national vvf project nigeria

evaluation report V

(January through June 1994)

reprint

Babbar Ruga Fistula Hospital
KATSINA

and

Laure Fistula Center
KANO

by

Kees WAALDIJK

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VVF-projects

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by

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fifth evaluation report
VVF-projects KANO and KATSINA

introduction

There has been a slow but steady increase in the activities. The number of operations increased, the postgraduate training of doctors stabilized and a good start was made with the postgraduate training of nurses as well.
Two national workshops were held, one in KANO on VVF in general organized by NCWS in January and one on VVF counselling organized by NTFVVF in June in KATSINA.
At last, in June the United Nations Development Programme headquarters in New York approved the agreement between UNDP and Federal/Kano State/Katsina State Government. The agreement is for a period of 3-4 years with the following objectives: a) to train two deputy surgeons, one for Kano and one for Katsina; b) to train 50 Nigerian doctors; c) to train the UN volunteer gynecologists; d) to train Nigerian nurses; e) to reorientate TBAs; and f) to organize workshops for leaders at all levels of the community.
Within the programme between the Netherlands Government and the National Coalition on VesicoVaginal Fistula: a) the first national Workshop on VVF counselling has been organized for doctors/nurses/social workers from all over the Federation; b) postgraduate training of nurses in the overall management of VVF was started; and c) a PEUGEOT J5 bus has been donated to Babbar Ruga Fistula Hospital

long-term objectives

To establish a lasting VVF-service with ultimately the total eradication of the obstetric fistula.
The first objective is "easier" to be achieved than the second!

lasting VVF-service

In KANO and KATSINA a VVF-repair service with training of doctors and nurses has been established. However, that is still very far from a lasting VVF-service, and it will take a long time.
It has to be a service where at different levels people can cope with all the problems. This will involve continuous training of present and future cadres of health personnel. Within the UNDP programme we hope to make a major step forward.

prevention

The prevention of VVF with reduction in its incidence and ultimately its eradication can only be achieved by education, education and education!
There is no relation to tribe, religion, culture, early marriage or anything else, except for early intervention by CS within 3 hours.
A strengthening of the secondary health facilities seems to be utopic under the present financial situation in which most African countries prevail.
Only for Northern Nigeria a network of 1,875 obstetric units (with facilities to perform a cesarean section within 3 hours!) is needed in order to get half the coverage of for instance a country like Holland.
So the consultant will not live long enough to witness a reduction in the incidence/prevalence of VVF.
As the relation between early marriage and the obstetric fistula is negligible we should concentrate on the real issue, viz. to establish a network of functioning obstetric units throughout Africa.
N.B. Legislation of banning early marriage will not prevent the obstetric fistula as then the woman will get her fistula 3-5 years later. We should not use the wrong arguments for the right cause.

short-term objectives

KATSINA

Water supply: in addition to the 6 functioning wells, two bore holes have been drilled inside the hospital compound by KTARDA, and in the near future a handpump will be mounted on one and a submersible pump on the other. Then we have to tackle the distribution system; however for the time being we can be satisfied. The submersible pump will only be used for the theater, the handpump for drinking water and the wells for cleaning/washing. This will reduce the incidence of gastroenteritis/diarrhea, our main (postoperative) problem. It will serve roughly 1,500 persons with reliable drinking water, a major asset.

Transport: a PEUGEOT J5 bus has been donated by the Netherlands Government to Babbar Ruga Hospital. With proper maintenance and sound use of this bus the transportation problem will be solved for the coming 8-10 years.

International Training Center: We are completely set and fit now to train doctors/nurses from all over Africa. For a smooth coordination we would like to liaise with WHO and NTFVVF. However we are not in a position to sponsor the candidates; this should be done by other organizations. Every candidate has to organize his own sponsorship.

KANO

Earlier than thought, a start has been made with the building of another additional postoperative ward, as the Kiwani Club ALPHEN a/d RIJN made a first installment. This year we hope to finish it completely and then we can increase the number of operations in KANO by at least 50%.

As NEPA is unreliable there is need for a small 7.5 kVA standby generator for the theater to ensure that we can operate at all times. Otherwise the elactric autoclave cannot be used for sterilizing.

In both centers KANO and KATSINA there is an urgent need for 2 hydraulic high-quality operation tables; so four in total

Within the UNDP agreement there are two operation tables included as well as in the agreement between the Netherlands Government and the National Task Force on VVF. The make we are looking for is MAQUET type Velox 113.

activities

postgraduate training (see Annex I)

After many years of intensive training all types of health personnel in the management of VVF/RVF, we are now ready to to expand our services to other countries as the problem is all over Africa with 1.5-2 million VVF-patients waiting for surgery. So in the near future we would like to start with an international training programme as well. Within the UNDP agreement we have to enter discussions with WHO, another member of the United Nations family.

The international training programme shall be along the same guidelines as sofar: to provide optimal VVF-service under primitive conditions within the limited financial resources of the developing countries!!!

So no high-tech academic approach, but a down to the ground, basic, effective, practical, payable and feasible no-nonsense programme.

deputy surgeons

Two interested indigenous doctors have to be selected, one from Kano State and the other from Katsina State. An intensive training programme will be set up sothat in due time they will be able to take care of the centers more or less on their own, and the consultant will have time to concentrate on expansion of the project first throughout the rest of (Northern) Nigeria and eventually throughout the whole of (West) Africa.

general doctors with at least 3 yr surgical experience

Sofar, 19 doctors from 10 different states have been trained for a minimum period of 3 months.

Some of them stayed far longer (6 months up to 2 years); so there was some continuation, and they were involved in the training as well, as training has to be at all levels.
All of them upon returning to their own centers have started some VVF work, including repairs.

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.
All of them started their own VVF-repair programme, even in areas where it was said there were no VVF-patients.
This training programme has come to a standstill as the Carnegie Corporation funds were exhausted. We hope to restart is again as it is very important that the young African consultant gynecologists know to handle VVF.

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

visiting consultants
Dr Ruben A ROSTAN, an Argentine surgeon working in Sierra Leone, visited us during the month May with his operation team. We wish them all the best in Masanga Hospital.

one-month postgraduate training course for nurses
We started also training of nurses in the pre/postoperative care and counselling of VVF-patients and their relatives.
A total of 24 Nigerian nurses from all over the Federation attended and completed the course.
For this I have to praise Mr Kabir LAWAL, training coordinator for KATSINA, and Mrs Hadiza MOHAMMED, training coordinator for KANO.

surgery (see Annex II)
In KANO we performed 202 VVF-repairs and 20 RVF-repairs, and in KATSINA 274 VVF-repairs and 25 RVF-repairs making a total of 521 VVF/RVF-repairs during the first half of 1994.

research

generally
Almost all problems related to VVF-surgery have been solved except postoperative urge incontinence due to detrusor instability.
However, it seems that 2-3 out of 1,000 fistula patients are not operable under our conditions right from the beginning. They present with extensive fistula, subtotal bladder loss, narrow pubic angle and severe funnel-shape vagina stenosis.

VVF-surgery
An elegant mini-invasive technic has been developed for the (postoperative) stress incontinence without touching the area of the previous fistula. Thus there is no risk of fistula recurrence.
However, the indication is stress incontinence only without any sign of detrusor instability. This means accurate screening preoperatively.

immediate surgical management; by means of catheter and/or early closure
Our standard treatment for patients with a fistula duration of less than 3 months can be recommended to any fistula surgeon.

Already some 450 patients have been treated in the 2 years since we started with a success rate of almost 95%!
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
For sphincter ani rupture with or without a rectovaginal fistula, a simple technic has been developed where both sphincter ani ends are not dissected at all or only minimally. This seems to give better results than when the sphincter ends are properly dissected.

administration/documentation

database (see Annexes)
There has been a delay in establishing a computerized relational dBase programme mainly due to problems with the structure.

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

conclusion

For Kano State and Katsina State a functioning VVF-service has been established including a training programme for doctors and nurses from all over the Federation of Nigeria.
Time has come now to expand the programme, first to the other 29 States of (Northern) Nigeria and then to the rest of (West) Africa.
Negotiations have been started between Katsina State Government and Maradi Prefecture to establish a VVF-unit in MARADI town in the Republic of Niger, which is only 90 km from KATSINA.

P.S.
what about the rest of the 1,5-2 million VVF-patients in Africa?

an International Obstetric Fistula Foundation is long overdue!!!

No body is interested or willing to sponsor a single person, as they need an organization which can overlook the activities being legally responsible for the coordination, the objectives and the financial implications.

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chief consultant i/c

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KATSINA
and
Laure Fistula Center
Murtala Muhammed Specialist Hospital
KANO

annex I

list of trainees

general doctors with at least 3 yr surgical experience

Dr Idris S ABUBAKAR	Kano State
Dr Abdu ADO	Katsina State
Dr Said AHMED	Jigawa State
Dr Yusha'u ARMIYA'U	Katsina State
Dr Shehu BALA	Katsina State
Dr Bello Samaila CHAFE	Sokoto State
Dr Umaru DIKKO	Kano State
Dr Gyang DANTONG	Plateau State
Dr Zubairu ILIYASU	Adamawa State
Dr Benedict ISHAKU	Plateau State
Dr Momoh Omuya KADIR	Kogi State
Dr Hassan LADAN	Kebbi 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 Aminu SAFANA	Katsina State
Dr (Mrs) Yalwa USMAN	Kano State
Dr Munkaila YUSUF	Kano State

senior registrars

Dr Yomi AJAYI	IBADAN
Dr Nosa AMIENGHEME	ILE-IFE
Dr Lydia AUDU	SOKOTO
Dr Ini ENANG	ZARIA
Dr Nestor INIMGBA	PORTHARCOURT
Dr Jesse Yafi OBED	MAIDUGURI
Dr Dapo SOTILOYE	ILORIN
Drr Emmanuel UDOEYOP	JOS
Dr (Mrs) Marhyya ZAYYAN	KADUNA

residents in anesthesia

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 Ulrich WENDEL	MAIDUGURI, Nigeria

annex II

VVF/RVF-repairs in Babbar Ruga and Laure Fistula Centers

	KANO		KATSINA		grand total
	VVF	RVF	VVF	RVF	
1984	-	-	83	6	89
1985	-	-	196	20	216
1986	-	-	260	18	278
1987	-	-	318	7	325
1988	-	-	353	31	384
1989	-	-	464	21	485
1990	222	25	416	29	692
1991*	248	17	195	4	464*
1992	348	27	529	34	938
1993	416	35	488	62	1,001
1994 first half	202	20	274	25	521
total	1,436	124	3,576	257	**5,393**

total VVF-repairs and related operations: **5,012**

total RVF-repairs and related operations: **381**

total: 5,393

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

success rate at **RVF** closure roughly **75%** per operation

* sabbatical leave consultant for 6 mth

seminar on Vesicovaginal Fistula at Daula Hotel in KANO
24th and 25th of January 1994

evaluation and plan of continued action

kees waaldijk MD PhD

introduction

Having worked intensively in VVF/RVF-care for the last 10 years, time has come to evaluate the programme and to present a plan of continued action.

evaluation of achievemnts

VVF-centers

Two highly efficient centers have been set up from scrap, one in KATSINA and the other in KANO, where patients from all over Northern Nigeria and also from the neighboring Republic of Niger are being treated; even some patients referred from LAGOS/ENUGU do attend.
However, it seems that the action radius of each center is some 100-120 km as the majority come from Kano, Jigawa and Katsina State.

surgery

A total of 5,000 operations have been performed in 4,400 VVF/RVF-patients. Each year it was possible to increase the number of operations: from 89 repairs during 1984 the first year to 1,001 during last year 1993. Where it will end is not yet known as the number of patients coming to the hospitals are still increasing. During the first 3.5 weeks of this year already over 130 new patients have been seen.

training

Both centers have been appointed as National Training Centers for indigenous Nigerian doctors.
Sofar, 31 doctors of different cadres from all over Nigeria have attended the various courses lasting from 2 weeks up to 3 months; some stayed even longer or came back for a second time.

research

For public health reasons.
incidence: it could be calculated that the incidence of the obstetric fistula is at least 2 per 1,000 deliveries where the mother survives when there is no easy access to a functioning obstetric unit.
prevalence: based upon the incidence rate there are a minimum of 100,000 to 150,000 VVF-patients in need of surgery in the whole of Nigeria.
For surgical reasons.
classification: a classification was developed where the anatomic/physiologic location could be related to the operation technic and to the prognosis as to closure and to continence.

For public health and surgical reasons.
immediate surgical management of fresh obstetric fistulas; by catheter and/ or early closure: the biggest success sofar as the high success rate at closure (95%) and continence could be coupled to a prevention of the woman from being ostracized out of her own community.

scientific publications
accepted and published
1. A surgical PhD thesis: for the highest possible postgraduate degree in Holland
2. A public health thesis (Dr Aminu SAFANA): University of LEEDS, England
3. An article about VVF as public health problem (consultant and Dr Yusha'u ARMIYA'U): International Urogynecology Jounal in the United States
4. A presentation of classification (consultant): European Jorurnal of Urology
accepted, not yet published
Four more articles about VVF-related problems.
in preparation
several

database
Right from the beginning a written operation report has been made for each patient including the complete history, a schematic drawing and documentation by color slides and 30 hours of video for operation technics.
Over the years some 350,000 parameters could be collected which were analysed by hand.
So there is a complete data-bank available for all the 4,400 patients who attended the centers in KANO and KATSINA.

Concluding it can be said that for Kano, Jigawa and Katsina State a well-functioning VVF-service has been established. But this is not enough!!

what about the rest of the 150,000 fistula patients in Nigeria??
and
what about the rest of the 1,5-2 million patients in the whole of Africa??
and
the population is exploding without increase in maternal health facilities

plan of continued action

prevention
The ultimate goal will be reached by education, especially of the females, sothat they will fight for their rights on maternal health and safe motherhood. However this will take a long time.
Besides this, health education that any woman who is in labor longer than 24 hours should be transported as soon as possible to the nearest hospital. Also any primipara should attend the hospital services.

In the meantime we have to concentrate on the curative aspects!!

continuation of the existing services
An effort has to be made to keep up the quantity and the quality of the already existing services wherever they are.
For KANO and KATSINA it means that the facilities/equipment have to be updated to cope with the increased demand.

expansion of the existing services
Expansion of the services in KANO and KATSINA first throughout (Northern) Nigeria and then through (West) Africa.
For this two deputy surgeons have to be trained, one for KANO and one for KATSINA, sothat the consultant could travel to and work in other places to set up more VVF-centers.
Ideally every state in Nigeria should have a well-functioning VVF-unit in (the neighborhood of) the State Capital.

intensification of training
More doctors and nurses have to be trained in the principles of VVF management; also African doctors/nurses from outside Nigeria.

For this one of the centers, probably KATSINA, has to be appointed also as an International Training Center.

training curriculum for residents in obstetrics/gynecology
Within their training curriculum a 3-week stage in a VVF-center should be recommended or even better incorporated.

research
More research is needed on the prevention, sociology, traditional health care, (surgical) management, training, rehabilitation, patient counselling etc.

rehabilitation
A successful repair is a guarantee for a spontaneous and complete resocialization of the woman.
But few patients (2-3%) cannot be helped anymore by surgery and need rehabilitation sothat they learn how look after themselves without sliding down the hill.

awareness
An awareness programme should be started in the industrialized world with the intention to interest more donors.

world-wide attention
For this the United Nations and the World Health Organization should participate under their programmes to improve maternal health.

more workshops
Workshops are highly effective for an exchange of experience and also for stimulating each other.

combined action
To be effective it has to be a combined action by the government, women's organizations, health professionals, general public and donor agencies like in KANO.

continuous monitoring
It is important to evaluate the activities and objectives in order to find out if any improvement in the situation has been made.

conclusion
The road is long, we have covered a small distance and with a major effort it might be possible to have an impact.

parity at obstetric fistula

introduction

there are several possibilities to develop obstructed labor and fistula:

- **a** the maternal pelvis is anatomically too small or malformed
- **b** the fetal head is anatomically too big or malformed
- **c** the fetus itself is malformed
- **d** an abnormal presentation of the fetal head
- **e** an abnormal lie of the fetus
- **f** any combination of the above situations

the first labor is a test case for the female pelvis, especially when there is no professional obstetric expertise available

therefore it is expected that when the pelvis is too small or malformed the obstructed labor (and fistula) develops immediately at the first delivery of the woman unless the fetal head is small as well

if the woman has delivered once without obstructed labor it seems that at further deliveries the other factors play a role in developing obstructed labor and fistula

once obstructed labor has developed there are four possibilities:

A the obstructed labor is relieved in time, with no fistula formation

B the obstructed labor is relieved, but not in time, with development of a fistula

C the obstructed labor is relieved, but the woman dies from the trauma and exhaustion

C the obstructed labor is not relieved at all resulting into the death of the woman

it is the author's opinion that when no professional obstetric expertise is available, most women with obstructed labor will die in the bush; only a few "lucky" ones survive for the price of a dead infant and a fistula

only how to assess the incidence of obstructed labor in areas without obstetric expertise?

results

in the great majority of the obstetric fistulas (50-60%) it happened at the first labor; the other 40-50% of the obstetric fistulas developed at parity II to XV making it clear that obstructed labor and fistula can occur at any parity whatever the cause

parity at obstetric fistula

patients	nonobst	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV
katsina-vvf																
1-100	3	61	6	4	6	1	8	3	2	1	1		1	1		
101-200	9	61	11	3	8	3		1	2		1			1		
201-300	3	58	11	11	4	3	2	2	3	2	1					
301-400	6	61	11	7	2	6	1	1		2		2				1
401-500	9	47	12	8	10	6	1	4	1	1	1					
501-600	3	40	18	8	8	7	4	7		3	2					
601-700	4	53	7	5	2	5	6	2	6	2	5	2		1		
701-800	6	44	12	14	5	3	3	6	3	1	1	1	1			
801-900	5	50	11	11	4	5	6	2	2	2	2					
901-1000	5	47	13	10	4	4	6	4	2	3	2					
1001-1100	5	49	12	8	2	7	6	6		3		1	1			
1101-1200	12	46	12	8	1	4		5	2	6	1	2			1	
1201-1300	3	47	11	10	6	8	4	5			2	2	2			
1301-1400	4	53	6	5	3	6	5	7	5	3	1	2				
1401-1500	4	44	12	13	6	5		6	2	5	1	1			1	
1501-1600	6	45	8	5	5	8	2	5	7	3	2	4				
1601-1700	5	59	8	6	2	4	1	5	5	1		1	3			
kano-vvf																
1-100	12	52	14	4	2	6	3	2	2	2				1		
101-200	5	55	8	3	7	2	5	6	3	2	4					
201-300	10	50	8	5	4	2	6	8	4	1	1				1	
301-400	4	52	13	6	7	6	4	4	1	1	1			1		
katsina-catheter																
1-100	4	46	18	8	3	7	5	1	2	2	3	1				
101-200	3	53	9	10	5	4	2	4	4	2	1	1	1	1		
kano-catheter																
1-100	5	61	11	5	3	2	5	4	1	2		1				
katsina-rvf																
1-100	5	66	12	6	5	1			3				2			

parity at obstetric fistula
total figures per center

total obstetric	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	
katsina-vvf																
1610	866	181	136	78	85	50	76	43	40	23	18	8	3	2	1	
in %	**53.8**	**11.2**	**8.4**	**4.8**	**5.3**	**3.1**	**4.7**	**2.7**	**2.5**	**1.4**	**1.1**	**0.5**	**0.2**	**0.1**	**0.1**	**%**
kano-vvf																
391	223	47	19	21	17	18	20	10	6	7			2	1		
in %	**57.0**	**12.0**	**4.9**	**5.4**	**4.3**	**4.6**	**5.1**	**2.6**	**1.5**	**1.8**			**0.5**	**0.3**		**%**
katsina-catheter																
283	148	32	22	10	19	13	8	13	5	6	4	2	1			
in %	**52.3**	**11.3**	**7.8**	**3.5**	**6.7**	**4.6**	**2.8**	**4.6**	**1.8**	**2.1**	**1.4**	**0.7**	**0.4**			**%**
kano-catheter																
127	77	16	5	8	2	6	5	3	3		2					
in %	**60.6**	**12.6**	**3.9**	**6.3**	**1.6**	**4.7**	**3.9**	**2.4**	**2.4**		**1.6**					**%**
katsina-rvf																
128	89	15	8	9	1	1		3			2					
in %	**69.5**	**11.7**	**6.3**	**7.0**	**0.8**	**0.8**		**2.3**			**1.6**					**%**
katsina-rvf																
42	32	4	2	1		2	1									
in %	**76.2**	**9.5**	**4.8**	**2.4**		**4.8**	**2.4**									**%**

parity at obstetric fistula

total figures per VVF-repair, VVF-catheter and RVF-repair

total obstetric	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	
vvf-repair																
2001	1089	228	155	99	102	68	96	53	46	30	18	8	5	3	1	
in %	**54.4**	**11.4**	**7.7**	**4.9**	**5.1**	**3.4**	**4.8**	**2.6**	**2.3**	**1.5**	**0.9**	**0.4**	**0.2**	**0.1**	**0.1**	**%**
vvf-catheter																
410	225	48	27	18	21	19	13	16	8	6	6	2	1			
in %	**54.9**	**11.7**	**6.6**	**4.4**	**5.1**	**4.6**	**3.2**	**3.9**	**2.0**	**1.5**	**1.5**	**0.5**	**0.2**			**%**
rvf-repair																
170	121	19	10	10	1	3	1	3				2				
in %	**71.2**	**11.2**	**5.9**	**5.9**	**0.6**	**1.8**	**0.6**	**1.8**				**1.2**				**%**

scientific papers

scientific papers

Waaldijk K and Armiya'u YD:
The obstetric fistula: a major public health problem still unsolved. Int Urogyn J 4: 126-128, 1993

Waaldijk K and Elkins T:
The obstetric fistula and peroneal nerve involvement: an analysis of 947 patients. Int Urogyn J 4: , 1993

Waaldijk K:
The immediate surgical management of fresh obstetric fistulas with catheter and/or early closure. Int J Gynecol Obstet 45: 11-16, 1994

Waaldijk K:
A surgical classification of vesicovaginal fistula as based on a personal experience in over 3,500 patients.
accepted for publication in Int J Gynecol Obstet

scientific thesis/book

Waaldijk K:
The (surgical) management of bladder fistula in 775 women in Northern Nigeria. PhD thesis, University of Utrecht, Holland, 1989

Safana SA:
The problem of vesico-vaginal fistulae in Katsina State - Northern Nigeria: a strategy for change. MPH thesis, University of Leeds, 1991

Waaldijk K:
step-by-step surgery of vesicovaginal fistulas, Campion Press, Edinburgh, 1994

papers presented at congress/meeting

Waaldijk K:
A classification of vesicovaginal fistula according to its location with regards to operation technic and prognosis as based on a personal experience in over 1,250 patients. Paper presented IXth Congress of European Association of Urologists in Amsterdam. Europ Urol 18/S1: 33, 1990

Waaldijk K:
Preliminary incidence of obstetric fistula in Northern Nigeria. Paper presented at National Task Force on VVF, 1992

Waaldijk K:
Prevalence of obstetric fistula in (Northern) Nigeria. Paper presented at National Task Force on VVF, 1992

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