Application of Social Media Campaign Strategy for Prevention of Drug Abuse among Undergraduate Students in Igbinedion University, Okada

¹ABDULSALAMI Lucky Tijani, ²ESIEVO Lovet Ovigue, ³ADESHINA Temilade Jumoke

¹Igbinedion University Library, Okada, Edo State ²Kashim Ibrahim Library, Ahmadu Bello University, Zaria, Kaduna State, Nigeria ³Department of Accounting, Igbinedion University Library, Okada. Edo State

Email: ¹luckyabdulsalami@gmail.com, ²elcomesievo@gmail.com, ³adesinatemilade9@gmail.com

Abstract

This research work discusses the Application of Social Media as a Campaign Strategy for the Prevention of Drug Abuse among Undergraduate Students of Igbinedion University Okada. The research adopted a survey design. A total population of 1077 comprises and targeted 100-level students (fresh intake) of (2020/2021) section. A sample size of 10% was used from the total population resulting in a sample size of 108 which was randomly selected and distributed to respondents, while 107 were duly filled and returned, representing (99.07%); this was based on Nwana (2003) postulation that a population of a few hundred 10% or 20% could be used to determine the sample size. The instrument for Data Collection was a questionnaire designed based on objective and research questions. The data collected was analyzed and presented using descriptive statistics such as frequency distribution tables and simple percentages. The finding revealed that computers, the Internet, E-mail, and Telephone are used as a campaign strategy to prevent drug abuse among students. There was a lack of sufficient media facilities to properly manage and maintain the menace of drug abuse, while training on using the existing media facilities is needed. The researcher discusses some strategies that can be used to overcome the problem, such as educating the staff and students, creating current awareness and campaign programs that will educate students about the danger of drug abuse, such as billboards, flyers, posters, pamphlets, etc., that can be used during orientation program to be organized yearly for fresher/new intake. Based on the findings, a conclusion was drawn. The research revealed that there was a reduction in delinquencies of drug abuse by the student, and the continuous use of social media campaign strategies such as orientation programs, creating awareness, launching of campaigns on the effect of drug abuse through posters etc., are encouraged. The study recommended that the University management should endeavour to provide adequate and functional social media facilities for the campaign/prevention of drug abuse. The University management should continue reinforcing their campaign strategies to provide good network connectivity (smart campus), sufficient power supply and functional equipment to students.

Keywords: Social Media, Campaign Strategies, Drug Abuse, Prevention, undergraduate students

Introduction

The use of mass media campaigns in drug prevention is both relatively common and not without controversy. Both policymakers and practitioners have hotly debated the effectiveness of such campaigns to reduce young people's drug use or their intention to use. The alarming evidence of the prevalence of drug abuse and the effects and consequences of substance abuse among students has called for concern and challenge to all helping professions to mount strategies of equipping youths with skills of living devoid of substance abuse. In Nigeria today, the consequences of substance use are diverse, including acute and chronic health, social as well as psychological problems. The problem of drug abuse among university students in Nigeria is a recognized phenomenon (Adelekan, Abiodun & Ogunremi, 2012), and the alarming rate of this problem is such that it may be regarded as one of the greatest problems in contemporary Nigerian society (NDLEA, 2003). Consequently, Abdulsalami and Abdulsalami (2014) opine that drug abusers are known to demonstrate various forms of deviant behaviour and organized crimes, including truancy, cultism, examination misconduct and high-risk sexual behaviour, among others.

According to Goode (2013), a drug may be defined as any licit or illicit substance that, when swallowed, smoked, sniffed or injected, influences the function and operation of the body and mind. In other words, a drug is any chemical substance that, by its chemical nature, affects the structure and functions of a living organism. This includes virtually all types of materials and substances, including food, ingested, inhaled or injected into the body. From these definitions, it is obvious that heroin, cocaine, marijuana, barbiturates, amphetamine, alcohol, coffee and cigarettes are classified as drugs.

Drug abuse refers to the misuse or wrong use of drugs which have adverse effects on the central nervous system, mind, mood, behaviour and personality of the individual (Dewan, 2002). In the same vein, it is the use of any drug to the point where it interferes with an individual's health or economic or social adjustment. Omolade (2003) opines that drug abuse involves the self-administration of the drug in a manner that deviates from the approved medical and social patterns within a given culture.

The effects of drug abuse among University students in Nigeria cannot be underestimated. According to Osarenren (2012), truancy and absenteeism are among the effects of drug abuse. Truancy occurs when students stay away from school or academic activities regularly without permission, while absenteeism is when there is a high rate of absence from school or academic activities when regular attendance is required. These problems are indications of adolescent rebellion, self-assertion, perceived poor academic achievement or maladjustment, which are traceable to drug abuse (Falaye & Gesinde, 2013). Other effects are cultism, armed robbery and Organized Crimes. Drug abuse gives students a false sense of security and self-confidence. As a result, these adolescents take to different types of crime, including kidnapping, rape and armed robbery. All these are manifestations of deliberate indulgence and issues that spurred the researchers to investigate the possible ways to prevent students from drug abuse and deviant behaviour among university undergraduates in the University, particularly, Igbinedion University, Okada, Nigeria. The research seeks to investigate the use of social media to prevent drug abuse among undergraduate students of Igbinedion University, Okada, Nigeria.

Problem Statement

Students take drugs to boost their self-confidence to approach their female counterparts for amorous relationships; some students take drugs when they are under stress or feel frustrated. Such ugly situations may arise from the death of a loved one, a quarrel between the student and his/her parents leading to the teenager fleeing from home, or maltreatment by a stepmother. Some University students find it difficult to combine their academic programmes with other social activities. Consequently, students may use drugs either to study late into the night or relieve tension. The use of drugs is particularly common during examinations. Students take drugs because of curiosity and desire for adventure, and because these drugs may have a feeling of excitement, such students find it difficult to do without them. Drug abuse among students gives rise to various anti-social ills such as rape, mass failure in examinations, indiscriminate sexual acts, unintended pregnancies, low self-concept, truancy, lying and stealing and many other vices that may interfere with teaching/learning and peaceful atmosphere in the school settings Newton, et al. (2010). Students who abuse drugs are seen as threats to the peace and security of their institutions. The effects of drug abuse on academic work are also associated with problems evident in the social, psychological, health and economic levels of functioning of individuals and the society at large. The majority of drug abusers have no respect for constituted authorities, and criminal behaviours are often associated with drug abuse. Condemnable activities such as armed robbery and kidnapping are perpetuated mostly when people are under the influence of drug abuse. Psychologically, the effects of most drugs abused include symptoms of stress, anxiety, depression, behaviour changes, fatigue and loss or increase in appetite.

To address these problems, various measures and programmes by government and non-governmental agencies have made several efforts towards curbing the menace of drug abuse (cigarette and hard drugs), of which the youth are the most gullible victims. The government has for some years been conducting drug abuse education in schools on an ad-hoc basis to increase awareness and to monitor its benefits through its Curriculum Research and Development Division. Out-of-school youth is often educated through mass media and public lectures organized by non-governmental organizations. The media have made positive attempts by contributing to public education on drug abuse and its social and political repercussions by exposing some drug traffickers dead through using their bodies as 'human cargoes' in the trade and its resultant effects. Drug awareness days have been organized yearly in the country. Individuals and groups have also taken initiatives to give ad-hoc education to members of the public and to press for legislative steps to be taken.

Research Questions

The research provides answers to the following research questions

- 1. What are the social mediacampaign facilities used to prevent drug abuse among undergraduate students in Igbinedion University, Okada
- 2. What are the problems associated with the social media facilities used to prevent drug abuse among undergraduate students?
- 3. What are the strategies used to proffer solutions to the problems associated with the use of social media facilities in the prevention of drug abuse among undergraduate students?

Literature Review

Drug abuse can be defined as excessive drug use inconsistent with medical practice, leading to physical or psychological dependence, mental confusion and other sign of abnormal behaviours. Drug abuse is a major public health problem all over the world. The use and abuse of drug abuse by adolescents have become one of the most disturbing health-related phenomena in Nigeria and other parts of the world (NDLEA, 1997). Several students experience mental health programmes, either temporarily or for a long period; some become insane, maladjusted to school situations, and eventually drop out of University. According to Fawa (2013), a drug is defined as any substance which is used for the treatment or prevention of a disease in man and animals; the drug alters the body functions either positively or otherwise depending on the body composition of the user, the type of drug used, the amount used and whether used singly or with other drugs at the same time. Usually, students develop attitudes based on the information available to them. This is because students do not just develop an attitude towards an issue; they do so because of the knowledge and information they have about it. AhbiRami and Zuharah (2020), in a study, reported that knowledge was an essential requirement for influencing the attitude of the student, especially within the context of health education. Generally, researchers Holt (2013) agrees that information is central to influencing the attitude of students. Researchers Ida, R. (2020) have utilized mediums such as the theory of planned behaviour, and their results showed that the theory is a useful framework for understanding behaviour intention. It can, therefore, be argued that social media-based intervention could provide useful information that may influence the attitude of students towards drug abuse and reduce their drug abuse propensity, which the researchers felt will be important to the current study because it offers a framework for understanding the impact of social media in influencing the behaviour intention of students-visà-vis drug abuse propensity.

NAFDAC (2000), as cited by Haladu (2003), explained the term drug abuse as excessive and persistent, Self-administration of a drug without regard to the medically or culturally accepted patterns. It could also be viewed as the use of the drug to the extent that it interferes with the health and social function of an individual. World book encyclopaedia (2004) defined drug abuse as the non-medical use of a drug that interferes with a healthy and productive life. Manbe (2014) defined drug abuse as the excessive, maladaptive or addictive use of drugs for a non-medical purpose. In essence, drug abuse may be defined as the arbitrary over-dependence or misuse of one particular drug with or without a prior medical diagnosis from a qualified medical practitioner. It is, therefore, very important to devise ways to prevent drug abuse.

Social media campaign facilities used in the prevention of drug abuse

According to Abdulsalami (2014), social media facilities infrastructure is an umbrella term that includes any processing and communication devices such as computer systems, Internet, fax, electronic copier, Telephone, e-mail, satellite, telex, projector etc.

Computer system: a computer can be described as a storage program (institution) that can accept data as (input) in a prescribed form, store the data apply a series of arithmetic and logical operation on the data (processing) and produce the result of the operation as an (output) information in a specified format at a very fast speed. G-Mail: a message distributed electronically from one computer user to another or more recipients via a network. These enable users to send electronic mail analogue in the world, either to the organization, higher institutions

or companies that are fully computerized and want to make extensive use of E-mail because it is fast, flexible and reliable. Internet: is a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols. The Internet is today one of the most important parts of our daily life. There are large numbers of things that can be done using the Internet, so it is very important. The Internet is used for different purposes, such as education, financial transaction, research, communication etc.

A fax is an exact copy of a document made electronically, scanned and transmitted as data by telecommunication links. Furthermore, it sends a document through the standard telephone line to another fax medium. It does this by scanning the document using photosensitive devices; it digitizes the images that can be transmitted like normal data through the telephone work. When received in another machine, it decodes the message and prints it out. Electronic Copier: A photocopier (also known as a copier or copy machine are a machine that makes paper copies or documents and other visual images quickly and deeply photocopying is widely used in education, business and government. Telephones: a system for transmitting voice over a distance using wire or radio by converting constricts vibrations to electrical signals. It also permits two or more users to conduct a conversation. Telex: is an international system of telegraphy with printed messages transmitted and received by teleprinter using the public telecommunication network.

Information and communication technology played a vital role in preventing drug abuse among undergraduate students at IUO. The basic understanding of information and communication; relates to the acquisition, storage and dissemination of information; computer systems and telecommunication systems are the two things that come together to enable the student to communicate effectively with their colleagues and enable the student to source information from different databases (shay 2015) in another word, information and communication technology has being a fast medium of communication used by IUO students. Most of the time, social media facilities are used to create awareness through various channels like social networks, radio, television, Internet etc. these media are the fastest way of transmitting the information. Hence, Ray and Day (2004) are of the option that the attitude of coconsistency in drug administration is what leads to drug abuse among youth. In other words, taking drugs without a proper prescription from a qualified doctor or satisfied by (NAFDAC) approval and the level of literacy in drug administration is termed as drug abuse.

The problem associated with the use of social media in the prevention of drug abuse by undergraduate students.

There are numerous problems facing organizations, institutions, societies and the health sector in adopting information and communication technologies in Nigeria. For instance, Dwarfs (2009) mentioned an erratic power supply, which deters the preventive group from getting access to required information about delinquent individuals through social media facilities. However, effective utilization of social media facilities in disease control and prevention centres may be properly achieved when we consider the fact that some challenges which appeared to have retarded the easy flow of information and management were still adamant. Ogbomosho (2011) identified challenges associated with using social media facilities, including infrastructure-

related challenges. These, according to him, would involve a deliberate effort by policy maker and planners to consider the provision of facilities such as; electrical cable, satellite cable, Internet etc., to provide a conducive environment for social media facilities operations in crime prevention, coupled with a positive attitude of staffs to control the abuse are fundamental for social media system to be successful in any institution.

Other problems also identified by Ilaunisi and Osuagwu (2010) included the paucity of social media infrastructure, lack of network access, inadequate funding for social media maintenance and absence of funding allocation to technology. In the same view, Abisoye (2010) opined that budget allocation, such as funds, is the major reason why many Nigerian drug law agencies do not have sophisticated technologies like drug surfer machines. Allocation for social media knowledge training and necessary crime control technology like drug sniffer machines must be budgeted, bought and provided to drug law agencies.

Strategies used to overcome the problem associated with the use of social media in the prevention of drug abuse.

Martin (2007) opines that social media facilities used in the prevention of drug abuse need to be properly managed if the menace is to curb, minimized or checkmated. Drug enforcement agencies face the deployment of social media in their operational activities. Similarly, the educational program should be implemented to equip staff and other personnel involved in crime control with the technical skills required to operate social media gadgets. Davies (2002) postulates that the purchase of social media facilities should be considered based on time and purpose since development in technology is changing. This simply means that technologies become obsolete within a few years. Therefore social media facilities should be careful in accommodating new and long-time use. In the same vein, organizations that leverage social media facilities to effectively discharge their core responsibilities must adopt a technological shift in their policies to remain at their peak over the passage of time (Engels, 2008). However, direct problems like erratic power supply, conclusive infrastructure, the technological know-how of staff, and attitude toward technological acceptance should be effectively checkmated from time to time to constituted authorities of schools, institutions, agencies and organizations.

Methodology

This research adopted a survey research method. A survey research is used to answer the question that has been raised to solve problems that have been posed or observed to access needs and set goals to determine whether or not specific objectives have been met, to establish a baseline against which future comparisons can be made, to analyze trends across time and generally to describe what amount and in what context. A total of 1077 comprises the targeted student population. Nwana (2003) opines that the population is all the number of the target group. Therefore the population of the research covers the targeted student of Igbinedion University, Okada. Nwana is of the opinion that in a population of few thousand, a sample size of 20% is needed, which is a manageable sample size of 108, representing the entire population. The sampling technique is used as a process for a specified portion of the population of the area of the research. The instrument for data collection is the questionnaire, designed based on the

objective and research questions. The data collected was analyzed and presented using descriptive statistics such as frequency distribution tables and simple percentages.

Results and Discussion of Findings

The results and discussion of findings present data collected, analysis, and discussion of the findings arising from the analysis.

Response Rate

A total of one hundred and eight (108) copies of questionnaires were distributed to the respondents, and one hundred and seven (107) were duly filled and returned, representing (99.07%) percent of the respondents. This explained the high level of response derived from the data collection.

Table 1: Social Media Facilities Used as Campaign Strategies to Prevent Drug Abuse in Igbinedion University, Okada

Types	Frequency (f)	Percentage (%)
Computer	30	28.0%
E-mail	5	4.6%
Internet	11	10.2%
Cell-phone/Facebook/Group chat	58	54.2%
Others specify	3	2.8%
Total	107	99.8%

Table 1: reveals facilities used as campaign strategies to prevent drug abuse in Igbinedion University, Okada. From the data requiring a response. Cell-Phone/Facebook/Group chat 58 (54.2%) opine cell phone/Facebook/Group chat was used, 30 (28.0%) of the student disclosed that they are mostly acquainted with a computer as a social media facility used to access the university campaign. Through the university portal/internet, 11(10.2%) use school internet connectivity to access the university campaign. Only some of the respondents within 5(4.6%) of the respondents agree that their assessment is through electronic mail. Meanwhile, the least of the responses derived from 3(2.8%) respondents disclosed other various types of facilities known.

Table 2: The Problem Associated with the Use of Social Media Strategies in Prevention of Drug Abuse

Option	Frequency (f)	Percentage (%)
Insufficient power supply	8	7.4%
Insufficient network	20	18.6%
Insufficient operating skills	11	10.2%
Insufficient Information Management	41	38.3%

Insufficient fund	25	23.3%
Others specify	2	1.8%
Total	107	99.6%

Table 2 shows that sufficient information management 41 (38.3%) has the highest response rate, followed by insufficient power supply 11(10.2%), insufficient network 20 (18.6%), insufficient operating skills, 25(23.3%), insufficient fund, 8(7.4%) and others 2 (1.8%). This means that, although efficient information would go a long way in reducing the prevention of drug abuse, the issue of cognitive dissonance (in disparate individual beliefs) and information behaviour might limit the propensity of success in achieving drug abuse prevention.

Table 3: Strategies Used to Overcome the Problem Associated with Social Media in the Prevention of Drug Abuse.

Option	Frequency (f)	Percentage (%)
Use of social media facilities	28	26.1%
Strategic campaign (Lunch)	44	41.1%
Educational programs organization/orientation for fresher	4	3.7%
launch campaign to checkmate challenge	30	26.1%
Disciplinary measure for offenders	1	0.9%
Total	107	99.8%

Table 3 shows that educational programs should be organized for staff and others, which has the highest response rate of 44(41.1%), the campaign should be a launch to checkmate challenge 30 (26.1%), social media facilities should be properly managed 28(26.1%), skill on the use of social media facilities should be acquired by staff through training, with a response rate of 4 (3.7%) and maintenance of social media facilities 1(0.9%). This, thus, shows that respondents are still aware of the most effective and efficient strategy to be adopted in order to avert the challenging trend of drug abuse.

Discussion of Findings

The objective of this study is to measure the application of social media campaign strategy for the prevention of drug abuse among students at Igbinedion University Okada. The participants were exposed to social media facilities. The intervention was to train skills to staff on the use of social media facilities; data were collected, analyzed and interpreted. The following are some of the highlights of the discussion of the findings:

- 1. The finding revealed that computers, the Internet, E- mail, and Telephone are used as a campaign strategy to prevent drug abuse among students of Igbinedion University, Okada.
- 2. From the investigation, there was an insufficient allocation of funds for the media campaign, which made the campaign on the prevention of drug abuse among students of Igbinedion University, Okada, worthwhile linger. Facilities were not properly managed

- and maintained; there was no emphasis on training in using media facilities in their related information areas of needs.
- 3. The researcher also discusses some strategies that can be used to overcome the problem, such as educating the staff and students and creating current awareness and campaign programs that will educate students about the danger of drug abuse among students and staff.
- 4. Billboard, flyers, posters, pamphlets, etc., were among the media facilities discussed and will be produced and distributed to students during orientation organized yearly for fresher/new intake to minimize the menace of drug abuse by students.

Implications of the Results

The results of this study have implications for policies and programmes aimed at addressing the growing menace of drug abuse among students. For example, the information provided in the study could guide administrators/experts on the need to creatively utilize social media platforms as avenues for educating students on the dangers of drug abuse. The results also suggest the need for university management and curriculum development experts to form a synergy and come up with a training package that will help to educate students on the dangers of drug abuse.

Conclusion

Based on the results of the research, the following conclusion is drawn. First, the research revealed that there is a decrease in drug abuse by the student of Igbinedion University, Okada. This can be concluded that there is remarkable progress in the campaign on the use of drug abuse among students. Moreover, using media campaign strategies such as organizing programs, creating awareness, and launching a campaign on the effect of drug abuse among students educate them on the dangers of drug abuse. Such interventions also assist them in building resistant mechanisms based on accurate information. Finally, the media campaign strategies created a magnanimity impact on preventing drug abuse among students and effectively reduced drug abuse propensity more than those that assume a motivational.

Recommendations

- 1. The University management should endeavour to provide adequate and functional social media facilities to prevent drug abuse.
- 2. There is an urgent need for the University management to employ competent resource personnel who will help the students access current and relevant information on the effect of drug abuse.
- **3.** The management of Igbinedion University, Okada, should continue to reinforce their campaign strategies to provide good network connectivity (smart campus), sufficient power supply and good equipment to students.
- 4. New strategies needed to be developed to prevent drug abuse among the student and staff

References

- Abdulsalami, T. Lucky and Abdulsalami, P.F. (2014) Application and Use of ICT Facilities Availability for the Enlightenment of HIV/AID in Nigeria. Global Review of Library and Information Science. UNN. 8 (1). 38-42
- Adelekan, M.L.; Abiodun, O.A.; & Ogunremi, O.O (2012). Prevalence and Patterns of Substance Use among Undergraduates in Nigeria. Drug and Alcohol Dependence, 29, 255 261.
- Abisoye, O.A (2010). Challenges Facing Crime Control Agencies: A Nigeria Practioners of Health. Vol.3 (2), 102-108.
- AhbiRami, R & Zuharah (2020). School-based health education for dengue control in Kelantan, Malaysia: Impact on knowledge, attitude and practice. PLoS Neglected Tropical Diseases. 8(2). 9-10.
- Becta (2002). The Impact on Information and Communication Technology on Pupil. Learning and Alternment (I.C.T) in school Research and Evaluation Serial No 71 DFES. 51
- Davies, M. (2002). Information and Communication Technology: Police on Technological Shift. England: Oxford University press. pp.78
- Dewan, S.E. (2002). The Relationship between Drug Abuse and Truancy among Secondary School Students. Inter-World Journal of Management and Development Studies, 1(1), 57-65.
- Dwarf, A.A. (2009). Information and Communications Technology University Libraries, the Nigeria Experience. Journal of Library and Information Science 7(182), 23-30.
- Engels, F. (2008). Application of Communication Technology in Business Organisation Journal of Information and Communication Technology Nigeria. vol.3 (2), 14-18
- Fawa, M.S. (2013). Drug Abuse Eradication Programme in Schools: The Relevance of Terms Approach Alternative, in A Garba (ed). Youth and Drug Abuse in Nigeria, Strategies for Counselling, Management and Control Kano-Matasa Press. 106-107
- Falaye, A.O. & Gesinde, A.M. (2013). Chronic School Absentees' Opinion About Child Centered Factors Responsible for their Non-School Attendance Behaviour. Ibadan Journal of Education Studies, 3(1&2), 22-31.
- Goode, E. (2013). Drugs and Youth: The Challenge of Today. New York: Nathan Lanitor and Pergamon Press Inc. 47.
- Haladu, A.A. (2003) Outreach Strategise for Curbing Drug Abuse Among out of School Youth in Nigeria: A Challenge for Community Based Organization (C.B.S) in A.Garba Counselling and Control Kano Matasa Press. 8.
- Holt, K. . (2013). Age and the effects of news media attention and social media use on political interest and participation: Do social media function as leveller? European Journal of Communication 3(2). 112-113
- Ida, R. (2020), an empirical analysis of social media usage, political learning and participation among youth: A comparative study of Indonesia and Pakistan: Quantity & Quality 18(1). 234-235
- Ilaunisi, N. O and Osunagwu, C. C. (2010). An Evaluation of the Impact of I.C.T Diffusion in Nigeria Higher Educational System. Gateway Library Journal. 11(1). pp. 31
- Manbe, D.A. (2014). Crime and Drug Abuse among Nigerian Youths: A Critical Examination

- in World Health Organization (WHO). Export Committee and Drug Dependence, 28th Report (Unpublished). 54-57
- National Drug Law Enforcement Agency (1997). Drug Data Collection and Research, Lagos:Drug Demand Reduction Unit, National Drug Law Enforcement Agency. pp. 17-26
- Newton, N. C., Teesson, M., Vogl, L. E. and Andrews, G. (2010), 'Internet-based prevention for alcohol and cannabis use: final results of the Climate Schools course', Addiction 105(4), 49–59.
- Nwana, D. (2003) Social Research Practice. Vol. 9(6): New Jersey: eagle wood clifft. 25-27
- National Drug Law Enforcement Agency (NDLEA). (2003). Information on Drug Trafficking. In 1992 NDLEA Drug Data Collection. Lagos: Drug Demand Reduction Unit. 1-6
- Osarenren, N. (2012). Child Development and Personality. Lagos: Derate Nigeria Ltd. 119-136
- Ogbomosho, E.F. (2011). Issue and challenges in the Use of I.C.T in Health Education and Knowledge Management, 10 (1).91-97
- Ray and Day (2004). Attitude of Educated Personnel in the Use of ICT in the Academic Environment. A Journal of Library and Information Science 3, (7). 67-68
- Shay, R (2015). Analysis and Presentations as a Phenomenon in Any Academic Research Work Turkey Online Journal of Distance Education, 5 (4). 112-113
- World Health Organization. (2006) Technical Paper on Regional Strategy for ICT Management to Support Public Health Geneva. 239-240