

# Sexual and Contraceptive Practice of Female Nigerians Living with HIV/AIDS

Michael Emefiele **AZIKEN**, Lawrence Utiyenin **AFINOTAN**

*Department of Obstetrics and Gynecology, University of Benin Teaching Hospital, Benin City, Nigeria*

**Received 18 December 2006; received in revised form 09 February 2007; accepted 27 February 2007; published online 08 March 2007**

## Abstract

**Objective:** To determine the sexual and contraceptive practice of female Nigerians living with HIV/AIDS.

**Material and Methods:** Structured questionnaire was administered to 146 women confirmed to be HIV positive and attending the Dermatology Clinic of University of Benin Teaching Hospital for care.

**Results:** Seventy-three (50%) of the 146 respondents were still sexually active post HIV diagnosis and 5 (3.5%) of them had multiple sexual partners. Age group 30-39, increasing level of education, marriage, partners awareness, retroviral positive partners and antiretroviral treatment for >12 months were associated with increased reported sexual activity. About 93% of the respondents were aware of contraception while only 55.5% used condom prior to HIV diagnosis and only 50.7% of the sexually active respondents post HIV diagnosis used the condom with low consistency. Condom utilization was less likely amongst the older and married women, and women whose partners were retroviral positive. Duration on antiretroviral treatment did not affect likelihood of condom use.

**Discussion:** One half of Nigerian women living with HIV/AIDS on antiretroviral drugs are still sexually active but their condom utilization is low. This behavior may engender further spread of the disease.

**Keywords:** HIV/AIDS, highly active antiretroviral therapy, sexual activity, condom

## Özet

### HIV/AIDS Tanılı Nijeryalı Kadınların Cinsel Yaşamı ve Doğum Kontrolü Uygulamaları

**Amaç:** HIV/AIDS tanılı Nijeryalı kadınların cinsel yaşam ve doğum kontrolü yöntemlerini saptamak.

**Materyal ve Metot:** Benin Üniversitesi Eğitim Hastanesi Dermatoloji Kliniği'ne bakım için gelen ve HIV/AIDS tanısı konmuş 146 kadına, yapısal anket formları verildi.

**Sonuçlar:** Anket formlarını cevaplayan 146 hastadan 73'ü (%50) halen cinsel yaşamını sürdürmekte ve 5'inin (%3.5) birden fazla cinsel eşi bulunmaktaydı. Eğitim düzeyinde yükselme, 30-39 yaş grubunda olma, evlilik, cinsel eşlerin durumdan haberdarlığı, retrovirüs taşıyıcı cinsel eşler, >12 ay retrovirüs tedavisi görmüş olmak bildirilen cinsel aktivitede artma ile ilişkiliydi. Cevap veren kadınların %93'ü doğum kontrolünden haberdardı, ancak sadece %55.5'i HIV tanısı öncesi ara sıra kondom kullanmıştı ve cinsel yaşamı devam eden kadınların sadece 50.7'si HIV tanısından sonra ara sıra kondom kullanmıştı. Kondom kullanımı, evli ve ileri yaş grubunda ve cinsel eşleri de HIV taşıyan kadınlarda daha azdı. Retrovirüse karşı tedavi süresi kondom kullanma olasılığını etkilememişti.

**Tartışma :** HIV/AIDS ile yaşayan ve retrovirüse karşı ilaç kullanan Nijeryalı kadınların yaklaşık yarısı cinsel yaşamına devam etmektedir, ancak kondom kullanımı düşük düzeydedir. Bu davranış, hastalığın daha da yayılmasına neden olabilir.

**Anahtar sözcükler:** HIV/AIDS, retrovirüse karşı etkin tedavi, cinsel yaşam, kondom

**Corresponding Author:** Dr. Michael Emefiele Aziken  
Department of Obstetrics and Gynecology, University of Benin  
Benin City, Nigeria  
**Phone** : +234 803 727 12 71  
**E-mail** : michaelaziken@hotmail.com, goaziken@uniben.edu

## Introduction

The impact of HIV/AIDS is mostly felt in Africa where in 1997, an estimated 14 million Sub-Saharan Africans (60% of the global total) were already infected with the virus (1). One million people are estimated to be infected with HIV in Nigeria (2).

In most African countries including Nigeria, HIV transmission is primarily through heterosexual sex (3).

The global efforts at reducing HIV transmission is to entrench appropriate behavioral change including safer sex practices (4-6), and the use of Highly Active Anti-Retroviral drugs (HAART) by infected people.

Treatment with HAART can reduce the viral load to very low level hence reduce infectivity (7). Nevertheless, the risk of transmission may infact still exist considering the possibility of emergence of resistance and the phenomenon of 'Blips' (transient increase in viral load while on HAART) (8,9). People living with HIV/AIDS on HAART may thus represent a potential source of spread of the virus if they assume freedom from the disease because they are on HAART and engage in unsafe sex.

Studies on sexual practice among people living with HIV/AIDS are few (10-14), and considering the prevalence of HIV infection in Nigeria it would be rewarding to determine the sexual and contraceptive practice of these women on HAART. Findings from this study could be used to develop strategies to prevent further spread of the disease by people living with HIV/AIDS on treatment.

## Material and Methods

This was a cross-sectional questionnaire based study conducted between 28<sup>th</sup> February to 14<sup>th</sup> March 2005 among female subjects confirmed retroviral positive that have been attending the University of Benin Teaching Hospital (UBTH) for anti-retroviral drugs for minimum duration of three months. The UBTH is one of the hospitals in Nigeria designated by the Government of Nigeria for treatment of HIV/AIDS and it gets its drug supply directly from the Federal Ministry of Health. Drugs are dispensed to the patients at a subsidized cost of one thousand naira per month for the supply of the three drugs (Nevirapine, Lamivudine and Stavudine). Treatment is now free (since Jauary2006) for all patients with HIV/AIDS in all federal government hospitals in Nigeria.

Retroviral positive women are enlisted for treatment after confirmation of diagnosis by the Western Blot test technique and a CD4 count of <250. Patients with CD4 count above 250 are followed up with regular CD4 estimation.

The minimum duration of 3 months on treatment was chosen to ensure that patients for the study had overcome the period of shock that is usually associated with the awareness of being HIV-positive and so should be able to complete the questionnaire honestly without much of grief.

The questionnaire which had no space for name to guarantee anonymity was structured into three parts.

The first part sought information on bio-data, the second part was on their knowledge of contraception and practice prior to confirmation of HIV/AIDS and the third part sought information about their current sexual and contraceptive practices against the background of their HIV status and awareness.

The patients were counseled and verbal consent was obtained before the administration of the questionnaire which was self administered. Trained hospital staff was on hand to give clarification when necessary and also to assist those with language barrier in completing the questionnaire. The questionnaire was pre-tested among twenty non-participants to ascertain the clarity of the questions and their responses before commencing the study.

## Data management

The completed questionnaires were used to generate a computer data bank using SPSS 10.0 for windows. Reliability analysis of the questionnaire ( $\alpha$ ) was calculated with five selected variables (Age, duration since diagnosis, duration on anti-retroviral, number of sex partners, and number of children) and this gave a reliability coefficient ( $\alpha$ ) of 0.5595 and a standardized item  $\alpha$  of 0.5643.

The results were first aggregated into percentages and further analysis was done using  $\chi^2$  test to determine significant difference in proportions of analyzed outcomes between subgroups. We also performed a binomial forward Wald logistic regression to determine the likelihood (odds ratio) at 95% confident interval of sexual activity and the use of condom amongst respondents who were sexually active. A  $p$  value of  $\leq 0.05$  was taken as significant.

## Results

One hundred and forty six respondents completed the questionnaire satisfactorily.

The mean duration since diagnoses was 17.2 months (SD 11.5) with a range of 4-62 months and the mean duration on treatment was 11.8 months (SD 8.8) with a range of 3-49 months.

## Socio-demographics of the respondents

The ages of the respondents ranged between 21-46 years with a mean of 33.8 years (SD 6.9). Forty-seven (32.2%) of the respondents were aged 20-29 years while 64 (43.8%) and 35 (24.0%) were aged 30 to 39 and above 40 years respectively.

Forty-two (28.8%) of the respondent were single (not married), 67 (45.9%) were married, 14 (9.6%) were divorced while 23 (15.7%) were widows.

With respect to education, 32 (21.9%) of the respondents had primary level education while, 54 (37.0%) and 60 (41.1%) had secondary and tertiary level education respectively.

Seventy (47.9%) of the respondents were self employed, 36 (24.7%) were employed in the public sector while 13 (8.9%) were in the private sector. Fourteen respondents (9.6%) were students while 4 (2.7%) and 6 (6.2%) were housewives and unemployed respectively.

Thirty-one (21.2%) of respondents reported that their partners were also positive for the virus, 16 (11.0%) were negative while 99 (67.8%) of the respondents did not know the status of their partners.

Table 1 shows the sexual activity of the respondents; Of the 146 respondents, 73 (50.0%) reported sexual activity after they were diagnosed HIV positive and 5 (3.5%) of them had multiple sexual partners.

Sixty-eight (93%) of the sexually active respondents practiced vaginal intercourse while 5 (7.0%) were engaged in vaginal, oral and anal intercourse.

The respondents in the age range of 30-39 years were significantly more sexually active than the other age groups. The married respondents were also significantly more sexually active than the other categories.

Respondents whose partners were aware of their (respondents) HIV status were more sexually active than those whose partners were not aware. Eighty-seven percent of respon-

dents whose partners were retroviral positive reported sexual activity and the corresponding figure for negative partners was 75% while only 34.3% of respondents who do not know their partners status reported sexual activity.

Antiretroviral treatment for >12 months was associated with significant increase in reported sexual activity (60.4% vs 44.1%;  $p=0.042$ ).

Increasing level of education was also associated with increased sexual activity but this observation was not statistically significant.

Regression analysis of the above variables showed that only age group 30-39 years, marriage and positive retroviral status of their partners were significantly associated with increased likelihood of sexual activity. See Table 2.

Table 3; respondents' contraceptive practice.

The respondents awareness of contraception prior to HIV diagnosis was good (93.2%) but only 81 (55.5%) of them had ever used the condom with very poor consistent rate (7.5%). Post HIV diagnoses, only 37 (50.7%) of the sexually active respondents used the condom. Sixteen (21.9%) reported consistent usage.

**Table 1.** Factors that affect sexual activity

Variables	Total	Using condom n (%)	$\chi^2$ value	$p$ value*
<b>Age in years</b>				
20-29	47	18 (38.3)	19.6	0.000
30-39	64	45 (70.3)		
Above 40	35	10 (28.6)		
<b>Education</b>				
Primary	32	11 (34.4)	6.7	0.035
Secondary	54	25 (46.3)		
Tertiary	60	37 (61.7)		
<b>Marital status</b>				
Single	42	16 (38.1)	33.0	0.000
Married	67	50 (70.4)		
Divorced	14	3 (21.4)		
Widow	23	4 (17.4)		
<b>Partners awareness</b>				
No	75	20 (26.7)	33.6	0.000
Yes	71	53 (74.6)		
<b>Partners HIV status</b>				
Positive	31	27 (87.1)	30.8	0.000
Negative	16	12 (75.0)		
Don't know	99	34 (34.3)		
<b>Duration on HAART</b>				
≤12	93	41 (44.1)	3.6	0.042
>12	53	32 (60.4)		

\*P value calculated using  $\chi^2$  square test with Yates correction

**Table 2.** Logistic regression of factors that affect sexual activity with determination of odds ratios and confidence intervals for likelihood to report sexual activity

Variables	Odds ratio	$p$ value*	Confidence interval
<b>Age in years</b>			
20-29	3.0	0.158	0.65-13.61
30-39	10.8	0.000	2.93-40.07
Rc: 40+			
<b>Education</b>			
Primary	0.31	0.088	0.08-1.19
Secondary	0.46	0.148	0.16-1.32
Rc: Tertiary			
<b>Marital status</b>			
Single	2.18	0.357	0.42-11.51
Married	9.34	0.008	1.78-48.92
Divorced	3.06	0.294	0.38-24.65
Rc: Widow			
<b>Partners awareness</b>			
No	0.39	0.371	0.19-1.86
Rc: Yes			
<b>Partners HIV status</b>			
Positive	9.39	0.002	2.32-37.98
Negative	1.94	0.423	0.38-9.87
Rc: Don't know			
<b>Duration on antiretroviral</b>			
≤12	0.40	0.066	0.15-1.06
Rc: >12			

Rc=reference category

**Table 3.** Respondents' contraceptive practice and reasons for not using contraception

Awareness and use prior to diagnosis	n (%)
Aware	136 (93.2)
Use of condom	81 (55.2)
Consistent use of condom	11 (7.5)
Use post diagnosis among sexually active	
Use of condom	37 (50.7)*
Consistent use of condom	16 (24.0)*
Aware of dual protection	40 (27.4)
Use of dual protection	9 (6.2)

\*% of sexually active respondents otherwise percentage of study population (146).

Of the 36 sexually active respondents who were not using condom, 24 said they were not using it because their partners were also HIV positive while 4 said they desired pregnancy. One respondent disliked the condom while two did not use it for religious reason. Five respondents claimed ignorance of the condom.

Condom utilization by sexually active respondents was significantly affected by age, education, marital status, partners awareness of respondent retroviral status and the partners retroviral status, and the duration the respondent has been on anti-retroviral treatment. See Table 4.

**Table 4.** Factors associated with the use of condom among sexually active respondents

Variables	Total	Using condom n (%)	$\chi^2$ value	p value*
Age in years				
20-29	18	13 (72.2)	7.2	0.028
30-39	45	22 (48.9)		
40+	10	2 (20.0)		
Education			3.0	0.226
Primary	11	3 (27.3)		
Secondary	25	13 (52.0)		
Tertiary	37	21 (56.8)		
Marital status			7.9	0.049
Single	16	13 (81.1)		
Married	50	21 (42.0)		
Divorced	3	1 (33.3)		
Widow	4	2 (50.0)		
Partners awareness			1.3	0.302
No	20	8 (40.0)		
Yes	53	29 (54.0)		
Partners HIV status			6.4	0.041
Positive	27	11 (40.7)		
Negative	12	10 (83.3)		
Don't know	34	16 (47.1)		
Duration on antiretroviral			10.2	0.002
≤12	41	14 (34.1)		
>12	32	23 (71.9)		

\*P value calculated using Chi square test with Yates correction

However logistic regression analysis of the above variables for likelihood (odds ratio) for condom use showed that only marriage, partners unawareness and antiretroviral treatment duration for >12 months were significantly associated with low utilization by the respondents. See Table 5.

### Discussion

This study showed that retroviral positive Nigerian women on antiretroviral medication are relatively young and educated, and majority of them are married. The preponderance of married women in this study population is attributable to the fact that majority of women attending the Dermatological Clinic for HIV/AIDS care were identified through the Prevention of Maternal to Child Transmission (PMTCT) service of the hospital.

The reported sexual activity (50%) amongst our subjects is similar to a previous report from Brazil (10). But lower than the 65% quoted in a study from the United States of America (11). In consonant to the findings from the latter study, our study showed that the majority (93%) of the sexually active respondents engaged in vaginal intercourse with 7% engaging in a combination of vaginal, anal and oral intercourse.

**Table 5.** Odds ratios and confidence intervals for likelihood of non use of condom by women on HAART

Variables	Odds ratio	p value	Confidence interval
Age in years			
20-29	4.8	0.226	0.37-61.22
30-39	1.1	0.924	0.13-10.31
Rc: 40+			
Education			
Primary	0.15	0.253	0.01-3.88
Secondary	0.79	0.824	0.10-6.13
Rc: Tertiary			
Marital status			
Single	0.87	0.934	0.03-27.09
Married	0.02	0.030	0.001-0.68
Divorced	0.08	0.353	0.000-17.80
Rc: Widow			
Partners awareness			
No	0.03	0.040	0.001-0.84
Rc: Yes			
Partners HIV status			
Positive	0.303	0.202	0.05-1.89
Negative	6.951	0.126	0.58-83.15
Rc: Don't know			
Duration on antiretroviral			
≤12months	0.071	0.002	0.01-0.38
Rc >12 months			

Rc=reference category



Such risky sexual behaviors have also been reported amongst retroviral positive hemophilic men in the United States where over 60% of them practiced oral/genital sex in addition to vaginal intercourse (12). This study showed that age 30-39 years, marriage, increasing level of education, partners awareness and sero-positive partners, and antiretroviral treatment for more than 12 months were associated with increased frequencies of reported sexual activity. However, after logistic regression analysis of these factors only age between 30-39 years, marriage and partners' retroviral positive status significantly increased the likelihood of the respondents to be sexually active.

Sexual intercourse by retroviral positive people who are on antiretroviral medication have attracted research interest in the recent past (10-14). Consensus opinion advocates the use of condom always to prevent further spread of the virus because it's still not certain to what extent antiretroviral drug would reduce transmissibility of the virus. Does it reduce transmissibility to zero? Also the possibility of emergence of resistance to current antiretroviral drugs (8), and the phenomenon of 'blips' (9) makes it pertinent for retroviral positive women on medication to embrace safer sex to prevent further spread of the virus. This study showed that condom utilization amongst the respondents remained unchanged post HIV diagnosis and it was lower than was reported among similar cohort of women in Brazil (10), where an appreciable increase in condom utilization post HIV diagnosis was noted. The consistency (24.0%) of condom utilization by the sexually active respondents in this study was unacceptably low compared to an earlier consistency rate of 63% reported from developed countries (11).

The respondents gave various reasons for not using the condom with the fact that their partners were already retroviral positive topping the list. Engaging in unsafe sex because both partners already have the virus could expose either or both of them to acquiring new infections if they are not infected by the same HIV subtype. They are also at risk of unwanted pregnancy and other sexually transmitted diseases. The condom utilization (40.7%) by respondents whose partners were also retroviral positive was low compared to 88% condom uptake reported among concordant partners in Thailand (13). Our findings suggest that retroviral positive Nigerian women either have poor knowledge about the various HIV subtypes or are not yet heeding to counsel on behavioral change and safer sex practices. Therefore, there is need for urgent and appropriate education, and counseling of women living with HIV/AIDS to improve their condom utilization to prevent further spread of the virus.

This study also revealed that the older women, and the married ones are less likely to use the condom than the young and single women. Possible explanation for this, is that the single woman is perhaps empowered by her single 'status' to negotiate the use of condom than the other categories of women. In the typical African setting, married women are not culturally empowered to resist or negotiate sexual issues

with their husbands (15), unlike what happens elsewhere where women are socio-economically empowered (14).

Another possible reason for low condom uptake in this country is the fact that only the male condom is widely available in Nigeria and therefore its use is unfortunately a matter of the mans choice. Perhaps, if the female condom is made available and accepted by women in this country, its uptake may be different.

From our findings in this study, it thus appear the emphasis in the care of people living with HIV/AIDS in this country is on the provision of highly active antiretroviral drugs with little or no attention to other reproductive health issues. There should be more effective integration of HIV/AIDS care with other aspects of reproductive health care services such as promotion Behavioral Change Communication and safer sex practices to provide a more comprehensive care for these people.

### Conclusion and recommendation

This study showed that one half of female Nigerians in Benin City with retroviral disease are still sexually active post HIV diagnosis and only about half of the sexually active ones use the condom with very low consistency rate. Poor condom uptake was mostly associated with the older women, marriage and positive status of partner. The readiness to have unprotected sexual intercourse with retro-positive partners reflects poor knowledge of the risk of secondary HIV infection, unwanted pregnancy and other sexually transmitted diseases. There is an urgent need to intensify counseling and promotion of healthy sexual practices amongst both retroviral positive women as well as those who are retroviral negative. We recommend integration of services to properly address the reproductive health needs of people living with HIV/AIDS.

### References

1. WHO. Weekly epidemiological record 1997;4:2
2. World Health Organisation (WHO) Global program on AIDS. The current Global situation of HIV-AIDS pandemic. Geneva.
3. De Kock KM, Ekpin E, Gnaore E et al. The public health implications of AIDS research in Africa. Journal of the American Medical Association 1994;272:6:481-6.
4. Allen DR, Carey JW, Manopaiboon C et al. Sexual health risks among Thai women: implications for HIV/STD prevention and contraception. AIDS Behav 2003;7(1):9-10.
5. Oindo ML. Contraception and sexuality among youth in Kisumu, Kenya. Afr Health Sci 2002;2(1):33-9.
6. Vidal-Trecan G, Warszawski J, Coste J et al. Contraceptive practices of non-HIV-seropositive injecting drug users. Eur J Epidemiol 2003; 18(9):863-9.
7. WHO. Anti-Retroviral drugs and prevention of mother to child transmission of HIV infection in resource-constrained settings. Recommendation for use. 2004 Revision. Geneva.
8. Greud G; Cozzi-Lepri A, Ledergerber B et al. Intermittent and Sustained low level viral rebound in patients receiving potent antiretroviral therapy. AIDS 2002;16:1967-9.
9. Hoffmann C. HIV Medicine. eds Christian Hoffmann and Bernd Sebastian Kemps. John Hopkins University, Baltimore 2003;117-30.
10. Ventura-Filipe EM, Newman SP. Influence of HIV positive status on sexual behavior males. RevSaude Publica 1998 Dec;32(6):503-13.
11. Wilson TE, Massad LS, Riestler KA et al. Sexual, contraceptive and drug use behaviors of women with HIV and those at high risk for infection: results from

- the women's Interagency HIV study. *AIDS* 1999 Apr 1; 13(5):591-8.
12. Lawrence DN, Jason JM, Holman RC et al. Sexual practice correlates of human immunodeficiency virus transmission and acquired immunodeficiency syndrome in heterosexual partners and offspring of U.S. hemophilic men. *Am J Hematol* 1989 Feb;30(2):68-76.
  13. de Boer MA, Celentano DD, Tovanabutra S et al. Reliability of self-reported sexual behavior in human immunodeficiency virus(HIV) concordant and discordant heterosexual couples in northern Thailand. *Am J Epidemiol* 1998 Jun 15;147(12):1153-61.
  14. Kline A, Kline E, Oken E. Minority women and sexual choice in the age of AIDS. *Soc Sci Med* 1992 Feb;34(4) 447-57.
  15. Allison Smith-Estelle, Sofia Gruskin. Vulnerability to HIV/STIs among Rural women from migrant communities in Nepal. *A Health and Human Right Framework. Reproductive Health matters* 2003; 11(22):142-51.

## APPENDIX 1

### RELIABILITY ANALYSIS-SCALE ( $\alpha$ )

#### Correlation Matrix

	Age	Children	DURATHIV	DUART	NUMPARTN
Age	1.0000				
Children	0.6367	1.0000			
DURATHIV	0.0881	0.0738	1.0000		
DUART	0.1725	0.1472	0.7369	1.0000	
NUMPARTN	-0.0033	0.0021	0.0372	0.1661	1.0000

n of cases = 145.0

Item variances	Mean	Minimum	Maximum	Range	Max/Min	Variance
	52.1163	0.3480	131.5850	131.2370	378.1302	2996.7498

#### Item-total statistics

	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Squared multiple correlation	Alpha if Item Deleted
Age	31.5793	372.3010	0.1952	0.4129	0.5703
Children	63.3448	442.4914	0.3105	0.4071	0.5596
DURATHIV	48.2000	173.7583	0.5502	0.5524	0.3435
DUART	53.4759	218.0706	0.6789	0.5750	0.2129
NUMPARTN	64.6414	469.1899	0.0863	0.0450	0.5938

#### Analysis of variance

Source of variation	Sum of Sq.	DF	Mean square	F	Prob.
Between people	13586.2069	144	94.3487		
Within people	128602.0000	580	221.7276		
Between measures	104664.4966	4	26166.1241	629.6265	0.0000
Residual	23937.5034	576	41.5582		
Non-additivity	1664.1719	1	1664.1719	42.9616	0.0000
Balance	22273.3316	575	38.7362		
Total	142188.2069	724	196.3926		
Grand mean	13.0621				

### Intraclass Correlation Coefficient

Two-Way Mixed Effect Model (Consistency Definition):  
People Effect Random, Measure Effect Fixed

Single Measure Intraclass Correlation=0.2026\*  
95.00% CI Lower=0.1335 Upper=0.2828  
F=2.2703 DF=(144 576.0) Sig=0.0000 (Test Value=0.0000)

Average Measure Intraclass Correlation=0.5595\*\*  
95.00% CI Lower=0.4351 Upper=0.6635  
F=2.2703 DF=(144 576.0) Sig=0.0000 (Test Value=0.0000)

\* Notice that the same estimator is used whether the interaction effect is present or not.

\*\* This estimate is computed if the interaction effect is absent, otherwise ICC is not estimable.

### RELIABILITY ANALYSIS-SCALE (ALPHA)

Tukey estimate of power to which observations must be raised to achieve additivity=0.6195

Hotelling's T-Squared=4879.4774 F=1194.4554 Prob=0.0000  
Degrees of Freedom: Numerator=4 Denominator=141

Reliability Coefficients 5 items

$\alpha=0.5595$  Standardized item  $\alpha=0.5643$