national vvf project nigeria

evaluation report IX

first half 1996

reprint

Babbar Ruga Fistula Hospital
KATSINA

and

Laure Fistula Center
KANO

and

Jummai Fistula Center
SOKOTO

by

Kees WAALDIJK
sponsored and financed by:

**waha-international**
paris

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VVF-projects

Babbar Ruga Fistula Hospital
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SOKOTO

by
Kees WAALDIJK
IXth evaluation report  
VVF-projects KANO/KATSINA/SOKOTO and MARADI

introduction
There is a slow but steady progress with the implementation of our VVF-surgery/training project as public health surgery. It seems the backlog of patients in Kano and Katsina State has been cleared and there are no long waiting lists anymore. There are some groups in Europe and in the United States of America who are approaching sponsoring organizations with proposals to obtain grants using our project as an introduction, or stating that nothing whatsoever is being done about VVF in Northern Nigeria, or even claiming part of our project as their own. However, we are not involved in these proposals.

long-term objectives
To establish a lasting VVF-service with ultimately the total eradication of the obstetric fistula.
VVF-service
In 5 out of the 31 states in the whole of Nigeria there are functioning VVF repair centers, viz. Akwa Ibom State (run by Dr Ann WARD), Plateau State (run by Dr Jonathan KARSHIMA), Kano State, Katsina State and Sokoto State. So we have a long way to go before there are functioning centers in the 26 more states.

prevention
The establishment of a network of 75,000 functioning obstetric units throughout Africa is a utopia for the moment. However, it is the only solution for VVF as a major public health problem.

The population explosion and deterioration of the health care system are moving in the opposite direction.

short-term objectives
KATSINA
End of last year a relation of one of the VVF-patients came with chickenpox resulting in a chickenpox epidemic which lasted up to June 1996!
In January there was an outbreak of cerebrospinal meningitis (as usual during the dry/cold harmattan); it stopped after all the patients/staff were vaccinated.
During June there was an outbreak of serious gastroenteritis throughout the state including Babbar Ruga Hospital. This always happens at the beginning of the raining season. A special Task Force was appointed.

KANO
In one week in January 5 patients fitted some 4-6 days postoperatively but no signs of cerebrospinal meningitis were found; then it stopped.
End of June there was an outbreak of “cholera” in the hostel Kwalli!

SOKOTO
As there was no fuel available during the first 4 months of the year, the consultant could only visit the place once. On a previous trip we had to return at two-thirds of the distance because there was not a single drop of petrol available in GUSAU.
There were some difficulties between the deputy surgeon and the management resulting in a degrading of the VVF-service. We shall look into these problems, discuss it with both parties involved and try to get a solution.
The wards are occupied by patients which could be discharged (stress and/or urge incontinence) as they do need surgery but for some reason or the other are there already for years! This is the wrong approach as they occupy the beds of any (new) patient in need of operation. As such the efficiency rate of the project is too low in terms of public health surgery.

It is not the intention to provide outcasts with shelter but to prevent new outcasts to be added to the number already existing!

The operating table is below any fistula surgery standard, and the consultant has to sit on a dustbin to perform the repairs since the table cannot be adjusted in height and in lithotomy position!

It shows strength that despite all these problems still a fair amount of surgery could be performed.

In all centers KANO/KATSINA/SOKOTO there is an urgent need for a hydraulic high-quality operating table; so three in total; six operating tables seem to be not feasible, even these three????

MARADI

Just over the border in Republique du Niger, only 90 km away from Babbar Ruga Hospital, there are quite a number of patients as well. We always thought that these patients were coming to us, but it seems now that only the "richest of the poorest" could afford it.

It is another example that the obstetric fistula is a major public health problem throughout Africa.

After initial beaurocratic problems, every fortnight on Friday we go there early in the morning and return early in the evening.

JOS

In June the consultant visited Dr Jonathan KARSHIMA from the Evangel Hospital in JOS to discuss about closer cooperation which is supposed to start in September this year.

activities

training (see Annex I)

During the various courses for the different cadres of doctors, only the basic surgical principles of VVF/RVF-surgery including history taking, preoperative care, catheter treatment, spinal anesthesia, postoperative care, follow-up and counselling can be taught.

general doctors with at least 3 yr surgical experience

Sofar, 15 doctors from 8 different states have been trained for a minimum period of 3 months.

senior registrars in gynecology/obstetrics

A total of 9 senior registrars have had ample exposure during their 3-week programme accompanying the consultant in both centers.

senior registrars in anesthesia

One doctor came forward to be trained in spinal anesthesia and others are encouraged to do the same.

visiting consultants

The 6 consultants came for a 2-week visit to both centers to have a look around and see if they could benefit from our programme which I hope they did.
surgery (see Annex II)
The reliable supply of surgical instruments, spinal anesthetic agents and suturing materials was only possible due to continuous donations by the stichting van Tiel Tot Tropen, the Kiwani Club in TIEL and the Wereldwinkel in MAASTRICHT.

research
generally

VVF-surgery
classification (see Annexes)
The classification based upon the anatomic/physiologic location proved to be very valuable.

route of operation
Which surgeon is contemplating of performing a tonsillectomy through the neck? All the VVF-repairs have been performed through the vagina with the exception of one only, a vesicouterine fistula and the second repair in the consultant's life who is an abdominal/traumatologic surgeon by profession!

position of the patient
Invariably the (exaggerated) lithotomy position with the legs flexed and abducted and the buttocks far over the end of the operation table.

assistance
Only the surgeon and an instrumentating operation nurse. Two retractors inside the vagina are already a crowd.

instruments
Normal vaginal instruments, including an AUVRAND self-retaining speculum, a pair of curved THOREK scissors and a sharp DESCHAMPS aneurysm needle.

suturing materials
Only chromic catgut for the bladder/urethra and supramid for the anterior vagina wall on small needles. No atraumatic suturing materials which actually would be preferred for urethra reconstruction.

immediate surgical management; with catheter and/or early closure
Out of the 302 patients treated during the 17-month period (since started in August 1992), the fistula was closed in 286 (94.7%). Also the continence rate was very good as only 3 (1.9%) out of 156 patients with closed fistula who completed 6 months "postoperatively" complained about and demonstrated severe incontinence. It has become the standard treatment for any woman with a fistula duration of less than 3 months, and can be recommended to any fistula surgeon. The latest development is to perform debridement of the necrosis in order to speed up the healing process, so early closure becomes even earlier. Its main advantage is not only its high success rate as to closure and continence, but especially the prevention of the girl/woman from being ostracized out of her own society.

RVF-surgery
As a colostomy is unacceptable to African patients, all our RVF-surgery is done without it. As an abdominal approach is too risky in our set-up, only the vaginal route is used though it must be said that a combined vaginal/ abdominal procedure in certain types would be preferable. A lot of research has been done on the RVF-surgery, and slowly but surely the success rate is improving.
Since we started a combination of intravaginal/intrarectal surgery (using PARK retractors) it seems we are on the right way. Also whenever possible we combine the VVF-repair with a RVF-repair in the same session, with good results.

**spinal anesthesia**
It is the anesthesia of choice for operations on the lower half of the body as it simple, effective, safe and cheap. No major investment is required. N.B. the total costs per anesthetic procedure including everything (equipment, drugs, gauze, methylated spirit etc) is not up to one US dollar!

**administration/documentation**
The time spent on administration/documentation is at least 2-3 times more than the time spent on operating. It is extremely important that the work is documented properly, otherwise nobody knows what he/she is doing. The Schumacher-Kramer Foundation in AMSTERDAM made funds available to purchase professional cameras and computers with printer.

**database (see Annexes)**
Within the coming 2 years all the 400,000 parameters collected so far will be put into an extensive computerized related dBase programme so that the various determinators can be analysed.

**photography**
Already for years, each fistula/operation has been documented by at least 3-5 color photographs/slides, including multiple series of 30-40 slides for the different operation technics; so far over 20,000 color slides. The trend is to even extend this type of documentation.

**video**
Some 30 hours of operation technics have been documented by video, but we need a semiprofessional camera so that these videos can be edited and then multiplicated. Also a documentary of the obstetric fistula is a must.

**teaching materials (see Annexes)**
The short notes/checklist on VVF has been updated. The surgical handbook on VVF-surgery will probably published next year.

**conclusion**
For Kano State and Katsina State a functioning VVF-service has been established including a training programme for doctors from all over Nigeria. Time has come now to expand the programme, first to the other States of (Northern) Nigeria and then to the rest of (West) Africa. It would be a pity if all the experience/expertise in VVF-care and training obtained during the last 10 years would not be used.
P.S.
what about the rest of the 1,5-2 million VVF-patients in Africa?

an International Obstetric Fistula Foundation is long overdue!!!

First an awareness campaign has to be started in the industrialized world, then a plan has to be developed (already present in principle since 1989) followed by a fund-raising campaign, and as last step this plan has to be executed under a big organization like the United Nations with continuous monitoring of the activities and results.

kees waaldijk  MD PhD
chief consultant surgeon i/c

Babbar Ruga Fistula Hospital
P.O.Box 5
KATSINA

and

Laure Fistula Center
Murtala Muhammed Specialist Hospital
KANO
### Annex I

#### List of Trainees

**Present Deputy Surgeons**

- Dr Idris S ABUBAKAR  
  Laure Fistula Center, KANO
- Dr Jabir MOHAMMED  
  Babbar Ruga Fistula Hospital, KATSINA
- Dr Bello Samaila CHAFE  
  Jummai Fistula Center, SOKOTO

**Past Deputy Surgeons**

- Dr Yusha'u ARMIYA'U  
  Babbar Ruga Fistula Hospital, KATSINA
- Dr Aminu SAFANA  
  Laure Fistula Center, KANO
- Dr Said AHMED  
  Jummai Fistula Center, SOKOTO
- Dr Illyas Ibadi ZUBAIRU

**General Doctors with at least 3 yr surgical experience**

- Dr Garba Mairiga ABDULKARIM  
  Borno State
- Dr Umar Faruk ABDULMAJID  
  Katsina State
- Dr Ibrahim ABDULWAHAB  
  Niger State
- Dr Idris S. ABUBAKAR  
  Kano State
- Dr Abdu ADO  
  Katsina State
- Dr Mohammed I AHMAD  
  Jigawa State
- Dr Said AHMED  
  Jigawa State
- Dr Imman AMIR  
  Kano State
- Dr Ebenezer APAKE  
  Taraba State
- Dr Yusha'u ARMIYA'U  
  Katsina State
- Dr Shehu BALA  
  Katsina State
- Dr Bello Samaila CHAFE  
  Sokoto State
- Dr Umaru DIKKO  
  Sokoto State
- Dr Gyang DANTONG  
  Plateau State
- Dr Bello I DOGONDAJI  
  Sokoto State
- Dr James O. FAGBAYI  
  Kwara State
- Dr Gabriel HARUNA  
  Kaduna State
- Dr Sa’ad IDRIS  
  Sokoto State
- Dr Zubairu ILIYASU  
  Adamawa State
- Dr Benedict ISHAKU  
  Plateau State
- Dr Momoh Omuya KADIR  
  Kogi State
- Dr Hassan LADAN  
  Kebbi State
- Dr Sabi’u LIADI  
  Katsina State
- Dr Ado Kado MA’ARUF  
  Katsina State
- Dr (Mrs) Linda MAMMAN  
  Adamawa State
- Dr Umar Mohammed MARU  
  Sokoto State
- Dr Bako Abubakar MOHAMMED  
  Bauchi State
- Dr Jabir MOHAMMED  
  Katsina State
- Dr Gamaliel Chris MONDAY  
  Plateau State
- Dr Ibrahim MUHAMMAD  
  Jigawa State
- Dr Dunawatuwa A.M. MUNA  
  Borno State
- Dr Yusuf Baba ONIMISI  
  Kano State
- Dr Yusuf SAKA  
  Kwara State
- Dr Aminu SAFANA  
  Katsina State
- Dr Isah Ibrahim SHAFI'I  
  Kebbi State
- Dr Aliyu SHETTIMA  
  Borno State
- Dr (Mrs) Yalwa USMAN  
  Kano State
- Dr Aqsom WARIGON  
  Adamawa State
- Dr Munkaila YUSUF  
  Kano State
senior registrars in obstetrics/gynecology
Dr Yomi AJAYI  IBADAN
Dr Francis AMAECHI  ENUGU
Dr Nosa AMIENGHEME  ILE-IFE
Dr Lydia AUDU  SOKOTO
Dr Ini ENANG  ZARIA
Dr Deborah HAGGAI  KADUNA
Dr Nestor INIMGBA  PORTHARCOURT
Dr Jesse Yafi OBED  MAIDUGURI
Dr Nworah OBIECHINA  ENUGU
Dr John OKOYE  ENUGU
Dr Benneth ONWUZURIKE  ENUGU
Dr Mansur Suleiman SADIQ  KANO
Dr Dapo SOTILOYE  ILORIN
Dr Emmanuel UDOEYOP  JOS
Dr (Mrs) Marhyya ZAYYAN  KADUNA

senior registrars in anesthesia
Dr SaIdu BABAyo  Bauchi State
Dr Abdulmummuni IBRAHIM  Katsina State

visiting consultants
Prof Dr Shafiq AHMAD  PESHAWAR, Pakistan
Dr Frits DRIESSEN  NIJMEGEN, Holland
Prof Dr Jelte DE HAAN  MAASTRICHT, Holland
Dr Vivian HIRDMAN  STOCKHOLM, Sweden
Prof Dr Oladosu OJENGBEDE  IBADAN, Nigeria
Dr Thomas J.I.P. RAASSEN  NAIROBI, Kenya
Dr Ruben A. ROSTAN  MASANGA, Sierra Leone
Dr Ulrich WENDEL  BESIGHEIM, Germany

physiotherapists
Garba M FAGGE  Kano State

nurses
Mohammed B A ADAMU  Adamawa State
Rauta I BENNETT  Bauchi State
Hauwa D HERIJU  Borno State
Martha F MSHEH’A  Kaduna State
Theresa INUSA  Kano State
Hajara S MUSA  Kano State
Sara SALEH  Kano State
Fatima A UMARU  Kano State
Herrietta ABDALLAH  Kano State
Florence AJAYI  Kano State
Esther AUDU  Kano State
Hauwa BELLO  Kano State
Sherifatu A JIMOH  Kano State
Ramatu DAGACHI  Kano State
Amina KABIR  Kano State
Kutaduku B MARAMA  Kano State
Hadiza MOHAMMED  Kano State
Maio A MOHAMMED  Kano State
Mabel A OBAYEMI  Kano State
Comfort OYINLOYE  Kano State
Rabi RABI’U
Amina UMARU
Habiba A USMAN
Adetutu S AJAGUN
Magajiya ALIYU
Taibat AMINU
Hauwa GARBA
Halima IBRAHIM
Kabir K LAWAL
Ladi H MOHAMMED
Halima I NOCK
Saratu S SALEH
Aishatu M ANARUWA
Aishatu SAMBAWA
Kulu A SHAMAKI
Leah T AMGUTI
Hajara JOSEPH
Dorcas NATHANIEL
Hauwa TAUHID
Rhoda T AGANA
Victoria S HARRI
Lami PAN
Esther ADAMU
Beatrice AKINMADE
Elizabeth Y GAJE

operation theater nurses
Mohammed B A ADAMU
Dahiru HALIRU
Florence AJAYI
Mairo ALIYU
Ramatu DAGACHI
Hadiza ISAH
Amina KABIR
Hadiza MOHAMMED
Rabi RABI’U
Maijiddah SAIDU
Adetutu S AJAGUN
Taibat AMINU
Saratu GAMBO
Mohammed HASHIMU
Halima IBRAHIM
Kabir K LAWAL
Hauwa MAMMAM
Faruk SAMBO

Katsina State
Kebbi State
Kogi State
Niger State
Plateau State
Sokoto State
Yobe State
Adamawa State
Kaduna State
Kano State
Katsina State
# VVF/RVF-repairs in Laure/Babbar Ruga/Jummai Fistula Centers and MARADI

### Grand Total

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<th>KANO VVF</th>
<th>KANO RVF</th>
<th>KATSINA VVF</th>
<th>KATSINA RVF</th>
<th>SOKOTO VVF</th>
<th>SOKOTO RVF</th>
<th>MARADI VVF</th>
<th>MARADI RVF</th>
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**Total VVF-repairs** and related operations: 7,075

**Total RVF-repairs** and related operations: 595

**Success rate** at VVF closure roughly 90% per operation

**Success rate** at RVF closure roughly 85% per operation

Healed by catheter only: 342

Wound infection rate: < 0.5%

Postoperative mortality rate KANO: 0.5%

Postoperative mortality rate KATSINA: 0.5-1%

* Sabbatical leave consultant for 6 mth
annex la
known performance of trainees

Dr Said AHMED over 700 repairs
Dr Yusha'u ARMIYA'U over 600 repairs
Dr Ilyasu ZUBAIRU over 300 repairs
Dr Bello Samaila over 300 repairs
Dr Jabir MOHAMMED over 300 repairs
Dr Aminu SAFANA over 200 repairs
Dr Hassan WARA over 200 repairs
Dr Idris ABUBAKAR over 100 repairs
introduction
Nigeria covers an area of almost 1 million sq km and has a population of some 120 million people.
With a life expectancy of 50 years, a perinatal mortality rate of 20%, a maternal mortality rate of 1.5% and an annual population growth of at least 3%, there are some 7 million deliveries a year in the whole federation.

The incidence of the obstetric vesicovaginal fistula (VVF) has been calculated at a minimum of 1.5-2 per 1,000 deliveries where the mother survives in situations where obstetric care is poor, irrespective of race, tribe, religion, early marriage etc. The incidence in the whole Federation of Nigeria is then 2% of 7 million being 12,000-15,000 new VVF-patients a year.

As a maximum of 2,000 patients are being operated successfully each year, there is a huge backlog of patients, each year already over 10,000.

The prevalence in the whole Federation of Nigeria can be calculated then at a minimum of 150,000 VVF-patients in need of surgery.
This constitutes a major public health problem with far reaching social implications as these (mostly young) women/girls are being ostracized from their own community.

There are 4 centers in Nigeria where annually more than 150-200 patients are operated, viz. in Akwa Ibom, Kano, Katsina and Sokoto State. However, these centers are no enough by far, and each of the 31 States needs its own center.

prevention
N.B. early marriage, a hot political item, has nothing to do with the obstetric fistula.
Primary health care can only play a role by detecting risk factors antenatally and by immediate referral if obstructed labor develops.
Prevention is solely by early intervention of obstructed labor by cesarean section within 3 hr to prevent necrosis.
In the industrialized world the obstetric fistula has disappeared by establishing a network of functioning obstetric care/units, and not by banning early marriage; this exercise took some 50-70 years.
In Northern Nigeria already 1,875 functioning obstetric clinics are needed where an emergency cesarean section can be performed; who is going to pay for this??

Though ultimately prevention is the solution, it remains a utopia for at least 50 years to come.
The yankan gishiri fistula, like female circumcision a cultural phenomenon, could be eradicated by a mass enlightening programme; but it is difficult considering the experience with female circumcision.

Secondary prevention of the patient from going down into an ever-increasing social isolation is achieved by a successful repair with total spontaneous rehabilitation.
what has been achieved in (Northern) Nigeria
Three VVF-centers have been established from scrap in Kano, Katsina and Sokoto where far over 7,000 patients have been repaired:
Laure Fistula Center with 40 postoperative beds, a hostel of 60 beds where theoretically 1,000 repairs could be performed yearly.
Babbar Ruga Fistula hospital with 38 postoperative beds, a hostel of 150-200 beds where theoretically 950 repairs could be performed yearly.
Specialist Hospital Sokoto with only 20 postoperative beds and no hostel where theoretically 250-300 repairs could be performed.
In Kano and Katsina 61 doctors and 61 nurses have been trained in examination, catheterization, spinal anesthesia, classification, surgery, postoperative care, documentation, counseling and management.
Awareness of the VVF-problem has been created throughout the society in the whole of the Federation of Nigeria.

what can be done now!

VVF-centers
To establish VVF-centers in each of the 31 states in or near the state capital, where patients can come for surgery/counseling and doctors/nurses for training, also in the preventive aspects.
These centers should be separate units integrated into existing government health services at least until the backlog of patients has been cleared.
It must be possible to expand our existing VVF-service with one state each year after careful planning/training.
see also the project document Expansion.

training
VVF should be incorporated into the curriculum of the registrars in obstetrics/gynecology. For this the Society of Obstetricians/Gynecologists of Nigeria has to be involved.
Any gynecologist in the whole of Nigeria should be familiar with the VVF-problem and its management.
see also project document Training.

yankan gishiri
An awareness programme has to be started to inform the public and the traditional health caretakers (wanzami, ungozoma) that this practice is very dangerous and therefore should be abolished.

research
More research is needed into all the aspects of VVF, especially the demographic and epidemiologic parameters, but also into its prevention and into a simple surgical programme.
Simple solutions are the best, but how to find them??
see also project document Research.

Babbar Ruga Fistula Hospital in KATSINA
It should be developed into a WHO-recognized training center for the whole of (West) Africa as the obstetric fistula is an Africa-wide problem.
All the facilities to train doctors/surgeons/nurses how to perform quality VVF-care under primitive conditions are available.
All the personnel are highly experienced in the care as well as in training all cadres of health workers.
Good national, international and intercontinental connections are available as well as a high-standard accommodation.
see also project document KATSINA.

Laure Fistula Center in KANO
It should be further developed into a training center for Nigerian doctors/nurses as well as a research center especially in cooperation with Bayero University.
Another 100-bed hostel is needed since the present one is in very poor hygienic condition and as its capacity is not sufficient. Good national, international and intercontinental connections are available as well as medium-standard accommodation.
see also project document KANO.

**Specialist Hospital in SOKOTO**

It should be further developed into a VVF-repair center for Sokoto State; perhaps some research could be done in cooperation with the Usman Danfodio University.
An upgrading of the operating table as well as a 50-bed hostel is urgently needed.
see also project document SOKOTO.

**financing**

As it is a Nigerian health problem, it has to be solved within the limited financial resources of Nigeria.
The State Governments should take care of the day-to-day running including personnel, equipment etc., and the Federal Government should take care at a different level, e.g. employ the consultant, supply transport, etc.
However, not all can be financed by Nigeria, and that is the stage where a large nongovernmental organization has to come in together with one or more division(s) of the UN family, like WHO, UNDP, UNFPA etc.
the problem with surgeons is that they tend to do too many things at the same time in order to help the patient; however, it is better to concentrate on one thing at a time and make sure it is done properly

as well the trend is to make simple things complicated to impress oneself and others; that is easy

however, the art of surgery is to make complicated things simple and to concentrate on the essentials; and that is very difficult

simple solutions are the best; only how to find them?

therefore we are in the continuing process of simplifying our approach according to basic general surgical principles whilst ensuring high quality:
minimum dissection
tension-free closure
minimum amount of sutures
one-layer closure of bladder/urethra
no dye testing
no martius fibrofatty graft
only adaptation of vagina wall
principles of reconstructive surgery

whatever we do it has to make sense

the best rehabilitation is a successful repair, so why waste time, energy and money?

primary prevention
is a utopia for at least another century

secondary prevention
the immediate management by catheter and/or early closure is my best contribution to the obstetric fistula considering the high success rate at closure and continence preventing the woman from becoming an outcast