

Oral Sex, Oral Sex Protective Barriers, And Oral Cancer: A Triple Concern

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Abstract

Oral sex refers to sexual activities involving the stimulation of the genitalia by the use of the mouth, tongue, teeth, or throat. Oral sex is practiced by people of all sexual orientations, and it is practiced in various forms: cunnilingus (oral-vaginal contact); fellatio (oral-penile contact); and anilingus (oral-anal contact). Over 35% of the global adult population have engaged in an oral sex activity at least once in their lifetime. Individuals who engage in oral sex are more vulnerable to various sexually transmitted oral infections, including oral gonorrhoea and oral HPV infection. These infections can result in severe health consequences, including oral cancer. Nonetheless, sexually transmitted oral infections could be avoided by using oral sex protective barriers such as cling films (aka saran wraps), dental dams, and tongue condoms. If oral sex protective barriers are used appropriately, the infections can be avoided. Unfortunately, the global use rate of these protective barriers is very negligible. For example, evidence has shown that just less than 10% of adolescents and young adults in the USA used condom at their last oral sex experience. Overall, the issue of oral sex, oral sex protective barriers, and oral cancer is a triple concern of global health significance; this commentary offered recommendations on how to address the triple concern.

Keywords: Oral sex, protective barrier, oral cancer, global health

Introduction

Oral sex is a form of non-coital sexual activity that has been practiced by both the young and the elderly from time immemorial¹. Oral sex involves the use of the mouth, tongue or teeth to stimulate the genitalia of one's partner and may be in form of oral-vaginal contact (cunnilingus), oral-penile contact (fellatio) or oral-anal contact (anilingus)². Although oral sex practice has been known to interfere with

people's morals, culture and religious doctrines, it is not an uncommon practice worldwide. It is a highly erotic sexual activity with both benefits and potential risks^{3,4}.

Over 35% of the global adult population has engaged in an oral sex activity at least once in their lifetime⁵. According to a United States study, up to 85% of men and 83% of women have engaged in oral sex practice in their lifetime⁶. Though evidence on the prevalence of oral sex practice is limited among

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the general population in Africa, reports have shown that over 50% of young people in Africa engage in oral sex practice⁷⁻⁹.

Oral sex predisposes individuals to many sexually transmitted oral infections including gonorrhoea, human immunodeficiency virus (HIV) infection, and human papillomavirus (HPV) infection; all of which may lead to serious health complications (for example, oral cancer can develop from exposure to HPV) since saliva, semen or vaginal secretions can get into the oral cavity during the sexual activity¹⁰. However, this could be prevented through the use of oral sex protective barriers such as tongue condoms, dental dams, and cling films¹¹.

This commentary aims to discuss oral sex, oral sex protective barriers and oral cancer as a triple public health concern, and as well provide key recommendations for the reduction of the global burden of sexually transmitted oral infections, especially the HPV infections and its health complications.

The Triple Concern

Oral Sex

Though oral sex could improve relationship quality and sexual partners' intimacy and promote sexual activity and well-being among sexual partners while avoiding the risk of unwanted pregnancy¹²⁻¹⁴, it is not totally risk free². Oral sex may promote transmission of several pathogens, including HPV, HIV, hepatitis B virus, Chlamydia trachomatis, Neisseria gonorrhoeae, and Treponema pallidum, causing different diseases and health complications¹⁰. For example, HPV infection can predispose individuals to oral cancer¹⁰. Surprisingly, many people (especially adolescents) who engage in oral sex believe that the act in itself does not mean "having sex", and that they can avoid sexually transmitted infections (STI) and unwanted pregnancy through the act; hence, they engage in the practice even without any form of protective barriers¹⁵. This is, however, a serious misconception which should be dispelled, and a cause for public health concern.

Oral Sex Protective Barriers

The use of protective oral sex barriers including dental dams, tongue condoms, and cling film (or

plastic wrap) for the protection against sexually transmitted oral infections has been described in literature¹¹. These protective barriers keep semen, vaginal fluids or even saliva away from making contact with the oral cavity. Hence, their use is advised when receiving or giving oral sex especially with a partner whose STI status is unknown.

Unfortunately, the use of these protective barriers is relatively uncommon¹⁶. For example, a recent survey among the United States of America (USA) population revealed that less than 10% of adolescents and young adults reported the use of condom at their last oral sex experience. Similarly, another USA study also found that less than 7% of adult women and adult men used condom at their last oral sex experience¹⁶. This practice of non-use of protective barriers during oral sex, which is also very common in other parts of the world¹¹, is very worrisome, making it a serious global health issue.

Oral Cancer

Oral cancer is the most common malignancy affecting the head and neck region, with associated serious economic and psychological burdens and unsatisfactory five-year survival rates¹⁷. The global burden of oral cancer is increasing with a higher prevalence observed among the Asian population, especially Indians which accounts for one-third of this burden¹⁷. This trend is also true for the mortality rate attributable to oral cancer¹⁷. Though most cases of oral cancer occur in the 6th to 7th decades of life, the global incidence of oral cancer in individuals below the age of 45 is increasing at an alarming rate¹⁷. The major attributable risk factors for oral cancer include tobacco use, harmful alcohol consumption, and exposure to HPV¹⁸. Though oral cancer has been historically linked with tobacco and alcohol use, HPV infection is an important emerging risk factor in the aetiology of oral cancer mostly in the high-income countries and this accounts for the increasing incidence among individuals below the age of 45 years^{17,19}. In fact, HPV now accounts for the 33% global incidence of oral cancer and over 70% of oral cancer cases in the USA^{20,21}. This is expected to continue to rise over the coming decades. The consistent rise in the prevalence of HPV associated oral cancers may be due to low utilization of oral sex protective barriers, especially among young people and an increased

number of oral sex partners^{6,16}, which is also a cause for concern due to the high morbidity and mortality rates of oral cancer.

Recommendations

The need to reduce the global burden of sexually transmitted HPV infections and HPV-induced oral cancer cannot be over-emphasized. Firstly, the mass prevention through HPV vaccination programme remains very crucial. HPV vaccination has been offered widely to girls for nearly two decades and has led to decreased rates of cervical cancer in many countries of the world especially the high-income countries. An extension of such vaccination programme to boys, as it is applicable in countries like Australia, Germany, Italy, New Zealand, the United Kingdom (UK) and the USA, through gender-neutral vaccination programme will be highly desirable. The gender-neutral programme was first implemented in Australia with high vaccine uptake and this was followed by the USA and the UK²².

Secondly, advocacy on safe oral sex practice should be promoted through oral sex education programmes. Oral sex education programmes will help to transmit knowledge and values to individuals and the general population for healthy sexual relationships. A comprehensive oral sex education programme involves the passage of appropriate information for the age and cultural values of the participants through appropriate communication channels which can be in form of mass address, group discussion or individualized talks. A properly carried out oral sex education programme will promote acquisition of healthy sex habits by reducing the number of sexual partners, reduce risky sexual activity and increase the use of oral sex prevention barriers to ultimately prevent STIs.

Thirdly, public policies that promote public access to and awareness of the use of oral sex protective barriers including dental dams, plastic wraps and cling film, should be developed and implemented. The policy should be comprehensive, favouring both privileged and underprivileged groups, and should be implemented at all levels.

Fourthly, the production of the oral sex barriers should be made with adequate quality control to prevent failure during use. The materials used for

the production of the preventive barriers may also be flavoured with good integrity without compromising the user's sexual satisfaction. Provision of usage manuals should also be attached to product packages for easy usage¹¹.

Fifthly, a comprehensive screening for the identification of potential premalignant lesions or oral cancer among the general population or asymptomatic individuals is highly essential. This will help to down-stage the disease and reduce morbidity and mortality associated with oral cancer²³. The screening programme may be in the form of a population-based screening, screening in dental office, workplace screening, and self-screening, using the visual oral examination (VOE) test. Similarly, due to the global increase in HPV-induced oral cancers where the conventional visual oral examination may be insufficient, the saliva or expectorated oral rinses to screen for oncogenic HPV may be employed^{24,25}. Therefore, a national screening programme which adopts these screening methods may be introduced to capture patients with abnormal oral findings for accelerated referral to specialists in order to limit advanced stage oral cancer presentation. Cuba introduced the national oral cancer case finding programme in 1982 to improve the stage at presentation among their population. They reported a favourable case shift with an increase in cancers detected at stage 1 and reduction in advanced disease²⁶. Hence, this form of screening programme can be adopted worldwide.

Conclusion

Oral sex is a common sexual practice worldwide with lots of benefits as well as potential risks. However, these risks can be prevented with adequate use of oral sex protective barriers. An exposure to the various sexually transmitted oral infections, including HPV, due to non-use or improper use of the oral sex preventive barriers has been associated with various complications like the development of oral cancer. Therefore, oral sex, oral sex protective barriers and oral cancer constitute a triple concern of global health importance.

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Data Availability Statement

Data sharing is not applicable to this article as no new data were created or analyzed in this study. All authors have read and approved the final version of the manuscript. Afeez Abolarinwa Salami had full access to all of the data in this study and takes complete responsibility for the integrity of the data and the accuracy of the data analysis.

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Ethical Considerations

Being a commentary, ethical approval is not applicable to this study, as this study did not collect data from human or animal subjects but from an open research repository.

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