 350,000
Anesthetists	1: 350,000
Nurse Anesthetists	1: 82352
Druggists	1: 175,000

The majority of physicians are expatriates mainly from Cuba followed by Nigerian doctors on a two year contract basis. There are also physicians from Egypt and other countries who provide services. Services are disrupted when ever expatriates go back to their countries for vacations and when ever they are replaced by a new group.

4.5 Nurse Training Schools

There are 3 Nursing schools which give basic trainings for undergraduate and postgraduate nurses in the Gambia. These are the School of Nursing and Midwifery in Banjul established in 1966, The School of Community Health Nurses in Mansakonko established in 1976 and The State enrolled Nursing School which was established in Banjul and transferred to Bansang in 1989.

The Mid wives in the three schools agree that fistula was a common finding while they were practicing as clinicians years back, but they do not see them any more since there exposure to the clinics is very limited due to their type of work. All the three schools train and deploy nurses in basic midwifery while the training in the community health nursing school focuses more on preventive medicine the other two focus in clinical practice.

All the informants of these schools informed us that uptake of students have increased in all the three schools to be able to replace lost staff due to brain drain from the public facilities. Nevertheless the schools themselves are suffering from severe shortage of tutors. "The school suffers from lack of adequate number of nurse tutors. Currently we have 9 general nurse tutors, but we need 2 tutors/class, principal lecturer and senior lecturer. Professionals are not interested in teaching because of low payment. Especially the practical aspect of training is heavily compromised because of absence of clinical tutors. If there are some who are interested they do not qualify, because they are lazy to read and are not up to date with the science".(Principal Nursing School Banjul)

"The main problem for us is lack of tutors. We do not have clinical tutors at all and the clinical practices are in the hands of health facility staff. It is worse for the midwifery programme because there are only two tutors in the school including my self. The school used to have 7 tutors when it run only undergraduate programme but now it has only 2 tutors while running undergraduate and postgraduate programmes".(Actining principal School of Community Health, Mansakonko).

"This years' uptake of students for specialization in midwifery was supposed to be in November but up to now we are unable to admit due to lack of nurse midwife tutors. The last one joined her husband in the US and there is no one interested to work in the school. In this school most of the postings are permanent. Infrastructure especially the roads are very poor, school for children of staff is non existent, leaving a husband and staying away for long period in a polygamous society is also a problem for female nurses. In addition, the low salary, the poor living and working conditions are de-motivating factors that no body wants to come and work on permanent bases".(Nurse Tutor Bansang)

Inadequate funding is another problem for all the three schools, which is reflected in inadequacy of teaching aid materials, fuel for transporting students to community activities or staff for some activities. Informants say that they depend heavily on donors like WHO and UNICEF for teaching AID and include other donors for supply of fuel.

"It makes you lazy when you don't have things to do. I always improvise to keep the school going. You don't have a soap, no disinfectants. A budget of 25,000 Dalasi (\$888.00) for a school, what can this cover? Books? Chalks? Markers? Flip charts? so what do you have?"

In all the schools students qualify only after they have attended certain number of deliveries and attended deliveries themselves under supervision of midwives. But their community activities are compromised due to lack of funds since there is no fund at all for community activities. The research team found students of Banjul Nursing school begging the community on the streets to raise funds for their community activities.

Research team enquired about it and, the response of the principal was "fund raising for community activities has nothing to do with the school management. Students have to save for their expenses for the community activities from day one in the school from their stipends which they are informed about in the beginning".

Once they graduate nurses with under graduate training are expected to handle only normal deliveries and refer all complicated cases. They are also expected to work closely with the TBAs.

4.6 Traditional Birth Attendants

A total of 51 TBAs were interviewed, out of which 45(88.2%) were trained and 6 (11.7%) untrained. Ninety percent of TBAs have met with midwives in the last one year. The majority 82% of TBAs had never seen fistula cases, while only 6% of them saw a case of fistula in the past one year. The remaining saw fistula cases 5 years before.

Interview to TBA have shown that 94.1% of TBAs use appropriate sterile instruments. Forty one percent of TBAs do not apply any thing on the cord after cutting, while 51%

apply Shea butter and 7.8 % use alcohol. Though 47.1% of the TBAs use herbs for upper respiratory symptoms and chest pain, none of them use herbs for obstetric indications. TBA interviews showed that 41% of the TBAs never refer mothers and the newborns to health care facilities after home delivery, while 43% refer in the first week post partum mainly for immunization purposes.

The majority of trained TBA did not identify the danger signs of pregnancy.

Table No 19: Percent distribution of trained traditional birth attendants by danger signs that would lead to referring a pregnant woman to a health facility

Warning signs	Yes	Percent	No	Percent
Previous bad obstetric history	1	2.2	44	97.8
Hypertension	25	55.6	20	44.4
Anaemia	32	71.1	13	28.9
Cessation of fetal movement	3	6.7	42	93.3
Abnormal lie/position	14	31.1	31	68.9
Sepsis	12	26.7	33	73.3
Light bleeding	14	31.1	31	68.9
Haemorrhage	26	57.8	19	42.2
Multiple pregnancy	14	31.1	31	68.9
Obstructed labor	23	51.1	22	48.9

4.7 Traditional Healer interview

A total of 43 traditional healers were interviewed out of which 34(79%) said that women see them seeking help from them during pregnancy, child birth and postpartum.

Table No 20: Reasons (problems) for which women visit traditional healers, during pregnancy and child birth.

Reasons/problems	number	percent
Prayers, write scripts to ease labor	2	3.92
Anemia	9	17.65
Abdominal pain	14	27.45
Back ache	5	9.8
Difficult labor	7	13.73
Bleeding	5	9.8
Difficulty to go to health facility	2	3.92
Child illness	2	3.92
Cessation of Mensus/2 ^{ry} infertility	5	9.8
Total	51	100

Abdominal pain, back ache and anemia are the two main reasons for seeking help from traditional healers during pregnancy. However women also approach traditional healers when they have difficult and prolonged labor and vaginal bleeding during labor. The post partum reasons are mainly delayed menstruation, infertility and illness of the child.

Fourteen (32.5%) traditional healers have seen women who leak urine /feces while 2(4.6%) have heard but not seen about the condition and the remaining 27(62.3%) never saw or heard about OF. The belief of traditional healers who say the causes of fistula is spiritual (God or Evil) is 8 (18.6%), child birth 4(5%), early marriage and female circumcision 4(5%), problems associated with urinary bladder 4(5%) and several other reasons like promiscuity, worms, spiritual means and the like.

Almost half of traditional healers who saw cases of fistula tried to treat women with fistula with herbs and holy water, while more than a third of them did nothing as one of them put it "This is not my domain I have nothing to do with them". Only one traditional healer mentioned referring women to the hospital.

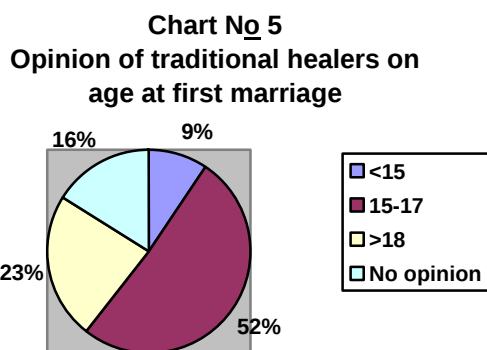
To help women with fistula 22(51.3 %) of traditional healers believe in the need for intervention by the modern health care system while 7(16.2%) of them believe in prayers and other spiritual means. The others suggest that women should be faithful to their husbands, or stop FGM and early marriage as well as intergenerational marriages.

Early marriage is identified as a harmful traditional practice by 15(34.8%) of traditional healers while 8(18.6%) identified FGM as Harmful Traditional Practice in the community, 7(16.2%) responded that they have no idea of a HTP in the community. The remaining of the healers identified Gum pricking, forced marriage, intergenerational marriages and unquantified herbal medicine usage as HTPs.

Female genital mutilation is perceived as a good culture by 17(39.5%), while 5(11.6%) think it is traditional and 9 (20.9%) link it with religion. However most of them say that it can not be avoided. FGM is mainly performed by elderly women, but 27(62.7%) of them do not perform it despite their attitude towards FGM.

The majority 15(34.8%) believes that the age for marriage of girls needs to be 15 or above based on the maturity of the girl. It should be delayed for slow-maturing girls but needs to be early for the girls who see their menstruation early and mature fast.

Chart No 7:Opinion of traditional healers on the age of marriage for girls.



The opinion of the majority is that polygamy is a religious practice and that it can not be avoided. However the religion has a precondition of being financially and sexually strong to satisfy all the wives. When it comes to the economic and social effects of

polygamy in the community, opinion is divided in to two groups. The majority 15(34.8%) believe that polygamy is good, and justify their opinion by giving social and economic reasons, which amongst others include the fact that all women get husbands and more children are produced bringing more work- force in to the family. In contrast the other group 6(13.9%) argues that the practice should not be encouraged on the basis that it is impossible to like and treat two people equally, and this brings competition in between the wives and unhealthy relation ship. In addition if one of those involved is not faith-full the risk of sexually transmissible illnesses is high. The remaining healers did not give their opinion whether it is a good or bad practice apart from mentioning that it is a religious practice.

Though some of the traditional healers didn't express their idea on the subject, the majority 29(67%) of the traditional healers agree that death of women during child birth is Gods'/Allahs' work or it is the destiny of these women to die from child birth. Seventeen(39.5%) said that it is a jihad to die in child birth if the woman is a Muslim and married. Only very few 7(16.2%) say that dying in child birth is not good and it has to be stopped associating it with poor nutrition, early marriage and lack of help.

4.8 Opinion of stake holders about obstetric fistula

Opinion about Obstetric fistula and associated factors varies among the reproductive health community of the Gambia. Some people do know about the situation of obstetric fistula in details while others don't.

Department of state for health officials:

"It is well known that obstetric fistula is a consequence of CPD. There is no need for the study instead this fund could have been used for upgrading health institutions to prevent fistula. I also do not attribute the occurrence of fistula to the shortage of health professionals, but rather to early marriage preference of delivering at home, especially around CRD and URD".

"There is a need for our own professionals to be trained in fistula surgery. The point is not how many cases do we have to treat, because conditions like fistula needs to be

treated only by trained people other wise the number of failed repairs increase which is worse for the patient".(Dr. Tamsir Mbowe, SOS Health and Social welfare).

"The services for obstetric fistula are available only at RVTH hospital intermittently. Once services are available more and more people do come for treatment. In terms of good obstetric care, the department has been working towards that objective for long. We have been giving various trainings for different cadres of health workers in terms of safe delivery and quality of care. We have tried to adhere to all new developments which come from WHO"(Dr. Mariatou Jallow, Director of Health Services, DoSH)

"All major health centers were constructed with operation theaters with a view to provide comprehensive emergency obstetric care. How ever none of them provide CEMOC due to resource constraints which include financial, human and material". "Since the first referral site in the country is not functional people resort to secondary referrals. Transportation is by means of donkey carts or taxis and as you know "a donkey is a slow animal". I believe that, "the Major Health centers should not be transit points but service providing points". (Mrs. Ramou Cole-Cissay, RCH unit leader)

Obstetrician Gynecologists:

Almost all Obstetricians and Gynecologists, think that Obstetric fistula is not a public health problem for the Gambia.

"Concerning Obstetric fistula, there is no cause for alarm. We do see quite a number of cases and significant number of them is non Gambian. Obstetric fistula is related to obstructed labor, they keep women in labor in the health center for more than 24 hrs. It is after this time that women are moved from CRD to Banjul. And what ever effort is tried after this time, they get a fistula. Most of these women even don't realize that they have fistulae. They realize it only when the smell starts to be offensive. They do every thing after that to conceal it before they come to us for help. They come when they can no longer manage. "(Dr. Malik Njaye, Deputy Chief Medical officer RVTH Hospital"

"When you think Gambia as a country I don't believe that fistula is a big problem. In this part of the world there is no boundry and people are highly mobile. Our health care system does not have bureaucracy and if you come on the clinic day you go straight to

the specialist. This is why it seems there are large numbers of fistula cases while we do treat women with fistula for the neighboring countries".(Dr. Dumbaya Sherif Aba, Obstetrician Gynecologist Westfield clinic)

"Fistula was very common in the past 5-6/ year. The trend is reducing not because that cases have reduced but the number of doctors who see them increased. Currently we have in our country atleast about 23 patients who are waiting for the UK doctors to come and repair them". (Dr. Camara Bekaia obstetrician Gynecologist Head Dept RVTH)

Womens' Organizations.

There are several organizations and womens' groups which work on various womens' issues in the Gambia. However there are no organizations working on the issue of fistula in the country. In the Gambia there is Ministry of Womens' Affairs which is being headed by the vice president. Under the ministry there is the National womens' council.

"The National womens' council was set up by the act of the parliament to serve as advisory body on women affairs to the government. In doing so 50 counselors have been selected from all over the country. The counselors so nominated 5 women to serve as technical advisors because they have skills. The council has executive director to lead the group and to liaise with other organizations and government".

"The council has its representatives in the Divisions through which it reaches to the women at a lower level. Women and Health, Women and Education and Women and Gender issues, Women and Agriculture are issues we are working on. We also try to empower women economically through Community skills development project and some microfinance activities. In addition the council link women with microfinance institutions. We are also working on elimination of all forms of discrimination against women, and the womens' bill was signed and legislation is in the process." (Mrs Kassa Kanteh Sanneh, Chair person National Womens' Council)

"There are several HTPs in the Gambia which we think is a female issue, but the social dimensions reach men and heads of communities. You need to target all to address the

mind set". The parliament first signed the African portfolio for elimination of all forms of discrimination against women with a lot of restriction, but through advocacy and mobilization of grassroot women now the womens' bill is signed fully"

"They call it any name but there are women organizations, in fact it is peer group and they are all over the Gambia. We reach Women through this structures to keep the community informed on what is going on regarding development". "I am not aware of fistula but if you are really committed you need to break the language barrier to reach them all. The majority of women are illiterate and for real life interaction even the literate ones use their local languages".(Amie Bojang Sissho, Program coordinator GAMCOTRAP)

UN Agencies

UNFPA, UNICEF and WHO work in the areas of reproductive health in the Gambia. WHO is the principal adviser on health to the Gambian government, we mainly support government at plicy and strategy formulation and translation of guide lines into locally applicable guidelines.

"WHO participates in all safe motherhood activities but mainly by providing technical expertise, advocating for the health sector, organizing partnerships for health, training, of health workers as well as community members on health issues, provision of training materials to health training institutions, providing and monitoring of norms and standards for health care, evaluation of health care services donation of equipments and logistic support amongst others". "As for advocacy work, with regards to obstetric fistulae, there is a need to establish scientific basis of this problem. We there fore need to know the magnitude of obstetric fistula in the Gambia so that we ofcourse together with our partners could get organized to address it. In addition this country is highly religious. And may be from religious point of view there seems to be a tendency of accepting things as they are or as they happen to one. It is a culture of tolerating or accepting problems by saying ""God wants these problems to be here"". WHO supports the government in the provision of emergeny obstetric care. Many activities are currently on-going (Dr. Nestor Shivute, WHO Representative Gambia)

"The role of WHO is to assist the government in realizing the MDG. Which means accelerating reduction of maternal and child mortality and morbidity. Fistula comes along that line. The main activity is providing technical support. WHO also provided both technical and financial support for the preparation of country specific road map strategies as guide lines to attaining the MDG. It was done in collaboration with UNFPA, UNDP and UNICEF.(Mrs, Agnes Kuye, Family health Promotion Advisor,WHO Gambia)

"Fistula is stigmatized in the Gambia. Husbands return these women to their families. The thinking is production of children is the primary function of a woman if you fail in that some how, they will say that it has to do with witch craft and the woman has a devil. This brings people to Stigmatize women with fistula, and women also isolate themselves because they loose their self esteem".

"The activities of UNFPA in the Gambia has three components, namely:

1. Reproductive Health
 - Integrated reproductive health services which is executed by RCH unit of DoSH.
 - Adolescent Reproductive Health implemented by department of youth and sport this includes establishment of youth friendly centers, Training of peer educators Provide equipment and supplies . Set up network of young people for advocacy including the development of youth chapter.
2. Population and Development
 - Developing and supporting population centers
 - Preparation ,conduct and analysis of census.
3. Advocacy in Reproductive Health
 - Gender and Reproductive Rights Issues
 - Establishing net work of civil societies(CBO)".(Dr. Reuben Mbodge, Assistant UNFPA representative in The Gambia)

4.9 Community Awareness of Obstetric Fistula and Other Reproductive Health Issues

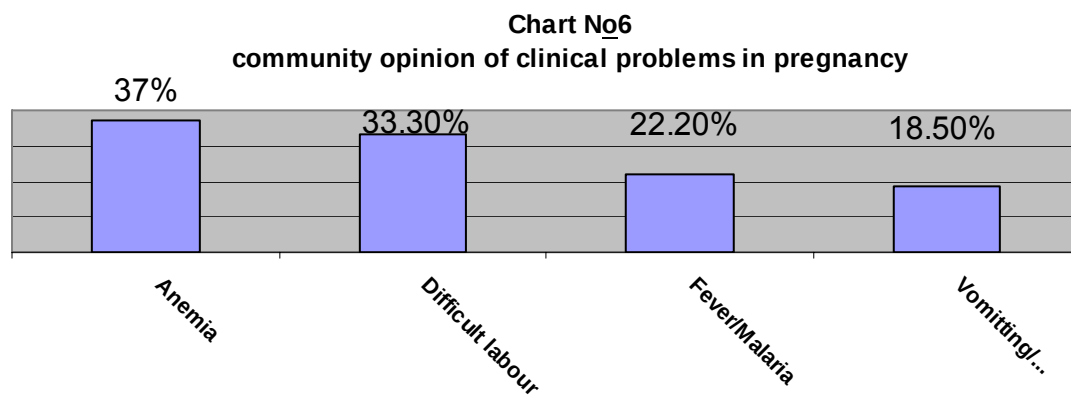
A total of 27 focus group discussions (FGD) were conducted in all the 6 health divisions. The FGDs were conducted in 12 urban (6 groups of men and 6 groups of women), 14 rural (6 groups of men and 8 groups of women) and one mixed youth group. Each group consisted of 8-10 people. The discussions were led by the supervisors of data collection

teams. Ten guide questions were designed to help assess the knowledge attitude and practice of the community concerning, obstetric fistula, problems associated with pregnancy and child birth, maternal death, Harmful traditional practices

Findings

The community expressed their understanding of problems associated with pregnancy and child birth in the community in the context of clinical, social, economical, health facility, attitude of women and attitude of health professionals.

The community identified several clinical conditions as problems of pregnancy and child bearing such as abdominal pain and back ache to swelling fits and loss of consciousness. How ever the major clinical problems identified are displayed in the following table.



Socio economic problems were identified mainly by the rural groups. Lack of proper nutrition and heavy work load on rural women associated with poverty, resulting in anemia and back pain were identified by all the 8 rural groups of women which is 100% and supported by six of the rural groups of men which are 50%.

Women and Men focus groups explained the situation as follows: "In our village only few men are able to cater for their needs. Therefore women spend all their time out in the gardens. The profit from the garden is what they use to buy clothing for themselves and

their children and also support their families, when their husbands are not in a position to do so. We know that it is our responsibility to take care of our women but we are not in a position. We would be grateful to any one who can come up with a project to help them. (Madiana Rural Male group) . "God shared wealth in a way that some have a lot and others don't & we must accept it." (Njawara rural women).

Pregnancy and child birth at a young age in and out of marriage, attitude of women towards their own health expressed in late booking or not following advices of health professionals, and not taking prescribed medications, were cited as social problems during pregnancy and child birth. "Some women don't book early they say they are concealing it, pregnancy cannot be concealed because when you deliver you get exposed". (Barra mens' group)

However the main problem which was identified by 11(78.5%) of the rural community is lack of means of transportation to a health institutions for ANC follow up or during labor especially at night. Lack of obstetric care services in general was identified by 6(42.8%) the rural groups as being reasons for the complications in pregnancy and child birth, while 12(44.4%) groups claim that lack of health professionals or lack of qualified health professionals and attitude of available health professionals as problems during pregnancy and child birth. The following quotations show the scenario.

"You go to the facility at night, there would be only one nurse and she would be sleeping. You go to one ward they will tell you to go to another ward and you go there and they tell you to go to another and so on. For the whole night your patient will not be attended to. Or a nurse would be at the out patient department working, suddenly she would be asked to go to the labor ward and in the mean time there might be a need to attend to some one else. One person can not attend to every one." (Barra men urban)

"My wife was once pregnant and we were told the child was lying in a bad position and she was unable to deliver. We were referred to Bansang hospital where she was operated

upon. Since that operation she never had any children and I don't know why" (Male group Basse Santousu)

"My wife said that a nurse once refused to give drugs or weigh the woman's child because she did not change or replace the MCH card. The woman returned home without drugs that day. Women complain a lot about the nurses attitude. Some of these nurses are not friendly at all". (Tanje Group of Men)

"Sometimes you go to the clinic and you are not given the necessary attention. You go there because you don't know medicine; otherwise no one will go there".(Serekunda Women Group).

Knowledge about obstetric fistula

To assess the community knowledge about obstetric fistula all the groups were asked if they ever came across women who constantly leak urine or faeces or have a smell of it as a result of child birth? Women seem to know better than men as 8(57.1%) of women groups have seen or heard of fistula cases while only 4(33.3%) of the men group came across fistula. Those who know say that women conceal these conditions not to be stigmatized and share their experiences as the follows.

"As for that, we can't say much because women are secretive. For us men, there are things that we just can't know unless we are told". (Basse Santosu Men Group)

"This is not easy to know because it is a serious matter that any affected woman would conceal by all means. It would be difficult for others to know".(Karantaba Male group)

" I first knew when women were talking about her when she was approaching, Their talking made her sell her shop and leave the town, that was the last time she was seen around".(Banjul Men urban)

"There was a relative of ours who had such a problem, but she no longer live in this community. She was married here, but after she got this problem and it was not cured for a long time, she was taken back to her family. Here if a woman can no longer perform what she is married for she will be returned to her parents. We have a lot of broken

marriages, if you are no longer useful to the husband he will send you home."(Njawara rural women)

"This is a condition that one does not disclose if you have it, It is only through observation that one can notice it. So from now on we will let you know if we come across it".(Tanje women rural)

The majority 92.5% of the focus groups identify child birth as a cause of fistula, and associate it with early marriage, prolonged labor, mal-position as causes while others identify failure to seek obstetric care, lack of transportation to go on time to health facilities, health professionals, out of wed lock pregnancies (Promiscuity) as cause of fistulae" Some health problems come from God and others come from other people, if you are serious and control yourself, then you may not get it" (Women Jamwelly).

To help women with fistulae community groups suggest that, "We require health institution with transport, we are very far from the capital, or if we could get some one with the skills here it would be helpful".(Busuranding women rural)

Some of the groups said that delaying the age of marriage for girls will help prevent occurrence of fistula. "Those parents who have daughters should ensure that they only marry them off when they are fully matured. And for those who have sons who want to marry let them marry only fully matured girls, otherwise you end up with a weak woman and women should not be weak".

"We are in the age of **Duck Parent hood** if you don't give her out in marriage, she would give herself out in marriage. There is nothing you can do about that. We just pray that God help us."

24 hour MCH Service

Ten (74.2%) of the rural groups say that they do not have 24 hour MCH services while 6(50%) of the urban and 5(35.7%) of the rural groups say that they have 24 hour services but the type of available services are limited. Here is how the community described the situation:

"Our women have MCH cards and go to MCH clinic on special days but when the child is sick you take him to the clinic where he would be attended to regardless of day and

night. Drugs are not always available and you are given prescriptions to go and buy the medicines. Before you get the drugs your child will have fits."

" I will say no because I took my child at 4AM in the morning, to Brikama health center, I was told that the doctor would be there soon and asked to wait. I waited there until 7AM in the morning. And at 7AM they gave her only paracetamol." (Serrekunda Women group)

"It also happened to my wife during her first childbirth. I went to Serrekunda Health Centre but only the security person was around. I eventually took my wife to the private clinic of Dr. Jack Faal." (Serrekunda Men group).

"It's a bit difficult for women to get maternal and child health care services in this community. The health center is not that close to us. The health center at Baja kunda is 7km from here, the other health center is 11km from here. There is a health personnel staying at Barrow kunda and women do go there from time to time. The difficulty is however on us in this regards".(Chamoï Bunda men group)

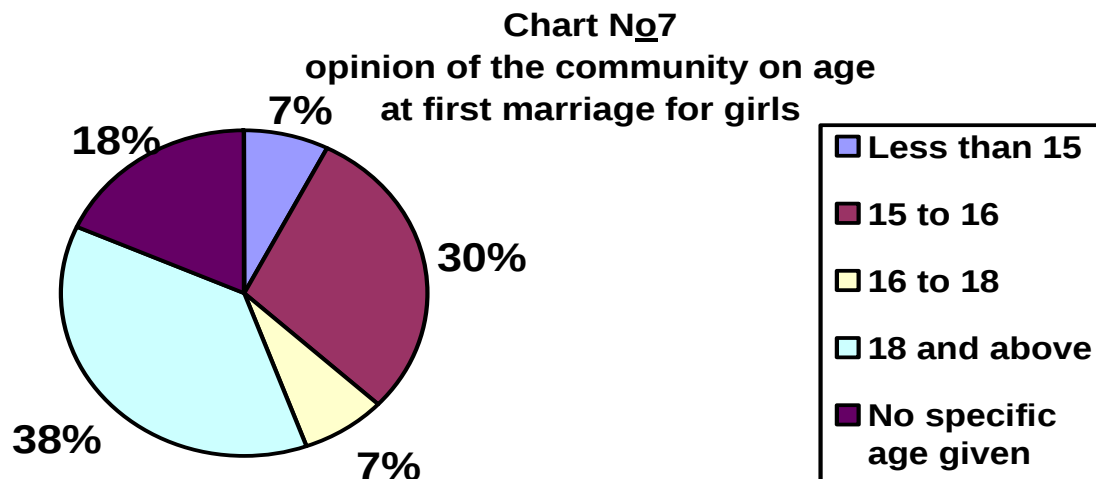
Focus Group Discussion on harm full traditional practices revealed that, the community is suspicious about our motives in discussing with them issues on reproductive health. Here is how some of them responded.

"Well I was aware from the start that this is where we will end up. Pricking of gums is bad because it changes what you naturally look. We don't have any knowledge but if educated people tell us we will abandon it. I know the emphasis is on female circumcision and yes we practice it. Male circumcision has religious reasons, but female I never saw in any of Islamic scriptures, but they do it for purity just like the male". The other man in the group sai" I can not say about female circumcision because we find women doing it and we can not change that"." It is meaningless for a man to be circumcised and be married to uncircumcised woman as she will make him impure. " If there is any harm from it please tell us we are willing to listen (Madiana Male group Rural)

Another community group described their opinion by saying "It is not easy that your traditions brings any harm to you, but probably you have taken some one elses' tradition

which brings harm to you, we abandoned ours and followed western (White mans') tradition and started to have problems. In the past we were told to feed our children powdered milk instead of our traditional breast feeding, and now they realized that breast milk is better and are telling us to go back". Any way few of the urban community groups agree that female circumcision is harmful. Otherwise most of the groups agree that if female circumcision is performed properly there is no harm from it. In addition few groups mentioned about gum pricking (Jammu, Tamiiso) but others failed to mention it.

The main issue on which 40.7% of the groups agree as harmful is early marriage for girls. However their understanding of age of maturity for girls varies from 15 to over 18 or 20. Chart No9 shows the opinion of community on age at first marriage for girls.



Even though they agree that the right age for marriage is 18 the community opts to give out girls even at a younger age justifying their actions like this.

"The girls should be given to marriage when they are matured enough, that is when they are above age 16 years. How ever families give them off even before the age of 15 years to avoid embarrassment and shame". (Basse Santosou women group)

"When you give her off at a younger age she will face difficulties at child birth, and if you don't she gets a child out side wed lock and you will have to feed her and her child which is an additional economical burden in the family". (Sifoe Rural Men group)

"Nowadays it is better to give them at a younger age like 15years, so that they don't disgrace you by out of wedlock pregnancy, other wise the right age for marriage is 18".(Wassu Rural Women group)

Opinion on Polygamy

The opinion of the community on polygamy varies in the community except for one thing that poly gamy is a religious practice in which 92.5% agree. However men do not mention any of the problems of polygamy while 57.1% of the women group say that it is harmful health wise. Both men and women groups agree that having more than one wife depends on the economic status of men, while women emphasize that the man can get married to a second or more wife on the permission of the first wife. Men emphasize that it is important to have more children who will take care of you when you get old but you have to be able to control your wives if you decide to have more than one.

"Our religion allows polygamy with in the limit of 4, for men. because women can control them selves much beter than men. How ever it should be practiced in such a way so that not to make others suffer. The husband should be just and fair but that is not possible. Men conceal their weakness as the hear is concealed with in them, the hurt can never be balanced. One will out weigh the other. The man should discuss with the wife and the 1st wife should agree that he gets 2nd wife."(Barra Men group)

" In a way poly gamy is not bad because the prophet said that we should increase our followers, How ever you should do it only if that you have good health".(Sifoe Men grouP)

"Polygamy is in the hands of the husband, because no woman tells her husband to marry another wife. What can the woman say or do if the husband decides and goes for ahead to marry another wife without informing the first wife. I can only tell the second wife that she is welcome".(Sifoe Women Group)

"Co-wives are two matured sisters that have some little, misunderstanding between them They should be in good terms so that the husband can be happy and he could have peace of mind, so that when he goes out for work he would not be worried that the wives could be quarrelling or fighting. Polygamy brings conflicts. Some women find that the first

wife is well settled and would want to displace her. This brings conflict. New wives should follow and respect the wife that came before them. It is only then that the first wife will also respect them. The first wife should not feel threatened since they are both wives of the man. And there is only little business to do with each other if she accepts the second wife."(Barra women group urban)

Opinion of the community on women dying during child birth

Many said that dying from child birth is a jihad, 48.1% of the groups believe that it is gods' will to die in child birth and stated that if the woman is a Muslim and the pregnancy is with in wedlock then that woman will go to heaven. "That is Gods' secret. God said that when a woman is giving birth he does not send the angles but he presides over it himself. Only God gives the necessary interventions. Although God has given us the knowledge to earn a living but the secretes of child birth is only in his hands".(Banjul Mens group)

How ever 29.6% of the groups said that it is lack of proper care which leads women to death in child birth "If it is time to die there is nothing one can do, that is gods' will But negligence comes with problems. If I become sick, instead of going to seek medical treatment I feel ashamed or lazy, the sickness would not wait for me. It will continue to worsen until it overpowers me. When I eventually decide to seek care it would have been late. Some times the blame is with the health facility. Some of the nurses there are not educated enough or trained to do that kind of work. It is by some favor that they were assisted to those positions. The government should ensure that the nurses are trained before engaging them as voluntary nurses".(Sarauja men rural)

The remaining groups gave different reasons for death in pregnancy/childbirth: From the preferred lying position of a woman in bed during pregnancy, poor diet, desires of husbands to have more and more children and discontinuation of intercourse during pregnancy after 5 month of gestation.

" When the pregnancy is in its advanced stage, the woman should be mindful of how she lies down. When she lies on one side and wants to turn to the other side, she first have to

sit up and then lie on the other side, other wise the baby could be entangled with internal organs and this could be fatal."(Busuranding rural Men)

"Our economic condition is also a factor. If you do not have the required diet and health care it could be fatal".(Busuranding rural women)

5. Discussion

House Hold survey

The study findings showed that on average there are 2-3 women aged 15-49 in a house hold in the Gambia, which influenced the increase in the number of women in sampled house holds more than anticipated. The proportion of women in urban and rural areas is in accordance with the census (1993 and 2003) findings of higher number of people aged 15-64 living in the urban areas than in the rural communities.

Poverty, lack of knowledge of danger signs of pregnancy and lack of decision making power of women are known to reduce utilization of available health care services by women who are in need. The results of the study shows that despite the fact that 96.9% of women have ANC follow-up during pregnancy, knowledge about danger signs of pregnancy is minimal among these women. This could be attributed to the lack of health education to women on birth planning and preparedness during antenatal care follow-up and lack of IEC materials in health institutions.

The gate keepers are too many for a woman in labor to access health facility in the Gambia. Only 20.1 % of women had decision making authority to go to health institution when they were in labor while husbands (42%), mother in-laws (16%), TBA (14%) and any other person (8%) had decision making authority for the rest of the women.

Less than 50% of women who had ANC had used the available health care facilities when they encountered complication of pregnancy which resulted in still birth or abortion. (Chart No 4). This finding shows the role of the gate keepers from accessing available health care services and the quality of ANC services provided in terms of creating awareness on danger signs of pregnancy and birth planning and preparedness.

It is known that obstetric fistula is associated with silence, shame and stigma in many communities. The situation in the Gambia is no different on this aspect as discussants of focus group discussions and key informants confirmed that fistula cases are often stigmatized and even ostracized from society which makes women conceal their condition as much as possible. This finding is consistent with the testimony of interviewed fistula patients who expressed their fear to let others know about their condition so as to avoid stigma, and the severity of ill-treatment by others including family members if fistula patients let others find out about their condition (fistula).

The research team believe that fear of information leak had an impact on our finding of lower prevalence of fistula (0.5/1000) than estimated (0.75), which we suspect is as a result of a non-response bias/Denial. If we took only the 4 interviewed fistula patients in sampled households for computing, the prevalence of fistula further diminishes to (.3/1000). The fact that one of them was traveling to Senegal for fistula repair during the time of survey and the other one denying having fistula even though her hospital record shows that she has VVF substantiates the suspicion that the prevalence is more than the study findings. The other fistula cases were found either in sampled EA but not in the sampled household or in hospitals, health centers and through TBA and are not included in computation of prevalence of fistula. These fistula cases are used for analysis of characteristics of fistula patients. It is our belief that once women know that care is available they will come out.

The Age at first marriage of fistula patients ranged from 14-26, however the mode was 15 which is consistent with the general belief of the community for the age at first marriage. Only 7% of the focus groups suggested that the age for first marriage of girls should be less than 15years. The remaining groups agree it should be above 15 even if their definition for the age varies.

All the three delays or a combination of them are factors of indirect causes of fistula in the Gambia. Fistula cases stayed in labor from 12-78 hours. Most of these women stayed in labor for 48 hours.

- The first delay: Our fistula cases stayed at home 5 hours to 40 hours in prolonged labor before decision was made to go to the hospital. This delay is due to lack of knowledge on danger signs of pregnancy by the woman, family and TBA. Poor economic status of women and waiting for the get keepers to decide to go to the health facility. For the entire fistula cases some one else decided that they should go to the hospital but not themselves.
- The second delay: Once decision to go to hospital was made fistula cases had to stay long before reaching the hospital due to lack of means of transportation or lack of fuel (especially at night); problems with ferry crossing(such as high waves and ferries are closed at night); bad condition of roads or lack of money to pay for transportation.
- Third delay: Once they reached to a health institution, treatment in the health facility was further delayed for several hours. In some cases up to an additional 22 hours. The reasons for these delays could not be explained by fistula patients. However focus group discussions showed that there is a problem of provision of maternal health care services due to shortage of staff, use of volunteer workers and unfriendly attitude of some of the health staff and inadequate supply of drugs. Some of the fistula patients had also secondary referrals from the rural hospitals (Bansang) to the tertiary hospital, RVTH. The observation in health facilities also showed that at times services are not available due to lack of health professionals, Lack of electric power and fuel for transport or for generator.

The socio demographic characteristics of fistula patients show that their age ranged between 14-26 years with the mean of 16.5 and the mode of 15 years. This is consistent with the findings of community opinion and traditional healers on age at first marriage in the community. The fact that the study found a non Gambian woman who was married to a Gambian and that she sustained fistula while living in the Gambia shows tribal

marriages across borders are realities and further studies are needed to identify whether or not expatriates come to the Gambia solely to receive treatment without having family ties in the country.

Analysis of in-depth interview of fistula patients show that 16(80%) of fistula patients are from the rural community which is consistent with international findings. The Gambia being a country where polygamy is exercised throughout, all our married fistula patients are living in a polygamous family relationship. The living set up for the polygamous family is either that they all live in the same household with the wives in separate rooms or they all live in separate houses in the same compound but share one cooking facility. Out of 14(70%) patients who are married 3(21%) are first wives while 7(50%) are second wives and the remaining 3(21%) are third wives. Though 14(70%) of fistula cases are legally married, some of them live with their husbands concealing their condition from other wives and other family members except for the husband, while others live with their immediate family separated from the husband. These findings are quite different from the usual isolation and abandonment of fistula patients and need to be studied further.

The duration of stay with fistula ranged between 1-32 years making the mean year of stay 8.7 years and the median 10 years. All these women have tried to get treatment some of them in different places in the Gambia, and some even outside of the country. The sad thing is despite their repeated attempt to get treated, they neither get treatment nor get accurate information whether or not their condition is treatable or not. In most of the cases even explanation was not done about the nature of illness or how and where it can be treated. The suspicion is either awareness about fistula is lacking at different levels of health cadres or Health professionals do not know that patients have a right to information.

There are no health institutions which provide fistula repair services continually. However intermittent surgical repair was being provided for the last 5 years in RVTH hospital by the UROLINK team. The team usually brings missing instruments with them and is assisted by the hospital staff which is helpful but sometimes inadequate in number or lacked required training for specialized care. None of the Obstetrician gynecologists or

the Surgeons in the hospital has fistula repair training. Unavailability of services has made fistula patients live for several years with VVF concealing their condition when possible.

Analysis of hospital records showed incomplete documentation of hospital records as well as poor record keeping. In the majority of cards, information was found to be incomplete with regards to; socio demographic characteristics of patients, history of illness, obstetric history, success of repairs. History sheet, progress note sheet, treatment order sheet & medication chart, vital sign, fluid input & out put recording sheet, discharge summary sheet and post-op follow up record sheets were missing from the cards of patients. Instead of these sheets any scrap of paper is used to write notes on and inserted in the charts of patients. The lack of these sheets and shortage of staff especially doctors may have contributed for the incompleteness of patient records. In addition there is lack of bladder retraining, post-operation follow-up and social rehabilitation of fistula patients.

It is said that the best option for addressing fistula is prevention. Presence of skilled attendant at birth at all times during delivery, availability of basic and comprehensive EmOC with a functional referral system and utilization of these services are mandatory to prevent fistula.

Formulating and adopting policies to meet the reproductive health needs of the people and address womens' issues has been accomplished. However these policies are not supported with sustainable programmes and adequate funding for implementation. In addition there are harmful traditional practices which are exercised widely in the Gambia, which are detrimental to reproductive health and rights of women. These HTPs are not addressed with relevant policies and legislations to empower Gambian women, economically, socially and politically so that they can exercise their reproductive health and rights to the fullest. These HTPs are: FGM, early marriage, intergenerational marriage, widow inheritance, issues of divorce and inheritance of wealth/property.

The number of staff for RCH unit is too low to run various reproductive health programmes of the country. The allocated budget for the unit is inadequate 1,330,646 Dalasi

(\$ 47,269.84). It looks as if all the funding for reproductive and child health except for the health staff salary is left for the UNFPA and UNICEF to cover. Though there are 6 health divisions to run programmes in the divisions, power is not decentralized in to health divisions at all. The divisional teams do not manage personnel, finance or other resources but only operate with what is allocated for them in kind. To elaborate further, salaries are paid from the center, drugs are procured centrally and distributed based on availability, fuel is distributed by Riders for Health, Divisions even do not have an imprest, incase a vehicle breaks or some thing goes out of order they have to wait for the center for maintenance.

Our study identified 7 health facilities operating as comprehensive EmOC facilities which are above the minimum standard of the UN guidelines and 11 facilities operating as BEmOC which is just under the minimum standard. How ever except for RVTH hospital none of these facilities give services for 24 hours through out the year, due to several short comings associated with inadequate electric power supply, vacations of expatriate staff or lack of one or other type of skilled health personnel at a particular time of the year due to unexpected staff turnover.

The proportion of births in health institutions is above the minimum standard for all the health facilities except for GFPA and Westfield Clinic making institutional deliveries 89% for the whole country. However the met need for surgical and medical complications of pregnancy is very low which is less than 30%, which explains the high maternal and perinatal deaths. The proportion of Cesarean section is above the standard limit for RVTH while is below the lower limit of the norms for GFPA, Essau H.C and Westfield clinic. These show that there is uneven distribution of case load due to cost factor for GFPA and Westfield while other factors are responsible for Essau H.C which needs to be studied further.

Perinatal mortality rate computed from records of institutions was found to be 55/1000 which is an underestimate as many of neonatal deaths might have occurred at home and may nothave been reported. Maternal mortality ratio based on the records is 556/100,000

which we believe is also an underestimation since it doesn't include those who couldn't make it to the hospital. More than 50% of the perinatal and maternal mortality occurred in RVTH hospital which shows the delays in referrals due to several factors in the referral system. The referral system is not fully functional due to:

- No referral forms are available to refer patients and receive feedbacks, but use any scrap of paper is used to refer patients.
- Most of the institutions do not have telephone/radio transmitter or the available telephone is not accessible to labor ward staff outside the official working hours.
- In most of the cases there is only one ambulance, which could be on trek or at fault or there is no fuel for ambulances.
- At times ferries may not be available for different reasons.

The three nursing training institutions are in serious shortage of training staff to be able to produce competent health care providers. In addition the lack of adequate budget and shortage of teaching aids further deteriorates the quality of nurse training at these schools. The fact that contraception provision is mainly by the hospitals and GFPA shows that there is a problem in contraception distribution in the system. The number of permanent and prolonged methods of contraception also needs to be studied in order to increase use of these methods. It is known that the consent of the husband is needed for female sterilization and some professionals acknowledged lack of skills for the provision of IUCD. However further analysis is needed why most of the health institutions are not providing family planning services adequately in number and in type.

It is highly appreciated that 94.1% of TBAs use appropriate sterile instruments to cut the cord and none of them use herbal medicine for pregnant women. However TBAs lack knowledge of warning/danger signs of pregnancy and child birth that is contributed to by the delay in decision making to go to health institution when labor is attended by the TBA. Applying Shea butter on the cord after cord cutting should also be discouraged as it can cause infection as it may be contaminated.

The study shows that women approach traditional healers for different reasons during pregnancy. However knowledge of traditional healers about fistula, its causes prevention

or socio cultural factors is found to be very limited. In addition their attitudes towards harmful traditional practices are not very different from the community. The belief that "maternal death is a jihad provided a woman is Muslim and married" shows that traditional healers had no training in terms of reproductive health from DOSH.

It is a great achievement to have a national womens' council and to be able to organize grassroots women according to their peers all over the country. These organizations can be used for different types of interventions in addressing reproductive health and rights of women. Advocacy work by different womens' group needs to be non- confrontational and culturally sensitive, to avoid incidents like what happened to advocacy work on FGM in the Gambia.

Awareness of the general population on obstetric fistula and socio cultural factors associated with it varies according to their exposure. However the community acknowledges the burden of responsibility on women to take care of their families especially in the rural community. The competition of the wives in polygamous relationship to have more children to be entitled for inheritance of more property is also regarded as a leading factor to multi- parity and ill health of women. Accepting burden of illness and maternal death as Gods'/Allahs' will and giving young girls to marriage in fear of shame and embarrassment resulting from out of wed-lock pregnancies or due to poverty shows that the level of education of the community is inadequate to bring about behavioral change. It is also an indication for the need of policies and legislations to address womens' reproductive health and rights.

6. Conclusion

The government of the Gambia shows its commitment to the PHC and RHC of the people through various policies adapted to strengthen reproductive health. However these policies are not supported monetarily. The allocated budget for the RCH unit from the government is very low which makes the services donor dependent. Whenever external funds are stopped ongoing services were disrupted which made implementation of policies challenging.

Though adequate numbers of health facilities are available for provision of EmOC services the geographic distribution is not equal in all Divisions.

Lack of awareness about the nature of fistula and associated harmful traditional practices; lack of knowledge about danger signs of pregnancy; perception of the community and traditional healers that married Muslim women who die in child birth would go to heaven; facilities with unskilled health workers and/or intermittent availability of services with poor referral system and poor socio economic status of women are all the factors which lead to high maternal and perinatal mortality and morbidity like fistula which have been identified in the Gambian health system.

7. Recommendations

Obstetric Fistula Treatment

- RVTH hospital being the only tertiary center and Medical teaching hospital, would be ideal for establishment of OF treatment unit. Invite Fistula surgeons from a well established center to inaugurate the unit and conduct the first round of training together with master trainers (Training of Trainers).
- As there are no doctors who have the skills of OF repair in The Gambia, there is a need for training of master trainers in well established fistula treatment center (possibly in Addis Ababa Fistula Hospital) for maximum skills transfer. The task force needs to identify interested and committed candidates, among the available Obstetrician/gynecologists, Surgeons or General practitioners, theater nurse and Nurse Midwife/General Nurse for this training(Team training).
- Prepare curriculum for in service training of professionals in country. The curriculum should be based on the principles of clinical management and secondary prevention of obstetric fistula. The curriculum will include clinical examination and diagnosis, repair of simple fistula cases, bladder retraining, pelvic floor exercises and addressing social and psychological needs of the patient.
- Include social workers and physiotherapists to complete the care package for fistula patients

- Establishment of waiting homes for fistula patients pre and post operatively until catheter is removed, near the health facility.

Primary prevention of obstetric fistula

- Increase promotion and education of women and the community to delay the age of marriage.
- Increase promotion and distribution of contraceptive methods to avoid unwanted and unplanned pregnancy and child birth.
- Enable women to seek health care with out seeking authorization from their husbands or other community members.

Secondary prevention of obstetric fistula

- Training of more reproductive health care professionals such as physicians, midwives, anesthetists, laboratory technologists according to the need of the country to make available skilled birth attendants at all levels.
- In service training of available staff in EmOC including timely intervention of obstructed labour to prevent Obstetric fistula is mandatory.
- Strengthening of Management Information Systems (MIS) in all health institutions and divisions to enable supportive supervision and timely address the needs of health facilities.
- Embarking on Inter-sectoral collaboration with relevant institutions for health promotion and implementation of policies and programmes.
- Utilizing private public partnership in the delivery of all reproductive health care services.
- Intensify community involvement in all Reproductive health activities to facilitate ownership of programs by the people and make activities sustainable.
- Provision of medically accurate and culturally appropriate reproductive health education both in the schools and community.
- Economical empowerment of women, specifically in the rural areas to enable them to decide for themselves using programmes of women organizations.
- Awareness creation programmes on HTPs such as FGM, human rights specifically women and children's' rights, HIV/AIDS and Polygamy

- Embarking on basic infrastructure development such as roads, electricity, water supply, etc... .
- Advocacy work to sensitize higher officials and policy makers to make available policies and legislations to empower women economically, socially and politically so that they can enjoy their reproductive health and rights to the fullest.

Tertiary prevention of obstetric fistula

- To give in service training of health professionals to the use of partograph for monitoring of labor and timely identification of obstructed labor. Taking measures to minimize occurrence of fistula whenever obstructed labor is diagnosed or repair of small fistulae if they occur.

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Annex: 1
Ethics
Consent Form
Survey on the magnitude of Obstetric Fistula in the Gambia

Name and code of enumerator reading the form_____

Name and line number of interviewee_____

The information sheet has been read to me and I understand it / I have read and understood the information sheet. I understand what participation in the study means for me. I understand that the information regarding me that is collected in the course of this study will remain confidential.

I understand that in the event when End fistula materializes, I will be informed for the possibility of getting treatment and involvement on social rehabilitation programm. I understand that I am free to take part in the study or refuse, and that I can withdraw from the study at any time, and without giving any reason. Deciding not to take part or to withdraw from the study will not affect the care that I am normally entitled to.

I have had a chance to ask questions and have them answered.

Agree_____

Disagree_____

Signature of enumerator _____

Annex: 2

Information Sheet

Survey on the magnitude of Obstetric Fistula in the Gambia

SCC number _____ Date _____
EC project numbers _____

Obstetric fistula is a term used for an abnormal opening (hole) between a woman's Vagina and bladder and /or rectum through which her urine and/or feaces continually leak. OF is the result of prolonged and obstructed labour.

In order to curb this problem and find means to help fistula patients and to prevent women from having fistula The Department of State for Health of the Government of The Gambia is conducting a study to know the magnitude of the problem in the country.

In this regard we are requesting your agreement to give us information about your illness. This will assist the government in its' plans to prevent the occurrence of obstetric fistulae. In doing this we would like to let you know that in the event of realization of the end fistula programm, you will possibly be involved in surgical treatment and/or social rehabilitation of the programm.

We also want you to know that you have the right to refuse participation in this study. Refusal of participation in the study will not result in losing the benefits you are entitled to.

If you agree to participate in the study we assure that all your information's will be kept confidential. We need to keep your name and address including your telephone number or your' nearest telephone number to get back to you for a possibility of getting surgical repair.

Annex:3

COMPOUND AND HOUSEHOLD LISTING FORM

EA. No. _ _ _

LGA.....

District.....

Settlement.....

Compound no.	Compound address	Household no. (1 st HH starts with no. 1 in each compound)	Name of head of household	Serial numbering of all households from 1 to N	Serial numbering of selected households from 1 to 19
1	2	3	4	5	6

Enumerator.....Supervisor.....

Annex: 4

Geographic Information Panel & House Hold questionnaire

- HH1. EA _____ HH2. House hold Number _____ HH3 LGA. _____ HH4. Settlement name _____
- HH5. PHC---1 Non PHC---2 HH6 District. _____
- HH7. Urban--1 Rural---2 HH8. Date Day____/Month____/Year_____
- HH9. Name of enumerator_____ HH10.Name of supervisor_____
- HH11. Results of the interview 1. Completed 2. Not completed 3. Refused 4. House not found 8.others
- HH12. Number of women eligible for fistula interview_____
- HH13. If number eligible is more than (0),-----a) number treated b) number untreated
- HH14. Number of women questionnaires completed_____
- HH15. Total number of people in the house hold _____
- HH16. Total number of women aged 15-49_____
- HH17, Wealth of household (Thick all appropriate answers below)1. corrugated roof 2.Own car/taxi 3. Own gas stove
4. Electricity 5.Radio 6. Animal drawn carts 7. Refrigerator 8. Tap water 9. Telephone/Mobile 10.Television
- HH18, Have you ever come across a woman who constantly leaks urine and /or feces all the time after giving birth in the
village/town? Yes 1,seen 2heard B. No
- HH19, Is there a woman in this house hold who has been /is pregnant and is below age 15.
A. Yes write number of women_____ B, No _____
- HH20, If the answer for question number 19 is yes what is the age of the girl?
1. 1st girl A, 12 b,13, c,14 2. 2nd girl A, 12 b,13, c,14 3. 3rd girl A, 12 b,13, c,14
- HH 21, Is there a woman with fistula who is below age 15 or above age 49 in the house hold?
1. Yes State the age & Name of the woman.

Complete the information below for each woman Aged 15-49 in this house hold

Serial number	Name	Age	Have you ever been married 1. yes 2. No	Did you have sexual debut 1. yes 2. No	Have you ever been pregnant? 1. Yes 2. No	Out come of the pregnancy 1. Live birth 2. Still birth 3. Abortion 1. Spontaneous 2. Induced 3. Both	Did you ever encounter difficult labor? 1. Yes 2. No	Where did you deliver still birth or had abortion 1. Home 2. Public HF 3. Private HF 4. Other	If pregnant do you have ANC 1. yes 2. No	If pregnant or puerperal tell me the signs of pregnancy complications during which you need to go to health institution*	Did you ever leak urine/faeces (Have Obstetric Fistula)									
											No Code 2	Yes Write line No. of women								
												T	UT							
HL 1	HL 2	HL3	HL 4	HL 5	HL 6	HL 7				HL8	HL9				H L10	HL11	HL12	HL13	HL 14	
						1	2	3			1	2	3	4						
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14																				

*1.Scanty vaginal bleeding 2. heavy vaginal bleeding 3. severe headache 4.Swelling fetal movement 5.Offensive vaginal discharge 6. Prolonged labor 7. fever 8.Absent 9.Difficulty of breathing for the neonate.

Annex: 5

**Questionnaire for the study of magnitude of fistula and integration of patients in the
community in The Gambia
FOR UNTREATED PATIENTS**

UN1. EA _____ UN2. District _____ UN3 LGA. _____
UN4. Settlement name _____ UN5. PHC---1 Non PHC---2
UN6. District _____ UN7. Serial Number _____

UN 8	Divisional Health Area	
UN 9	Date of interview	
UN 10	Date of review by the supervisor	
UN 12	Respondents ID Number*	
UN 13	Respondents Telephone number/Nearest telephone number	
UN 14	Respondent compound address	

***FOR THOSE WHO DON'T HAVE AN ID THE HOUSE NUMBER OR VOTERS CARD NUMBER WILL BE WRITTEN.**

SECTION I. SOCIO -DEMOGRAPHIC CHARACTERISTICS

Read: To start, I would like to ask you a few general questions.

1	What is your name ?	
2.	a. What is your age?*	_____ years
	b. Year of birth	Date/ Month/Year _____
3	What is your current marital status?	Single1 Married2 Living together.3 Widowed4 Divorced5 Separated 6 Other, specify8
4	What was your age at first marriage (for those who have ever been married)?	_____ years
5a	Type of marital union	Monogamous.....1 Polygamous.....2
5b	If the marital union is polygamous, which one of these positions describe you well	1 st wife 2 nd wife 3 rd wife 4 th wife Other specify_____8
6	What is your religion ?	Islam 1 Christian 2 Traditional/Animist 3 Other (Specify)_____ 8
7	Educational status	Illiterate 1 Primary 2 Secondary 3

		Post secondary 4 Other specify __8
8	. Occupational status	unemployed 1 Farmers 2 Service and market sales 3 Professional 4 Technician 5 Craft and related trade 6 Unskilled worker 7 Other (specify _____) 8
9	Ethnicity	Mandinka 1 Fula 2 Wollof 3 Jolla 4 Srrahule 5 Serere 6 Manjago 7 Other (specify _____) 8
10	Nationality	Gambian 1 Senegalese 2 Guinean 3 Nigerian 4 Malian 5 Other Specify 6
11	Residence	Urban 1 Rural 2
12	Health divisional	Western 1 Lower river division 2 North Bank west 3 North Bank East 4 Central river division 5 Upper River Division 6

- If age is not known give rough estimate or do it by calculation. Obstetric

	When did you have it ?	At what age? (How old	Where was the delivery conducted? *	Mode of delivery*	Outcome of pregnancy***
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II. OBSTETRIC HISTORY

Read: Now I want to ask you about the pregnancies you had.

Read: Please take some time and think of the pregnancies you had and answer the following questions about each pregnancy.

			a	b	c	d	e	f		
1 st pregnancy										
2 nd Pregnancy										
3 rd Pregnancy										
4 th Pregnancy										
5 th pregnancy										
6 th pregnancy										
7 th pregnancy										
8 th pregnancy										
9 th pregnancy										
10 th pregnancy										
11 th pregnancy										
12 th pregnancy										

13 th pregnancy										
15 th pregnancy										
16 th pregnancy										

- *A. Home 1. Grand mother, 2. Trained TBA 3. Untrained TBA 8. Others specify
 B. Hospital 1. Doctor. 2. Midwife, 3. RN, 4. EN, 5 CHN 6. NA 7. volunteers
 C. Major Health station 1. Doctor. 2. Midwife, 3. RN, 4. EN, 5. CHN 6. NA 7. volunteers
 D. Minor health center 1. Doctor. 2. Midwife, 3. RN, 4. EN, 5. CHN 6. NA 7. volunteers
 E. Dispensary 1. Doctor. 2. Midwife, 3 RN, 4. EN, 5. CHN 5. NA 6. volunteers
 F. Other specify _____

- ** 1. Vaginal delivery (Normal) 2. Vaginal delivery (Instrumental) (Forceps, Vacuum..)
 3. Vaginal delivery (Breech) 4. Vaginal delivery (Destructive)
 5. Abdominal delivery (Cesarean section 6. Symphysiotomy
 8. Other (Specify) _____

*** **Outcome of pregnancy** 1. Live birth 2. Still birth 3. Abortion 4. Ectopic Pregnancy

III. FISTULA HISTORY

Read: Now I am going to ask you a few questions about the problem/incontinence

1. During which of the deliveries did the problem/fistula develop?	_____ delivery
2. How old were you when the fistula developed? (Check with the response in section II above)	_____ years
3. How long ago was that?	_____ years _____ months
4. How long were you in labor (days) during that delivery?	_____ days
5. Where was the delivery conducted? (Check with the response in II above)	1. Home 2. Hospital 3. Major Health center

	4. Minor Health center 5. Dispensary 8. Other specify _____
6. Did you go to a health institution when labor was difficult?	Yes 1 No 2
7. If yes to Q 6, how long after labor was established did you go?	_____ hours _____ days
8. If no to Q.6, why didn't you go to health institution?	
9. If yes to Q 6, where did you go?	
10. How far is the nearest health institution?	On foot _____ (hours_____ minutes_____) By Horse cart _____ hours_____ minutes_____) By Donkey Cart _____(hours_____ minutes_____) By Taxi _____(hours_____ minutes_____) Other specify _____(hours_____ minutes_____)
11. If you went to a health institution, were you referred to another health institution?	Yes 1 No 2
12. If yes to Q.11, where were you referred?	
13. If yes to Q.11, did you go to the referral health institution (hospital)?	Yes 1 No 2

14. If no to Q.11, why didn't you go to the referral institution?	
15. Have you ever visited a health institution for urine/fecal incontinence?	Yes 1 No 2
16. If yes to Q 15, which health institution did you visit first?	
17.If yes to Q.15, were you referred to another health institution	Yes 1 No 2
18. If yes to Q 17 did you go to the referred institution?	Yes 1 No 2
19. If no to Q.17, why didn't you go to the referral institution?	
20. If yes to Q 18 were you referred to another health institution (second referral) from the institution you were referred to?	Yes 1 No 2
21. If yes to Q 20 did you go to the referred second time institution?	Yes 1 No 2
22. If no to Q.20, why didn't you go to the referral institution?	
23.What type of incontinence do you have now?	I can control feces but not urine 1 I can control feces but not urine and flatus 2 I can control urine but not feces 3 I can control feces and urine but not flatus 4 I can't control both feces and urine 5
24. How often do you leak urine?	I am leaking, all the time 1 I am leaking while coughing and sneezing 2 I am leaking the moment I got out of bed 3

	I am not leaking urine 4 Other, specify _____ 88
25. How often do you leak feces?	I am leaking, all the time 1 I am leaking while coughing and sneezing 2 I am leaking the moment I got out of bed 3 I am not leaking feces 4 I am leaking feces when I have diarrhea 5 Other, specify _____ 88
26. How often do you leak both urine and feces?	I am leaking, all the time 1 I am leaking while coughing and sneezing 2 I am leaking the moment I got out of bed 3 I am not leaking both /leaking only one of them/ 4 Other, specify _____ 8
27. Do you have other Reproductive Tract health problems?	Yes 1 No 2 I don't know 9
28. What other health problems do you have?	
29. How did your marital status change after developing the problem?	Remained the same 1 Divorced/separated 2 My husband died 3 Others (specify) 8
30. Are you living with other family members in this same house?	Yes 1 No, I am in other shed or room alone 2 Other (specify) 8
31. Do you eat food together with other/share same plate/ family members?	Yes 1 No 2

32. Do you participate in familial ceremonies /wedding festivals, holiday festivals etc/?	Yes, always	1
	Yes, some times	2
	No	3
33. Are you a member of any community organization (women Kafo/ yaye compine)	Yes	1
	No	2
34. If yes to Q 33, which associations/ organizations/are you a member of?		
35. Have you ever heard about a hospital where fistula could be treated?	Yes	1
	No	2
36. If yes to Q. 36, what was the source of information?	Friend/relative	1
	A patient with the same problem	2
	Health institution/health worker/	3
	Mass media	4
	Others (specify)	8
37. Have you ever had low mood/felt depressed/ ?	Yes	1
	No	2
38. If yes, how frequently do you feel depressed/ you have low mood/?	Always	1
	Often	2
	Sometimes	3
	Rarely	4
39. Have you ever had any ideation of committing suicide?	Yes	1
	No	2
40. What do you think is the cause of this problem/fistula/incontinence?		
41. Do you think this is a curse/ evil spirit /or a sin?	Yes	1
	No	2
	I don't know	9

42. Do you think this problem is treatable?	Yes	1
	No	2
	I don't know	9

“ THANK YOU VERY MUCH”

Annex: 6

**Questionnaire for the study of magnitude of fistula and integration of patients
in the community in The Gambia
FOR TREATED PATIENTS**

T1. EA _____ T2. District _____ T3 LGA. _____

T4. Settlement name _____ T5. PHC---1 Non PHC---2

T6. House hold Number _____ T7. Serial Number _____

T 8	Divisional Health Area	
T 9	Date of interview	
T 10	Date of review by the supervisor	
T 12	Respondents ID Number*	
T 13	Respondents Telephone number/Nearest telephone number	
T 14	Respondent compound address	

***FOR THOSE WHO DON'T HAVE AN ID THE HOUSE NUMBER OR VOTERS CARD NUMBER
WILL BE WRITTEN.**

SECTION I. SOCIO -DEMOGRAPHIC CHARACTERISTICS

Read: To start, I would like to ask you a few general questions.

1	What is your name?	
2.	What is your age? b. Year of birth	_____ years
3	What is your current marital status?	Single1 Married2 Living together.3 Widowed4 Divorced5 Separated 6 Other, specify8
4	What was your age at first marriage (For those who ever married)	_____ years
5a	Type of marital union	Monogamous.....1 Polygamous.....2
5b	If the marital union is polygamous, which one of these positions describe you well	1 st wife 2 nd wife 3 rd wife 4 th wife Other specify _____
6	What is your religion ?	Islam 1 Christian 2 Traditional/Animist 3 Other (Specify)_____ 8
7	Educational status	Illiterate 1 Primary 2 Secondary 3 Post secondary 4 Other specify __8

8	. Occupational status	unemployed 1 Farmers 2 Service and market sales 3 Professional 4 Technician 5 Craft and related trade 6 Unskilled worker 7 Other (specify _____) 8
9	Residence	Urban 1 Rural 2
10	Ethnicity	Mandinka 1 Fulani 2 Wolof 3 Sarahule 4 Jolla 5 Manjago 6 Other (specify _____) 88
11	Nationality	Gambian 1 Nigerian 4 Senegalese 2 Malian 5 Guinean 3 Other Specify 6

II. OBSTETRIC HISTORY

Read: Now I want to ask you about the pregnancies you had.

Read: Please take some time and think of the pregnancies you had and answer the following questions about each pregnancy.

	When did you have it ? (Year)	At what age? (How old were you?)	Where was the delivery conducted? *						Mode of delivery* *	Outcome of pregnancy****
			a	b	c	d	e	f		
1 st pregnancy										
2 nd Pregnancy										
3 rd Pregnancy										
4 th Pregnancy										
5 th pregnancy										
6 th pregnancy										
7 th pregnancy										
8 th pregnancy										
9 th pregnancy										
10 th pregnancy										
11 th pregnancy										
12 th pregnancy										
13 th pregnancy										
15 th pregnancy										
16 th pregnancy										

*A. Home 1. Grand mother, 2. Trained TBA 3. Untrained TBA 8. Others specify

B. Hospital 1. Doctor. 2. Midwife, 3. RN, 4. EN, 5 CHN 6. NA 7. volunteers

C. Major Health station 1. Doctor. 2. Midwife, 3. RN, 4. EN, 5. CHN 6. NA 7. volunteers

D. Minor health center 1. Doctor. 2. Midwife, 3. RN, 4. EN, 5. CHN 6. NA 7. volunteers

E. Dispensary 1. Doctor. 2. Midwife, 3 RN, 4. EN, 5. CHN 5. NA 6. volunteers

F. Other specify _____

** 1. Vaginal delivery (Normal) 2. Vaginal delivery (Instrumental) (Forceps, Vacuum..) 3. Vaginal delivery (Breech) 4. Vaginal delivery (Destructive)
5. Abdominal delivery (Cesarean section 6. Symphysiotomy
8. Other (Specify) _____

*** **Outcome of pregnancy** 1. Live birth 2. Still birth 3. Abortion 4. Ectopic Pregnancy

III. FISTULA HISTORY

Read: Now I am going to ask you a few questions about the problem/incontinence

1. During which of the deliveries did the problem/fistula develop?	_____ delivery
2. How old were you when the fistula developed? (<i>Check with the response above in section II</i>)	_____ years
3. How long ago was that?	_____ years _____ months
4. How long were you in labor (days) during that delivery?	_____ days
5. Where was the delivery conducted? (<i>Check with the response above in section II</i>)	1. Home 2. Hospital 3. Major health center 4. Minor health center 5. Dispensary 8. Other specify _____

6. Did you go to a health institution when labor was difficult?	Yes 1 No 2
7. If yes to Q 6, how long after labor was established did you go?	_____ hours _____ days
8. If no to Q.6, why didn't you go to health institution?	
9. If yes to Q.6, where did you go?	
10. How far is the nearest health institution?	On foot _____ (hours_____minutes_____) By Horse cart _____ hours_____minutes_____) By Donkey Cart _____(hours_____minutes_____) By Taxi _____(hours_____minutes_____) Other specify _____(hours_____minutes_____)
11. If you went to a health institution were you referred to another health institution?	Yes 1 No 2
12. If yes to Q.11 where were you referred?	
13. If yes to Q.11, did you go to the referral health institution (hospital)?	Yes 1 No 2
14. If no to Q.11, why didn't you go to the referral institution?	

15. How long have you suffered before treatment for incontinence (months)?	_____ Week _____ months _____ Years
16 Which health institution did you visit first ?	
17. Were you referred to another health institution?	Yes 1 No 2
18. If yes to Q 17 did you go to the referred institution?	Yes 1 No 2
19. If no to Q.17, why didn't you go to the referral institution?	
20. If yes to Q 18 were you referred to another health institution (second referral) from the institution you were referred to?	Yes 1 No 2
21. If yes to Q 20 did you go to the second referred institution?	Yes 1 No 2
22. If no to Q.20, why didn't you go to the second referral institution?	
23. Where was the fistula repaired/were you operated for incontinence/ first?	
24. What other treatment did you receive apart from surgery?	
25. How many times did you have surgery for your problem?	
26. When was the last time you have been in the hospital for treatment?	(month/ /year/ /)
27. Where did you have your treatment last?	
28. Do you have any incontinence (urine and/or	Yes 1

feces and/or flatus) now?	No 2
29. If yes to Q 28, what type of incontinence do you have now?	I can control feces but not urine 1 I can control feces but not urine and flatus 2 I can control urine but not feces 3 I can control feces and urine but not flatus 4 I can't control both feces and urine 5
30. If yes to Q 28, how often do you leak urine?	I am leaking, all the time 1 I am leaking while coughing and sneezing 2 I am leaking the moment I got out of bed 3 I am not leaking urine 4 Other, specify _____8
31. If yes to Q 28, how often do you leak feces?	I am leaking, all the time 1 I am leaking while coughing and sneezing 2 I am leaking the moment I got out of bed 3 I am not leaking feces 4 I am leaking feces when I have diarrhea 5 Other, specify _____8
32. If yes to Q 28, how often do you leak both urine and feces?	I am leaking, all the time 1 I am leaking while coughing and sneezing 2 I am leaking the moment I got out of bed 3 I am not leaking both /leaking only one of them/ 4 Other, specify _____8
33. How long did it take you to control your urine/feces after surgery	Immediately after surgery 1 Three months after my surgery 2 Six months after my surgery 3 There is some change but still I have some problem 4 There is no change after surgery 5

34. Did you receive training in pelvic floor exercise?	Yes 1 No 2 I don't know 9
35. If yes to Q.34 for how long did you have the pelvic floor exercise?	
36. If yes to Q 34, did the exercise help?	Yes 1 No 2 I don't know 9
37. Did you have bladder retraining?	Yes 1 No 2 I don't know 9
38. If yes to Q.37 for how long did you have the bladder retraining exercise?	
39. Do you have any problem with sexual intercourse?	Yes 1 No 2 I don't have any sexual intercourse 9
40. If yes to Q 39, what type of problem do you have?	I am unable to have sexual intercourse 1 Sexual intercourse is very painful 2 Others specify 8
41. Are you on follow up?	Yes 1 No 2
42 If yes, to Q.41, what is the follow up for?	
43. Do you have any (other) health problem?	Yes 1 No 2 I don't know 9

44 If yes to Q 43 what health problem(s) do you have?	
45. Did you have another child after treatment?	Yes 1 No 2
46. If no, why didn't you have another child?	I cant have a child 1 (Specify) _____ I don't have sexual intercourse 2 I use contraceptive methods 3 Others (specify) 8
47. Do you have any problem with menstruation?	Yes 1 No 2 I don't know 9
48. If yes to Q 47, what type of problem do you have?	I have never seen my period after surgery 1 My cycle is irregular since my surgery 2 My cycle is irregular, since I started using the contraceptive 3 Other (specify) 8
49. Did you have problems in walking?	Yes, but not now 1 Yes I had and still have some problem 2 No I don't 3 Other (specify) 8
50. Did you have physiotherapy for your problem?	Yes 1 No 2 I don't know 9
51. If you had physiotherapy, did it help?	Yes and I have no problem now 1 Yes, but still have some problem 2

	It didn't help at all	3
	Other (specify)	8
52. How did your marital status change after developing the problem and before surgery?	Remained the same	1
	Divorced/separated	2
	My husband died	3
	Others (specify)	8
53. How did your marital status change after treatment	Remained the same	1
	Got married	2
	Divorced/separated	3
	My husband died	4
	Remarried	5
	Others (specify)	8
54. Are you living with other family members in this same house?	Yes	1
	No, I am in other shed or room alone	2
	Other (specify)	8
55. Before treatment, were you living with other family members in this same house?	Yes	1
	No, I was in other shed or room alone	2
	Other (specify)	8
56. Do you eat food together/share same plate/ with other family members now?	Yes	1
	No	2
57. Did you eat food together/share same plate/ with other family members before treatment?	Yes	1
	No	2
58. Do you participate in familial ceremonies /wedding festivals, holiday festivals etc/?	Yes, always	
	Yes, some times	
	No	
59. Are you a member of any community organization (Kafo/yaye compine)	Yes	1
	No	2

60. If yes, which associations are you a member of?	
61. Have you ever had low mood/felt depressed/ before treatment?	Yes 1 No 2
62. If yes, how frequently do you feel depressed/ you have low mood/ before treatment?	Always 1 Often 2 Sometimes 3 Rarely 4
63. Have you ever had any ideation of committing suicide before treatment?	Yes 1 No 2
64. Have you ever had low mood/felt depressed/ after treatment?	Yes 1 No 2
65. If yes, how frequently do you feel depressed/ you have low mood/ after treatment?	Always 1 Often 2 Sometimes 3 Rarely 4
66. Have you ever had any ideation of committing suicide after treatment ?	Yes 1 No 2
67 What do you think is the cause of this problem/fistula/incontinence?	
68. Do you think this is a curse/ evil spirit /or a sin?	Yes 1 No 2 I don't know 9
69. Do you think this problem is treatable?	Yes 1 No 2 I don't know 9

“ THANK YOU VERY MUCH”

Annex: 7

Divisional Health Team Interview				
	Name	Title		
<i>Please list names and titles of all persons present:</i>				
{DHT1}	WHAT IS THE TOTAL POPULATION OF THIS Division? <i>Enter population; enter 0 if not known</i>			
Divisional facilities				
IN THIS DISTRICT, HOW MANY OF EACH OF THE FOLLOWING FACILITIES ARE OPERATIONAL?		<i>Enter number of facilities in division</i>		
		1, Public	2, Private	3, NGO
{DHT2A}	HOSPITALS			
{DHT2B}	MAJOR HEALTH CENTRES			
{DHT2C}	MINOR HEALTH CENTRES			
DHT2D}	DISPENSARIES			
DHT2E}	CLINICS			
DHT2F}	MATERNAL WAITING HOMES			
DHT2G}	RCH OUT REACH STATIONS			
{DHT2A}	HOSPITALS			
Staffing for entire district				
IN THIS DISTRICT, HOW MANY POSTS ARE THERE FOR:		<i>Enter number of posts occupied</i>		
		Required	Occupied	G NG
{DHT3A}	REGISTERED MIDWIVES AND NURSE/MIDWIVES (FULLY QUALIFIED)			
{DHT3B}	ENROLLED MIDWIVES AND NURSE/MIDWIVES (LIMITED QUALIFICATIONS)			
{DHT3C}	PHYSICIANS (GENERALIST)			

{DHT3D}	PHYSICIANS (OBSTETRICIAN/GYNAECOLOGIST)				
{DHT3E}	ANAESTHETISTS AND NURSE-ANAESTHETISTS				
{DHT3F}	PHARMACISTS				
{DHT3G}	DRUGISTS				
{DHT4}	CAN YOU PROVIDE US WITH A LIST OF ALL TRADITIONAL BIRTH ATTENDANTS (TBAS) IN THE FOLLOWING COMMUNITIES (LIST ALL COMMUNITIES IN THIS DISTRICT THAT THE TEAM WILL BE VISITING)? IF POSSIBLE, INCLUDE BOTH TRAINED AND UNTRAINED TBAS. <i>Tick box if list is available</i> <i>IMPORTANT! This list will be used for sampling for the TBA interviews. See detailed instructions in Surveyor's Manual. Do not ask district staff for suggestions for particular TBAs to visit.</i>	9 1 Yes 9 0 No			
Divisional training					
HAS ANY FORM OF IN-SERVICE TRAINING BEEN PROVIDED IN THE PAST 12 MONTHS FOR THE FOLLOWING CATEGORIES OF STAFF? IF YES, HOW MANY OF EACH OF THE FOLLOWING TYPES OF HEALTH WORKERS RECEIVED THIS TRAINING IN THE PAST 12 MONTHS? <i>Number of workers trained</i> <i>if no training was provided, enter 0</i>					
{DHT6A}	REGISTERED MIDWIVES AND NURSE/MIDWIVES (FULLY QUALIFIED)				
{DHT6B}	ENROLLED MIDWIVES AND NURSE/MIDWIVES (LIMITED QUALIFICATIONS)				
{DHT6C}	PHYSICIANS (GENERALIST)				
{DHT6D}	PHYSICIANS (OBSTETRICIAN/GYNAECOLOGIST)				
{DHT6E}	ANAESTHETISTS AND NURSE-ANAESTHETISTS				
{DHT6F}	PHARMACISTS/ DRUGISTS				
{DHT7A}	WHEN WAS ANY MIDWIFERY TRAINING LAST PROVIDED TO STAFF FROM HEALTH CENTRES. BY TRAINING, I MEAN IN-SERVICE OR CONTINUING EDUCATION OF MIDWIVES. <i>Circle one best response</i>	9 0 Never 9 2 In the past month 9 3 In the past 6 months 9 4 In the past year 9 5 In the past 5 years 9 6 5 years ago or longer 9 9 Do not know			

{DHT7B}	WHEN WAS ANY TRAINING IN FAMILY PLANNING SERVICES LAST PROVIDED TO STAFF FROM HEALTH CENTRES. BY TRAINING, I MEAN IN-SERVICE OR CONTINUING EDUCATION. <i>circle one best response</i>	9 0 Never 9 2 In the past month 9 3 In the past 6 months 9 4 In the past year 9 5 In the past 5 years 9 6 5 years ago or longer 9 9 Do not know
{DHT7C}	WHEN WAS ANY TRAINING IN COMMUNICATION AND COUNSELLING SKILLS LAST PROVIDED FOR STAFF FROM HEALTH CENTRES? <i>Circle one best response</i>	9 0 Never 9 2 In the past month 9 3 In the past 6 months 9 4 In the past year 9 5 In the past 5 years 9 6 5 years ago or longer 9 9 Do not know
<i>Supervision of staff</i>		
{DHT8}	HOW OFTEN DO SUPERVISORS AIM TO MEET THE MIDWIVES THAT THEY SUPERVISE? <i>Circle one best response</i>	9 0 Never/do not meet/no time 9 1 Every week 9 2 Every month 9 3 Every 3 Months 9 4 Every 6 months 9 5 Every year 9 6 Every 5 years 9 7 Longer than every 5 years 9 9 Do not know
<i>Coordination of services</i>		
{DHT5}	IS ANTENATAL CARE PROVISION INTEGRATED WITH OTHER HEALTH SERVICE (I.E. IS ANTENATAL CARE PROVIDED DURING ALL NORMAL OPENING HOURS AT ALL FACILITIES)? <i>Circle box</i> <i>IMPORTANT! If antenatal care provision is not integrated, ask district staff for the schedules for facilities that you plan to visit, and adjust your survey schedule in order to visit facilities on days when antenatal care is provided. See detailed instructions in Surveyor's Manual.</i>	9 1 Yes 9 0 No

Emergency transport for referral		
{DHT9A}	WHAT PERCENTAGE OF HEALTH CENTRES IN THIS DIVISION CAN COMMUNICATE EASILY WITH THE REFERRAL FACILITY TO ARRANGE FOR EMERGENCY OBSTETRIC TRANSPORT? <i>Enter percentage</i> <i>If no health centre has communication capacity, enter 0</i>	%
{DHT9B}	WHAT PERCENTAGE OF REFERRAL FACILITIES HAVE TRANSPORT AVAILABLE ON-SITE TO TRANSFER AN EMERGENCY OBSTETRIC REFERRAL FROM A HEALTH CENTRE? <i>Enter percentage</i> <i>If no health centre has transport capacity, enter 0</i>	% 9 1 FERRY 9 2 AMBULANCE 9 3 Fuel
Logistics		
{DHT10A}	AT THE DISTRICT LEVEL, DO YOU EVER RUN OUT OF DRUGS AND SUPPLIES BEFORE YOUR SUPPLIES ARRIVE? <i>Circle one box</i>	9 2 Often 9 1 Sometimes 9 0 Never
{DHT10B}	HOW DO STAFF AT THE DIVISIONAL HEALTH LEVEL DECIDE HOW MUCH OF EACH DRUG TO REQUEST? <i>Listen carefully.</i> <i>Do not read out list.</i> <i>Circle one best response</i>	9 1 Order based on consumption 9 2 Order based on estimated need (standard treatment and morbidity method) 9 3 Order the same as last time 9 4 Order two times what we need 9 5 Never order drugs, shipments come/kits arrive 9 6 Other - specify:
{DHT10C}	HOW DO STAFF AT THE HEALTH DIVISIONAL LEVEL DECIDE WHEN TO RE-ORDER DRUGS? <i>Listen carefully.</i> <i>Do not read out list.</i> <i>Circle one best response</i>	9 1 Order same time each week / month / quarter 9 2 Order whenever stocks reach "re-order level" 9 3 Re-order when we run out 9 4 Never order drugs, shipments come/kits arrive 9 5 Other - specify:

{DHT10D}	HOW DO STAFF IN HEALTH CENTRES AND HEALTH POSTS DECIDE HOW MUCH OF EACH DRUG TO REQUEST? Listen carefully. Do not read out list. Circle one best response	9 1 Order based on consumption 9 2 Order based on estimated need (standard treatment and morbidity method) 9 3 Order the same as last time 9 4 Order two times what we need 9 5 Never order drugs, shipments come/kits arrive 9 6 Other - specify:
{DHT10E}	HOW DO STAFF IN HEALTH CENTRES AND HEALTH POSTS DECIDE WHEN TO RE-ORDER DRUGS? Listen carefully. Do not read out list. Circle one best response	9 1 Order same time each week / month / quarter 9 2 Order whenever stocks reach "re-order level" 9 3 Re-order when we run out 9 4 Never order drugs, shipments come/kits arrive 9 5 Other - specify:
Health education and communication		
{DHT11A0} {DHT11A1} {DHT11A2} {DHT11A3} {DHT11A4} {DHT11A5}	WHAT TYPES OF CLIENT INFORMATION, EDUCATION AND COMMUNICATION (IEC) MATERIALS ARE AVAILABLE TODAY FOR MATERNAL HEALTH CARE? <i>Listen carefully.</i> <i>Do not read out list.</i> <i>Circle as many boxes as apply</i>	9 1 None 9 2 Posters 9 3 Counseling cards 9 4 Take-home leaflets 9 5 Materials to support community IEC 9 6 Other - specify:
{DHT11B}	DO COMMUNITY HEALTH WORKERS OR TBAS ROUTINELY PROVIDE INFORMATION AND EDUCATION ON SAFE MOTHERHOOD?	9 1 Yes 9 0 No

{DHT11C0} {DHT11C1} {DHT11C2} {DHT11C3} {DHT11C4} {DHT11C5} {DHT11C6} {DHT11C7} {DHT11C8}	WHAT TYPE OF COMMUNITY SAFE MOTHERHOOD EDUCATION OR OUTREACH ACTIVITIES HAVE THERE BEEN IN THE PAST YEAR? <i>Listen carefully. Do not read out list. Circle as many boxes as apply</i>	9 1 None 9 2 Plays 9 3 Role plays 9 4 Folk art 9 5 Market activities 9 6 Literacy activities with health content 9 7 Community maternal health assessment 9 8 Radio or television 9 9 other - specify:	
{DHT11D}	ARE ANY SAFE MOTHERHOOD INFORMATION, EDUCATION AND COMMUNICATION ACTIVITIES TARGETED AT MEN?	9 1 Yes 9 0 No	
Monitoring and evaluation			
{DHT12A}	IS INFORMATION ON MATERNAL DEATHS ROUTINELY REPORTED BY THE HEALTH FACILITIES TO THE DIVISIONAL LEVEL? <i>Circle box</i>	9 2 Always 9 1 Sometimes 9 0 Never	
{DHT12B}	IS INFORMATION ON MATERNAL DEATHS ROUTINELY REPORTED BY DIVISION TO THE NATIONAL LEVEL? <i>Circle box</i>	9 2 Always 9 1 Sometimes 9 0 Never	
{DHT12C}	ARE STANDARD ANTENATAL RECORDS USED IN ALL FACILITIES IN THE DIVISION? <i>Circle box</i>	9 2 Always 9 1 Sometimes 9 0 Never	
{DHT12D}	ARE STANDARD DELIVERY RECORDS USED IN ALL FACILITIES IN THE DIVISION? <i>Circle box</i>	9 2 Always 9 1 Sometimes 9 0 Never	
{DHT12E}	ARE CONFIDENTIAL ENQUIRIES OR AUDITS ROUTINELY DONE FOLLOWING MATERNAL DEATHS? <i>Circle box</i>	9 2 Always 9 1 Sometimes 9 0 Never	

IN YOUR OPINION, WHAT ARE THE TWO GREATEST PROBLEMS FACING THE HEALTH SYSTEM IN THIS DIVISION RIGHT NOW? WHAT ARE THE SOLUTIONS TO THESE PROBLEMS?

	PROBLEM	SOLUTION
{DHT13A1} {DHT13A2}		
{DHT13B1} {DHT13B2}		

THANK YOU FOR TAKING THE TIME TO SPEAK TO US TODAY.
DO YOU HAVE ANY QUESTIONS THAT YOU WOULD LIKE TO ASK US?

Annex:8

Facility Management

Facility name:		Facility code:		District code:	
Type of facility (enter 1=Hospital; 2=Major Health Centre; 3=Minor Health centre 4=Dispensary)					
Facility administration (enter 1=Government; 2=NGO; 3=Private):					
Date today:		Team code:		Surveyor code:	

<i>After initially meeting with the officer in charge of the facility to ask questions on pages 1-3, explain that you would like to be shown the facilities to gather the remaining information. Complete one survey form for each facility.</i>			
{FAC1A}	WHAT IS THE ESTIMATED POPULATION SERVED BY THIS FACILITY? <i>Enter population; if not known enter 0</i>		
{FAC1B}	HOW MANY BEDS ARE THERE AT THIS FACILITY (INCLUDING MATERNITY) <i>Enter number</i>		
{FAC1C}	HOW MANY MATERNITY BEDS ARE THERE AT THIS FACILITY (BEDS FOR USE BEFORE, DURING AND AFTER DELIVERY) <i>Enter number</i>		
{FAC1D}	WHAT IS THE ANTENATAL CARE COVERAGE RATE FOR THIS FACILITY? <i>Enter percentage;</i> <i>if not known do not calculate, enter 0</i>	%	
{FAC1E}	WHAT IS THE DELIVERY COVERAGE RATE FOR THIS FACILITY? <i>Enter percentage;</i> <i>if not known do not calculate, enter 0</i>	%	
AT THIS FACILITY HOW MANY FULL-TIME AND PART-TIME OCCUPIED POSTS ARE THERE FOR:		Enter number of posts occupied	
		Full-time	Part-time
{FAC2A}	REGISTERED MIDWIVES AND NURSE/MIDWIVES (FULLY QUALIFIED)		
{FAC2B}	ENROLLED MIDWIVES AND NURSE/MIDWIVES (LIMITED QUALIFICATIONS)		
{FAC2C}	PHYSICIANS (GENERALIST)		
{FAC2D}	PHYSICIANS (OBSTETRICIAN/GYNAECOLOGIST)		
{FAC2E}	PHYSICIANS Surgeon/Urologist		
{FAC2F}	ANAESTHETISTS AND NURSE-ANAESTHETISTS		

{FAC2G}	PHARMACISTS/DRUGIST		
WHICH OF THE FOLLOWING SERVICES HAVE BEEN PROVIDED WITHIN THE PAST SIX MONTHS AT THIS FACILITY? <i>Ask about each service separately</i>		<i>Tick one box for each item _</i>	
{FAC3A}	ANTENATAL CARE	☐ 1 Yes	☐ 0 No
{FAC3B}	TETANUS TOXOID IMMUNIZATION	☐ 1 Yes	☐ 0 No
{FAC3C}	MANAGEMENT OF SEXUALLY TRANSMITTED DISEASES	☐ 1 Yes	☐ 0 No
{FAC3D}	NORMAL DELIVERY CARE	☐ 1 Yes	☐ 0 No
{FAC3E}	VACUUM EXTRACTION DELIVERY	☐ 1 Yes	☐ 0 No
{FAC3F}	"ROOMING IN" FOR POSTPARTUM CARE OF MOTHER AND BABY	☐ 1 Yes	☐ 0 No
{FAC3G}	POSTPARTUM CHECK UP	☐ 1 Yes	☐ 0 No
{FAC3H}	FAMILY PLANNING SERVICES	☐ 1 Yes	☐ 0 No
{FAC3J}	VOLUNTARY TERMINATION OF PREGNANCY	☐ 1 Yes	☐ 0 No
{FAC3K}	BLOOD TRANSFUSION OR REPLACEMENT	☐ 1 Yes	☐ 0 No
{FAC3L}	CAESAREAN SECTION	☐ 1 Yes	☐ 0 No
{FAC3M}	Repair of Obstetric Fistula	☐ 1 Yes	☐ 0 No
FAC3N	Gynaecological Surgeries	☐ 1 Yes	☐ 0 No
WHICH OF THE FOLLOWING COMPLICATIONS HAVE OCCURRED AND HAVE BEEN MANAGED AT THIS FACILITY WITHIN THE PAST SIX MONTHS? <i>Ask about each service separately</i>		<i>Tick one box for each item _</i>	
{FAC4A}	SEVERE ANAEMIA	☐ 1 Yes	☐ 0 No
{FAC4B}	ANTEPARTUM HAEMORRHAGE	☐ 1 Yes	☐ 0 No
{FAC4C}	PRE-ECLAMPSIA	☐ 1 Yes	☐ 0 No
{FAC4D}	ECLAMPSIA	☐ 1 Yes	☐ 0 No
{FAC4E}	POSTPARTUM HAEMORRHAGE	☐ 1 Yes	☐ 0 No
{FAC4F}	ABORTION COMPLICATIONS	☐ 1 Yes	☐ 0 No
{FAC4G}	RETAINED PLACENTA	☐ 1 Yes	☐ 0 No

{FAC4H}	BREECH PRESENTATION/DELIVERY	☐ 1 Yes	☐ 0 No
{FAC4J}	SEPSIS	☐ 1 Yes	☐ 0 No
{FAC4K}	ECTOPIC PREGNANCY	☐ 1 Yes	☐ 0 No
{FAC4L}	OBSTRUCTED LABOUR	☐ 1 Yes	☐ 0 No
{FAC4L}	RUPTURED UTERUS	☐ 1 Yes	☐ 0 No
	ARE THE FOLLOWING SERVICES PROVIDED EVERY DAY THAT THIS FACILITY IS OPEN? <i>Ask about each service separately</i>	<i>Tick one box for each item _</i>	
{FAC5A}	ANTENATAL CARE	☐ 1 Yes	☐ 0 No
{FAC5B}	FAMILY PLANNING SERVICES	☐ 1 Yes	☐ 0 No
{FAC5C}	CHILD HEALTH SERVICES	☐ 1 Yes	☐ 0 No
	WHICH OF THE FOLLOWING LABORATORY SERVICES HAVE BEEN PROVIDED AT THIS FACILITY WITHIN THE PAST WEEK? <i>Ask about each service separately</i>	<i>Tick one box for each item _</i>	
{FAC6A}	SYPHILIS TESTING	☐ 1 Yes	☐ 0 No
{FAC6B}	HAEMOGLOBIN MEASUREMENT	☐ 1 Yes	☐ 0 No
{FAC6C}	URINE TESTING - PROTEIN MEASUREMENT	☐ 1 Yes	☐ 0 No
	<i>Emergency services and referral</i>		
{FAC7A}	ARE MATERNITY SERVICES AVAILABLE AT NIGHT AND AT WEEKENDS?	☐ 1 Yes	☐ 0 No
{FAC7B}	ARE ON-CALL SERVICES FOR CARE OF COMPLICATED DELIVERIES AVAILABLE AT NIGHT AND AT WEEKENDS?	☐ 1 Yes	☐ 0 No
{FAC7C}	ARE ON-CALL SERVICES FOR CAESAREAN SECTION AVAILABLE AT NIGHT AND AT WEEKENDS?	☐ 1 Yes	☐ 0 No
{FAC7D}	ONCE YOU DECIDE TO REFER AN OBSTETRIC EMERGENCY CASE, ABOUT HOW LONG DOES IT TAKE FOR HER TO ARRIVE AT THE REFERRAL FACILITY AND RECEIVE CARE? <i>Enter number of hours</i> <i>Enter 0 for referral centre/hospital</i>		
{FAC7E}	HOW FAR IS THE NEAREST REFERRAL FACILITY, IN		

	KILOMETRES? <i>Enter number of kilometres, one way</i> <i>Enter 0 for referral centre/hospital</i>				
{FAC7F}	WHO, APART FROM THE DRIVER, USUALLY ACCOMPANIES AN EMERGENCY REFERRAL PATIENT TO THE HOSPITAL? <i>Tick one box_</i>	☐ 0 Patient is not accompanied (driver only) ☐ 1 Nurse/Midwife ☐ 2 Other health personnel ☐ 3 Family member ☐ 4 Other - specify			
	Infrastructure and equipment				
	WHICH OF THE FOLLOWING ITEMS ARE AVAILABLE AND IN SATISFACTORY CONDITION? <i>Ask about each item separately. Code as unsatisfactory items which in your judgement are not functional, have missing parts, are unhygienic, or otherwise sub-standard. Be sure to look at each item.</i>	<i>Enter correct number below</i> 0 = Not available 1 = Available but not satisfactory 2 = Available and satisfactory 9 = Not applicable for this facility			
		0	1	2	9
{FAC8A}	EXAMINATION ROOM OR AREA PROVIDING CLIENT PRIVACY (ROOM FOR SCREENING, COUNSELLING AND EXAMINATION)				
{FAC8B}	TABLE AND STOOL FOR GYNAECOLOGICAL EXAMINATIONS				
{FAC8C}	STORAGE AREA OR CUPBOARD FOR DRUGS AND OTHER SUPPLIES				
{FAC8D}	TOILET FACILITIES OR LATRINE				
{FAC8E}	DELIVERY OR LABOUR ROOM WITH BED				
{FAC8F}	DELIVERY OR LABOUR ROOM WITH LIGHTING				
FAC8G}{	REFRIGERATOR				
FAC8H){	WATER SUPPLY				
FAC8J}	TELEPHONE OR RADIO TRANSMITTER				
{ FAC8K}	AMBULANCE OR VEHICLE TO REFER AN OBSTETRIC EMERGENCY				
FAC8L}	FUEL FOR AMBULANCE OR GENERATOR				

	WHICH OF THE FOLLOWING ITEMS ARE AVAILABLE AND IN SATISFACTORY CONDITION? <i>Ask about each item separately. Code as unsatisfactory items which in your judgement are not functional, have missing parts, are unhygienic, or otherwise sub-standard. Be sure to look at each item.</i>	<i>Enter correct number below</i> 0 = Not available 1 = Available but not satisfactory 2 = Available and satisfactory 9 = Not applicable for this facility			
		0	1	2	9
	Registers				
{FAC9A}	CLINICAL MANAGEMENT GUIDELINES/FLOW CHARTS FOR MATERNAL HEALTH CARE				
{FAC9B}	DELIVERY REGISTER OR LOG BOOK				
{FAC9C}	ANTENATAL CARE REGISTER OR LOG BOOK				
{FAC9D}	FAMILY PLANNING REGISTER OR LOG BOOK				
	Basic equipment				
{FAC10A}	BLOOD PRESSURE APPARATUS (SPHYGMOMANOMETER)				
{FAC10B}	STETHOSCOPE				
{FAC10C}	INFANT WEIGHING SCALE				
{FAC10D}	FETAL STETHOSCOPE				
{FAC10E}	STERILIZER				
{FAC10F}	CLINICAL ORAL THERMOMETER				
{FAC10G}	MANUAL VACUUM ASPIRATOR (MVA)				
{FAC10H}	PROTECTIVE CLOTHING (SHOES, APRONS)				
{FAC10J}	SPECULUM (VARIOUS SIZES)				
{FAC10K}	VACUUM EXTRACTOR				
{FAC10L}	OBSTETRIC FORCEPS				
	Absolute minimum equipment for delivery				
{FAC11A}	SCISSORS				
{FAC11B}					

	SUTURE NEEDLES AND SUTURE MATERIAL				
{FAC11C}	NEEDLE HOLDER, LONG				
	Absolute minimum for care of neonate				
{FAC12A}	CLOTH OR TOWEL TO DRY BABY				
{FAC12B}	BLANKET TO WRAP BABY				
{FAC12C}	BAG AND MASK FOR NEONATAL RESUSCITATION				
	Educational materials...				
{FAC13A}	... ON WARNING SIGNS OF COMPLICATIONS IN PREGNANCY				
{FAC13B}	... ON POSTPARTUM OR NEWBORN CARE OR BREAST-FEEDING				
{FAC13C}	... ON FAMILY PLANNING				
{FAC13D}	... ON SEXUALLY TRANSMITTED DISEASES / HIV/AIDS				
{FAC13E}	...ON ANTENATAL NUTRITION OR ANAEMIA				
{FAC14A}	IS ALL EQUIPMENT THAT YOU REQUIRE FOR FAMILY PLANNING/CONTRACEPTION AVAILABLE? <i>If equipment is not available or unsatisfactory, please specify below:</i>	☐ 1 Yes	☐ 0 No		Not applicable
{FAC14B}	IS ALL EQUIPMENT THAT YOU REQUIRE FOR CAESAREAN SECTION AVAILABLE? <i>If equipment is not available or unsatisfactory, please specify below:</i>	☐ 1 Yes	☐ 0 No		Not applicable
{FAC14C}	IS ALL EQUIPMENT THAT YOU REQUIRE FOR Fistula Repair AVAILABLE?	☐ 1 Yes	☐ 0 No		Not applicable
	Essential drugs and consumable supplies				
		Enter correct number below			
	<i>For essential drugs and consumable supplies, it is sufficient to look for and see that a particular item is available, regardless of condition or expiration date.</i>	0	1	9	
{FAC15A}	GLOVES				
{FAC15B}	DISPOSABLE SYRINGES AND NEEDLES				
{FAC15C}	IV KIT				
{FAC15D}	BLANK "LABOURGRAPHS" OR "PARTOGRAPHS"				

{FAC15E}	BLANK ANTENATAL CLIENT CARDS OR MATERNAL RECORDS (AS APPROPRIATE)			
{FAC15F}	CORD TIES			
{FAC15G}	BLOOD GIVING SETS			
{FAC15H}	SYPHILIS TEST KITS			
{FAC15J}	URINE DIP STICK / PROTEINURIA TEST SUPPLIES			
Anaesthetics: general				
{FAC16A}	NITROUS OXIDE OR OTHER GENERAL ANAESTHETIC AGENT			
{FAC16B}	DIAZEPAM (INJECTION)			
{FAC16C}	KETAMINE (INJECTION)			
Anaesthetics: local				
{FAC17A}	LIDOCAINE 2% OR OTHER			
Analgesics				
{FAC18A}	PETHIDINE			
Anti-infective drugs: antibacterial (mother)				
{FAC19A}	AMPICILLIN (CAPSULES OR INJECTION)			
{FAC19B}	BENZATHINE BENZYL PENICILLIN OR PROCAINE BENZYL PENICILLIN (INJECTIONS)			
{FAC19C}	CEFTRIAXONE (INJECTION) OR CIPROFLOXACIN (CAPSULE)			
{FAC19D}	GENTAMICIN (INJECTION)			
{FAC19E}	KANAMYCIN (INJECTION)			
{FAC19F}	SULFAMETHOXAZOLE+TRIMETHOPRIM (400 mg + 80 mg TABLETS)			
<i>For essential drugs and consumable supplies, it is sufficient to look for and see that a particular item is available, regardless of condition or expiration date.</i>		Enter correct number below 0 = Not seen at facility 1 = Seen at facility 9 = Not applicable for this facility		
		0	1	9
Anti-infective drugs: antibacterial (neonate)				
{FAC20A}	TETRACYCLINE (OINTMENT) OR SILVER NITRATE (EYE DROPS)			
Anti-infective drugs: anti malarials				
{FAC21A}	CHLOROQUINE (TABLETS)			
{FAC21B}	QUININE (INJECTION) OR CHLOROQUINE (INJECTION)			

Anti anaemia drugs				
{FAC22A}	FERROUS SALT+FOLIC ACID (IN COMBINED FORM OR SEPARATELY)			
Antihypertensive drugs				
{FAC23A}	METHYLDOPA OR PROPRANOLOL OR ANY OTHER ANTIHYPERTENSIVE			
{FAC23B}	HYDRALAZINE (INJECTION)			
Anticonvulsive drugs				
{FAC24A}	MAGNESIUM SULFATE (INJECTION) OR DIAZEPAM (INJECTION)			
Contraceptives				
{FAC25A}	ORAL CONTRACEPTIVES (ANY TYPE)			
{FAC25B}	INJECTABLE CONTRACEPTIVES (ANY TYPE)			
{FAC25C}	CONDOMS			
{FAC25D}	IUCDS/IUDS			
Immunologicals: Vaccines				
{FAC26A}	TETANUS TOXOID (INJECTION) STORED IN REFRIGERATOR			
{FAC26B}	BCG VACCINE (INJECTION)			
Oxytocics				
{FAC27A}	ERGOMETRINE (INJECTION) OR OXYTOCIN (INJECTION)			
Disinfectants and antiseptics				
{FAC28A}	CHLORHEXIDINE OR SURGICAL SPIRIT OR ANY OTHER			
Intravenous solutions				
{FAC29A}	SALINE SOLUTION OR SODIUM LACTATE COMPOUND SOLUTION OR ANY OTHER			
Delivery registry and presentation of maternal complications				
Ask to see the delivery records or log book. Tally information on the number of cases of various conditions from the delivery registry or other relevant records for the past 12 months. Space is provided under each condition for tallying the number of cases. After completion, enter numerical totals in the right hand column. Exclude cases in which the baby was born before arrival at the facility.				
{FAC30C}	ABNORMAL VAGINAL DELIVERIES (BREECH, FACE, SHOULDER DELIVERIES) <i>Use space below for tally</i>			Enter number below
{FAC30A}	TOTAL NUMBER OF BIRTHS (FOR PAST 12 MONTHS)			
{FAC30D}	CAESAREAN SECTIONS			
{FAC30B}	INSTRUMENTAL DELIVERIES (VACUUM EXTRACTION OR FORCEPS)			
{FAC30E}	MATERNAL DEATHS			

{FAC30F}	STILLBIRTHS (FRESH AND MACERATED)	
{FAC30G}	EARLY NEONATAL DEATHS	
Family planning register		
<i>Ask to see the family planning register or log book. Tally information on the number of users of various contraceptive methods for the past 3 months. For sterilization, it might be necessary to look at the operating theatre register. Space is provided under each family planning type for tallying the number of clients. After completion, enter numerical totals in the right-hand column.</i>		
<i>Use space below for tally</i>		<i>Enter number below</i>
{FAC31A}	ORAL CONTRACEPTIVES/PILL	
{FAC31B}	INJECTABLE (E.G. DEPOT-MEDROXYPROGESTERONE ACETATE/DEPO- PROVERA, NORETHISTERONE ENANTHATE/"NORESTAT")	
{FAC31C}	CONDOMS	
{FAC31D}	DIAPHRAGMS	
{FAC31E}	IUCD OR IUD	
{FAC31F}	SUBDERMAL IMPLANTS (E.G. NORPLANT®)	
{FAC31G}	SPERMICIDE (E.G. FOAM TABLET, FOAM, CREAM, JELLY)	
{FAC31H}	STERILIZATION: FEMALE	
{FAC31J}	STERILIZATION: MALE	

19 March 2007

Annex:9 Traditional Birth Attendant Interview

Data entry sequence number	Data entry initials		
Name of community		Name of TBA	Division code
Name of facility serving this area (1.Hospital, 2.Major Health Center, 3.Minor Health Center, 4.Dispensary)			
<i>Please see sampling instructions from surveyor manual</i> WE ARE CONDUCTING A SURVEY OF MATERNAL HEALTH SERVICES PROVIDED IN THIS AREA AND WOULD BE GREATFUL IF YOU WOULD TAKE FEW MINUTES TO ANSWER SOME QUESTIONS. ALL OF YOUR ANSWERS WILL BE KEPT IN STRICT CONFIDENCE			
TBA1	WHEN WAS THE LAST TIME YOU ATTENDED A BIRTH <i>Take one best response- If TBA never attended birth, thank TBA and close interview</i>		☐ 0 NEVER(☞CLOSEUESTIONNAIRE) ☐ 1 LAST WEEK ☐ 2 LAST MONTH ☐ 3 IN THE PAST 6 MONTHS ☐ 4 IN THE PAST YEAR ☐ 5 IN THE PAST 5 YEARS ☐ 6 5 YEARS OR LONGER ☐ 9 DO NOT KNOW
WHAT WARNING DANGER SIGNS IN PREGNANCY DELIVERY AND AFTER DELIVERY WOULD PROMPT YOU TO REFER A WOMAN TO A HEALTH FACILITY? <i>Listen carefully, probe for multiple responses, do not read out least, Tick as many boxes as apply</i>			
TBA2A	Previous bad obstetric history/abdominal scars/previous stillbirth		
TBA2B	Hypertension/headache/swelling/fits		
TBA2C	Anaemia /pallor/fatigue/breathlessness		
TBA2D	Cessation of fetal movement/baby does not move		
TBA2E	Abnormal lie/position of fetus		
TBA2F	Sepsis/foul smelling discharge/postpartum abdominal pain		
TBA2G	Light bleeding/spotting		
TBA2H	Haemorrhage/heavy bleeding		
TBA2I	Multiple pregnancy/large abdomen		
TBA2J	Obstructed/prolonged labour/sunset two times		
TBA2K	Other specify		
TBA3	WHAT DO YOU USE TO CUT THE CORD? <i>Tick one best response- Probe to determine if and how tools are cleaned and sterilized. Ask to see tools</i>		☐ Appropriate sterile instrument-razor blade (new and/or sterile) ☐ 2 Appropriate instrument, but not sterile-razor blade or scissors ☐ 3 traditional materials- reeds, bamboo, etc... ☐ 9 other - specify
TBA4	AFTER YOU CUT AND TIE THE CORD, WITH WHAT DO YOU TREAT IT? <i>Circle only one box-</i>		☐ 1 Nothing ☐ 2 Ash ☐ 3 Herbs/flowers ☐ 4 Dung ☐ 5 Dust from pestle ☐ 6 Alcohol ☐ 8 other - specify
DO YOU EVER USE HERBS? IF YES WHAT DO YOU USE THEM FOR? <i>Listen carefully, probe for multiple responses, do not read out least tick as many boxes as possible</i>			
TBA5A	Do not use herbs		
TBA5B	Fever		
TBA5C	Obstructed labour		

TBA5D	At birth	
TBA5E	Bleeding	
TBA5F	To stimulate contractions	
TBA5G	To change sex of baby	
TBA5H	To avoid abortion	
TBA5I	To expel placenta	
TBA5J	Other- specify	
TBA6	AFTER A NORMAL, NON-COMPLICATED BIRTH DO YOU REFER A PATIENT TO THE HEALTH FACILITY? IF YES, WHEN? <i>Circle one best response-</i>	☐ 0 Never or do not refer patients ☐ 1 immediately ☐ 2 During first week ☐ 3 During first six weeks ☐ 4 If she is ill or in case of problem ☐ 9 other specify
WHAT ADVICE OR INFORMATION DO YOU PROVIDE TO MOTHERS AFTER CHILD BIRTH? <i>Listen carefully, probe for multiple responses, do not read out least tick as many boxes as possible</i>		
TBA7A	Child spacing or family planning	
TBA7B	Early breast feeding	
TBA7C	Information on postpartum complications	
TBA7D	Cord care	
TBA7E	Nutrition for mother	
TBA7F	Immunization	
TBA7G	Personal hygiene	
TBA7H	Other- specify	
TBA8A	WHEN WAS THE LAST TIME YOU SAW A WOMAN WITH COMPLICATIONS RESULTING FROM AN INCOMPLETE OR UNSAFE ABORTION? <i>Circle one best response-</i>	☐ 0 NEVER(☞ CLOSEUESTIONNAIRE) ☐ 1 LAST WEEK ☐ 2 LAST MONTH ☐ 3 IN THE PAST 6 MONTHS ☐ 4 IN THE PAST YEAR ☐ 5 IN THE PAST 5 YEARS ☐ 6 5 YEARS OR LONGER ☐ 9 DO NOT KNOW
TBA8B	HAVE YOU EVER SAW A WOMAN WHO LEAKS URINE AND /OR FAECES RESULTING FROM CHILD BIRTH?	☐ 0 NEVER(☞ CLOSEUESTIONNAIRE) ☐ 1 LAST WEEK ☐ 2 LAST MONTH ☐ 3 IN THE PAST 6 MONTHS ☐ 4 IN THE PAST YEAR ☐ 5 IN THE PAST 5 YEARS ☐ 6 5 YEARS OR LONGER ☐ 9 DO NOT KNOW
TBA9	HAVE YOU EVER RECEIVED TRAINING FROM THE HEALTH FACILITY STAFF IN MATERNAL HEALTH CARE? IF YES, WHEN WAS THE LAST TIME THAT YOU RECIEVED THIS TRAINING?	☐ 0 NEVER(☞ CLOSEUESTIONNAIRE) ☐ 1 LAST WEEK ☐ 2 LAST MONTH ☐ 3 IN THE PAST 6 MONTHS ☐ 4 IN THE PAST YEAR ☐ 5 IN THE PAST 5 YEARS ☐ 6 5 YEARS OR LONGER ☐ 9 DO NOT KNOW
TBA10	DO YOU EVER MEET WITH A NURSE OR MIDWIFE TO DISCUSS YOUR WORK/ IF YES, WHEN WAS THE LAST TIME?	☐ 0 NEVER(☞ CLOSEUESTIONNAIRE) ☐ 1 LAST WEEK ☐ 2 LAST MONTH ☐ 3 IN THE PAST 6 MONTHS ☐ 4 IN THE PAST YEAR ☐ 5 IN THE PAST 5 YEARS ☐ 6 5 YEARS OR LONGER ☐ 9 DO NOT KNOW
THANK YOU FOR TAKING TIME TO SPEAK TO US TODAY. DO YOU HAVE ANY QUESTIONS THAT YOU WOULD LIKE TO ASK US?		

Annex: 10

Traditional healer questionnaire

Name of settlement_____

Name of healer_____

speciality_____

Guide questions for Traditional healer

1. Do women who are pregnant and immediate after giving birth come to you for help?
2. What are the health problems of women associated with child birth in your community?
3. Have you ever come across or heard of a woman who constantly have a smell of urine/ faeces (leaking urine/ faeces)?
4. If yes what happen to them?
5. What do you think is the cause of this ailment?
6. How did you help them?
7. In your opinion what can be done to help this women and to avoid the problem in the future?

8. Have you ever seen women with walking difficulty after child birth?
9. If the answer for question #8 is yes how did you help them?
10. In your opinion what are the traditional practices harmful to women and girls in your community?
11. Do you perform female circumcision (female genital cutting)? What is your opinion about the practice?
Cultural, religious, health,
12. What is your opinion about the age of marriage for girls?
Cultural, religious, health, social, economical
13. What is your opinion about polygamy?
Social, religious, health, culture
14. What is your opinion about women who die in child birth?

Annex:11
FGD Questionnaire

Name of settlement_____ Participants

Men/Women_____

Guide questions for Focus Group Discussions of in the community

- 1) What are the health problems of women associated with child birth in your community?
- 2) Have you ever come across or heard of a woman who constantly have a smell of urine/ faeces (leaking urine/ faeces)?
- 3) If yes what happen to them?
- 4) What do you think is the cause of this ailment?
- 5) In your opinion what can be done to help this women and to avoid the problem in the future?
- 6) Can you get maternal and child health care available 24 hours a day to this community? If yes what type of care is given? If no why not?
- 7) In your opinion what are the traditional practices harm full to women and girls in your community?
- 8) What is your opinion about the practice of female circumcision (female genital cutting)? Cultural, religious, health,
- 9) What is your opinion about the age of marriage for girls? Cultural, religious, health, social, economical
- 10) What is your opinion about polygamy?
Social, religious, health, culture

Annex:12

Roles and Responsibilities of field Staff

Roles and Responsibilities of field Coordinators

Field Coordinators will be recruited at the central level by the consultant and the research team. They will at least be diploma level graduates or in community health, statistics or related field.

They will meet the following criteria:

- Training in public health survey.
- Previous experience in conducting an epidemiological field survey
- Have to be recommended by their immediate supervisor for the job
- Ready for the whole period of assignment in the field

Duties and responsibilities of survey coordinators

1. Communicate effectively with health and other officials in their areas of assignment to start and run the field work
2. Recruit and train supervisors and enumerators
3. Supervise all fieldwork during the survey including field supervisors, and enumerators in the designated area.
4. Liaise with all local stakeholders along with field supervisors.
5. Participate in the development of the questionnaire, translation and pilot test.
6. Review questionnaires for accuracy and completeness.
7. Identify survey areas along with local supervisors and help the supervisors to select villages and households.
8. Oversee data collection and conduct regular debriefing sessions with the supervisors and enumerators during the course of the survey (every 4-7 days).
9. Check completed questionnaires submitted by field supervisors for completion and accuracy.

10. Conduct regular field visits with the enumerators and supervisors to monitor fieldwork.
11. Liaise with and provide regular progress updates to the consultant and research team.
12. Manage financial and logistics aspects of survey at the field level.

Roles and Responsibilities of Enumerators

Enumerators will be recruited from the geographic areas where the survey will be conducted. Enumerators will meet the following criteria:

- Completed high school
- Speak the local language
- Known to be honest and hardworking
- Not known for unacceptable to the community behaviors
- Priorities will be given to those:
 - Who know the locality well (come from the study area)
 - Who have experience in community based data collection
 - With training (experience) and knowledge in health care and related activities
- Healthy and physically fit to stand the community based field work in a possibly remote village

Enumerators will be expected to:

1. Complete the compound and house hold listing form with the supervisors.
2. Conduct interviews
 - Complete *the Geographic information panel and household question form for each house hold that has been selected & case identification and the relevant fistula questionnaire* for each fistula patient along with the in depth interview form.
 - Interview traditional healers.
3. Submit completed questionnaires to the supervisors daily.
4. Update the supervisors on the number of identified cases daily.

5. Correct errors including by going back to a household, when requested by the supervisors.

Roles and Responsibilities of Field Supervisors

Field supervisors will be recruited from the geographic areas where the survey will be conducted. They will meet the following criteria:

- Nurse, sanitarian, health assistant
- Speak the local language
- Prior experience in conducting field surveys
- Can bring recommendation from his/her supervisor
- Healthy and physically fit to stand the community based field work in a possibly remote village
- Is able to work continuously on the field for the whole period of data collection

The supervisor has the following duties and responsibilities

1. Identify areas selected for the study using the Maps provided if necessary seek the assistance of local authorities
2. Field test of the survey questionnaire as appropriate.
3. Work closely with the enumerators, through out the period of collecting data.
4. Develop and coordinate work schedules of the enumerators in his/her team.
5. Ensure that the data collectors visit all households assigned to them.
6. Ensure that the data collection forms are completely and correctly filled. After checking the forms s/he has to sign them.
7. Clarify the information in survey forms with the enumerators and if necessary direct them to reinvestigate cases when additional information or clarification is required.
8. Update the survey coordinators on the number of identified fistula cases daily.

Annex: 13
List of Key informants

Dr. Tamsir Mbowe
*Secretary of State
for Health and Social Welfare*

Mr. Sulayman Samba
*Permanent Secretary of
State for Health and Social welfare.*

Dr. Mariatou Jallow,
Director of Health Services, DoSH

Dr. Nestor Shivute
WHO Representative The Gambia

Dr. Reuben Mbodge
*Assistant UNFPA representative
The Gambia*

Mrs, Agnes Kuye
*Family health Promotion Advisor
WHO The Gambia*

Dr. Malik Njaye
*Ob/Gyn. Deputy Chief Medical officer
RVTH Hospital*

Dr. Camara Bekaia
*Ob/GYN. Head Obs/Gyn department
RVTH*

Mr. Kebba S. Badjie
*Chief executive Officer
Sulayman junkung General Hospital.*

Bakery Sanneh
*Nurse Tutor, State Enrolled Nursing
School. Bansang*

Ahmadu Kanteh
*Divisional public health officer
Central River Division*

Mammy Camara
Principal nursing officer

Bansang Hospital

Wandifa Samateh
*SRN Midwife, Acting Principal nurse Officer.
Bansang Hospital*

Jeandark Jarju
Officer in Charge, Basse health Center

Mrs Beatrice Haffier
*Head School of nursing and Midwifery,
Banjul*

Mrs, Kassa kanteh Sanneh
*Community Development officer
Kanifing municipality
Chair person for National Women
Council.*

Mr. Yankuba Dibba
*Executive Director
Gambia family Plannig Association*

Mrs. Fatou Bah
*Programme officer, Service Delivery.
GFPA*

Sr. Christin Shneeberger
Hands On Care, RCH Clinic, Brikama

Dr, Patrick Nshe
Hands On Care, RCH Clinic, Brikama

Amie Bojang Sissoho
Program Coordinator, GAMCOTRAP

Dr. Dumbaya Sherif Aba
*Obstetrician Gynecologist
Weisfield Clinic*

Dr, James N'Dow & members of
UROLINK Team, UK
Birom Bah
Nurse Midwife, Soma Heath Center

Annex:14
The story of A.J.

A.J. is a 40 years old Gambian woman, who is a follower of Islam and from the tribe of Fulani. A.J. has been divorced twice and is remarried for the third time and is living in a polygamous relation ship.

At the age of 15 A.J. was given to her husband by her family, as it is required by the culture. She had her 1st pregnancy at the age of 20, but had no ANC follow up. Labor started at home at 2 o'clock in the afternoon and it was assisted by a TBA until 6 AM the following morning. Her parents decided that labor is prolonged and she needs to go to the hospital. It took them four hours to reach from her village to Bansang hospital. She was admitted to the labor ward at 10 AM. How ever Aminata was kept for an additional 22 hours before she delivered a still birth at 8Am on the third day.

A.J. says, "Immediately after delivery I started to leak urine and I got frightened because I never new or heard that such a condition exists". When she was asked if after delivery catheter was inserted or she was referred to another health facility? Her response was "they told me nothing they simply gave me medicine and send me home".

After the incident "my husband abandoned me completely for ten years, his relatives and neighbors also gave me their back. How ever he never asked for a divorce but after 10 years I did, because I was abandoned and left alone suffering. He abandoned me and didn't want to see me yet he wanted to use the divorce to get back the money he spent for the dowry".

"It was only my parents who took care of me. I only have one sister who her self was sick and was in no condition to assist me. I became a burden to them. Later my parents heard that my condition can be cured in different places. They sold their crop and my father brought me to RVTH". A.J. was admitted the same year twice with an interval of a month in between the two admissions. Each time she was kept in the hospital for two weeks and discharged with out an operation. She says "No explanations were made in both occasions neither for the admissions nor for the discharges with out operation. It was

never explained to me if I can get treated either. Finally my father sold the only bull he had and took me to Guinea Conakry". She was examined by the doctors in Guinea, but returned home with out treatment, since they run out of money due to long waiting for admission.

"The death of my father added to the fact that I am unable to work efficiently as I used to and this made my social and economic condition so low. I concealed my condition for the fear of ill-treatment from people. Since men do not know my condition they ask my family for my hand and when I refuse they think that I want to go around without being married, (indicating prostitution) so I have to agree. I was remarried 10 years ago the moment the husband found out that I have this condition he didn't want me any more and I was divorced for the second time. Nevertheless I was pregnant from the relation ship and had a miscarriage at the fourth month of the pregnancy. I went to Bansang hospital, when they couldn't help I decided to go to RVTH where the fetus was expelled. They told me it was a boy".

"Last year I was remarried for the third time, and this time to a man who is 30 years older than me. Because of my condition, he got remarried to a 17 years old girl soon after he married me. We live in the same house but all the three separately. He gave me two children to raise, a boy and a girl of 10 years each. They live with me in the same house".

"I believe that this is my destiny desired by god. I am depressed and I think often about my condition. I some times think that it is an evil spirit, and some times think some bad people did it to me for the reason I don't know because I am carrying this curse for 20 years. But killing my self? No it is beyond my limit." A.J. thinks that her condition might be curable she says "Peoples' knowledge and skills are different if I meet the right people I can get cured".

Annex:15

Annexed Table N_o 1: Women aged 15-49 by 5 year age group (Comment: this chart can be in the annex)

Age range	Number of women 15-49	Percent
15-19	3183	26.4
20-24	2141	17.7
25-29	2283	18.9
30-34	1673	13.9
35-39	1319	10.9
40-44	923	7.6
45-49	544	4.5
Total	12066	100

Annexed Table N_o 2: Households who reported pregnant girls under the age 15 (this table may also be put in the annex)

N _O	Number of households	Percent
None	4939	99.6
1	14	.3
2	4	.1
4	1	.0
Total	4958	100