

Women Perception of Service Quality at Antiretroviral Therapy Centres in Ghana: Evidence from Ashanti Region

Daniel Boateng¹, Dadson Awunyor-Vitor^{2*}, Godfred Seidu Jasaw³

1. Department of community Health, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. Email: kingdannie@gmail.com
2. Department of Agricultural Economics, Agribusiness and Extension, Kwame Nkrumah University of Science and Technology, Kumasi-Ghana. Email: awunyovitor@yahoo.co.uk
3. Department of Community Development, Faculty of Planning & Land Management, University for Development Studies- Wa Campus- Ghana. Email: gsjasaw@yahoo.com

*Email of the corresponding author: awunyovitor@yahoo.co.uk

Abstract

In Ghana, the number of HIV positive women who received a complete course of ART for PMTCT has been very low and inconsistent over the last three years. In the Ashanti Region, only 22.2% of HIV positive women in need received ART attended ART centres for medication in 2010. Certainly, appropriate strategy is required to improve use of ART centres. Thus the study aimed at exploring HIV positive women perception of ART centres specifically service quality and its implication on their use of ART centres. The study was conducted in three out of eight ART centres in the Ashanti Region of Ghana. Data was collected from a total of 265 HIV positive women who had been on ARVs for treatment or prophylaxis technique. The respondents were randomly sampled for the study. The data was collected using semi structured questionnaires and focus group discussions (FGDs) using tape recorders and interviews guides. Statistical Package for Social Sciences (SPSS) version 16 was used to analyse the data. Generally the respondents perceived the service quality as satisfactory as they are satisfied with the care given them by the staff of the ART centres. However, Long waiting times, unavailability of drugs and lack of follow ups have been mentioned by the respondents are key barriers to barriers to ART centre attendance by the respondents. Thus efforts should be made to reduce waiting time of patients, and make drug available. Future study should be a multidimensional study which would critically examine all barriers influencing access to ART.

Keywords: ART, PMTCT, HIV, Women, Ghana

1. Introduction

HIV/AIDS still remains a major public health problem. Despite tremendous efforts, leading to stabilizing and declining of the epidemic in many countries with generalized epidemics, too many people are still acquiring HIV infection and too many people are dying (WHO/UNICEF/UNAIDS, 2012). Thirty-four million people were living with HIV/AIDS in 2010, 2.7 million people were newly infected and 1.8 million people died from AIDS-related causes (WHO/UNICEF/UNAIDS, 2012). In Ghana, HIV prevalence increased in all regions in 2010 except Upper East (NACP, 2011). The estimated adult national prevalence was 1.5% with an estimated 95,206 and 126,735 females living with HIV and AIDS. There were 12,890 new infections and 16,319 death due to AIDS (National AIDS Control Programme, 2011).

Globally, approximately 50 percent of people living with HIV are females. HIV remains the leading cause of death among women in reproductive age and HIV infection among children has mainly been through Mother-To-Child-Transmission (MTCT) (WHO 2009). In sub-Saharan Africa females are close to 60 percent of those infected with the virus. In Ghana, the level of HIV infection in 2009 was nearly 3 times higher among young

women (1.3%) than young men (0.5%) and in 2010, new infections of HIV among females was higher than males (7,039vs 5,852) (National AIDS Control Programme 2010; National AIDS Control Programme 2011). This growing feminization of the pandemic does not only reflect women's greater physiological vulnerability to infection, but also their social and psychological vulnerability created by a set of interrelated economic and socio-cultural factors (Gender and Development Group 2004).

The use of ARV has led to a marked reduction in AIDS related morbidity and mortality. In countries where ARVs are widely available there are clear declines in AIDS related deaths, up to about 70% (Joint United Nations Programme on HIV/AIDS, 2011). The World Health Organisation (WHO) has made recommendations on the use of ART recognizing the critical role adherence play in achieving the best virological response. Expanding access to treatment has contributed to a 19% decline in deaths among people living with HIV (PLHIV) between 2004 and 2009 and further treatment stands to avert 10million more deaths by 2025 (UNAIDS, 2010). Evidence shows that successful viral suppression through treatment can substantially reduce the risk of vertical, sexual and blood-borne HIV transmission (Joint United Nations Programme on HIV/AIDS 2010)

In many countries, overburdened health systems are struggling valiantly to address the challenges posed by HIV, including health worker shortages, centralized programmes, fragmented rather than integrated and holistic services delivery. This is especially true for health systems in sub-Saharan Africa, which has to provide care for about 70% of the people living with HIV but have only 3% of the world's health care providers. Countries in Asia, the Middle East and North Africa report that an inadequate supply of health care workers skilled in delivering antiretroviral therapy impedes treatment scale-up (*Factsheet: UNAIDS*) In a qualitative study in Western Uganda, service factors such as long wait times and negative interactions with the staff, represented barriers to continuing HAART. In the same study, 33% of participants reported very negative interactions with programme staff, such as rude comments and unacceptable behavior as a barrier to continuing HAART (Duff, Kipp and Wild 2010)

More than 50% of the people eligible for treatment globally, do not have access to antiretroviral therapy (WHO/UNICEF/UNAIDS 2012). In Ghana, the total need for ART was estimated at 112, 549 (93,633 adults and 18,916) and mothers needing PMTCT was 11,496. This accounted for 51% of the estimated PLHIV population. As at 2009, 793 centers have been established and supported exceeding a target of 563 and the number of service delivery points providing ART as at 2009 was 138 over a target of 73 (National AIDS Control Programme, 2010) On the contrary, the number of HIV positive women who received a complete course of ART for PMTCT has been very low and inconsistent over the last three years. It increased from 12.6% in 2007 to 38.1 in 2008 and decreased again to 28% in 2009 (National AIDS Control Programme, 2010) With 152 PMTCT centres and 21ART centers in the Ashanti Region, only 22.2% of HIV positive women in need received ART for prophylaxis and 10.7% for treatment in 2010 [10]. This indicates a significant wide gap between the country's achievements in 2009 (28%) and target (80%) for 2010. Undoubtedly, a concerted effort will be required to unearth the barriers to inform interventions to improve utilisation. This study focuses on exploring the health facility related barriers leading to low utilization and uptake of ART despite efforts to increase access.

2. Methods

2.1 Study population and sample

The study was a descriptive cross sectional design. The methods were both qualitative and quantitative and data was collected at the individual and facility level. The study was conducted in the Kumasi Metropolis. Kumasi is the capital city of the Ashanti region and the second largest city in Ghana. HIV/AIDS continues to be a major challenge to health professionals in the metropolis (Ghana health service, 2010) Voluntary Counseling Test (VCT) activities are currently carried out at ten (22) centres in the metropolis and antiretroviral treatment are offered at nine (9) centers. With respect to HIV prevalence, the Ashanti Region recorded the second highest in the country in 2011 (3.0%) (National AIDS Control Programme, 2011) Routine HIV testing and counseling are offered during antenatal care visits for pregnant mothers at both ART centres.

The study was conducted in three ART centres. The study population consisted of HIV positive women who had been put on ARVs for treatment or prophylaxis and staff of the ART centers. The inclusion criterion was HIV positive women from 18 to 49 years who have been on ART for more than three months. The sample was selected in two (2) stages. A random sampling technique was used to select three facilities out of a total of eight (8) ART centres in the Metropolis and a systematic random sampling was used to select 265 respondents for exit interviews and FGDs at the ART centre. These were Suntreso Government Hospital (71), Aninwaa Medical Centre (38) and Kumasi South Government Hospital (79). Administrative records were also used to get information of respondents.

2.2 Data collection and Statistical analysis

The data collection technique for the quantitative method was interviews using structured questionnaires. Qualitative data was obtained using semi-structured interviews, focus group discussions (FGDs) and interviews with key informants using tape recorders and interviews guides. The interviews were conducted and audio-taped in the local language. Tapes were transcribed verbatim in Twi and back-translated into English. Spot checks of interview and FGD transcripts and translations were regularly conducted to ensure the completeness of the transcription and the accuracy of the translation. Questionnaires and interview guides were pre-tested to check for clarity, consistency and acceptability of the questions to respondents.

All questionnaires and interview results from the field were checked for completeness and internal errors during data collection. Data was coded before entering using SPSS software. Qualitative data was analyzed using ATLAS.ti. Audio-recorded data from interviews of respondents were transcribed verbatim and translated into English. A preliminary analysis of interviews was done, and used for validation of results and further exploration using focus group interviews. Quantitative data was analyzed using STATA 11 and SPSS Version 16.

The main outcome variable was defaulting of ART. This was measured as client's inability to honor ART appointment for a period of one month or more. The independent variables were measured with questions to elicit clients' response on perception of care at the facility. Clients' responses were ranked on a Likert scale (1= strongly disagree, 2=disagree, 3 = neutral, 4 = agree, 5 = strongly agree). Analysis of variance with a computation of the F-statistics and p-values was done to access the influence of the health facility related factors on access to ART.

2.3 Ethical consideration

Ethical clearance for the study was obtained from the Committee on Human Research, Publications and Ethics (CHPRE) of the Kwame Nkrumah University of Science and Technology (KNUST) and Komfo Anokye Teaching Hospital (KATH) before commencement of the study. The participant's capacity to consent was also considered.

3. Results

Background characteristics

Majority of the women involved in the study were married and had formal education. Eighteen percent of them however had no formal education. Majority of them were between the ages of 25 and 44 years and the mean age of

the respondents was 37 years (± 7). Most of the respondents interviewed were working and the most cited job was trading (65%). The ART defaulting rate among the respondents was 27% with more people defaulting in Kumasi South and Suntreso Government Hospitals than Aninwaa Hospital. Respondents' reasons for defaulting ART included lack of family or partner support which was the most cited reason (14.7%). Other reasons included high transport cost to the facility (13.3%), not having regular access to transportation (11.9%) and use of alternative medicine (4.9%), Figure 1.

Quality of care

In general, most of the respondents cited that they feel attended to (mean =4.4), are treated with respect (mean = 4.3), feel can trust the health workers (mean = 4.4), they are listened to by health workers (mean = 4.3) and there is confidentiality and privacy (mean = 4.3). On the other hand, the clients least agreed that waiting time is not long (mean = 2.8) and there is enough waiting space at the facility (mean = 2.68). There was a significant association between defaulting ART and follow up ($p=0.003$) and treatment cost ($p = 0.034$), Table 1. Clients were found to be less satisfied with the waiting time at the facility and the costs of ARVs were more likely to default ART.

3.1 Qualitative results

The focus groups involved defaulters (group one and three) and other two groups were clients who had never defaulted their ARV appointment (group two and four). The in-depth interviews involved four (4) HIV counselors; five (5) nurses, two (2) prescribers and three (3) pharmacists were involved in the study.

The facility related barriers to ART identified included: Long waiting times, unavailability of drugs and lack of follow ups were the perceived barriers to ART most cited by the respondents.

Long waiting times and inadequate waiting space

Participants reported they sometimes spend almost the whole day at the facility and this demotivates them from going to the facility. And at certain times, they will come and had to go and come back a week later because the drugs they are supposed to be given are not available. This was confirmed in our interview with health workers. A respondent indicated;

“I always wake up early when I have appointment so get here very early in the morning but end up spending the whole day here. Now it's even better, previously we use to leave here at 7.00pm. At times I wake up and don't feel like coming because it's boring sitting here waiting the whole day” (defaulter).

The respondents further disclosed that the inadequate waiting space at the facility further makes it distressful when they wait at the facility for long. The complained of inadequate chairs to sit on and at certain times have to wait in the sun. This was mainly reported by respondents interviewed at Suntreso Government Hospital. A respondent disclosed:

Drug unavailability

Respondents disclosed how the shortage of drugs (antiretroviral therapy) has had a tow on their access to ART. Some respondents explained that they travel long distances to the facility just to return without the medicine they are supposed to be given. They further disclose how this discourages them from returning to the facility the following time. A respondent from Suntreso Hospital disclosed;

“On two occasions I came and was told the drugs I am supposed to be given are finished so I decided to stay home for a while. I just returned last week and they told me I am a defaulter so have to undergo counseling again” (defaulter).

A health worker explained that some patients were on “drug holiday” as at the time of the study because one particular drug they are supposed to be given is out of stock. They explained this usually occur when there is going to be a change of drugs. The health workers disclosed there will be no stock of the old drug, and the new drug will

take long before being brought in. They cited that there is a current change of Nelfinavir and the new drug is also not in so most clients are on drug holiday.

Follow ups

On follow ups, majority of the participants disclosed they have never received any calls or visits from any health worker. However they disclosed that such would encourage them a lot to adhere to ART. Some of the respondents indicated that no one has ever asked of their phone numbers or spoken to them about calling. A respondent disclosed;

“As for that, I have never seen them doing that before. No body from the hospital has ever called on phone or walked up to visit me in my house not even when I defaulted for about three months” (defaulter).

However a woman from the group 3 (never defaulted), confirmed she used to receive phone calls from a nurse at the facility by now she has stopped and that motivated her a lot.

“There used to be a nurse who used to call me on phone and sometimes visit me at home but I think she has been transferred and apart from her, nobody has ever called. They only wait for us to come here and they ask how we have been, that is all.” (Never defaulted)

A health worker however disclosed they used to follow up using their house addresses and phone numbers or at times call their monitors. He explained this is becoming difficult with increasing number of clients and limited resources. He stated that even though a worker would go to visit a client, baby, there wouldn't be the resources and mobilization to do so.

Challenges faced by health workers

The challenges cited by health workers interviewed included inadequate infrastructure, lack of motivation, inadequate staffing and drug shortages. The health staff disclosed that sometimes they had to work into the night because they are so small and the client number is increasing day by day.

“The staff strength is a headache. It's sometimes very difficult but we try as much as possible to cope. On many occasions, instead of closing the normal time, we close very late (pharmacist)”

“Now infrastructure is our major challenge. We started this programme with about 50 clients and now we are talking about over 2000 clients and we do not have the space to accommodate them. Most of them have to wait long and do not even have seat to sit on (prescriber).”

4. Discussion

4.1 Access to ART

This study has been conducted in order to identify barriers to accessing ART and to suggest possible ways to improve access. Reports from other countries have emphasized that sub-optimal adherence is the main cause for the failure of ARV therapy and that means that clients should be able to obtain optimal access. In general, the defaulter rate among the respondents was 27%. This was however inconsistent with other estimates of average rates of adherence to ART in other studies from different social and cultural settings which range from 50% to 70% (Li, Golin and Miller 200; Nemes, Carvalho and Souza 2004; Safren, Kumarasamy and James 2005). Personal reasons cited by the women for missing ART appointment ranked from no support to side effects. This emphasizes the importance of the family's support in achieving optimal adherence. Other reasons included long distance to the facility, waiting too long at the facility, poor staff attitude, preference and use of alternative medicine, forgetfulness, sickness and lack of privacy at the facility. There were further emphasized in the qualitative study.

4.2 Quality of care

Perceptions about quality of care have been reported to influence utilization of care. Clients with positive perceptions tend to utilize the service and vice versa. Many studies have reported a positive link between improve quality of care and increase service utilization. Good staff attitude, reduction in time spent at the facility, showing of respect and empathy towards patients encourage them to regularly visit the facility. In the quantitative study, respondents expressed their perceptions on the care given at the facility. Most of the respondents were in favor of how they were being attended to, how they are being treated, privacy at the facility) and felt they were being listened to. They were least satisfied with the waiting time at the facility and the waiting space available. There were differences among the respondents' perceptions on follow ups and cost of ARVs and these were statistically significant ($p=0.003$). HIV positive women, who were unable to afford the ARVs, were more likely to miss ART appointments.

In line with the quantitative study, long waiting time, unavailability of drugs and cost of ARVs were most cited health related barriers to ARVs in the qualitative study. Respondents gave a very good impression about how they were being treated at the facility. Both clients and health workers disclosed that ARVs are sometimes not available and clients will have to be on "drug holiday" e.g. Nelfinavir. On follow ups, most of the clients explained that they had never been visited or called by any health worker. This however had the potential of improving access by the clients. With follow ups, health workers will better understand and improve on various access problems clients tent to face. Lack of logistics and stigma in the community were the reasons cited for inadequate follow ups by the health workers.

The result of this study was consistent with a recent study in Uganda (Duff P, Kipp and Wild 2010), where long waiting time was a cited barrier to continuing HARRT. In contrary however was a report on negative interactions with staff as a barrier to accessing ART. This may be as a result of better understanding and appreciation of the challenges faced by HIV positives in our setting, thus extending much care and assistance towards them even at the midst of limited logistics. Other studies have also revealed that the cost of medication is one of the most significant barriers to treatment adherence. For example in a study in Botswana by Weiser, Wolfe and Bangsberg (2003) adherence difficulties related to the financial demands of therapy and an inability to afford medicines for varying periods was reported.

Challenges at the facility level reported by health workers included inadequate staff and infrastructure, lack of staff motivation, drug shortages and inadequate logistics. With the implementation of PMTCT services and the education on HIV on the increase, more and more people are getting tested and therefore the percentage accessing ART is on the increase. This calls for more expansion of facilities and staffing to accommodate the increasing workload. A health worker reported from one facility that the services began with only 50 people and now they have more than 2000 clients but the infrastructure is still the same. These infrastructural difficulties militate against the effective provision of services to the HIV positive clients.

5. Conclusion and Recommendations

The defaulting rate in this study still demands attention. A multidimensional study of all barriers influencing access to ART will be essential in tackling the issue of defaulting ART comprehensively. Most respondents indicating lack of support from as reason for missing ART appointment means that HIV positive persons do not get the needed support in the family and the community. This could however mean that, stigmatization is not all over and people still hold negative perceptions about the disease and people living with the disease. Community sensitizations with emphasis on demystifying negative perceptions about the disease must be prioritized. Majority of the respondents were not happy about the waiting time, waiting space, follow ups and shortages of drugs. The health workers confirmed this and cited inadequate human and logistical resources as being reasons for that. However, majority commended the good attitude shown towards them by health workers from all the facilities. It is recommended that government and major stakeholders improve and expand infrastructure at the various centers to help reduce congestion and waiting times as more mothers are getting tested through PMTCT programmes.

Acknowledgement

The authors wish to recognize the support of Dr. Baafuor Kofi Opoku, Department of Obstetrics and Gynaecology, KNUST, Kumasi and Prof. E.A. Addy, Dept of Community Health, KNUST. We also wish to acknowledge Miss

Golda Dokua Kwapong and Mrs. Deborah Boateng for their special contribution to this paper. We are also grateful to our research assistants for their assistance. Finally, we would like to appreciate the support of the management and staff at the ART centre at Suntreso, Kumasi South and Aninwaa Hospitals in Kumasi as well as all participants for their cooperation and enthusiasm in this study.

References

- Duff P., Kipp W., Wild T.C. (2010), Barriers to accessing highly active antiretroviral therapy by HIV positive women attending Anti natal Clinic in a regional hospital in Western Uganda. *J Int AIDS Soc.* 6(2), 13: 37.
- Factsheet*: UNAIDS website http://data.unaids.org/pub/Outlook/2010/20100713_ (August 15, 2011)
- Gender and Development Group, (2004), *Integrating gender issues in HIV/AIDS programmes: an operational guide*. Washington D.C.
- Ghana health service (2010), *Annual health review report*, Ashanti region.
- Joint United Nations Programme on HIV/AIDS, (2011), *UNAIDS World AIDS day report*.
- Joint United Nations Programme on HIV/AIDS, (2010), *Global Report: UNAIDS report on the global AIDS epidemic*. New York City.
- Liu H, Golin CE, Miller L.G. (2001), A comparison of multiple measures of adherence to HIV protease inhibitors. *Ann Intern Med.* 136 (2):175.
- National AIDS Control Programme (2010), *National HIV Prevalence and HIV/AIDS estimate report*. Accra
- National AIDS Control Programme (2011), *National HIV Prevalence and HIV/AIDS estimate report*. Accra
- Nemes M.I.B., Carvalho H.B., Souza M.F.M. (2004), Antiretroviral therapy adherence in Brazil. *AIDS* 18 (Suppl 3):15-20.
- Safren SA, Kumarasamy N., James R., (2005), ART adherence, demographic variables and CD4 outcome among HIV-positive patients on antiretroviral therapy in Chennai, India. *AIDS Care.* 17(7): 853-862.14.
- Weiser S., Wolfe W., Bangsberg D. (2003), Barriers to antiretroviral adherence for patients living with HIV infection and AIDS in Botswana. *Journal of Acquired Immune Deficiency Syndromes.* 34(1):281-288.
- WHO/UNICEF/UNAIDS (2012), *Global HIV/AIDS response; Epidemic update and health sector progress towards universal access: progress report 2011*.
- World Health Organization (2009), *Women & health: today's evidence tomorrow's agenda*:

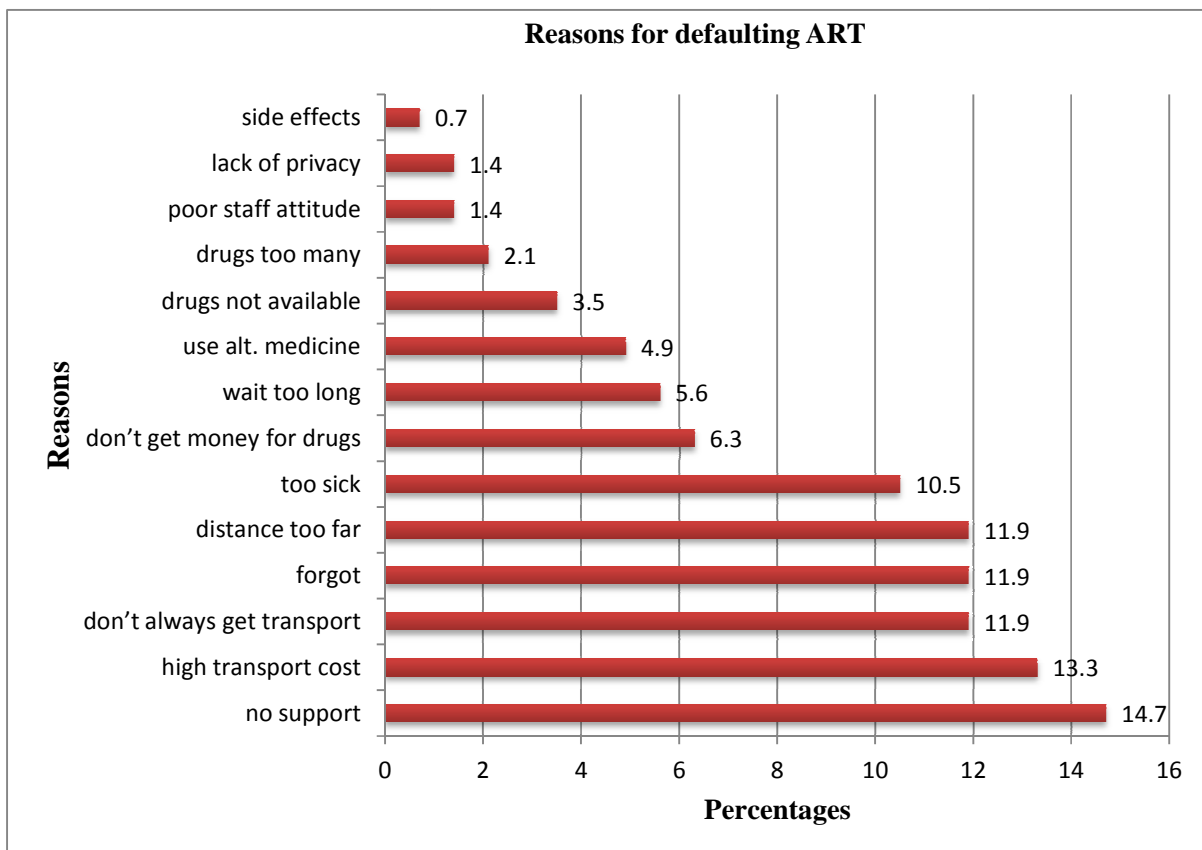


Figure1. Respondents' reasons for defaulting ART appointments

Table 1. Clients' perception of quality of care and access to ART

Variable	N	Mean	SD	F	p-value
I feel attended to	256	4.39	0.65	0.63	0.639
I am treated with respect	256	4.34	0.56	1.10	0.348
I feel I can trust the health workers	256	4.35	0.55	1.71	0.166
I am listened to by the health workers	256	4.29	0.73	2.19	0.330
There is privacy and confidentiality	256	4.32	0.61	0.54	0.655
The health staff follow up on me	256	3.36	1.27	4.25	0.003
I don't wait long before being attended to	256	2.78	1.15	1.69	0.154
There is enough waiting space at the facility	256	2.68	1.32	3.95	0.063
The cost of drugs is low	256	3.24	0.92	3.66	0.034

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage:

<http://www.iiste.org>

CALL FOR PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <http://www.iiste.org/Journals/>

The IISTE editorial team promises to review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request from readers and authors.

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

