

Adolescent Sexual and Reproductive Health in the Niger Delta Region of Nigeria-Issues and Challenges

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ABSTRACT

There has been an increasing awareness of the need to pay special focus on the adolescent and their sexual and reproductive health. This article reviews the sexual and reproductive health of adolescents in the Niger Delta region (NDR) of Nigeria. The objective is to bring to focus these important issues in the region.

Adolescents in the NDR engage in unhealthy sexual behaviour characterized by early age at sexual initiation, unsafe sex and multiple sexual partners. The local socio-economic condition exerts extra pressure on the adolescent with negative reproductive health consequences. There is urgent need to develop a time bound strategic framework and plan to redress this situation. This will require the participation of all stake holders. (*Rev Afr Santé Reprod* 2007; 11[1]:113-124).

RÉSUMÉ

La santé sexuelle et de reproduction de l'adolescent dans la région du Niger Delta au Nigéria: Questions et défis Il y a eu une conscience croissante de la nécessité de prêter une attention particulière aux adolescents et à leur santé sexuelle et de reproduction. Cet article passe en revue la santé sexuelle et de reproduction des adolescents dans la région du Niger Delta du Nigéria (RND). L'objectif est de tirer l'attention aux questions importantes concernant la région. Les adolescents dans la RND s'engagent dans des comportements sexuels malsains caractérisés par l'initiation sexuelle précoce, l'acte sexuel dangereux et des multiples partenaires sexuels. La condition socio-économique locale exerce une pression supplémentaire sur l'adolescent, aboutissant à des conséquences de la santé de reproduction négatives. Il y a une nécessité urgente d'élaborer un cadre stratégique et un plan qui seront liés au temps afin de corriger la situation. Ceci exigera la participation de tous les partis-prenant. (*Rev Afr Santé Reprod* 2007; 11[1]:113-124).

KEY WORDS: *Adolescents; sexual and reproductive health; Nigera Delta*

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Introduction

Since the late 1980's there has been an increasing awareness of the need to pay special focus on the adolescent and their sexual and Reproductive Health (RH). This is not surprising as there are 1.7 billion young people in the world which make up over one-quarter of the world's population¹. Eighty six percent of them live in the developing countries.¹ The sexual and RH behaviour of this age group will critically affect the global population growth pattern.²

However it is known that adolescents are not a homogenous group, their lives vary enormously by age, sex, marital status, class, region and cultural context, similarly their lives, sexual and RH needs may vary considerably across these different groups, cultures and regions. One of such regions is the Niger Delta Region (NDR) of Nigeria. There is reason to believe that due to the geographic, economic and socio-cultural peculiarity of the NDR, the adolescent are more susceptible to negative RH outcomes.

The Niger Delta Region (NDR) ³

The NDR is situated in the southern part of Nigeria and bordered to the south by the Atlantic Ocean and to the east by Cameroon. It occupies a surface area of about 112,110 square kilometres and represents 12% of Nigeria's total surface area.

The NDR is made up of nine states: Abia, Akwa-ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers. It is estimated to have a population of about 27 million which represents about 23% of Nigeria's total population. About 62% of the population are aged below 30 years. There are about 40 different ethnic groups speaking 250 languages and dialects.

The majority of the settlements are in the form of small settlements of fewer than 5000 inhabitants. However there are urban settlements which include Port-Harcourt, Warri, Asaba, Benin, Akure, Calabar, Uyo, Umuahia, Aba, Owerri and Yenogoa. Farming and fishing are the main source of livelihood for most of the NDR people.

All of the crude oil in Nigeria comes from the numerous, large, producing fields located in the swamps of the NDR. Nigeria produces over 2 million barrels of crude oil per day and is the 7th largest producer of crude oil in the world. The region is also rich in natural gas which was previously being flared but is now being harnessed and exported as liquefied natural gas. It has been debated whether the presence of crude oil in the region has been a blessing or a curse. Some have argued that the years of oil exploration activities with frequent oil spills have led to severe environmental degradation with resultant destruction of farmlands and aquatic flora and fauna. Consequently the oil boom has become to the people of the NDR, a doom.⁴

Years of official neglect has resulted in the NDR of today being the epitome of hunger, poverty and injustice.⁴ It is estimated that 10 million people in the area are destitute with 14 million people living in poverty in rural communities.⁴ Except in 2 states of the NDR, the unemployment rate in the region is much higher than the national figure.

The above situation in the region has led to recent agitation by political and youth leaders for full control of revenue derived from oil in the region. There is increasing youth restiveness with build up of arms as these youth mobilise to sabotage oil flow production as a way of pressing home their demands for better education, employment and social infrastructure in the region.

It is against this backdrop that the sexual and reproductive health of adolescents in the Niger Delta region is reviewed. This article, will also identify the various determinants of adolescent RH in the region, review initiatives aimed at improving adolescent RH in the region, and finally proffer possible solutions to meet the RH needs of adolescents in the Niger-Delta.

METHODOLOGY

A wide search of the print and electronic literature including the Medline was done. The reference

lists of identified articles were further searched to identify relevant related articles. Manual search of local journals and documents on Adolescent Reproductive Health from states in the Niger Delta Region were made. National documents on Adolescent reproductive Health and policy were also reviewed. Documentations of Non-governmental organisation were searched for relevant information. The Nigeria Demographic and Health Survey NDHS also provided information on ASRH in the NDR as its data were disaggregated into the 6 geopolitical zones with the South-South zone made up of 6 states from the NDR.

ADOLESCENT SEXUAL BEHAVIOUR IN THE NIGER DELTA REGION

Data from some states in the region indicate that adolescents in the region engage in unhealthy sexual behaviour characterized by early age at sexual initiation, unsafe sex and multiple sexual partners.⁵⁻¹⁵

Early sexual initiation

In a study of 410 adolescent girls in a rural community in Rivers state 62 % of them had initiated sexual intercourse; 43.6% of girls aged between 12 and 17 years and 80.1% of girls aged between 17-19 years had had sex.^{9,16} About 14% of the girls initiated sexual intercourse by age 10-14 years.¹⁶ Similarly in another study in Rivers state, 78.8% of the 768 adolescents aged 14-21 years had been sexually exposed and the mean age at sexual initiation was 15.04 years with 2% of them having initiated sex at the age of 12.¹⁰ Anochie, also in Rivers state documented that 12.4% of the 534 female students studied had initiated sexual intercourse by 11 years.⁶

Studies from other states in the NDR show a similar trend. In Calabar, Cross River State the mean age at sexual initiation was 13.7 years.¹¹ In Delta State, a UNFPA sponsored baseline survey which included 1013 adolescents showed that 34.4% of adolescents aged between 15 -19 years

have had sex ¹², while another study of 516 secondary school students also in Delta state showed that 69% of them have been sexually initiated.¹³

Social context of sexual debut

More worrisome is the context in which this sexual debut occurs. In a research on the social context of debut sexual encounter among young persons in Abala, Abia state it was established that 5.4% of the girls were drugged, 4.1% were raped, 7.4% were coerced, and 14.2% were deceived into having sex. Twenty-three percent of the girls attributed their first sexual encounter to curiosity about sex. 4.1% to 'biological urge' and 16.2% said they actually requested sex. About 10.9% gave other reasons. On the whole only about 34.6% of sexual debut by the adolescents seem to have been by mutual consent.¹⁵

It is well known that the first sexual intercourse often involves some breach of epithelium as the hymen is ruptured and the vagina distended for the first time. The degree to which this occurs to a large extent depends on whether the girl was prepared for intercourse and the amount of force exerted by the male partner. Furthermore the younger the girl, the more tender her vaginal wall is and thus more susceptible to bruising and other injury. In a survey in Cross Rivers State about 32% of female adolescents reported sustaining genital tract injury during sexual intercourse.¹¹

Subsequent sexual behaviour

Apart from this risk adolescents in the NDR are exposed to at sexual debut, their subsequent sexual behaviour makes them continually at risk of pregnancy and STIs including HIV/AIDS. In Rivers state, 34.3% of the sexually active girls have intercourse at least once in a week.⁶ Also 51% of the sexually initiated girls have been exposed to more than one sexual partner, with 6% sexually exposed to more than 5 sexual partners.¹⁰ In Cross Rivers State 22.6% of the sexually active

adolescents have more than one sexual partner¹¹, and in Delta state about one-third of the sexually active adolescents have had more than one sexual partner.¹³ In a FGD among secondary school students in Edo state, participants acknowledged that sexual activity was common among their peers, starting at an early age and often involving multiple sexual partners.¹⁷

Protection during sex

Unfortunately this level of sexual activity has not been matched with a high level of condom use. Only 12.4% of 180 adolescents interviewed in Abia state used condom during the first intercourse.¹⁵ In Rivers state, of the 768 secondary school girls studied only 6.2% had their partner use condom.¹⁰ Data from the NDHS revealed that 28.1% of sexually active adolescents within the age of 15 -19 years in the South-South zone use a modern contraceptive.^{5, 14} Even among older youths the picture is similar. In a study conducted involving 880 undergraduate students in Benin, only 39% had ever used contraceptives. Also among the 43% that were currently sexually active 58% claimed to know about emergency contraceptives but only 18% could correctly identify the proper time limit for its use.¹⁸

Sexually transmitted infections

The high level of unsafe sexual behaviour has led to a high rate of STIs, unintended and unwanted pregnancies resulting to either illegal abortions or teenage pregnancy. Brabin *et al*¹⁶ reported that 42.1% of the sexually active adolescents had experienced either an abortion or STI. In the same study, among girls aged less than 17 years, 19.8% had symptomatic candida and 11.1% trichomonas infections. On the whole 83.4% of 410 adolescents reported having a vaginal discharge. Similarly in Abia state, 19.3% of boys and 9.5% of girls claimed they were infected with Gonorrhoea and Syphilis.¹⁵ In Cross Rivers State 15.1% of the adolescents have had genital tract infection.¹¹

A pre-existing STI increases the susceptibility to acquiring HIV infection. The 2003 HIV sero-prevalence sentinel survey showed that in the South-South zone the highest prevalence of HIV was in the age group 20 -24 years.¹⁹ These young people must have contracted the infection as adolescents. STIs if not properly treated could lead to infertility in future.

Treatment seeking behaviour for STIs

Evidence from a FGD among adolescents in Edo state revealed that majority seek care from traditional healers, patent medicine store and private medical clinics.¹⁷ In Delta state 62.9% of adolescents who had STI treated it in a health centre, 25.8% went to a patent medicine store and 4.8% went to a traditional healer.¹² It is doubtful whether the majority of adolescents with STI who sought treatment outside a health facility had their infection properly treated.

Unintended pregnancy and abortion

Unwanted pregnancy is also a notable outcome of adolescent sexual activity in the NDR. Most studies have documented an 'ever pregnant' rate between 18.4% and 39.1%.^{6,9-11} These pregnancies have in most cases been terminated. Documented rate of abortion among 'ever pregnant' adolescent girls in the NDR ranged between 33.0% and 88.6%.^{6,9,10,15} Studies with sample population of older adolescents and young adults¹⁵ reporting a higher figure than studies with sample population of young adolescents¹⁰. In some of these studies about 10% of sexually active adolescents have had more than three abortions.⁶

It is pertinent to mention here that in Nigeria, the law restricts abortion. Thus most of these abortions are done illegally and by unskilled personnel under septic conditions.²⁰ About 610,000 induced abortions are carried out in Nigeria annually.²¹ It is estimated that 20,000 out of the 50,000 maternal deaths are related to abortion and its complications.²² In a hospital based study up to 80% of the patients admitted for abortion complications were adolescents.²³

Pregnant adolescent girls who do not succeed in procuring an abortion go on to have a delivery and exposed to the risks associated with teenage pregnancy, labour and delivery. In the South-South zone, 11.3% of women aged 15 -19 years had given birth.^{5,14} In Abia state, of the 10.9% of girls who became pregnant after their first sexual intercourse, 36% had a delivery.¹⁵

Early marriage

Recent survey results show that early marriage among adolescents is on the decline. It is substantially lower among those aged 20-24 than among those aged 40-44. In the South-South zone there was a drop of 42 percentage points (from 70% to 28%) over a period of about 20 years.¹⁴ While this is a welcomed development it also means that with the decreasing age at sexual debut, adolescents are exposed to a longer period in which they are at risk of unintended pregnancy. Generally pregnancy before marriage is not accepted among the diverse cultures of the Niger Delta region. Among the sexually active girls aged 15-19 years, 91.1% do not want a child soon.¹⁴ With the low rate of use of modern contraceptives among sexually active adolescents there is an unmet need for an effective contraceptive of about 21.3%.¹⁴

Female Genital Cutting

Female Genital Cutting (FGC) is prevalent in most communities in the NDR.²⁴⁻²⁷ The timing of the event and the extent of the surgery varies among communities.²⁵ While in majority of communities it is performed in the first year of life, in other communities it is performed as a pubertal rite.^{24,25} This practice has negative short and long term effects on the sexual and RH.²⁸ Despite the promulgation of a law banning FGC in Nigeria, the practice is still being done mainly for cultural reasons in the belief that it will reduce promiscuity in the female. However researchers have documented that the reduced sexual pleasure associated with FGC could lead them into having

multiple sexual partners with the hope that sexual satisfaction will be discovered with one of them.²⁹

In summary, adolescents in the NDR initiate sex early and practice unprotected sex. They do not use the condom and so are prone to contracting STIs and unintended pregnancies. Pregnant adolescents are likely to seek unsafe abortions. Teenage births with its attendant health, educational, socio-economic consequences abound.

DETERMINANTS OF ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH IN THE NIGER DELTA REGION

Several factors determine adolescent sexual behaviour. Majority of these factors are common to adolescents world wide, however others are peculiar to adolescents in Nigeria and the NDR particularly.

Adolescent knowledge and perception of sexual and reproductive issues

It is a common assumption that adequate knowledge of RH issues by adolescents will affect their perception of these issues and so determine their sexual behaviour. Reports from the NDR indicate that adolescents have some knowledge on sexuality and RH. In Delta state about 48.3% of respondents aged 12 -14 years and 78.3% of respondents 15-19 years knew that disease could be transmitted during sexual intercourse¹². Similarly 71.8% of 1013 adolescents knew that STIs could be prevented by use of condom.¹² Also about 89.3% of adolescents in Delta state had heard of HIV/AIDS. Forty percent and 46.7% said that HIV could be prevented by abstinence and use of condom respectively.¹² In Rivers states, study results show that adolescents were equally aware that condoms could prevent both unwanted pregnancy and STI.^{6, 9,10}

Most adolescents get their information on RH from their peers, the print and electronic

media and from school education. Parents and health care providers are not a common source of information on RH.^{9,12,17}

Reports on ASRH in the NDR have demonstrated that there is a gap between adolescents' knowledge of RH matters and their behaviour. Despite their knowledge of the consequences of risky sexual behaviour they do not perceive that they are vulnerable. About 83.3% of adolescents in Delta state perceive that they stand no chance of contracting HIV, while 16.1% perceived that their risk is low and only 0.6% perceived that they were at high risk of contracting HIV.¹² This same study showed that 34% of adolescents aged 15-19 are already sexually active, and there is low and inconsistent utilisation of condoms.

Access to Adolescent Friendly RH Services

It is recognised that access to RH facilities could influence RH behaviour. Adolescent friendly clinics create the environment that attract and serve youth. Unfortunately there are few or non-existent. In the UNFPA baseline survey in Delta state majority of respondents in both urban and rural areas do not know of youth service centre in their locality.¹² Of the 240 RH facilities that were inspected in Delta state only 16% had space for adolescent service and only half of these say they provide youth friendly service.¹²

Legal restriction on abortion

The legal restriction of abortion services has been a very contentious issue in Nigeria. Abortion is a major cause of maternal mortality in Nigeria.²¹⁻²³ Experts have argued that liberalising the law on abortion will reduce abortion related deaths through increased access to safe abortion.²² The changes in abortion related mortality in association with the liberalisation of abortion in Romania is a typical example often cited.³⁰

Education

There is no study from the NDR that has looked into the effect of formal education on ASRH while controlling for such confounders as age and socio-economic background. However, the few studies that disaggregated their data according to educational characteristics showed that adolescents with little or no formal education are more likely to have had sex and would have initiated sex earlier.¹² Analysis of the NDHS data according to years of education showed that among adolescents aged 15 -19 years who had less than 7 years of education, the percentage that had given birth was 32.8% compared to 7.7% among adolescents that had at least 7 years of education.¹⁴

The Delta state house-hold survey 2003 showed that about 77% of adolescents aged 12 -17 years were enrolled in secondary school.³¹ This situation is quite encouraging as school based adolescent health programmes has the potential of reaching a large percentage of adolescents in the state.

Socio-cultural factors

Available reports indicate that a varied proportion of parents do not discuss sex and sexuality with their children. In Rivers state, 87.8% of 148 mothers of pregnant adolescent said that they do not talk freely about sex with their daughters.³² When asked what they did when they suspected that their adolescent daughter could have been sexually active, 79.3% simply advised their daughter to keep away from men while only 2.2% advised on contraception use, 6.5% told their daughter that she would possibly get pregnant and then kept a close watch on her.³² In this same study 79.1% of the parents said that sexually active adolescents should not use contraceptives because contraceptives kill, cause infertility and would promote sexual promiscuity.

On the other hand, another study from Delta state revealed that 67% of 300 mothers discussed

sexual issues with their adolescent children, but only 46.6% of them were comfortable with it.³³ The authors in the study noted that their finding differ significantly from research. Both studies however noted that most parents supported the teaching of family life education in schools.

Peer pressure and influence

Peer pressure is a significant determinant of ASRH in the NDR just like in other places. Male adolescents more often than females identify peer pressure as one of the reasons for having sexual activity^{8,10,11,15}.

Gender norms and values

The role of gender norms and values in determining ASRH behaviour in the NDR has not been systematically documented. With the increasing importance of analysing RH issues from a gender perspective world-wide, it has become obvious that gender norms and values make significant contributions to adolescent sexual behaviour and RH. Many cultures in the NDR show preference for the male child and accord him privileges often to the exclusion of the female child.³⁴ This leaves the female with little or no education and at a low socio-economic stratum with sex as the only bargaining tool.

Socio-economic factors in the NDR

In the NDR, the local economic environment exerts extra pressure on adolescents and youths, which directly has consequences on their health status and reproductive behaviour. In the oil producing areas, due to the economic attraction of the oil industry, male adolescents drop out of school and engage as low cadre staff. They are employed as migrant workers in the offshore sector. Usually this group of young boys operate a high risk lifestyle health wise which includes carefree sexual life and patronage of commercial sex workers. The female adolescents in this oil producing areas on the other hand are lured into

prostitution and part-time commercial sex work with male workers in the oil and allied industries in order to maintain a high social life style.³⁴ Material rewards as a reason for engaging in sexual practice has been documented in other reports.^{9,16,17,32} Although the magnitude of this problem has not been documented, anecdotal reports indicate that there is cause for worry.

A new emerging culture in the NDR is that of youth restiveness and violence. As a result of economic deprivation, high rate of unemployment and loss of economic source of livelihood (farming and fishing) youths in the NDR have taken up arms as a means of calling attention to their impoverished situation and negotiating for improved living conditions, infrastructure and employment. Associated with this campaign often are dangerous lifestyles like alcoholism, drug addiction, casual and unprotected sex and rape.^{3,4}

ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH INITIATIVES AND PROGRAMMES IN THE NIGER DELTA REGION

With the attention drawn by the international community to the global state of ASRH since the late 80s and the early 90s, there have been some attempts by various bodies and government at the National and State levels to address ASRH.

National Initiatives and Programmes to improve ASRH

Programmes at the national level to address ASRH have been limited mainly to policy formulation to address RH including ASRH in the country. The National Adolescent Health Policy³⁵ has among its objectives, the promotion of acquisition of appropriate knowledge by adolescents and to train and sensitise adolescents and other relevant groups in skills needed to promote effective health care and healthy behaviour. The Policy goes on further to state that towards achieving the objectives of this

policy there shall be committees on adolescent health at the National, State and Local Government levels.

Also the policy says that “the Federal Ministry of Health is expected to assist the state and Local Government Areas in the federation including the FCT Abuja in the development and implementation of adolescent health programmes”.

State Initiatives and Programmes to improve ASRH in the NDR

It is evident that state governments in Nigeria including those in NDR have little or no programme of their own to promote adolescent RH in their respective states. There are no state adolescent health committees as stipulated by the national adolescent Health Policy. Similarly there is no commitment of a specified percentage of their annual budget to adolescent health. Thus activities on ASRH at the state levels have been performed by UNFPA, International and local Non Governmental Organisations (NGOs).

Initiatives and programmes on ASRH by International and Local NGOs in the NDR

The UNFPA operates in 3 of the 9 states in the NDR. Their activities in the area of ASRH include provision of adolescent friendly RH services, development of the Family Life Education (FLE) curriculum and teaching of same in secondary schools. UNFPA is also involved in the training of health workers to offer adolescent friendly RH services. One of their most conspicuous activities however is the broadcast of the programme “I need to know”. This is an educational TV drama series by adolescents that impacts information on ASRH.³⁴

In Rivers state, the wife of the Governor Justice Mary Odili initiated an adolescent RH programme called “The Adolescent Project TAP”. TAP sponsors a TV programme called the “adolescent forum” and has conducted

adolescent forum for in-school adolescents. TAP has also sponsored some adolescents in skills acquisition and established a temporary half-way home for female adolescents in especially difficult circumstances³⁶.

In Edo state, the Women’s Health and Action Research Centre (WHARC) has also contributed significantly to improving ASRH by conducting research into adolescent health and health seeking behaviour. Significant among their activities was an intervention to improve treatment-seeking behaviour and prevention of STIs among adolescents in Edo state³⁷. In Delta state, the Public Health Impact Research Centre (PHIRC), Asaba is another NGO involved in promoting ASRH. It has organised school outreaches and has set up a youth centre in Asaba. PHIRC has solely sponsored a conference on adolescent RH in the Niger-Delta.

DISCUSSION

This article reviews the available literature on adolescent sexual and reproductive health in the Niger Delta region. However it is observed that not too many studies have been carried out in the region especially considering the fact that the NDR is quite a large region. Furthermore, available studies come mostly from Rivers, Edo, Delta, Cross River and Abia states (5 out of the 9 states in the NDR). These states have older and more established Tertiary institutions and Non-governmental organisations and researchers from these institutions carried out these studies within their localities. There is need for more research and documentation especially from parts of the region where studies have not been done.

The findings of some of the studies reviewed in this paper show wide variance in some reported indices of adolescent reproductive health. For example, Briggs³² showed that only 12% of mothers of pregnant adolescents could talk freely about sex with their daughters, while Okonkwo and Ilika³³ reported that 67% discussed sexual

issues with their adolescents. To what extent the difference in findings is valid is difficult to substantiate. However it is probable that the Briggs study by having pregnant adolescents as its study sample may have been highly selective and biased. The inability of these mothers to discuss with their daughters sex and sexuality would have led to their daughters having poor knowledge and consequently becoming pregnant.

Similarly other apparent difference in reported figures may reflect subtle differences in the adolescent population sample such as early adolescents compared to late adolescents or young adults. None-the-less, the reviewed literature highlights the state of adolescent sexual and reproductive health in the NDR and brings to fore issues that need urgent interventions.

CHALLENGES

From the foregoing it is obvious that the issues affecting ASRH in the NDR are diverse and multiple. A single uniform approach will not meet the needs of the diverse adolescent target groups in the communities in the region. What is needed to a large extent is a coordinated combination of targeted interventions. This will require collaboration between the state governments, NGOs, Health workers, parents, adolescents, teachers and the community.

The National Adolescent Health Policy and other related RH policies already in existence provide a platform for state governments and local government in the NDR to implement strategies that will improve ASRH. It is necessary to bring ASRH top on the government agenda using the existing policies as a basis for demanding greater government involvement and action

The issues raised about the state of ASRH in the NDR demands a concerted effort on the part of all stakeholders. The objectives of these efforts will be to create the enabling environment that will encourage better sexual behaviour; impact knowledge that will lead to the right decision and choice; and teach skills necessary for coping with

difficult situations, interpersonal communication and problem solving. To this end the following are recommended for implementation.

RECOMMENDATION

State governments in the NDR, along with all key players (e.g. NGOs, CBO, women groups, and adolescents) should develop a time bound State Adolescent Health Strategic framework and plan. In developing this strategic framework and plan, due consideration should be given to the following:

1. Involvement of adolescents in particular and other stakeholders in the planning, implementation, monitoring and evaluation processes.
2. The need for a situation and needs analysis as a basis for systematic action.
3. The accurate identification of various adolescent groups to be served in the state.
4. Information, education and communication strategies effective in reaching different targeted adolescent groups. This will also include establishment of acceptable channels of communication between adolescents and adults. Adolescents will be taught skills necessary for coping with difficult situations, interpersonal communication and problem solving.
5. Establishment of functional Youth-friendly services. Specialized approaches are needed to attract, serve and retain adolescents as RH clients. These includes having appropriately trained providers, respect for adolescent's privacy and confidentiality; accessible facilities and convenient location; reasonably priced services; flexible hours and an environment that feels appropriate and comfortable for adolescents
6. Advocacy and community mobilisation. Advocating increasing awareness of and

support for effective programmes and policies is essential to the success of any adolescent reproductive health effort. Advocacy efforts will seek to gain the support of key audiences- policy makers, health professionals, traditional and religious leaders.

7. Monitoring and evaluation of programmes. This is essential to assess implementation of programmes, identify challenges and pitfalls, and establish components of successful programmes.

Conclusion

The sexual and reproductive health problems of adolescents in the NDR can no longer be ignored. The short and long term consequences to the adolescent, family, community, and region are grave. However, these problems can be minimized and the trend reversed by well planned and implemented ASRH programmes. The challenges may be enormous but with every stake holder's support success will be achieved. We have to succeed because the adolescent holds the key to the future and we have to invest in them today.

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REFERENCES

1. Population Reference Bureau (PRB). The world's Youth 2000. Washington DC; PRB 2000.
2. Manju Ranl and Elizabeth Lule. Exploring the socio-economic dimension of adolescent RH: a multi-country analysis. *Int Fam Plann Persp* 2004, 30(3): 110-117.
3. Niger Delta Region Development Commission. Draft copy of the Niger Delta Regional Development Master Plan. NDDC: www.nddconline.org. Down loaded on 2nd May 2005.
4. NE Udonwa, M Ekpo, IA Ekanem, AV Inem, A Etokidem. Oil doom and AIDS boom in the NDR of Nigeria. *Rural and Remote Health* 4 (online), 2004: no 273. <http://rrh.deakin.edu.au>. Down loaded 24th April 2005.
5. National Population Commission (Nigeria) and ORC Macro. Nigeria Demographic and Health Survey 2003. Calverton, Maryland, USA: National Population Commission and ORC Macro; 2004.
6. Anochie I.C. and Ikpeme E.E. Prevalence of sexual activity and outcome among female secondary school students in Port-Harcourt, Nigeria. *Afr J Reprod Health*, 2001; 5(2), 63-67.
7. Ogbuagu S.C. and Charles J.O. Survey of sexual networking in Calabar. *Hlth Trans Rev* 1993; 3 (suppl) 105-120.
8. Evelyn U.I. and Osafu O. Sexual behaviour and perception of AIDS among adolescent girls in Benin-city, Nigeria. *Afr J Reprod Health* 1999; 3:39-44.
9. Kemp J.R. A study of sexual behaviour and RH of adolescent girls in South East Nigeria. PhD thesis 2000. University of Liverpool.
10. Okpani A.O.U. and Okpani J.U. Sexual activity and contraceptive use among female adolescents- A report from Port Harcourt, Nigeria. *Afri J. Reprod Health* vol 4 (1), 40-47.
11. Etuk S.J., Ihejiemaizu E.C., Etuk I.S. Female adolescent sexual behaviour in Calabar, Nigeria. *Niger Postgrad Med J*. 2004 Dec; 11(4): 269-73.
12. UNFPA. UNFPA assisted 5th Country Programme Baseline survey 2004: Delta state report. (Personal communications).
13. Oboro V.O. and Tabowei T.O. AIDS prevention programmes and sexual behaviour among secondary school adolescents in Delta state, Nigeria. *Trop J. Obst and Gynaecol* 2003; 20,(1) .
14. Singh S, Audan S, and Wulf D. Early child bearing in Nigeria: a continuing challenge, Research in Brief, New York: The Alan Guttmacher Institute, 2004 (No 2).
15. Chimaraoke Otutubikey Izugbara. Tasting the forbidden fruit: The social context of debut sexual

- encounters among young persons in a rural Nigerian community. *Afri J Reprod Health* 2001; 5(2): 22-29.
16. Brabin L. Kemp J, Obunge O.K., Ikimalo J et al. Reproductive tract infections and abortions among adolescent girls in rural Nigeria. *Lancet* 1995;345: 300-304
 17. Mirian J. Temin, Friday E. Okonofua, Francesca O. Omorodion *et al.* Perception of sexual behaviour and knowledge about sexually transmitted diseases among adolescents in Benin-city, Nigeria. *Int Fam Plann Perspect* 1999, 25(4): 186-190.
 18. Aziken M.E., Patrick I. Okonta, Adedapo B.A. Ande. Knowledge and perception of Emergency contraceptives among female Nigerian undergraduates. *Int Fam Plann Perspect*. 2003, 29(2): 84-87.
 19. FMOH. HIV/Syphilis sentinel survey results 2003, Abuja Nigeria: Ministry of Health: 2004.
 20. Okonofua F.E., Shittu S.O., Oronsaye F, Ogunshakin D, Ogbomwan S. and Zayyan M. Attitudes and practices of private medical providers towards family planning and abortion services in Nigeria. *Acta Obstet Gynecol Scand* 2005; 84: 270-280.
 21. Henshaw S.K., Singh S, Oye-Adeniran B, Adewole I.F, Iwere N, Cuca Yvete P. The incidence of induced abortion in Nigeria. *Int Fam Plann Perspect*. 1998; 24: 156-64.
 22. Okonofua F.E. and Ilumoka A. Prevention of morbidity and mortality from unsafe abortion in Nigeria: Critical issues in RH, The Robert Program, New York Population Council, 1992.
 23. Anate M, Awoyemi O and Oyawoye O. Induced abortion in Ilorin, Nigeria. *Int J Gynaecol and Obstet* 1995; 49(2): 197-198.
 24. Ebong R.D. Female Circumcision and its Health implications: a study of the Uruan Local Government Area of Akwa Ibom State, Nigeria. *J. R. Soc Health* 1997, 117 (2); 95-9.
 25. Myers R.A, Omorodion F.I., Isenalumhe A.E., Akenzua G.I. Circumcision: its nature and pattern among some ethnic groups in Southern Nigeria. *Soc. Sci Med* 1985; 21(5) 581 – 8.
 26. Snow R.C, Slanger T.E., Okonofua F.E., Oronsaye F, Wacker J. Female Genital Cutting in Southern urban and peri-urban Nigeria: Self reported validity, social determinants and secular decline. *Trop Med Int Health* 2002; 7(1) 91-100.
 27. Briggs L.A. Male and Female viewpoints on female circumcision in Ekpeye, Rivers state, Nigeria. *Afri J Reprod Health* 2002; 6(3) 44-52.
 28. Toubia N. Female circumcision as a public Health issue. *New Engl J Med* 1994; 331: 712-716.
 29. Okonofua F.E., Larsen U, Oronsaye F, Snow R.C., Slanger T.E. The association between female genital cutting and correlates of sexual and gynaecological morbidity in Edo state, Nigeria. *BJOG*. 2002; 109 (10): 1089-1096.
 30. WHO. Unsafe abortion: Global and regional estimates of incidence of unsafe abortion and associated mortality in 2000. 4th edition; World Health Organisation 2004.
 31. Central Office of Research and Statistics. Delta State Household survey 2003. Ministry of economic planning, Asaba, Delta State.
 32. Briggs L.A. Parents viewpoint on RH and contraceptive practice among sexually active adolescents in the Port Harcourt local Government area of Rivers state, Nigeria. *Journal of advanced nursing* 1998; 27: 261-266.
 33. Okonkwo I.P., Ilika A.I. Maternal attitudes and values to youth sexually related activities in Delta state, Nigeria. *Niger Postgrad Med J*. 2003; 10(3) 177-81.
 34. UNFPA. UNFPA-assisted population and development sub-programme Delta state: Final Project Report (FPR) of the 4th Country programme of assistance, community RH (1998 -2002).
 35. FMOH. National Adolescent Health Policy, 1995; Federal Ministry of Health, Federal Republic of Nigeria.
 36. SOGON, Adolescent Reproductive Health in Rivers State of Nigeria: The way forward. Proceedings of a workshop organised by the Society of Gynaecology and Obstetrics of Nigeria (SOGON) in collaboration with The Adolescent Project(TAP) and Rivers State Government; Port Harcourt, Oct. 27-28, 2000.
 37. Okonofua F.E, Paul Coplan, Susan Collins, *et al.* Impact of an intervention to improve treatment-seeking behaviour and prevent sexually transmitted diseases among Nigerian Youths. *Int J. Infect Dis* 2003; 7:61-73.

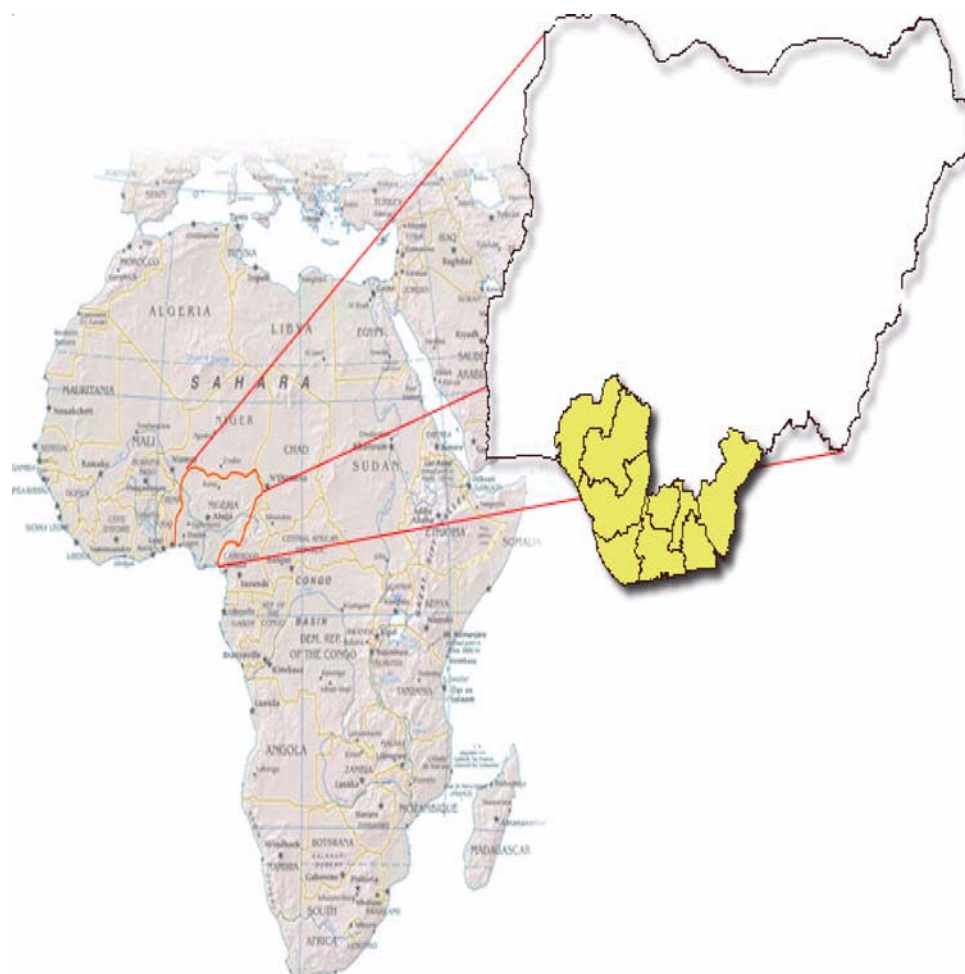


Figure 1: Map of Africa and Nigeria showing the Niger Delta Region of Nigeria⁴