

Content Analysis of Teleconsultation Enquiries in Positive Health Club, Imam Khomeini Hospital, Tehran, Iran

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Abstract: *Objective:* With the availability of specialists and the overflowing information in public and social networks, individuals have easy access to information about HIV and AIDS. However, medical counselling and healthcare settings still have an essential role. The aim of the present study was to analyze phone enquiries directed to the Positive Club of Imam Khomeini Hospital in Tehran; this analysis was based on demographic features of participants.

Design/Methodology/Approach: In this cross-sectional study, 5255 questions were extracted and coded from the Positive Club's counselling questionnaires; the coding procedure was based on Huber and Gilapsy's decimal classification. Data were processed by descriptive statistics and SPSS software.

Findings: A majority of callers were men (59.43%), most callers were aged between 26 and 30 years, and HIV transmission and high-risk sexual behaviours were among frequently asked questions (47%).

Originality/Value: Taking into account that most callers were concern about transmission via sexual contact (anal, vaginal, and oral) rather than injection and its related equipment, it seems reasonable to assume that HIV transmission flow may shift from shared injection equipment to high-risk sexual behaviors.

Keywords: Remote consultation, AIDS, Content analysis, Iran.

INTRODUCTION

There are currently 37.9 million HIV infected individuals all over the world and every 16 minutes; a patient dies from AIDS [1]. HIV prevention is one of the major concerns in developing nations. Availability of sufficient information and health services are essential indicators of a healthy community. A recent breakthrough in technology and communication have introduced numerous options to patients for accessing medical information. By employing tools such as Email, online phone services and numerous applications, remote medical consultation has become available and easily accessible for patients [2].

It is noteworthy to mention that the abundance of available information regarding HIV and AIDS has not undermined the importance of medical counselling [3]; furthermore, in some regions, the general stigma surrounds HIV and its related subjects prevents individuals to acquire sufficient information, and many of their questions will remain unanswered [4]. A quintessential would be Mwamwenda's research on 164 college students in Natal South Africa, in which

46% of the students believed that AIDS was a punishment from God [5]. In order to improve the access of rural communities to medical information, remote medical consultation is a solution which reduces the costs but needs to establish new healthcare settings [2].

The Positive Club in Imam Khomeini Hospital is one of the main consultation centers across Iran which provides this service. This institution has started its activities in 2006 and has encountered an ascending rate of enquiries since then, which reflects its demanding and beneficial role in the community. In addition, due to its collaboration and parallel activities with the Iranian Research Center for HIV/AIDS (IRCHA), it has served as a flagship for similar facilities across the region.

The necessity of this study emerges from similar studies in different regions across the globe. In a study performed by Torani in 2011, the avidity of affiliated hospitals and healthcare settings to Iran University of Medical Sciences regarding remote medical counselling was evaluated; this evaluation was based on management, workforce and available equipment. The study was performed as a cross-sectional analysis consisting of 106 individuals from hospital's executive and managing staff; data gathering was based on a

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partitioned questionnaire consisted of acquaintance and required standards of remote medical counselling sections. Results indicated that remote therapeutic counselling reduces public health costs and establishing such services was recommended by the author [2].

In Asra's study in 2010, analysing the results of 1252 enquiries, demonstrated that 700 enquiries were made on sexual behaviours, 325 were AIDS specific (with 60 of them regarding blood and sexual contacts), 50 regarding HIV related tests, 100 on signs and symptoms and 70 on disease control and the rest on stigmas. Results and the authors' recommendation were focused on the individual stress level regarding HIV/AIDS and its management [4].

In a study by Deevey in 2005, 913 reference questions asked between May 2002 and August 2004 in a special library in a mid-western community-based AIDS service organization, were analyzed and arranged by Huber's decimal classification. Promising results were obtained which could benefit the library itself; 24% of the questions were based on HIV tests and its related information, 18% on physical health, lowest frequency on addiction with 2.5% and general AIDS information with 2.4% [3].

In another study performed by Seth in 2008, using content analysis, 944 recorded counselling sessions were investigated and results indicated that the high-risk individuals require the most assistance in gathering and assessing correct and sufficient information; frequent questions involved prevention and condom use (15%), 14% were on signs and symptoms and 11% on related tests and procedures [6].

In an earlier study by Huber and Jeffrey in 1999, 192 web enquiries were processed via content analysis. 31 of 192 investigations were on medicine management, 21 on general information about AIDS, 21 on disease transmission, 12 on signs and symptoms and one enquiry on HIV histology. These results indicated that in parallel to HIV prevalence, educational and awareness programs should also be enforced and reassessed based on public needs [7].

The aim of the present study was to analyze phone enquiries directed to the Positive Club of Imam Khomeini Hospital in Tehran.

MATERIALS AND METHODS

This is a cross-sectional study based on Huber-Gilapsy's decimal classification, which consisted of 1-

Generalities, 2- Epidemiology and transmission. 3- Education and prevention, 4- Clinical manifestations of HIV and complications, malignancies, and infections associated with AIDS, 5- Treatments, therapies, and medical management of HIV, 6- Psychosocial and religious issues, case management, 7- Legal, ethical, economic, and political aspects, 8- Organizations, funding opportunities, and health policy, 9- Fine arts and 10- Belle letters and non-fiction.

It is worth mentioning that due to cultural differences, some content of Huber-Gilapsy's decimal classification had to be readjusted according to the opinion of experts and the type of questions, and the classification has changed somewhat which included: 1- General information on AIDS and its related tests, 2- Epidemiology and transmission, 3- Education and prevention, 4- Signs and symptoms, 5- Medications, 6- Religion, and psychological subjects, 7- Political, economic and racial status, 8- Health policies, 9- Disease's statistical data and 10- Other cases.

Available documented data in Positive Club of Imam Khomeini Hospital, Tehran was used for this study. During four consecutive months (2015), 5255 enquiries were documented by consultants based on the person's age, gender, occupation, marital status, education and the type of question. Then each enquiry was assigned a code by the researcher, and the number and percentage of enquiries coded into each category, were analyzed. SPSS software (version 22) and descriptive analysis (frequency and percentage) were employed in this study.

Ethical Consideration

The protocol of this study was reviewed and approved by the institutional review board (IRB) of Tehran University of Medical Science (Ethics No.159-35127). The content of the interviews was recorded and secured in a data file on the personal computer of the main researcher. All the authors used a password before running the primary data file.

RESULTS

Most enquirers were men (59.43%) aged between 26 and 30, 39.3% of the total enquirers were married, and 35.7% were single; in terms of educational status and occupation, 58.8% were high school graduates, 59.4% with senior high school education and 43.66% were self-employed (Table 1).

As depicted in Figure 1, most frequent enquiries were about transmission and sexual behaviours

(46.9%) followed by general information on the disease and its related tests (36.6%); no further enquiries on the prevalence of HIV, addiction, treatments and medications were made.

Table 1: Demographic Information of 5255 Enquirers from Imam Khomeini Hospital's Consulting Center via Hotline

Demographic characteristics	N (%)
Gender	
Male	3123 (59.43)
Female	2132 (40.57)
Age group (years)	
16-20	38 (0.7)
21-25	1024 (19.5)
26-30	2604 (49.5)
30<	1589 (30.3)
Occupation	
Unemployed	1016 (19.33)
Self-employed	2291 (43.66)
Staffer	1472 (28.01)
Others	476 (9)
Education level	
Illiterate	3 (0.05)
Elementary school	34 (0.6)
Junior high school	251 (4.7)
Senior high school	3114 (59.4)
Academic	1853 (35.2)
Marital status	
Single	1874 (35.7)
Permanent marriage	2092 (39.9)
Temporary marriage	896 (17)
Divorce	247 (4.7)
Widow	146 (2.7)

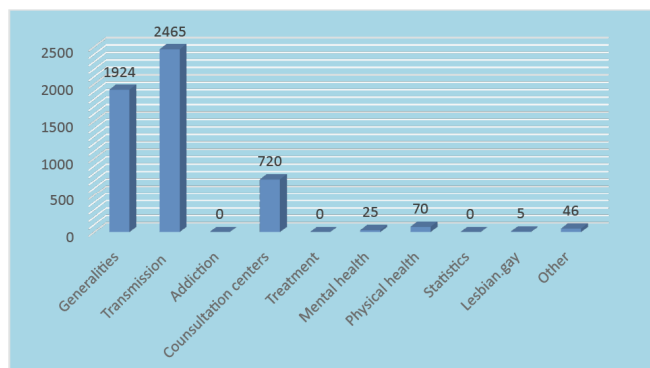


Figure 1: Frequency of enquiries from Imam Khomeini Hospital's consulting center via hotline (N=5255).

DISCUSSION

Since its outbreak, HIV has manifested itself as a global concern and referring to UNAIDS 2014 global AIDS report progress, a global effort for ending AIDS, is highly favoured due to its economic and social burdens; however, such changes require coordinated and abiding arrangements [8-11].

The context of our enquiries was different from that of the Deevey's study; our results demonstrated that most enquirers concerned the HIV transmission rather than its general information [3]. Asera's results indicated that more than 160 enquiries were about transmission and symptoms which portrays the disease apprehension and its amplitude in the community [4]. This confirms our results and initial concern regarding the importance of public information. Providing information for community is crucial; even though, it will not diminish their fear and anxiety toward the disease. Although 34% of the enquirers had tertiary education and educational programs have been conducted over the years, the lack of sufficient information on HIV and its various transmission methods is still evident.

Seth CK, *et al.*, analyzed 944 questions asked by 634 patients receiving HIV risk reduction counselling services at an urban sexually transmitted infections clinic. The most common questions asked by clients concerned condoms and other methods of HIV prevention (15%), HIV symptoms and progression (14%) and HIV antibody testing (11%). The results showed that many individuals at high risk for HIV infection have substantial information needs. Therefore, the basic education about AIDS facts should be implemented in HIV prevention interventions. In addition, the greatest need for information was related to understanding the methods for HIV prevention [6] that confirms our study.

One interesting fact was that the enquiries dramatically increased as the study progressed toward its end; it is quite understandable that the community is seeking a safe and reliable source of information to interact with it. This gap can be filled by employing social network, websites, and applications such as YouTube, Twitter, etc., to educate and interact with individuals. Furthermore, this method can be employed by health care providers as an augmented version of their awareness program.

CONCLUSION

This study analyzed the content of teleconsultation at Positive Club of Imam Khomeini Hospital, Tehran, Iran. The findings indicated that considering the fact that most callers concerned about transmission via sexual intercourse (anal, vaginal, and oral) rather than injection and its related paraphernalia; It seems that route of HIV transmission shifted from shared paraphernalia to high-risk sexual behaviour in recent years in Iran. This shift exposes our future generation at a greater risk of HIV infection; however, it can be averted by orchestrating educational programs through media, public libraries, academic institutions, health care settings and communal environments.

CONFLICT OF INTEREST

The authors have no conflict of interest.

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