### Hiv/Aids Scourge: A Threat To Health And National Development.

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**Abstract:** Researchers and scientists all over the World are working round the clock each day to find a clue to the AIDS scourge. AIDS with its present record has claimed lives more than the first and second World War put together (Adekunle, 2007). The global epidemiological report and estimation on Acquired Immune Deficiency Syndrome (AIDS), a killer disease of global repute is posing an "Operation kill them all posture". It appears as if the disease is determined to wipe out the entire human race. Therefore, all necessary measures must be embarked to stop the disease. The main thrust of this paper therefore, is to educate the public on HIV/AIDS, its causes, symptoms, prevention and threat to health and national development. The paper finally recommended global propaganda against the scourge among others.

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## Introduction

Disease, being one of the clogs in the wheel of human progress and well being is an age long battle confronting the existence of man. For ages, man has devised a multiphaseted and multidimensional approach of fighting diseases out of his existence. Unfortunately still, dreadful diseases of global repute emanate with the dawn of each day.

Scientists globally, have worked and are still working relentlessly to combat the diseases and their effect on man with huge success recorded in many cases such as Tuberculosis, Malaria etc. The advent of Human Immune Deficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) pose a marked turning point in the catalogue of human successes regarding diseases.

Adekunle (2007) tagged, Acquired Immune Deficiency Syndrome as the actual disease while HIV-Human Immune Deficiency Virus causes AIDS. The Federal Ministry of Health, Nigeria (2003) explained, that the term AIDS stands for Acquired Immune Deficiency Syndrome which inflicts human suffering from many diseases until death results. It further explained that AIDS is caused by a germ called HIV-Human Immune Deficiency Virus.

Oyerinde (1998) described, AIDS as a terrible disease of fatal con-

sequence whose cure or vaccine is not yet discovered. Acquired Immune Deficiency Syndrome was further described by Salisu (2006) as a virus induced immune deficiency occurring epidemically worldwide, principally affecting young, previously healthy homosexual and bisexual men and intravenous drug users. Reception of contaminated blood and blood transfusion products, prostitution and sexual gratification from infected persons and children born to mothers infected with the virus were also itemized as the channels through which the virus travels round the globe irrespective of age, sex, race, colour, social and economic status.

In consonance with this, the Federal Ministry of Health, Nigeria (2003) explained, that AIDS is said to be "Acquired" because it is always caught from someone else, Immune Deficiency because the virus attacks the immune system and makes it deficient. The disease can cause many different medical problems.

# HIV/AIDS in Nigeria

The first case of HIV in Nigeria was confirmed in a promiscuous 13 year -old girl in 1986. The end of 1986 reported the second case and by 1996, the case had risen to 18,334 in Nigeria (Adekunle, 2007). UNICEF (2001) situation assessment and Analysis highlighted, that after the first AIDS case was officially reported to the Federal authority in Nigeria in 1986, it took more than a decade to establish the reality of the epidemic in the minds of the general public and political leaders. However, the last few years have witnessed a considerable improvement. The environment for mounting a national response to the epidemic is now more positive.

UNAIDS (2009) estimated that in Nigeria, around 3.9% of adults between ages 15-49 are living with HIV/AIDS. Although the HIV prevalence is much lower in Nigeria than in other African countries such as South African and Zambia, by the end of 2006, there were an estimated 2,900, 000 people infected with HIV. Approximately 220, 000 people died from AIDS in 2006 alone (WHO, 2008). With AIDS claiming so many people's lives, Nigeria's live expectancy has declined. In 1991 the average life expectancy was 53.8 years for women and 52.6 years for men (UNDP, 2008). In 2007 these figures had fallen to 46 for women and 47 for men. Despite being the largest oil producer in Africa and the 12<sup>th</sup> largest in the world (WHO, UNAIDS, and UNICEF, 2007), Nigeria is ranked 158 out 177 on the United Nation Development Programme (UNDP) Human Poverty Index (UNDP, 2008). This poor economic position has meant that Nigeria is faced with huge changes in fighting its HIV/AIDS epidemic.

The present picture however, reflected on facts highlighted by WHO (2002) that, the impact of AIDS on society can best be understood when one remembers that AIDS selectively attack men and women at the prime of life. It emphasized that 90% of those infected with the virus fell within the 15-54 age groups. Within this age range, human beings are biologically and economically most productive. It further stressed, that the disease spares no professional group and attacks actors, actresses, lawyers, doctors, nurses, teachers as well as politicians, civil servants, businessmen, sports men and women and even students. These are people upon whom the society has invested much upon. At the time they are expected to take over economic and social leadership and parental roles they come down with AIDS.

The global picture portray the AIDS scourge as deadly armed militant soldier determined to ravage and devastate the entire world by hailing the cream of the human race into untimely graves. In this hopeless terrain of no cure, no vaccine discovered or inadequate effective drugs in the management of HIV/AIDS patients, e.g. antiretroviral drugs and determination to arrest this agent of slow but sure death AIDS pandemic today, is no longer a medical issue alone, it affects the social, political, economic and academic life of any nation.

# Stages between HIV Infection and AIDS

Monk (2000) and James (1999) identified different stages between HIV infection and AIDS. They stated that when an individual is infected with HIV he does not immediately show the sign and symptoms that are seen in the full-blown AIDS stage. Generally, people infected with HIV may have as long as fifteen years before they get into the fullblown AIDS stage. It is important that one learns about the stages between HIV infection and AIDS so that common wrong ideas about how the infection can be contacted from both healthy-looking infected person and someone who is already looking sick with or without the signs, can be corrected. Monk (2000) observed that after the first exposure to the AIDS virus, one may pass through the following stages:-

- i **Window Period**:- This last between 2-12 weeks after the first infection. When the person has HIV but no symptom of the antibodies or germ fighter in the blood and he can still infect others.
- ii. **Acute Infection Stage:** Between 3-6 months after infection. The person may have mild fever, catarrh, headache etc. But he often feels well with proper treatment, rest and balanced diet, and may show no further signs of illness for a very long time. But he can still infect other people.
- iii. A Symptomatic Stage: During this stage, no signs or symptoms are seen or felt. It may last between 6 months to 15 years. The infected individual looks and feels well. He goes about like normal person, but is able to infect others who have sex with him without adequate protection.
- iv. **AIDS Related Complex Stage:-** This is a period when other serious infectious diseases like Tuberculosis, Pneumonia etc affect the HIV person and make him develop signs and symptoms that look like the full-blown AIDS, such as
  - a. Fever lasting at least 1 month.
  - b. Diarrhoea lasting at least 1 month
  - c. Painful swellings of organs
  - (nodes) in armpit, and neck.
- v. **Full-blown AIDS stage:** This is the last stage when the signs and symptoms are easily seen. The individual's ability to fight infections is damaged.

# HIV/AIDS Mode of Transmission

Darrell and Mathilde (1999) claimed, that scientists have identified three possible ways people can contact HIV\AIDS infection.

- a. Through sexual contact, either homosexual or heterosexual.
- b. Through contact with blood or other fluid, blood products, or tissues of an infected person.
- c. Through transfer of the virus from an infected mother to her infant before or during birth, or shortly after birth through breast -feeding.

# Signs and Symptoms of HIV/AIDS

Warwick (1998) stressed, that a person living with HIV/AIDS can remain healthy for many years, with no physical signs and symptoms. As the virus multiples and more immune cells are destroyed, a person becomes increasingly vulnerable to opportunistic infections. He identified the following signs and symptoms as indicative of HIV/AIDS infection.

- a. Rapid unexplained weight lost.
- b. Fever, lasting over a month.
- c. Diarrhoea longer than one month.

d. Oral thrush. A milky white rash on the tongue and mouth and may

involve the throat and oesophagus.

e. Skin rash with extensive itching.

f. Cough which may lead to pneumonia or tuberculosis.

g. Herpes. A blister rash of the mouth or genital area. h. Shingles. A very painful rash on the skin.

i. Lymphadenopathy. Swelling on the neck or other parts of the body.

## **Prevention of HIV/AIDS**

The ideal preventive measure against AIDS is sexual abstinence. Most cultures, particularly, those in Africa, and religious sanction against premarital sex and prescribe virginity before marriages are good measures against AIDS. These sanctions should serve as a guide for unmarried youths against the danger of HIV/AIDS infection. Society should on health ground, revive these sanctions instead of allowing them to die off. Parents should monitor the sexual lives of their children while religious teaching should be intensified. Young girls should be made to see the need to reorientate their life -styles away from expensive dressing, feeding and moving with rich partners who usually finance the expensive life -style.

A major problem is the possibility of maintaining sexual abstinence in a family where one spouse is serepositive unknown to the spouse. Researches in Africa (Barnett and Blackie, 1992; and Anarfi, 1994) confirmed that some AIDS patients do not inform their spouses of their conditions. The risk of Africa women to AIDS has been attributed to their unawareness of their husband's conditions.

When a spouse is aware of his or her spouse's condition, there is the question of the extent to which he or she has the power to refuse the spouse sex in order to prevent AIDS spread. The paucity of researches on the question of the extent to which a man in Africa has control over his sexuality and therefore can refuse his wife sex is an eloquent admission by researchers that the right of men to sexuality is taken for granted and is not questionable. Ankrah (1991) reported about Kampala "When a woman falls ill or shows AIDS related symptoms before her partner, she is more likely than he to be sent back to her relatives or to be abandon". On the contrary, the extent to which women can control their sexual activities by refusing sexual relations or insisting on safe sex when their husbands are infected with HIV/AIDS has been extensively researched in many countries of Africa.

Studies in Kampala indicated that women lack powers of decision making over their sexuality or to negotiate or enforce strategies to reduce risk of HIV infection (Ankrah, 1991). This assertion has been substantiated by Seekiboobo (1992) when he reported wife's inability to refuse husband's sex, insist on safe sex with them or force them to curtail their extra marital relations. This situation has been explained by the fact that women in Africa are totally dependent on their husbands economically since they lack the right of ownership or control over land and cash, and in return for the provision of these resources they must provide their husbands with sexual services in all circumstances (Ankrah, 1991 and Obbo, 1990). But Islam grants women the right to independent ownership. Anything a Muslim woman owns, be it money, property, land or any other possession, is hers and hers alone. Nobody else has any right to it whatsoever. She has the right to buy and sell anything, and to negotiate a contract in her own right (Sajda, 1996). A woman has access to that which belongs to her, and can use her belonging and wealth in whatever way she wishes, provided, of course, that she does so within the limits of Islam.

Among the Yoruba, wives enjoy more autonomy and a greater degree of control over their sexual relations with their husbands when the latter is infected but this is only if they are aware of their husbands' condition [Orubuloye, Caldwell and Bledsoe, 1991]. The studies maintained that the autonomy of the Yoruba woman is derived from her ability to trade, control her earnings and thus have a separate resource base and budget different from her husband (Orubuloye, Caldwell and Bledsoe, 1991). This has made it possible for her to refuse sex with her husband even outside the mandatory abstinence periods of before marriage, menstruation, pregnancy, postpartum, breast feeding, after becoming a grandmother, and after menopause (Orubuloye, Caldwell, and Caldwell, 1993b).

There is in addition the unfortunate report that wives are reluctant to take note of their husband's extra marital sexual activity or do anything about it (Orubuloye, Omoniyi and Shokunbi, 1995; and Boroffice, 1994). This can be extended to imply that heterosexual wives in Africa may not bother to know about their husbands' bisexual activity. A preventive measure lies on cultural reorientation to allow women more power to refuse sex with their husbands when the latter are infected with AIDS or are having extra marital sexual activity (Caldwell, Caldwell and Orubuloye, 1994). There is also the need to expand and make available in urban and rural areas, AIDS diagnosing facilities so that the health condition can be made known at least to the sufferer. Decision on abstinence is not possible in the family, if the members do not know the health status of the family.

If sexual abstinence is not possible, the alternative preventive measure for AIDS is safe sex. Safe sex involves a behaviour change in which one takes decision to modify his sexual behaviour in order to reduce the risk of AIDS infection. The high risk behaviour that homosexual and bisexual need to change includes:

. Change of mode of sexual expression to conventional heterosexual

behaviour.

. Less sex outside normal relationship. This means maintaining sexual relationship with the individual's spouse or a steady partner whose sexual history or behaviour is known.

. Maintaining fewer sexual partners, sexual partners should if Possible be kept to one or to as few as possible. Multiplicity of sexual partners enhances the chances of contracting AIDS.

• Avoiding sexual relationship with high-risk groups such as strange or anonymous partner, prostitutes, long distance drivers and others.

• Avoiding anal sex or oral sex with swallowing of semen.

• Use of condom in risk sexual behaviour. This is particularly necessary with high risk groups.

The usefulness of AIDS education programme can be assessed from a review of its application in other countries. The history of what we have today as AIDS education programme started with urban gav men in the USA. The gav men who were the first to be infected with AIDS virus felt threatened by the deadly disease when they saw their friends and members of the community die, since they were alienated from governmental health programmes, they had to organize themselves to inform, educate and care for members of their community. These efforts produced significant behaviour change and so the small-scale community efforts have led to large projects in other places including Africa, Asia and Latin America. Report on studies in AIDS education from London and San Francisco (Weber, Wadsworth and Roger, 1986; Echenberger, Rutherford, O'Malley and Bodecker, 1985) confirmed the effectiveness of AIDS prevention campaign. There should be religious and moral approach to HIV/AIDS prevention in Nigeria. The Imams and Pastors should explore religious approach to HIV/AIDS prevention in their Mosques and Churches by preaching the gospel of HIV/AIDS prevention to their followers.

## Effect of HIV/AIDS on Health and Development

The International Development Magazine (2002) reported that the economically active age groups of 15-45 years old population of the developing world are severely hit with HIV/AIDS infection. Consequently, in years to come, there could be a negative impact on the nation's economy if this dangerous trend is not checked. HIV/AIDS is a real threat to economic growth in Nigeria. In areas where the epidemic has had the most impact, it has contributed to skills shortages and shrinking labour force, lack of incentives for investment, and strained government budget.

AIDS Treatment News (2002) averred that a person who has full-blown AIDS may exhibit any of the following symptoms:- prolonged diarrhea, white coating in the mouth or throat, persistent fever, loss of weight, enlargement of glands and brain tumor. Consequently, there will be a reduction in such person's productivity in the workplace because of constant absenteeism due to AIDS specific illnesses.

The health services of many states in Nigeria are becoming increasingly stressed, as a result of the growing AIDS problems, due to the huge cost of managing the AIDS epidemic. This burden is disproportionately heavy for the states which already have very high demands for health services related to other diseases. Apart from the high cost of caring for AIDS patients, the HIV/AIDS epidemic adds to health service needs through its synergistic relationship with other diseases, in particular the resurgence of tuberculosis, which now complicates over 40% of HIV infections.

In a 1997 study of 16 African countries, Nigeria inclusive, public health spending on AIDS alone was found to consume over 2% of their GDP (UNAIDS, 2000). This is a colossal amount, especially in countries with low expenditure on health. In Nigeria, it has been estimated that total health expenditure averaged only 1% of GDP in 1990-1996 (World Bank, 2000).

In addition, the epidemic risk depleting an already weak human resources base within the health system, undermining the system's capacity for effective delivery of health care services, not only to AIDS patients but more generally. AIDS –related illness and death among health workers have a high cost in terms of absenteeism, reduced productivity, and treatment of illness, death benefits and the retraining of new staff. In Nigeria, despite the absence of data on such costs, there is ample

anecdotal evidence of an increasing death tool among highly skilled manpower, including health workers.

Health Reform Foundation of Nigeria (2007) opined that with the concentrated increase in death rates of young and middle aged people, the population structure is eventually altered in Nigeria with severe long-standing HIV/AIDS epidemics. Traditionally, the typical population of Nigeria is pyramidal in shape, with a broad based of children at the bottom. As a result of the disproportionate number of deaths among adults of productive age, decreasing childbirth and the decline in child survival, a new chimney-shaped population structure emerges. This has a less broad base and again thins out markedly in the age range from about 25 to 50, before assuming a normal shape for the older age group. The major implication of this new population structure in Nigeria is that the dependency ratio is negatively tilted, as the remaining healthy adults of working age have to cater for a disproportionately larger number of dependants at the two extremes of the population structure.

The impact of HIV/AIDS epidemic in Nigeria will be especially pronounced in the pediatric age group, threatening to reverse the modest gains made in reducing infant and under-five mortality through immunization and other child survival strategies. The effect of HIV epidemic on children extends far beyond illness and death. Children will suffer greatly as AIDS deaths among economically active adults plunge families into poverty, or push them deeper into poverty than they already are. This process of family pauperization will adversely affect children's nutrition and health, and diminish their access to health services and to education. More children are likely to become victims of homelessness, child trafficking, harmful forms of child labour and sexual exploitation in these dire conditions. In turn, higher levels of child prostitution would lead to greater risks of HIV infection.

Among the most seriously affected children will be those who lose one or more of their parents to the epidemic. In 2005 it was estimated that 240, 000 children were living with HIV, most of who became infected from their mothers (UNAIDS, 2006). In 2006 it was estimated that just 7% of HIV-infected women and men were receiving antiretroviral therapy and only 0.2% of pregnant women were receiving treatment to reduce the risk of mother-to- child transmission of HIV (UNAIDS, 2009). Besides suffering emotional stress from the loss of mothers and fathers, children who have lost both their parents are the most likely to face a situation of absolute destitution, in the absence of effective measures of support and care. Shokunbi (2002) found the epidemic of HIV/AIDS to have increased mortality rates in Nigeria and now threaten the child and maternal international development target. It has been said that 65% of HIV positive adults in Nigeria are women and very soon, there is likely to be over 16.5 million children living with HIV. This implies that AIDS is putting an enormous strain on people's lives, health and education services by drastically reducing the size of the nation's workforce and the length of service of the existing active workforce, especially those ones with HIV/AIDS.

HIV/AIDS also impacts negatively on matters of security. The UN-Security Council in 2001 acknowledged HIV/AIDS as a global security risk as well as human security issue. The Daily Times affirmed on October 7, 2003 that 40% of new recruits into the Nigeria Army tested positive when screened for HIV/AIDS. The high level of attrition caused by AIDS related deaths in the armed and police forces of many countries exacerbates security instability (Akorede, 2004). HIV prevalence and the subsequent socio-economic impact on societies can be politically destabilizing. All these facts serve to emphasize that HIV is indeed a threat to health and national development.

## Conclusion

The uncontrollable spread of HIV/AIDS is very detrimental to the well-being of a nation both economically and educationally. UNAIDS (2000) opined that by the year 2010, the morbidity and mortality rates due to HIV/AIDS would have increased drastically by another 40%. It has been concluded that the most common means of HIV/AIDS transmission is through sexual intercourse, which could be due to inadequate public information about AIDS and inability of genders to negotiate or practice safe sex.

#### Recommendations

HIV/AIDS has a very negative impact on global economy, education, security, politics, health and productivity. It is therefore recommended by Gwen, Debbie and Slawn (1999) that: (i) global propaganda against this deadly scourge must be a priority. In addition, (ii) there should be a legislation that requires hospitals to only use blood from the National Blood Transfusion Service, which has advanced blood-screening technology and (iii) periodic and compulsory HIV testing should be carried among all Nigerians.

#### References

1. Adekunle, P.F. (2007). HIV/AIDS Awareness Levels and Appropriation Towards Behavioural Change Among Secondary School Students in Kwara, Ogun, Oyo and Ondo States of Nigeria. Unpublished Ph.D Thesis. University of Ilorin.

- 2. AIDS Treatment News (2002). AIDS Organization Incorporation. A Non-profile Education Organization.
- Akorede, O. D. (2004). HIV/AIDS-An epidemiological risk to the Health of the Nigerian Nation: <u>Nigeria School Health Journal</u>. 16 (1&2).
- 4. Anarfi, J. K. (1994). The condition and case of AIDS victims in Ghana-AIDS sufferers and their relations: Paper presented at the WARGSN workshop on sexual networking, STDs, HIV/AIDS and interventions, Ado Ekiti.
- Ankrah, E. M. (1991). AIDS and social side of health: <u>Social Science and Medicine</u>. 32 (9).
- Barnett, T. & Blackie, P. (1992). <u>AIDS in Africa</u>: It's Present and Future Impacts. London. Bechaven Press.
- 7. Boroffice, O. B. (1994). Female attitudes and activities in relation to Male sexuality: Paper presented at the WARGSN workshop on sexual networking, Ado-Ekiti.
- Caldwell, J. C. Caldwell, P. & Orubuloye, I. O. (1994). Intervention Strategies by the Nigerian segment of the SAREC workshop on sexual networking, STDs and HIV/AIDS intervention, Ado Ekiti.
- Darrell, H. R. & Mathilde, K. (1999). <u>The</u> <u>Amfer-Handbook of HIV/AIDS.</u> New York, London. W.W. Norton and Company.
- Echenberg, D., Rutherford, B., O'Malley, P. & Bodeckers, T. (1985). Update: Acquired Immune Deficiency Syndrome in the San Francisco cohort study, 1975 to 1985. MMWR.
- 11. Federal Ministry of Health, Nigeria, (2003). National HIV/AIDS and Reproductive Health Survey (NARHS).
- 12. Gwen, R. Debbie, P. & Slawn, B. (1999). <u>A</u> <u>wellness Way of Life.</u> USA: McGraw-Hill Companies Incorporated.
- 13. Health Reform Foundation of Nigeria (2007). Impact, challenges and Long-term implications of antiretroviral therapy programme in Nigeria.
- 14. International Development Magazine (2002). HIV/AIDS: Insite global Health: Imperial College, Wye external programme.
- 15. James, C. (1999). Early years of the HIV/AIDS epidemic, School of Public Health, Emony University, USA.
- Monk, G. R. (2000). Sermon based on Buddhist precepts. A response to HIV/AIDS. Mae Cham District, Chiang Rai.

- 17. Obbo, C. (1990). East Africa Women: Work and articulation of Dominance. In L. Tinker (ed) Persistent inequalities women and world development. New York: Oxford University Press.
- 18. Oyerinde, O.O. (1998). Managing the AIDS victims through a Community based health approach. *Journal of Physical Education and <u>Research</u> .6.5.*
- 19. Orubuloye, I.O., Caldwell, P. & Bledsor, C.H. (1991). The impact of Family and budget structure on health treatment in Nigeria. *Health Transition Review*. I, (2).
- Orubuloye, I.O., Caldwell, J. C. & Caldwell, P. (1993 b). African women's Control over their sexuality in an era of AIDS: Study of the Yoruba of Nigeria. <u>Social Science and Medicine</u>. 37, (7).
- Orubuloye, I.O., Omoniyi, O.P. & Shokumbi, W.A. (1995). "Sexuality Networking, STDs and HIV/AIDS in four urban towns in Nigeria". <u>Health Transition Review.</u> Supplement to Vol. 5.
- 22. Sajda, N. (1996). Feminism and Muslim Women.Logos. Bait-Ul- Iman Publisher.
- Salisu, A.A. (2006). HIV/AIDS awareness, belief and prevention in North-West Geopolitical Zone of Nigeria: Issues and preliminary findings. <u>The Gurara Journal of Humanity</u> <u>Studies.</u> 3 (2).
- 24. Seekiboobo, A.M.N. (1992). Women's social and reproductive rights in the age of AIDS. Paper presented at a workshop on AIDs and Society, Kampala.
- 25. Shokumbi, A.W. (2002), Training on Mother to Child Transmission of HIV/AIDS. University College Hospital, Ibadan.
- 26. UNAIDS (2000). Reports on Global HIV/AIDS Epidemic, Geneva.
- 27. UNAIDS (2006). Reports on Global HIV/ AIDS Epidemic, Geneva.
- 28. UNAIDS (2009). Nigeria Country Profile.
- 29. UNDP (2008). Human and Income Poverty: Developing Countries' Human Development Reports.
- 30. UNICEF (2001). Children's and women's rights in Nigeria: A wake-up Call situation assessment and analysis.
- Warwick, I. (1998). Household and Community Responses to AIDS in Developing Countries. <u>Critical Public Health.</u> 8, (4).
- Weber, J.N., Wadsworth, J.&Rogers, L.A. (1986). Three-year Prospective Study of HTL and HIV/AIDS Infections in Homosexual Men. Lancet.

- 33. WHO (2002). Infant and Child Mortality: World Estimate and Project. Weekly Epidemiologically Records, Geneva.
- 34. WHO (2008). World Health Organisation African Region, Nigeria.
- 35. WHO, UNAIDS & UNICEF (2007). Towards Universal Access: Scaling up Priority on HIV/AIDS Interventions in the Health Sector.
- 36. World Bank (2000). African Development Indicators 2000. Washington, D.C.

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