

Call Center and its Significance for Sexual and Reproductive Health

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Abstract

A call center is a central place where Customer Care Associates (CCA) handles queries of customers over the telephone. Over the past two decades, the rapid escalation in access to new information technologies that is computers and mobile phones in particular has increased the demand of creative methods to connecting these tools to address reproductive health challenges [1]. This paper will highlight the importance of the role of telehealth call centers in providing sexual and reproductive health services to attain woman reproductive health. It will also cover significance, purpose, and questions of the present study. This chapter intends to provide a comprehensive review of the literature around the topic of interest: telehealth call centre and its significance to women sexual and reproductive health. The purpose of the chapter, literature review is to write an in-depth analysis and synthesis of current literature to understand the advancement of information and communication technology (ICT) in providing health care through call centres and its significance for women reproductive health. In addition, barriers to approach women reproductive health will also be explored which will justify the need for conducting this present study.

Keywords: Tele-health; Call centers; Sexual; Reproductive health

Introduction

World health organization [2] defines telehealth as the health care delivery system utilized by all health care providers for the purpose of exchanging health information for prevention, diagnosis, and treatment of the diseases, to carry out research and evaluation, and for continuing education using information and communication technologies in order to improve the health of individuals and communities. In recent years, there has been an increasing trend for the use of telephone consultation and triage; it is the process where calls from people/patients with health care problems, are received, assessed, and managed by providing advice or by giving referral to a more appropriate service [3]. One stimulus for the development of call centers for health care was to decrease the visits to accident and emergency (A&D) departments and also reduces burden on general practitioners (GPs). The advancement of tele-consultation has been global and comprises system in Australia [4], Denmark [5], New Zealand [6], Sweden [7], Canada [8], the United States (USA) [9], and the United Kingdom (UK) [10]. Previously telephonic consultations were done by physicians [5]; most of it is now done by the qualified nurses utilizing computer based clinical decision support systems. This reflects transformation in the role of the nurses in recent years [10].

Literature indicates that for decades, call centers have been opened in countries like Canada, USA, and UK; a study carried out by Lvatury, Moore, and Bloch (2009) mentioned examples from developing countries like Pakistan, India, and Bangladesh as well. One of the largest telephonic consultation call center operating is National Health Service (NHS) direct in UK. It is a nurse-led telephone advice system which works for 24 hours, present in England. It aims to assist callers' self-manage problems and lessen unnecessary demand on other NHS services [11,12].

Background

Effective and efficient delivery of health care system has been global challenge specifically in rural areas. Many citizens residing in rural areas face difficulty in accessing health care services due to traveling distance, unavailability of resources, and transporting issues [13].

The lack of convenience and access to health care particularly the area of reproductive health which is the basic human right lacks access to seek health care. Various research studies internationally and nationally also highlighted the impeding factors that account for access of multidisciplinary approach for providing care to client which are lack of continuing education, professional development and availability of resources hinders the physicians and nurses to move into isolated settings for practice [14] may lead to poor health outcomes and unmet health care needs [15].

Therefore, the concept of tele-health call centers being available in real time become much more convenient for all stake holders to provide health care services. Like through call centers in Kenya, nurses can consult specialist in the capital if there are difficult cases. Similarly, in Uganda shopkeeper from remote area can order supplies of family planning from headquarter timely via informing in call centers. In Asian countries like Thailand, teens can contact call centers which is particularly designed to promote safer sex and reduce sexually transmitted disease (STIs) and HIV [1].

Telehealth call centers have a significant role in providing all kind of health care services including sexual and reproductive health services which is accessible and affordable to underserved communities. Like every aspects of health, sexual and reproductive health is also an essential part of human life and, thus, it is experienced by every individual. However, reproductive health is by and large considered a taboo topic due to which people often show awkwardness and uneasiness while conversing about it. Moreover, due to the sensitive and intimate nature of sexual and reproductive health issues, people

may hesitate to share their concerns face to face with health care professionals.

Hence, their concerns related to reproductive remain unrevealed, unaddressed, and untreated. Subsequently, these sexual and reproductive health issues changed into problems which, eventually, have impact people's physical, psychological, and social wellbeing.

Like many other parts of the world, significant gender inequalities exist in Pakistan that contribute to unequal power relations, that limits the ability of the women to improve their health status [16]. Gender norms can also presents hurdles to health services when men control family finances, women's mobility, and judgments on family health care.

Therefore, introducing call centers in providing these services can be helpful for the under privileged population of Pakistan. In the Pakistani context, the notion of sexuality and reproductive health is adversely prejudiced by cultural, ethical, and religious/spiritual factors, which may restrict people from experiencing and expressing healthy sexuality [17].

Furthermore, seeking counseling and health care for sexual and reproductive health issues is regarded as taboo for Pakistani women; that may perhaps directly or indirectly influence their overall health and wellbeing. Pakistan's health policy is unable to recognize the significance of women's reproductive and sexual health needs [18].

Therefore, the sexual and reproductive health of Pakistani women is the most neglected area in the healthcare system, which, if it remains unaddressed, could significantly increase maternal morbidity and mortality. Over several decades, many efforts have been made to improve and promote reproductive health, mainly in the developing countries.

Many things have been documented on the impact of call centers in providing care; nevertheless, no published literature has been found which highlights the role of telehealth call centers in sexual and reproductive health needs of women in the Pakistani context. This study is designed to evaluate the sexual and reproductive health concerns of Pakistani women who seek health care through Aman Foundation telehealth call center.

Purpose

The purpose of this literature review is to determine the reproductive and sexual health related concerns among women population who use call centers.

Methodology

The literature was retrieved by using electronic database such as the cumulative Index to Nursing and Allied Health Literature (CINHAL) Plus, PubMed, Medical Literature Analysis and Retrieval System Online (MEDLINE), and Google Scholar. The search was primarily limited to the literature of the past five years but as there seemed to be dearth in scientific data around the topic, the search was extended to include the period of the last fifteen years, and included a few widely cited and novel studies. The review was conducted by using keywords, such as: "telehealth", "telehealth call centres", "sexual and reproductive health and its impact", "sexual and reproductive health and call centres".

The researcher also used snow balling technique while doing the literature search, through which the primary researches were spotted

from the reference list of the secondary sources. This way, numerous classic and widely cited studies were retrieved and reviewed.

Literature Review

History of call center

The origin of call centers are from USA in 1908, when it became possible to utilize telephone in order to sell advertisement in a telephone book. Ford Motor Company in the start of 1960s made 20,000,000 phone calls to the consumer in search for possible buyers of the cars [19]. In Sweden in 1978, there was a biggest telemarketing campaign, when new American concept "yellow pages" was introduced by a Swedish telephone company now called "Telia" [20]. The telemarketing companies started to grow in 1980s, and many new companies were established. The call center caters telephone calls along with SMS services, e-mails and Fax. The call center business has grown very fast internationally and nationally. Most of the call centers are located at a distance from their customer base like in south East Asia [19]. Call centers (Telephone based nurse triage), primary care and health information have been offered in many developed countries since the late 1990's, and currently are accessible to over 150 million people in the United States, Britain, Australia, Canada, New Zealand, and elsewhere (GSMA Development Fund, 2009). More recently, health call centers like Health lines have emerged in developing countries, and have already been used by more than 10 million people in Mexico, India, Pakistan and Bangladesh (GSMA Development Fund, 2009). New call centers are being set up in the Middle East, the Caribbean, Latin America, and Southeast Asia.

Need of health call centers in Pakistan

In many developing countries, call centers play pivotal role in providing accessibility to health care. In Pakistan, to govern the health needs of women; men play a dominant role [16]. In view of the fact that men are the sole decision makers who control all the resources, they choose where and when women ought to seek health care. It is been reported that women suffers from illness show less health seeking behaviors as compared to men [21]. Raising and voicing concerns about health needs is also hindered by the low status of women. Moreover, women are often not permitted to visit a health care facility or to spend money on health care [16]. Therefore, generally women population cannot access health care in an emergency situations [16,22,23]. This indeed has severe consequences on health and self-respect of the women. Despite the ground reality, in many cases women are the primary care givers in their families, they have remained underprivileged from health care services and basic health care information [21].

The potential of telehealth call centres

Information and communication technology plays a vital role in improving global health care [24]. Ability of the simple phone function to efficiently act as a communication networks between health care systems is increasing [25]. Telehealth call centers have great prospective to deliver health care services to formerly "isolated" women and health care workers at any time they need it the most [26]. There has been a growing interest in capitalizing on the ubiquity of mobile technology infrastructure to develop health call center in low and lower-middle income countries, which can increase accessibility of health advice and information to patients and the public. This

technology has been proven as a mode to overcome extensive health system barriers like long travelling distance to health care facility, shortage of health care professionals, faith on unqualified health providers, lack of resources of reliable information and cost of transportation and health service.

Telehealth call centers have the potential in presenting opportunities of providing affordable and accessible reproductive healthcare. Maternal mortality rate has been cut by half worldwide yet; a woman still dies from often preventable complications, rather than those which are inevitable, related to pregnancy and child birth every two minutes [27,28]. It is indeed an alarming situation that 99% prevalence of these deaths takes place in developing countries [2]. Maternal mortality can be caused by deferrals in pursuing, accessing and receiving care [29]. This can be affected by women's place in the community, large geographical distances, weak healthcare organizations, poverty and lack of education [30].

Reproductive health status in developing countries

According to the Pakistani Demographic Health Survey (PDHS, 2012-2013) Pakistan is the 6th most populous country in the world and ranks 146 in Human Development index, 61% of its 180 million in under the age of 24. The health indicators of Pakistan are very poor. Out of 180 million, 89 million of the total population is female, and 28 million are married women of reproductive age with total fertility rate of 3.8 [31]. 61% of the population lives below poverty line, 82% health expenditures are through out of pocket payment, Moreover, 70% of population lack accesses to public health sector, 57% of women in Pakistan are illiterate, 7 million of Pakistani couples have unmet need for family planning and maternal mortality rate is very high with 276 out of 100,000 live births [31].

Women's reproductive health is not only restricted to reproductive years of life (15-49 years), rather it is connected to different stages of life cycle i.e., infancy and childhood, adolescence, adulthood, and older age; which reflects the diverse reproductive health needs and behaviors [32]. Generally women's reproductive health concerns can be divided into three main categories that are healthy sexuality, safe pregnancy and childbearing and planned births [33]. According to WHO (2012) the foremost reasons of maternal complications are post-partum hemorrhage, infections, pre-eclampsia, and unsafe abortions [2]. According to Begum, et al. [34] the most common causes of maternal mortality in Pakistan are hemorrhage (21%), hypertensive diseases (18.6%), sepsis (13.3%), abortions (11%), and others (36%). This can be prevented by the provision of appropriate and comprehensive sexual and reproductive health, easy access to skilled birth attendants and provide emergency obstetric care [2,35-38]. However, the challenge is to deliver these services at a global scale through call centers [39] so as to maximize the reproductive health related survival of woman.

Call center and its implication on reproductive health

Over the past decades, there is a gradual improvement in few of the health indicators like maternal mortality and child mortality. However, the reproductive health status of the population in Pakistan remains much below the desired level when compared with other countries having similar socio economic status [32]. It is observed that reproductive health services are inadequate to meet the demands of increasing population, resulting in severe health problems for women particularly those belonging to rural areas.

According to Groupe Speciale Mobile Association (GSMA) development fund (2010) city residents have better broadband access as compare to people live in rural areas. In Asia and Latin America young people tend to be more knowledgeable and at ease with the new technologies like using mobile phones. However, very few adult women own phones than men. By estimate woman in low and middle income countries (LMIC) are as much as 21% less likely to be phone subscribers hence, tend to be less aware with electronic technologies. Moreover, woman from very poor family are also unlikely to have an access to phone.

There are call centers globally providing woman reproductive care. In India, Program for Appropriate Technology in Health (PATH) project is working on providing on-demand guidance through SMS service on post-natal and newborn care for the midwives of rural areas [40]. Moreover, IntraHealth International and SpacedED.com in Mali are developing an in-service course on postpartum family planning for community health workers and a program for monitoring these protocols. This program will provide training through SMS and interactive voice response on mobile phones and through call centers [41]. In Thailand, PATH project has developed a chat room application for real-time-interaction with trained health care professionals and other patients concerned about sexual and reproductive health issues.

Also, there are many sexual and reproductive health services which are outpatient-based. The Health Management and Research Institute of Hyderabad, India, provide these requirements by offering "104 Advice," a call center that has assisted more than 10 million callers in Andhra Pradesh and three other states. 104 Advice provides a free hotline for medical consultations for those families who live in rural areas where traveling to a medical facility could be expensive and time-consuming, and where some unmet requirements for outpatient care could be handled by phone like queries about contraceptive use [42]. This database now comprises more than 10 million unique health records, building it the biggest public health database in the world [43]. There are even less evaluation data available in sexual and reproductive eHealth efforts. Most of these programs are pilot projects that are limited to particular geographical region and small number of population.

Challenges faced by call center nurses

Nurses who are dealing patients through call centers should keep the quality of care, devoid of having advantage of sensory and visual assessments of patients. Call center nurses are more often bound to the information they receive on phone from patient's verbalization, voice tone, and answers to questions. In around 10 minutes time, nurses must formulate and communicate a plan of care, they critically prioritize the urgency of client condition, work in partnership and develop plan of care with the support of multi-disciplinary team and patient [44]. This may comprise of education, call back instructions, and important recommendations for care and finally they measure outcome by evaluating quality of care.

In general, telehealth call center nurses deliver nursing care by using clinical symptom based on algorithms, protocols and guiding principles in order to systematically assess client's needs [44]. The telehealth call center is the place for experienced nurses. They should have very strong critical thinking and clinical judgment skills to overcome the drawback and hindrances of working with patients without face-to-face interaction [44].

Conclusion

Despite the growth of tele-health call centers, little information has been published on how the characteristics of calls concerning women sexual and reproductive health vary with symptoms, gender, and age. This knowledge is important for the development of cost effective specialized sexual and reproductive health call centers. Information about symptoms, its association and age related trends in calls may also be helpful to identify staff training needs, for example, in areas of sexual reproductive health.

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