



Understanding Homosexuality: Challenges and Limitations

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Abstract

Homosexuality has its roots with the evolution of mankind. There are different theories behind same sex behaviour among which H-Y antigens and fraternal birth order defect with same sex play in male gives a promising understanding of homosexuality. These sexual minorities have higher chances of practising high-risk behaviour and psychosocial implications with concurrent complications. Sexual minorities face multiple challenges in the society largely due to its perceived social stigmata. Health education and awareness targeted to individuals and society as a whole; is one of the best approaches to minimize these implications and improve the health status of sexual minorities.

Keywords: Homosexual; Sexual minorities; LGBT; Psychosocial implications

List of Abbreviations

SCE: Stressful Childhood Experience; LGBT: Lesbian, Gay, Bisexual, and Transgender; STI: Sexually Transmitted Infections; HIV/AIDS: Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome; SM: Sexual Minorities; MSM: Males Who have Sex with Males; HPV: Human Papilloma Virus; PrEP: Pre-Exposure Prophylaxis; FTC-TDF: Emtricitabine and Tenofovir Disoproxil Fumarate

Introduction

Homosexuality is the same sex behaviour within the animal species. Nature has created clear distinction in higher animals in terms of male and female partners. The ultimate goal of life is to re-produce by means of which it is possible to give the continuity of race in nature. Based on this principle, animal behaviour is directed directly and indirectly to re-produce and maintain the gene pool.

The traditional belief of male and female partners and subsequent marriage in society was incorporated in society and different religion, which was directly challenged by homosexual interactions. The ethical and moral discussions were based on natural differences and religious understandings. There is a vast difference in opinions regarding homosexuality. Homosexuality in humans has been center of the broad discussions and widely accepted by many societies in the recent times.

There are different theories regarding the homosexual behaviour in humans. These theories incorporate chemical, social and personal reasons behind the same sex attractions. We have come up with many studies and findings to explain same sex behaviour and understand it. Some of them give convincing evidences with proper explanation of homosexuality, which helps us to broaden our knowledge and incorporate sexual minorities into mainstream social role-play.

H-Y Antigens and Fraternal Birth Order Defect

The rationale of homosexuality is attributed with Y-linked minor histocompatibility antigens (H-Y antigens). The concurrent pregnancy with male fetus will immunize the mother with this antigen leading to production of antibodies that are capable of crossing into fetal circulation [1]. Therefore increase in the number of the same sex siblings in male is associated with homosexual behaviour. This observation is

supported by a hypothesis that fetus receives the anti-H-Y antibodies from mother, causing an alteration of sexual differential in the brain of these fetuses. This can be proven by a decrease in the observed weight of homosexual males with older brothers in comparison to heterosexual males [2]. This behaviour of perceived likelihood of homosexual orientation with direct increase in same sex sibling count is referred as fraternal birth order defect. There is also direct link of right and left-handedness in homosexual behaviour. The presence of elder sibling will increase the chances of homosexual behaviour in right-handed males; probably due to insensitive nature of the non right-handed males to the maternal antibodies or absence of these antibodies in mothers in these groups [3].

One of the probable reasons of fraternal homosexual behaviour is same sex play with male siblings. But this has not been proven and established in terms of same sex orientations in females, as same-sex play have not been found to alter the sexual preference in them. In regard to this observation same-sex play hypothesis does not look convincing and needs further evidences [4]. In regard to the fraternal homosexual behaviour, sibling sex ratio was also noted. The sibling same-sex ratio of homosexual males and lesbian females were not found to be significantly elevated [5]. The overall number of fraternal homosexual constitutes a minority, in homosexual community [6].

Stressful Childhood Experience (SCE) and Homosexuality

Many lesbian, gay, bisexual, and transgender (LGBT) people were found to have some sort of stressful childhood sexual experiences when comparison was made in between homosexual and heterosexual. In one of the study based on US, stressful childhood experience was directly

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linked with homosexuality in the respondents [7]. SCE is directly associated with stress related traumatic childhood disorder and these group has a high predisposition to substance abuse. Stressful childhood experience also had different outcomes based on race and ethnicity. Latino and African-American had the highest risk of psychiatric problems followed by Asian and whites [8]. But there is no conclusive evidence and controlled research to prove a relationship between SSC and homosexuality beside observational evidences. Therefore there is a warrant for definitive study in LGBT community to establish this causation in the near future.

Homosexuality and Its Related Implications

Suicidal ideation among homosexuals

Same sex sexual orientation is still not recognized by many society and considered taboo in many section of societies and religious beliefs. It is misunderstood as an alternative form of psychiatric problems and the negative attitude towards them is highly prevalent. Homosexual persons are likely to experience more violence and marginalization due to their sexual orientation. This negative behaviour targeted to them range from bullying to social discrimination, physical violence and psychological torture. Due to this adverse social behaviour directed towards homosexual males, there is higher incidence of suicide attempt and suicide related deaths amongst MSM. This increase in likelihood of suicidal ideation is partly contributed to the high-risk health behaviour and practices in homosexual related with substance abuse, sexually transmitted infections (STI) and Human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) [9]. Relationship breakup within gay partners and self-perception of the homosexuality, unavailability of gay partners and unexpected sudden abuse towards the belief by strangers are some others mentionable causes of the suicidal reasons [10].

Suicidal ideation and behaviour along with substance abuse is clearly higher in bisexuals and transsexuals, for some unknown reason, one of them might be due to high-risk behaviour and practices [11,12]. In certain countries homosexual males totals more than 50% of suicidal attempters. One of the main reasons of suicidal ideation and attempt is depression. Homosexual and bisexual males suffer from depression more than other people in the community [13]. These reasons completely coinciding with homosexual behaviour. Addressing social stigmata and change in the attitude against the vulnerable groups is an effective way to decrease the overall incidence of suicide rate in Sexual Minorities (SM) [14].

Psychosocial determinants

LGBT community has an increased risk of psychiatric problems. These psychiatric problems ranges from anxiety disorder, depression, suicidal tendencies and substance abuse in particular. Sexual minorities clearly show higher incidences of psychiatric problem and its related co-morbidities. The older same sex couples had a higher rate of psychological distress and functional disability associated with it in comparison to younger groups [15]. Various factors can be implicated for the sexual problems in LGBT. All of these sexual minorities are at increased risk of depression; bisexual men have the highest rate of psychiatric problems [16]. Negative perception of sexual behaviour by the community and negative attitude with social isolation is one of the most important determinate for increased rate of psychosocial problems in LGBT [17].

The effect of sexual orientation in alcohol consumption is skewed with higher incidences in lesbians and bisexual women [18]. These

homosexual and bisexual men and women spend considerable time in the bars as compared to the heterosexual counterpart. The time laps have a significant effect in drinking behaviour in females with higher incidences of alcohol consumption [19].

Risk of Sexually transmitted infections (STI)

STI are common determinants among homosexual community. There is a very high incidence of Human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) in young males who have sex with males (MSM). In US, black males were found to have higher prevalence's of HIV amongst MSM. Contrary to these findings, there was not much difference in blacks, whites or Hispanics in school age males <18 years age groups [20]. These groups have higher chances of contracting STI due to their unpreparedness for the sexual encounter and lack of proper safety measures [21].

Human Papilloma Virus (HPV) is common among the MSM community. HPV is capable of causing anal cancer, penile cancer and oro-pharyngeal cancer [22]. There are reported cases of high Shigella transmission in MSM [23]. Homosexual men also have an increased risk of Gonococcal and Chlamydial infection with higher chances of prostate cancer in homosexuals as compared with heterosexuals [24,25].

Pre-exposure prophylaxis (PrEP) among homosexual males having anal sex is directed towards preventive approach for HIV transmission. The pre-exposure prophylaxis has been tried with different drug combinations in the recent time. Among many combinations, emtricitabine and tenofovir disoproxil fumarate (FTC-TDF) has shown a promising efficacy in decreasing HIV transmission [26]. Oral TDF is as effective as combination prophylactic antiretroviral regimen of FTC-TDF in high-risk individuals [27]. PrEP in high risk sexual behaviour in male and females with daily oral regimen of antiretroviral medication is also an effective way to reduce overall HIV transmission. The overall transmission rate does depend on adherence to the regimen and behaviour modification in due consideration to all these factors [28].

Challenges

Sexual racism is the biggest challenge faced by LGBT community since the evolution of mankind. With the modernization and growing trend of technological advancement, sexual racism has taken its roots in the form of hate crimes delivered through electronic medium. Violence against LGBT community has drastically increased in the recent times. These increased in violence can be attributed to ultra orthodox thoughts and religious belief. There are several incidences of hate crimes targeted against sexual minority in every corner of the world. Sexual minorities still face biggest challenge to establish themselves firmly in society and to be accepted in every forms of it.

Discussion

There are different theories for same sex behaviour amongst which H-Y antigens and fraternal birth order defect with same sex play in male provides a conclusive insight into homosexual orientation in males. The drawback of these theories is that this has been proved only in males and gay community but there is no direct link between same sex play and lesbian behaviour within females. With the emergence of understanding and acceptance of same sex behaviour, there is clear need of discussion for its safe practices and proper establishment in the society. There is clear lack of awareness about the health hazards of high-risk behaviour in gay, bisexual and MSM [29]. This lack of proper acknowledgement and understanding about determinants of sexual

health is to be addressed first and proper planning is to be made for optimal health of sexual minorities.

There are recommendations following reduction of high-risk behaviour by target behavioural modification including reducing anal sex or favouring oral sex, reducing high-risk partners or number of partners, use of barrier methods while having anal sex or decreasing the overall anal sex behaviour. Use of condom has significant reduction of HIV in MSM [30]. More controlled studies are necessary in the future to study the overall impact of sexually transmitted infections in homosexual individuals and address them. This stratification would be immensely helpful to launch a program to create a healthy environment for homosexual individual in the society. These studies should be targeted to correctly identify behavioural focussed strategy and prevention plan, to reach into consensus as which measures would be most effective in terms of reduction of STI among high-risk behaviour individuals including homosexuals.

Conclusion

There are different theories implicated for same sex behaviour in humans. Homosexual individuals and sexual minorities have different sexual orientations contrary to traditional belief in certain society and religion and there is a perceived threat directed against them that can range from bullying, negative attitude and hatred to life threatening violence against them. The reasons of this violence against sexual minorities are mostly due to social and religious stigmata. LGBT also have increased chances of high-risk sexual behaviour with dreadful medical and psychological complications. We should recognize differences in sexual orientation and embrace these sexual minorities with open shoulder. There is a clear need of combined efforts to educate people about the challenges faced by sexual minorities; and holistic community and social approach should be directed against this marginal group to establish them in mainstream social circle.

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