<u>Vesico vaginal fistula (VVF)</u>

<u>A problem of under-development</u>

<u>By:</u>

Dr. Rahmat Hassan Mohammad
Foundation for Women's Health, Research and Development – (FORWARD) – Nigeria
Email: forward@forwardnigeria.org

Vesico vaginal fistula (VVF) or recto vaginal fistula (RVF) are problems of under-development; as such the best solution will be by putting in place appropriate integrated development programmes that are community based and sustainable. Such approach should be one that will strengthen the local capacity available to women to improve their health and social environment through the implementation of co-ordinated model programmes**.** Such programmes should include those that address the social and economic status of the community as a whole with focus on girl-child education, adult literacy and income generating skills development for women of childbearing age. Also necessary are, appropriate, affordable and accessible health services provision at the grassroots level. Interventions should be such that will integrate the socio-economic aspects of women's health, with the groundwork for total involvement and community participation to address the integrated relationship that exists between the health of women and their social environment. This approach will also highlight the contribution that women make to the quality of life within the community.

<u>The problem</u>: VVF and RVF are holes resulting from the breakdown in the tissue between the vaginal wall and the bladder or rectum caused by unrelieved obstructed labour. The consequences of such damage are urinary or faecal incontinence and related conditions such as dermatitis and erosion of the skin and other tissues in the vulva and vagina from the constant leaking of urine or faeces. In extreme cases the urethra, bladder and vaginal wall can be completely eroded. If nerves to the lower limbs are damaged women can develop foot-drop, a loss of co-ordination with one or both of the lower limbs.

In addition to these physical problems, VVF and RVF cause acute **social problems**. Due to constant leaking of urine or faeces and the accompanying smell, most communities consider these women outcasts and cut them off from all social activities. Commuting in public transport and engaging in social activities such as weddings and naming ceremonies becomes difficult. If the fistulae are not repaired, their husbands may

divorce the women. Some leave their families to roam in the cities where they are not known as the outlook for them remain bleak in the community.

Historically, the issue of VVF dates back to 2050BC when it was observed in the Mummies of Ancient Egypt. The first reference to fistula dates back to 1550BC and later linked to obstructed labour in 1030 AD. Between the 17th and 19th centuries VVF was a problem in much of what is now the developed world, including the US and Europe. This problem was tackled as social and economic development took place in the so-called developed continents.The year 1855 saw the establishment of the world's first VVF specific hospital in New York. Mr. Sims, a famous VVF surgeon, performed the first VVF repair there. In 1895, the hospital was converted to a general hospital as incidence of VVF decreased with development. In Nigeria, however, the problem of VVF is increasing as the general development of the community worsens. Despite the availability of VVF repair facilities in some Nigerian hospitals for almost a century, the problem persists. This can be associated with the general under-development of community health services structures and widespread poverty that has become ingrained in the lives of majority of Nigerians.

In rural areas, the prevalence rate is said to be higher due to inadequacy of facilities for pre and post-natal care. In such areas, long distances combined with high cost of care; ignorance and poor nutrition make women more vulnerable to VVF. Unreliability and scarcity of data has meant that accurate numbers of those inflicted is not available. Although it is certain that victims of this most preventable condition can be found across the length and breadth of the country, there appears to be a concentration of suffers in northern, south eastern and middle belt regions of the country.

In Nigeria, an estimated 529,000 women died from the complications of pregnancy and childbirth in 2000. For every woman who dies, approximately 20 more are seriously injured or disabled.

This means that, every year, close to 9 million women suffer some type of injury from pregnancy or childbirth that can have a profound effect on their lives and that of their families

According to the Federal Ministry of Health, between 500,000 and 1,000,000 women/girls are living with VVF, and an estimate of up to 80,000 new cases annually. The incidence is estimated at two per 1,000 deliveries. These estimates are based on information gathered from victims who attend established medical facilities seeking healthcare. The reality is, however,

that most sufferers, due to either distance or cost, never make it to any formal medical establishment for appropriate attention. [1]

Causes of VVF could be direct or indirect:

Direct causes of VVF - The main and direct cause of VVF is 'unrelieved' obstructed labour. This means that in an ideal situation, where there are health facilities to prevent obstructed labour, and where pregnancy has been monitored during the course of at least 6 months before the onset of labour, the likelihood of obstructed labour is minimised.[2]

Other factors that influence the incidence of VVF include accidental surgical injury related to pregnancy, and crude attempts at induced abortion. Surgical procedures that cause VVF are of two types. ***The first***, *orthodox medical accidental injur*y, which refers to injury caused to the bladder during surgical obstetric procedures performed within a formal/modern health care system, such as a hospital. Such procedures include Caesarean sections and difficult forceps deliveries.

The second are traditional procedures commonly employed during pregnancy and labour, and sometimes result not only to VVF, but also haemorrhage and sepsis. Examples include female genital mutilation (FGM), 'Gishiri' and 'Angurya' cuts. The latter 2 are traditional practices in which a tissue is removed from the vagina by traditional surgeons for the treatment of coital pain, infertility, obstructed labour, amenorrhea, vulva rash, goitre, and generalized body aches and pains.[3]

The indirect causes of VVF and RVF are multiple and affect poor, uneducated and young women/girls in rural areas of Nigeria.

Profile of girls/women who develop VVF

a) *Poverty and gender discrimination,* specifically within the family, result in under-nourishment and poor physical development, particularly of girls. In communities where early marriage is the norm many girls become pregnant in their early teens before the pelvis is fully developed. These girls have high risk of obstructed labour and ultimately VVF or maternal death.

b*) Lack of education,* coupled with low status and powerlessness of young wives, lack of education invariably results in poor uptake of antenatal services. Where these services are available, girls are often unaware of the

Federsl Ministry of Health; Fact Sheets on Safe Motherhood
[2] Braddock M, and Mohammad R, Feasibility study of the situation of VVF in Ethiopia and Nigeria, a Report - 1996.
[3] Bello, K Vesico vagina fistula – Only a Woman Accursed –Internet - Canada, 2001

importance of utilisation. It is not uncommon for young women to be stopped from uptake of such services either by their own timidity or by restrictions on freedom of movement imposed by their husbands. The dangers of early pregnancy are often not understood by the girl herself, her husband, her family, her community, or even the traditional birth attendants. High-risk pregnancies are not therefore identified in time.

c) *Culture, traditions or poverty* - A high percentage (87%) of rural childbirth takes place at home. Problems occur when complications arise and there is an absence of attendants adequately qualified to identify these complications and/or seek medical attention in good time.

d) *Access to service.* Where there is adequate information and information on the need for adequate medical attention during pregnancy and childbirth, many women in rural areas do not have access to medical services. This is often due to factors such as poor availability of the primary health care, lack of obstetric care, physical isolation or lack of transport. Where MCH (Maternal and Child Health) services are not free, many women lack funds to pay for medical care, particularly expensive procedures such as Caesarean sections.

The prevalence of VVF seems to be high in areas where:

- poverty is high, especially amongst women
- prevalence of education is low or in some cases non existent for girls/women
- maternal and child mortality rates are high.

Obstructed labour is preventable and by so doing VVF could be avoided. The profile described above is typical of under development. It is therefore logical to assume that the most appropriate approach to preventing VVF is social and economic development of 'at risk' girls/women long before they become pregnant. This development would commence *in utero* and through childhood and adolescence and last into womanhood. Such development could be possible with good nutrition of the mother of the girl who might be a victim of VVF in 15 years' time. Good nutrition before and during pregnancy as well as adequately equipped and staffed antenatal and post natal facilities at the rural areas will go a long way to help prevent obstructed labour. This approach is cheaper and the girl/woman is more or less in control of VVF prevention.

However, the classical approach in Nigeria today of preventing VVF is Caesarian section! It is not possible to cover all 'at risk' women/girls with Caesarian section. There is also the problem of distance to emergency

obstetric facilities in the rural areas to carry out procedures like the Caesarian section (CS). Even when available and accessible, CS is performed on a malnourished, probably anaemic girl/woman in a hospital that may be under-staffed and ill equipped. Also, considering the cost of the surgery, an average of N5, 000 for consumables, even in hospitals where services are supposed to be free, the procedure may not be affordable to those 'at risk' of developing VVF. It is noteworthy that this approach prevents VVF ***not*** obstructed labour and the doctor is in total control. One would think that it is better to prevent obstructed labour.

Interventions to address the problem of VVF have to be one with holistic approach to include treatment, rehabilitation and follow up in the community.

Ideally, interventions should be done with counselling from the time the sufferer comes to seek help, through to when she returns to her community. The counselling will form part of a whole package of rehabilitation which ideally should start with the treatment but not end with it. The sufferer has various stresses including physical, psychological and socio-economic, only this approach can bring complete healing for those suffering with VVF.

VVF treatment in hospitals - The government approach to intervention has been focused on surgical repair with million of Naira/dollars pumped into the process. The intervention is carried out in hospitals in town, where few 'at risk' women/girls can access or afford, therefore missing out on majority of those with VVF in the rural areas. There are certain conditions necessary to qualify for surgery that majority of sufferers are not able to meet. For example, it is important that patients awaiting surgery take as much as 2-4 litres of clean water a day to help clean their bladder in preparation for surgery. With the low economic status of women with VVF, affording that amount of water in addition to good food pre and post operations is hardly achievable. However, the surgery takes place anyway as the surgeon has a job to do.

Another drawback to hospital treatment is that this may be the first visit of the girl/woman to a hospital in the city, therefore she feels intimidated and vulnerable and additional psychological trauma. Leaking with urine, malnourished and sometimes with untreated infections, the woman's thin legs are hoisted up and she is put 'upside down' for a surgery that takes between one to two hours depending on the extent of the fistula. After surgery, she is taken to recovery room to be looked after by her relative under the supervision of understaffed nursing care team.

After 2 weeks in the post operative ward, the 'patient' is discharged to a rehabilitation centre where she stays for one month awaiting the removal of catheter and stitches. She is then discharged and asked to return to the surgeon after another month for review. All these sound well in theory. However, some VVF sufferers need 2 to 3 surgeries to attain complete recovery. This means 2-3 time return journey to the hospital and the repeat of the procedure stated above. This may be difficult as funds are not always available for subsequent journeys

The surgeon gives the girls/women advice not to have coital relationship with their husbands when they return home! This is not practicable as the husbands have not had any sensitization on the problem of their wives and have not been involved in any counselling they might have been given at the time of surgery and discharge. In addition to this, they cannot refuse their husband sexual relationship as this is against their Islamic faith (majority of VVF sufferers are Muslims). It is not surprising that the surgical repair disintegrates or pregnancy occurs soon after surgery making it difficult for follow up or for subsequent surgery if needed. Subsequent childbirth if not properly supervised may result in another fistula and she rejoins the queue for surgical repair!

Appropriate intervention package will be one that will take care of the physical, mental, social, and economical damage that has been the menace of the girls/women suffering with VVF. This type of intervention cannot be achieved in the hospital environment where we know that there are other urgent cases to attend to by meagre staff in the hospital. Also, the hospital is not a place to address issues of economic and social development, thus not appropriate for sustained healing of women suffering with VVF.

A situation analysis of VVF and the issues surrounding it in Addis Abba in Ethiopia, Uyo, Katsina and Kano in Nigeria, it was concluded that *'VVF is as a result of poverty, under-development, harmful traditional practices, low status and educational level of women, lack of primary health networks and maternal and child health (MCH) care, and lack of accessible Caesarean services.'*[4]

Convinced that VVF is caused by a complex multiple of social and economic issues, and that only holistic interventions can appropriately address them a project proposal for a multi-dimensional approach to the problem was presented to the Department for International Development (DfID) and the Community Fund both of UK in 1997. The proposal for a ***'Women's Health and Development'*** was approved in 1999. The funding was channelled though the *Foundation for Women's Health Research and Development*

[4] Braddock M, and Mohammad RH, Feasibility study of the situation of VVF in Ethiopia and Nigeria, a Report - 1996.

(FORWARD) UK to its sister organization – FORWARD – Nigeria based in Kano. The intervention was funded for 3 years, (July 1999 to June 2002). The Women's Health project includes components that addresses prevention, treatment, rehabilitation and reintegration back to the communities of women who have suffered the trauma of VVF. Project activities were carried out both at residential rehabilitation centre and in the communities of Dambatta and Makoda Local government areas (LGA), both in Kano State. The 2 LGA lie in the extreme northern part of Kano and Dambatta was chosen for the project because of an existing accommodation purposefully built for such intervention since mid 1980s by Kano State government through advocacy of the National Council for Women Societies (NCWS) Kano State branch.

After 3 years of intervention, the Women's Health and Development project was evaluated and was found to have had direct positive impact on the girls/women affected by VVF and indirectly on women in the communities around the centre. Armed with skills to generate income for economic independence, beneficiaries of the project return to their communities, living normal lives and delivering babies normally.

Between 2002 and 2004 when there was no external funding the project was sustained by FORWARD UK, local Philanthropists, UNFPA (through the Federal Ministry of Women Affairs) and NAPEP.

Presently, FORWARD is implementing another project - '***Well Women and Children Campaign'*** funded solely by Community Fund UK for 4 years. The present project (2004/08) –is aimed at improving health services to decrease maternal and child mortality and morbidities as well as raising awareness in the community on issues of HIV/AIDS. The VVF component of the previous project is included in the new intervention.

The Way FORWARD – Dambatta project

In order to address the issues of VVF appropriately, it is necessary for State governments to replicate FORWARD's project which has been evaluated and found to have had positive impact on the women/girls suffering with the trauma of VVF.

The '**Women's Health and Development'** project was set up to improve the health and social and economic status of women who have suffered/suffering from Vesico-vaginal fistulae (VVF). The project takes a holistic approach to addressing this problem through surgical repair and rehabilitation, as well as skills development and basic literacy and arithmetic, training to help women improve their physical, social and economic well-being. Activities specific to those with VVF take place in a residential setup in Dambatta, Kano State.

The project also campaigns to prevent VVF in young women through creating a culture of female empowerment and education, raising awareness of general health and reproductive health and rights issues, and integrating the role of women in mainstream community development programmes. The project also conducts outreach literacy classes, works with women to raise awareness of the civil and political rights and has established community health committees to work in the communities, promoting healthy living for women and their families.

3 Main Components of the women's health and development project in the community were:

- Strengthening existing community based health provisions and delivery services

- Improving the socio-economic status of women through strengthening adult literacy services with a high component of vocational training to develop and build skills for income generating activities.

- Creating community awareness through culturally sensitive information, education and communication (IEC) for behavioural changes.

However, activities specific to women/girls with VVF at a residential centre in Dambatta are:

1. Counseling (peer and professional), surgical treatment and appropriate pre- and post surgery nursing care.

2 Residential rehabilitation where activities are co-ordinated and managed to educate and train women on income generating skills

3 Physical and psychological rehabilitation at the centre and subsequent reintegration of women into their communities, with 12 months follow-up and monitoring of re-assimilation

The project is not only about surgical repair; it is about being an integral and semi-permanent feature in these women's lives. The project becomes a temporary alternative family for these marginalized women. They create links with other women like themselves in an atmosphere of support and learning. The content of the classes and instruction has a constant thread of women's rights and empowerment and the women's/girl's support and help each other. The issues of the VVF are put in a structure of health, reproductive and sexual health and rights so that they understand what and how the VVF occurred and what to do in order prevent it happening again. FORWARD does not see the women/girls with VVF as 'patients' as such they are said to be 'Clients' while they stay at the rehabilitation centre.

A typical day at the Centre starts with environmental sanitation and personal hygiene activities. Breakfast follows and literacy classes are conducted between 10 a.m. and 12.30 p.m. Lunch follows at 1.30 p.m., after which clients say their prayers. Then they have a rest period until 4 p.m. when they return to classes for income generating activities and extra curriculum activities like attending to the vegetable gardens and livestock. Dinner is served at 7.30 after which more activities if and when necessary are conducted before clients retire for the day.

Food preparation and cooking is done by the clients themselves (on a rota basis). 2 Clients cook breakfast, lunch and dinner for the rest of the group. An experienced live-in Matron supervises the cooking to ensure that diets are well prepared to ensure adequate nutrition. The centre has individual vegetable plots for clients to grow their own vegetables to contribute to ingredients for food preparation and nutrition demonstrations. The Centre has various fruit trees including pawpaw (papaya), banana, oranges, cashew, dates, guava and mangoes from which client's meals are supplemented for vitamins and minerals.

Income-generating activities

Improving the socio-economic status of women through income-generating activities is aimed at reducing the incidence of VVF and RVF in the project area, as low socio-economic status and lack of education have been identified as the major causes of this reproductive morbidity.

At the centre, the provision of education plus vocational skills means that the girls/women are equipped to return to their communities with skills and knowledge that make them valued and economically independent members of the community. This means that the women have options available to them that did not exist before. They are not only economically equipped to make their own decisions but also have the information to support them to make the best decisions possible.

Vocational skills development has constituted a very important part of activities within the Centre, and has enjoyed a great deal of involvement of clients both during and after their stay at the Centre. Skills development activities have included soap and pomade making, sewing, cap making (crocheting and weaving), knitting as well as livestock rearing and animal husbandry. Skills training take place daily at the centre and periodic workshops are held for training of facilitators and staff. The project runs literacy and arithmetic classes for the clients each day, sewing and knitting classes are conducted twice a week, while soap making and pomade production take place once a week. Clients participate fully in taking care of livestock and animal husbandry activities throughout their stay at the centre. This acts as a means of informal training for livestock activities outside of the centre should they wish to pursue this means of income generation. Small business management principles are also taught to help clients develop skills to manage their own businesses when they return to their villages.

Graduation ceremony takes place after an average of 10 months' stay at the centre. Families of Clients, community leaders, government functionaries at local and State levels are invited to witness the transformation of the women from being outcast to empowered literate individuals with high self esteem than when they came to the project.

When leaving the centre clients are given a loan in kind which usually consists of a specific quantities of knitting, sewing or crochet materials or animals or other raw materials for activities such as groundnut oil processing and local snack production The loan has an approximate value of N5,000 (about $35). The loan scheme was set up in the first year of the project. Clients pay back loans in instalments with 0% interest. Repayments are collected during outreach visits or when women come to visit the Centre.

FORWARD also conducts follow up visits with previous clients to assist and monitor their re-integration onto their communities and evaluate their income generating skills activities. In order to increase the social and economic well-being of women when they return to their villages, FORWARD

assists each client to establish a co-operative group in their various villages in order to sustain the skills acquired at the Centre and to pass them on to other women in the villages. Technical assistance from FORWARD project staff is offered during outreach and follow-up visits. FORWARD maintains its link with past clients by encouraging visits from them as well as inviting them to social functions as well as seminars and workshops at the Centre.

Follow up of past Clients

As soon as a Client is registered into the Centre, detailed information is recorded of her village of origin, the village into which she was married, and contact people (father, uncle, village head, mother husband etc) in both places. Based on this information, FORWARD makes a visit to link up with the villages to verify what was recorded with reality. During this visit, FORWARD establishes a link with the Clients' families and invites them to visit when they wish as well as invite them to graduation ceremonies. Clients are also allowed to visit home on compassionate grounds when they need to. The established link between FORWARD and the community help immensely in the follow-up component of this initiative.

Follow up of past Clients is an important activity that was not appropriately addressed by the entire VVF project visited during our feasibility study. It was argued that girls/women do not want to return to their villages after treatment because of past shame of smelling with urine. FORWARD's project found the opposite to be true. After 9-10 months of physical and mental rehabilitation as well as economic empowerment, our Clients return to their villages with a higher status than when they left. Outreach Officer have returned to the Centre filling fulfilled as they report that past Clients status have not only improved, they have brought happiness and pride to their families. They are referred to as '*Malama* (teacher) educated in Dambatta'.

This aspect of the intervention is an innovative approach to ensuring that the victims of VVF who have been cured and rehabilitated have gone back and successfully re-integrated into their communities armed with skills and the enviable status of empowered girl/woman.

The outreach exercise starts 2-3 months after they have left the Centre to allow clients time to settle down and plan strategies to continue with their income generating activities in the villages. The support provided by the aftercare visits, acts to keep the girls and women in a support system outside that which provided by their family and keeps them growing and developing. The outreach worker acts as a sounding board that they use to bounce ideas and thoughts off. Because they have this additional support, the girls are able to resist being forced into a position where the skills and

empowerment that they have had is curbed and stifled. Some of our clients who were still married before they came to the Centre have been so empowered that when they return to their villages and feel it necessary, they are able to 're-negotiate' their marriages. In some cases the marriage has been dissolved and they marry men of their choice. Those who had divorced before the rehabilitation refuse to be rushed into another marriage, as they now know that it is their right to consent to a marriage contract before it is carried out.

Past clients are required to mobilise women in their villages to form groups and learn from and share with each other issues of development and reproductive health. The clients are expected by FORWARD to be leaders in their communities and they have been given the skills to share that make them valued. Because they have the knowledge they have a level of power which they did not have before. They take this responsibility very seriously and become community leaders. This also helps them to reintegrate into the community. The ultimate aim is to assist them to continue with income generating activities and later form a community based organisation that could be registered as Co-operative groups.

Conclusions: The problems of women's health and their low socio-economic status have been of great concern to a number of different international and regional organisations. There is increased awareness that the best approach is to adopt comprehensive programmes that examines all key periods in a woman's life cycle: infancy, childhood, adolescence, childbearing age, menopausal phase and old age. For example, the Global Commission on Women's Health established under the auspices of the World Health Organisation (WHO), has adopted "health security for women throughout the life-span" as the platform for its future advocacy efforts to improve the quality of women lives. The Commission recognises that education and schooling rank first amongst the most powerful means for improving the health of women and girls.

Enough knowledge and technology is now available to respond to the health and development needs of women. What is lacking, and lagging behind is the right **action** programme to match such knowledge. In the past two decades, women-specific projects have been the main method of addressing the problems of women's health and development in most African countries. This approach however has made little or no impact on the situation. Presently, an integrated approach is being introduced. Policy makers and those responsible for implementing policies on women are being encouraged to integrate women's health, education, work burden, income, productivity and community participation into co-ordinated sectional programmes.

There is growing evidence that interrelated projects focused on efforts to improve the health and overall status of women will provide substantial benefits in term of human welfare, poverty alleviation and economic growth. Household food and economic security has emerged as a major priority, and programmes have been initiated in Burkina Faso, Burundi, Malawi, Nigeria and Tanzania. However, Nigeria, especially the northern area, continues to lag behind in focusing efforts on integrated programmes to improve the health and overall status of women.

In conclusion, the Dambatta initiative can be seen as an example of a holistic approach with community participation to address a problem whose causes are multi-dimensional. FORWARD's approach has changed not only the lives of those who have been affected by VVF but also that of their families and communities at large. The cost of the approach is minimal and sustainable. FORWARD's initiative has recorded unprecedented success because stakeholders and beneficiaries at all level have been involved in the planning and implementation of the initiative.

Recommendations

FORWARD has implemented a VVF surgery and rehabilitation project in Kano State – Nigeria for 6 years with funding from the UK and help from local Philanthropists and volunteers. The project has been extremely successful and is as such recommended for replication in other States of Nigeria, alongside other VVF projects in Africa to ensure long-term and sustained impact for complete success on VVF intervention. FORWARD is thus in a good position to make recommendations to help address the problem of VVF in Nigeria.

<u>The Federal Ministry of Health</u> has laudable maternal and child health initiatives. Examples include: *'Making Pregnancy Safer' (MPS) Initiative, 'Women and Children Friendly Health Services' (WCFHS) Initiative and the 'Birth Preparedness and Complication Readiness' (BPCR)* are all stated in the Ministry's Fact Sheets on Safe Motherhood. The Ministry should move down to the beneficiaries at the grassroots to ensure that initiatives are implemented and properly monitored and evaluated for positive impact.

The Federal Ministry of Health's Fact Sheets further indicated that the expectations of achieving the objectives of safe motherhood include: 1) One or more primary health care (PHC) facility per local government area (LGA) to offer basic essential obstetric care (BEOC) which must have at least 4 trained midwives; 2) one comprehensive essential obstetric care facility in each State. These expectations need to be met with concrete actions on ground to ensure improved quality of lives of Nigerian women and young

girls. There is an urgent need for functional BEOCs in each LGA as soon as possible in order to stop all unnecessary sufferings of women who want to perform the natural act of childbirth.

The Federal Ministry of Health should also develop a standard protocol for the surgical intervention for those with VVF. This will be necessary to control the activities of all the 'tourist' surgeons who come into the country to perform surgeries on the powerless, voiceless women/girls with VVF. It is also very important that the surgical procedures be monitored by indigenous doctors who have been trained to perform the surgery. Presently, 'doctors' who sometimes are seeing a fistulae for the first time, when they arrive in the country, become 'VVF surgeons' within a week, and depart the country as 'VVF specialists'!

In addition to the initiatives above, the State Ministries of Health should provide maternity waiting areas for women at risk of VVF recurrence as well as those at risk of developing VVF identified during antenatal period, where they are admitted for monitoring of labour progress and hopefully avoid development of VVF during childbirth.

<u>The Federal Ministry of Women Affairs (FMWA)</u> should be part of the principal stakeholders in addressing issue of VVF in Nigeria. This is necessary in order to add a tender supporting perspective to the problem of VVF. Surgical intervention only, on which a lot of money has been spent, has not yielded much success as it has lacked the love tender care that only a Ministry that deals with women issues can provide adequately. Residential rehabilitation centres, custom-built near hospitals like the one in Dambatta should be established and run by the Federal Ministry of Women Affairs in all the States with high prevalence of VVF and be linked to communities for sustainability.

<u>Mother and child nutrition</u> – is very important in improving the quality of psychological and physical health of women and children. A malnourished child is not likely to catch up physical development appropriate for carrying healthy pregnancy and childbirth. An undernourished mother could deliver a healthy child but since she is undernourished, she is not able to nurture the child to desired physical and psychological development. It is therefore necessary for more attention to be paid to adequate feeding of mother and their children. Nutrition rehabilitation centres as well as feeding centres should be instituted in every local government of Nigeria. Appropriate use of local foodstuff used in these centres to feed women and children will go a long way to address issues of malnutrition in the communities.

Involving local expertise – a home-grown solution will be cheaper and more sustainable. The use of bodies like the Medical Women Association of Nigeria to join effort with the Society of Gynaecologists of Nigeria (SOGON) in addition to other relevant professional association such as those of Nutritionists, Sociologists will go a long way in providing a lasting solution to the problems of maternal and child health in Nigeria.

Non-governmental organizations such as the National Council of Women Societies (NCWS), who started campaign on VVF in early 1980 should re-claim the issue and address it the way that will help to make it have community ownership as such ensure sustainability.

Millennium Development Goals (MDG) – Achieving the objectives of the MDG will go a long way to improve the health of mother and children in Nigeria. And since the achievement of the goals is tied to community empowerment and economic development, it is necessary that the policy makers both at State and Federal level commit adequate funds to carefully thought-out policies to achieve the MDGs. At least 60% of the debt relief should be spent on women and children's health and community development with focus on reproductive health issues.

In as much as it is important that funding for interventions such as FORWARD's are sustained by governments, it is important for international organisations funding development initiatives to reduce the bureaucracy ingrained in government institutions and over-dependence on government structures to ensure that their funds are spent for action projects. Enough money has been spent on conferences, seminars, and workshops in the past 20+ years on issues of VVF that shelves are filled with reports that do not have much effect on either addressing or solving the problems of maternal and child health. It is time to wind down on the advocacy and increase activities to address the issues surrounding VVF and related maternal morbidities and mortalities in Nigeria. National and international interventions on issue of maternal and child health should always tap into the wealth of experience and other resources that are available in the communities in order to help them with those issues to ensure sustainability of interventions.