

CME

Sexual Orientation Matters in Sexual Medicine

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ABSTRACT

Introduction. Homosexuality is a topic that needs to be integrated into the knowledge base of the practitioner of sexual medicine.

Aim. To present to the reader a summary of the current literature on homosexuality and sexual orientation and address specifically issues that pertain to the relationship sexual orientation and sexual medicine practice.

Main Outcome Measures. The information is presented in a continued medical education format, with a series of evaluation questions at the end of the activity.

Methods. A review of the literature is presented and organized according to the authors' judgment of the value of the information as to provide the reader with an inclusive panorama of the issues covered.

Results. Current concepts, debates, and need for further research are presented.

Conclusions. The professional of sexual medicine needs to be aware of the various topics reviewed in this article as his or her involvement in the area of sexuality can create the expectation on the part of the patients of knowingness of all aspects of human sexuality. Sexual orientation is a complex area but considerable understanding has fortunately been achieved in many issues in reference to homosexuality and heterosexuality. **Rubio-Aurioles E, and Wylie K. Sexual orientation matters in sexual medicine. J Sex Med 2008;5:1521-1533.**

Key Words. Sexual Orientation; Homosexuality; Sexual Identity; Determinants of Orientation

Introduction

Sexual medicine is a multidisciplinary field that has come to exist with the integration of professionals trained in several specialties of medicine and other health-related professions. Homosexuality, as a scientific topic, has traditionally been more studied and discussed by psychiatry and clinical psychology. The emergence of the new field of sexual medicine creates the need for educational activities that bring up to date professionals whose "field of origin" is not related to certain areas of human sexuality. When such a professional becomes involved in sexual medicine, their day-to-day clinical practice will inevitably expose the clinician to these topics, which are probably not included in their "original" specialty training.

The objective of this presentation is precisely to offer in a brief and short format a summary of what has been occurring with the area of sexual orien-

tation to the sexual medicine specialist. Homosexuality has a long history of debated issues in medicine and some of the debates have not reached a conclusion; a substantial part of this article intends to familiarize the professional with the state of the art of those debates.

A review of the literature is presented. The sources consulted include manuscripts that appeared in the literature in recent years but also include a number of classical references to illustrate the development of concepts. The process of the literature review followed an educational criteria and not a systematic procedure.

Basic Concepts in Sexual Orientation

Homosexuality is one of the possible arrangements of sexual orientation. Usually, it is agreed that sexual orientation can be heterosexual, homo-

sexual, bisexual, and in some individuals who deny any sexual interest, asexual. These categories refer to the preferred gender of sexual partner and also include an increased likelihood of establishing romantic ties with a person with the same gender as the one preferred for sexual interaction. Although most of the time there is a correspondence between the behavioral level and the inner experience, fantasies, and desires, sexual orientation refers basically to the internal experience that might be congruent or not with the explicit sexual behavior of the individual.

The Pan American Health Organization, which is the regional office of the World Health Organization for the Americas, in a report of a consultation on sexual health promotion with a group of experts convened by this organization and the World Association for Sexual Health, defines sexual orientation as “the organization of an individual’s eroticism and/or emotional attachment with reference to the sex and gender of the partner involved in sexual activity. Sexual orientation may be manifested in any one or a combination of sexual behavior, thoughts, fantasies, or desire [1].

Sexual behavior is commonly coherent with sexual orientation, but it has become clear that sexual behavior is much more variable than sexual orientation. For example, an individual can experience homosexual behavior, with his or her basic sexual orientation being heterosexual. The discordance in the other direction is also possible. However, it is assumed that most individuals on the long-term maintain a concordance between sexual orientation and sexual behavior.

A brief note on the previously used terminology is in order. Sexual orientation has followed a relatively large number of terms that denote the same human characteristic but that have been abandoned because of multiple connotations that erroneously portrayed the reality of homosexual men and women. A partial list includes: sexual inversion and perverted tendency [2], sexual deviation, [3] and more recently, sexual preference [4]. Most of the former terms have been abandoned because of their pejorative connotations. Sexual preference, although not pejorative, has acquired the connotation of free choice and scholars agree that a characteristic of sexual orientation is that it is not chosen by the individual, and for this reason, the term sexual preference is being substituted by the more neutral term “sexual orientation.”

In more recent years, the fact that many male individuals do not identify themselves as gay or homosexual but have sexual interaction with other men has prompted clinicians, especially those working in the prevention of HIV and other sexual transmitted infections, to use an even more descriptive term that avoids issues of self-identification: men who have sex with men. The main reason for the emergence of this new term is the relative low reliability of self-labeling in clinical settings when patients are interrogated about their sexual orientation or preference [5]. The following quote is from the Joint United Nations Program on HIV/AIDS: “The term ‘men who have sex with men’—frequently shortened to MSM—describes a behavior rather than a specific group of people. It includes self-identified gay, bisexual, transgendered, or heterosexual men. Many men who have sex with men do not consider themselves gay or bisexual. They are often married, particularly where discriminatory laws or social stigma of male sexual relations exist. Largely because of the taboo, the female partners of men who have sex with men are often unaware of their partner’s other liaisons, and the threat posed to themselves. Forced sex among men is not uncommon, especially in men-only environments such as prisons. Men who have sex with men are found in all societies, yet are largely invisible in many places” [6].

In a less formal way, the English term gay has gained acceptance among a large number of audiences to denominate individuals who identify themselves as homosexuals. Initially, the term applied only to men, but it has extended its meaning to include both men and women in many areas of the world. The term lesbian has also gained acceptability to denominate the homosexual women. In contrast to the term gay, lesbian applies only to female individuals who identify themselves as homosexuals.

Frequency of Gay and Lesbian Orientations

The question of how prevalent the homosexual and bisexual orientation is has been a subject of debate. A number of problems have prevented a straightforward answer to the question: first, the way in which the assessment is made can influence the conclusion of the particular study, especially in cultures and moments in history when homosexuality was concealed; second, the frequency of

homosexual behavior apparently is much higher than the prevalence of self-identified gay, lesbian, or bisexual individuals; third, in some areas of the world where gay activism has advanced, the reported frequency of gay, lesbian, and bisexual individuals seems to be higher.

For example, the Kinsey reports showed that 37% of men have had at least one orgasm as a result of sexual interaction with other man, 13% of females had at least some overt homosexual experience to orgasm; furthermore, 10% of males were more or less exclusively homosexual and 8% of males were exclusively homosexual for at least three years between the ages of 16 and 55. These figures include only behavior, and not the self-identification of the individual. The Kinsey report included a very large number of interviews but failed to obtain a representative sample of the population [7,8].

In general, the reports of the frequency of homosexual orientation vary from 1% to 10% of the adult population for male estimates, and in a consistent way, numbers are reportedly lower for females. Researchers attempting to evaluate the frequency of homosexual orientation in different populations usually agree that a fair estimate for male homosexual orientation in the general population is around 4–5% of the adult male population and around 2–3% of the female adult population [9,10].

Why Does Sexual Orientation Differ in People?

The debate continues about the role of factors resulting in same sex preference and sexual orientation. Among the proposed ones we can see: genetic and biological influences, environmental influences with exposure to various stimuli, and socially learned factors leading to personal choice. The role of genetic influences has been investigated with some vigor. Discouraging investigation into biological origins has been advocated by many in the fear that should a cause be found, the reclassification of sexual orientation as a disease state would lead to attempts to remove such sexual preference by conservative and religious scientists.

The role of genetics was investigated and reported by Hammer et al. [11] in a study that claimed to show a partial genetic influence. Extensive interviews with 76 pairs of gay brothers and their families identified homosexuality to be inherited through the maternal uncles and male

cousins but not from fathers or paternal relatives. This suggested the possibility of sex link transmission in a portion of the population. DNA linkage analysis revealed a correlation between homosexual orientation and the inheritance of polymorphic markers on the X chromosome in 64% of the pairs tested, linkage being on a patch of DNA called Xq28. Hu et al. [12] corroborated previous reported linkage of Xq28 and male homosexuality in selected families but not in women.

A review by Bocklandt and Hamer [13] found no evidence that physiologically occurring variations in androgen exposure influenced differences in sexual orientation. Instead, the authors hypothesized that genomic imprinting may regulate sex-specific expression of genes of sexual dimorphic traits, including sexual orientation.

The study by Otis and Skinner [14] in a rural state of the mid-south United States investigated respondent thoughts on what may affect sexual orientation, looking at issues of genetics, relationship between parents, relationship with parents, birth order, peers, growing up in a dysfunctional family, growing up in a single parent family, negative experiences with the opposite sex, and positive experiences with the same sex. The results followed similar results of studies of heterosexual men and women with gay men more likely to view sexual orientation as a result of genetics than lesbian responders. The lesbian group was more likely to view positive relationships with the same sex to have a great influence on sexual orientation.

The first genome screen for normal variation in the behavioral trait of sexual orientation in males was reported by Mustanski et al. [15]. Of interest, full linkage to Xq28 was not found in all of the samples. More recent studies have found that the number of women with extreme skewing of X chromosome inactivation was significantly higher in mothers of gay men (13%) compared to controls (4%) and an increase in mothers of two or more gay sons (23%). This further supports the role for the X chromosome in regulation of sexual orientation in a subgroup of gay men [16].

A study from Italy [17] found that women with gay family members have more children than women with all straight relatives. Mothers of gay men had an average of 2.7 children compared to mothers of straight men who averaged 2.3. This study confirmed previous reports that gay men have more maternal than paternal male homosexual relatives, that homosexual males are often

later born than firstborn, and that they have more older brothers than older sisters.

Genes are not the only biological factor that influences sexual orientation. Environmental factors experienced within the uterus are important. Having an older brother increased the odds of homosexuality in right-handers only; in non-right-handers, having older brothers did not affect the odds of homosexuality [18]. This study utilized information compiled from Alfred Kinsey's work in the 1940s.

An important study from Bogaert [19] identified that only biological older brothers and not any other sibling characteristic predicted men's sexual orientation and confirming the importance of fraternal birth order. This study allowed comparison from gay and heterosexual men who grew up in non-biological families (usually adopted). The conclusion being that it was not by having and living with the older brother that the younger man identified as gay, but more likely to be the environment and having shared the same womb of the mother. It has been hypothesized that the mother may develop immunity to certain male specific molecules in the Y chromosome, which with subsequent births leads to some immunological effect on the male brain.

Bocklandt and Vilain [20] have argued that genetic factors play some role in sexually dimorphic traits and that sex differences in the brain and behavior are an end point of that sex determination. They suggest that the number of dopaminergic cells in the mesencephalon may influence sexual orientation independently of gonadal hormones (such as testosterone secreted from the testes).

In a recent report by Ellis et al., heterosexual males and females exhibited statistically identical frequencies of blood type A whereas gay men exhibited a relatively low incidence and lesbians a relatively high incidence to significant values. An unusually high proportion of homosexuals of both sexes were rhesus negative compared to heterosexuals, suggesting a connection may exist between sexual orientation and genes on both chromosome 9 (where blood type is determined) and chromosome 1 (where rhesus factor is regulated) [21].

Recently, studies investigating sexual orientation have provided support for the role of another factor: developmental instability. The term developmental stability refers to an individual organism's capacity to produce the specific phenotype as

dictated by its genetic code under various environmental conditions [22]. Developmental instability is frequently measured indirectly using fluctuating asymmetry, which refers to small, non-directional deviations from perfect symmetry in the development of bilateral traits. An increase in developmental instability as measured by elevated fluctuating asymmetry in gay men and lesbians compared to heterosexual men and women was identified in a recent study [23].

Whether genes, hormones, immunological, or some other environmental factor results in same-sex orientation "the changes" within the brain structure still remain elusive. Interest remains in looking at an area of the anterior hypothalamus, particularly with the interstitial nuclei of the human anterior hypothalamus (INAH). The INAH 3 region had been reported as smaller in homosexual men compared to heterosexual men. However, a study by Byne et al. found no difference in the number of neurons within the nucleus based upon presumed sexual orientation [24]. In this line of inquiry, the group of Roselli et al. [25] reported a cell group within the medial preoptic area (MPOA)/anterior hypothalamus of eight matched adult sheep was found to be significantly larger than in adult rams than in ewes. In addition, the volume was two times greater in female orientated rams than in male orientated rams. There were also significantly greater levels of messenger ribose nucleic acid (mRNA) in female orientated rams than in ewes, while male orientated rams exhibited intermediate levels of expression. As the MPOA/anterior hypothalamus is known to control the expression of male sexual behaviors, the suggestion from the authors was that naturally occurring variations in sexual partner preferences may be related to differences in both brain anatomy and capacity for estrogen synthesis.

Why Homosexual Orientation Is Not Considered Pathology

In most of today's clinical world, it is common knowledge that homosexuality is not considered a pathological condition. The American Psychiatric Association removed homosexuality from its official Diagnostic and Statistical Manual of Mental Disorders in 1973 [26].

This decision occurred in the context of very important cultural changes in the United States brought on by the social protest movements of the

Table 1 Incidence of sexual techniques in the year previous to interview reported by participants who identified themselves as homosexuals in the Bell and Weinberg Study [28]

Technique	White homosexual men (N = 575) (%)	Black homosexual men (N = 111) (%)	White homosexual women (N = 228) (%)	Black homosexual women (N = 63) (%)
Body rubbing	41	53	46	77
Masturbating partner	83	91	79	88
Being masturbated by partner	85	88	82	89
Performing oral-genital	95	89	78	80
Receiving oral-genital	94	96	75	84
Performing anal intercourse	78	90	NA	NA
Receiving anal intercourse	67	78	NA	NA

1960s and 1970s, beginning with the civil rights movement, and evolving on to the women's and gay rights movements.

The decision was in fact an indirect result of the pressure exerted by gay activists, but what the political pressure did was to force a review of available scientific evidence that severely questioned the assumption that homosexuality was pathological. A very active scientist, psychiatrist, and heterosexual who participated in those discussions and processes writes some years later: "Countless objective psychological test have been done by now on nonpatient groups of homosexuals with matched groups of heterosexual, beginning with Evelyn Hooker's classic study (1957). With surprising uniformity, the vast majority of these studies have shown few, if any, significant differences in personality structure between the two groups and no greater psychopathology among non patients homosexuals than among matched heterosexual controls" [26, p. 400]. Psychologist Evelyn Hooker's groundbreaking study compared the projective test results from 30 non-patient homosexual men with those of 30 non-patient heterosexual men. The study found that experienced psychologists, unaware of whose test results they were interpreting, could not distinguish between the two groups [27].

The World Health Organization removed homosexuality from the International Classification of Disease (ICD)-10 in 1992.

Sexual Orientation and Sexual Behavior

The particularities of sexual techniques preferred by homosexually identified individuals have been the subject of attention by researchers. Investigations performed some 30 years ago tended to focus on the differences of techniques used by individuals that identified themselves as homosexuals and

comparing variations among ethnic and cultural groups. A classic example of this is the investigation conducted by Bell and Weinberg in the 1970s [28], who interviewed 686 males and 293 females who identified themselves as homosexuals recruited from the San Francisco Bay Area in the United States. These authors present a detailed report on the frequency of sexual techniques used by the respondent in the year previous to the interview. These are summarized in Table 1. As it can be observed, there is a wide range of sexual techniques used by persons with homosexual orientations, and contrary to somehow simplistic assumptions, there is a substantial number of homosexual persons who perform homosexual techniques equivalent to heterosexual vaginal intercourse. Also of interest is the information presented in Table 2 with data gathered from the same Bell and Weinberg Study [28], where the favorite sexual technique of homosexual males and females are recorded. There is no particular technique that is favored by all homosexual men and women. In particular, the assumption that anal intercourse is the favorite sexual technique of homosexual men is not sustained by this empirical information.

The figures reported by the Bell and Weinberg Study [28] are, however, from a sample obtained in the U.S. and with some time elapsed. There has been discussion in the literature pointing to possible differences in the preferences of sexual techniques of men from other cultures, especially the Latino culture where the link between masculinity and sexual behavior is reported to be more related to the inserter role in anal intercourse than the gender of the partner. In a recent report by Jeffries [29], who used a U.S. national probability sample of 4,928 men, found that non-Mexican Latino, but not Mexican men, had increased likelihoods of ever having anal sex than non-Latino whites and oral sex than non-Latino blacks. Latino men pre-

Table 2 Rating of sexual techniques as favorite reported by participants who identified themselves as homosexuals in the Bell and Weinberg Study [28]

Technique	White homosexual men (N = 575) (%)	Black homosexual men (N = 111) (%)	White homosexual women (N = 228) (%)	Black homosexual women (N = 63) (%)
Body rubbing	3	2	12	24
Masturbating partner	0	0	0	2
Being masturbated by partner	1	0	16	5
Mutual masturbation	2	1	13	7
Performing oral-genital	2	3	6	0
Receiving oral-genital	27	18	20	29
Performing anal intercourse	26	44	NA	NA
Receiving anal intercourse	5	11	NA	NA

ferred insertive or receptive sex in comparison to non-Latino blacks and whites, but the difference disappeared after education was controlled for.

HIV Transmission in High-Risk Sexual Behavior

The emergence of the HIV epidemic has renewed the interest of documenting the prevalence of the various sexual practices. This interest has been fueled by the need to identify the factors that determine risk behaviors that increase the chances of transmission. Accordingly, the sexual behaviors investigated focus on the ones that favor HIV transmission. For example, a recent survey conducted among 1,996 men who had sex with men in the San Francisco Bay Area [30] found that between 3 and 19% of the participants reported a form of sexual risk behavior including unprotected insertive anal intercourse (18.9%) or unprotected receptive anal intercourse with a partner of the same HIV serostatus (14.2%). When the risk factors for unprotected insertive anal intercourse with a serodiscordant partner were investigated the use of sildenafil and a greater number of partners in the last 12 months were identified.

The concerns raised by reports that linked the use of phosphodiesterase type 5 inhibitors (PDE-5i) to an increased risk rate of high risk sexual behavior were addressed in a multidisciplinary conference founded by the National Institute of Mental Health (USA) known as the Bolger Conference [31]. Leading investigators in several disciplines gathered for 2 days to make recommendations. Reports highlighting the potential misuse of PDE-5i as recreational drugs, often in association with drugs of abuse such as methamphetamines, methylenedioxymethamphetamine (MDMA) (known as ecstasy), cocaine, and other stimulant drugs were discussed. The pattern of

misuse was reported to be increasingly prevalent among men who have sex with men and is associated with the practice of unprotected oral or anal sex with multiple partners and a potential increase in HIV transmission rates. Additionally, concerns on the use in conjunction with inhalant nitrates (poppers) or with certain antiretroviral drugs were addressed. Overall, there was a strong consensus on the need for additional short and long-term studies on possible links of PDE5i use to changes in sexual behavior and lifestyle factors. On the medical use of PDE5i on individuals with HIV-positive status, the group of experts endorsed the applicability of the recently issued recommendations on erectile dysfunction management [32] with additional areas of emphasis: the need for safer sex counseling, comprehensive sexually transmitted infections screening and follow-up, avoidance of potentially dangerous drug interactions, and the potential benefit of testosterone replacement for HIV-positive men with decreased androgen.

Homophobia and Internalized Homophobia

The concept of homophobia has emerged as a clinically usable tool to explain several phenomena in relation to sexual orientation. As commented earlier, homosexuality was classified and declassified as a mental illness in the past century; the reasons for its classification as a mental problem or "pathology" are rooted in the cultural foundations of occidental culture where systematic condemnation and equation of homosexuality with sin and crime have been consistent, in the years 1150 to 1350, homosexual behavior had changed from something between the curious and the worth of celebrating to something that merits persecution, and in many places of Europe, the death penalty [33].

With the declassification of homosexuality as a disease, and the dissemination of scientific studies that showed the lack of validity of cultural assertions of what it means to have a homosexual orientation, the culturally held ideas on homosexuality have not vanished. Interestingly, the judgment of homosexuality was part of a greater condemnation that included any form of non-procreational sex: masturbation and other forms of “unrestrained” sexual lust, among which homosexuality was included.

Psychologist George Weinberg coined the term homophobia to denote the irrational aversion to homosexuality and homosexual people (quoted in [33]). It is important to note that homophobia does not mean disliking of homosexuals. Not feeling particularly prone to understand and be friendly with homosexual persons is generally rooted in the social condemnation of homosexuality that is highly prevalent in many cultures. Homophobia implies, as Friedman and Downey [33] comment, a much more active aggression toward the homosexual possibility in humans, homophobic reactions usually involve much more than the reactions typically seen in other phobias: “phobic people do not devalue or ragefully attack phobic objects” (p. 175) as people with homophobia often do with homosexual people. People with homophobia tend to be authoritarian, conservative, come from religious backgrounds in which homosexuality is viewed negatively, and tend to have little or no contact with homosexual persons [34].

Homophobia has been described as the most influential factor in symptoms that cause distress and disability in gay and lesbian people. Homophobic attitudes can come from parents, peers, society at large, and most importantly for the purposes of this manuscript, the health-care professional. When homophobic attitudes come from the patient himself, they become a very disruptive and destructive force that creates important health risks and that needs to be addressed in a proper manner by the clinician. A homophobic reaction on the part of the clinician to a behavior rooted in internalized homophobia of a patient can be an authentic trigger to self-destruction.

Homophobia can be rooted in complex unresolved psychological issues. When this is the case, the simple availability of information can be unsuccessful in resolving those issues and in the creating of a more rational, supportive, and

accepting environment. Homophobia, consequently, can be the subject matter of psychotherapeutic work. This is a critical element in the case of persons with homosexual orientation who seek clinical help but can also be a focus of psychotherapy for heterosexual persons that for reasons of professional interest, clinical work, or parenting, realize that they need to get rid of their irrational reactions.

Are Homosexual Persons Good Parents?

Somehow in the frontier of the discussions to consider individuals with homosexual orientation in exactly the same terms as the individuals with heterosexual orientation is the debate on the fitness for parenthood that people with homosexual orientation have.

The debate on this matter has been centered on the eventual consequences on the development of the children involved. There have been a considerable number of studies that have dispelled previously held ideas. The psychological health of the children is not damaged by the parent’s sexual orientation, regardless if they are biological sons or daughters, adopted, or if the parent lives in a homosexual union (marriage or de facto). Having a homosexual parent does not make it impossible to develop as a heterosexual, as some previously held ideas suggested.

A review by Patterson [35] concluded that more than two decades of research demonstrate that there are no important differences in the development or the level of adjustment in the children of homosexual couples compared to the children of heterosexual couples. Results indicate that the outcome is much more a result of the quality of the family interactions than the sexual orientation of parents.

On the other hand, a number of studies have shown that the likelihood of becoming homosexual does not increase dramatically by the fact that one parent is homosexual [36,37].

These and other research reports have been the basis of changes in some countries’ law systems that recently have granted adoption rights to homosexual people and couples. It is clear that homosexuality does not guarantee good parenting, in about the same degree that heterosexuality does either. However, restricting the right of people with homosexual orientation to raise children

seems, from the perspective of these studies, unjustified.

How Should Gay Men and Women Be Supported by Clinicians?

Many ethical and dubious treatments, including aversion therapy, apomorphine therapy, electric shock therapy, and covert sensitization have been used in the past to change “gay orientation” and this has led to marked criticism of psychiatrists in encouraging and supporting the stereotypes and social construction of gay and lesbian sex as a mental disorder. Assumptions were made in psychoanalysis as well as in the behavioral treatments that sexuality could be altered, which lead to unscientific therapy and practice. Homosexuality was considered the product of modern urban life and masturbation by Ammon (1879–1942) and could be prevented by sports, “respect for modesty,” and a natural living [38]. A recent review by Murphy [39] has suggested that the recommendations of therapies including bicycling, hypnosis (150 sessions), large quantities of alcohol followed by visits to brothels, cocaine, castration, testicle implants, and manipulating sex hormones during pregnancy should all be regarded with great concern. A review by King and Bartlett [40] concludes that mental health professionals should be aware of mistakes of the past.

Despite this, a study described over 200 participants (self-selective) who reported some minimal change from homosexual to heterosexual orientation that lasted at least 5 years [41]. Virtually all of the participants reported substantial changes in core aspects of sexual orientation, and for some, the change of self-identity also brought about change to overt sexual behavior. The study proposes that changes in core features of sexual orientation are possible although complete change was uncommon.

The official position of the American Psychological Association on the issue of therapeutic approaches that attempt to change sexual orientation is, however, very clear against the approach: “All major national mental health organizations have officially expressed concerns about therapies promoted to modify sexual orientation. To date, there has been no scientifically adequate research to show that therapy aimed at changing sexual orientation (sometimes called reparative or conversion therapy) is safe or effective. Furthermore,

it seems likely that the promotion of change therapies reinforces stereotypes and contributes to a negative climate for lesbian, gay, and bisexual persons. This appears to be especially likely for lesbian, gay, and bisexual individuals who grow up in more conservative religious settings” [42].

The move away from reparative therapy (conversion therapy) to affirmative therapy and gay sensitive therapy by therapists who are well-informed of the issues facing gay and bisexual men from living within cultures and religious orders where there is social homophobia will be beneficial.

Special Clinical Needs of People with Homosexual and Bisexual Orientation

It is necessary in all clinical consultations to not assume the sexual orientation of presenting patients to be heterosexual. Using open questions such as “are you single or married” and “are you living with someone” are a useful way forward to allow the patient to disclose some information. Asking them to “tell me about your relationship” and whether there are “any difficulties in the more intimate parts of that relationship” can allow the patient to disclose homosexual practice or orientation.

For some, it is important to give continued reassurance with statements such as “I realize that dealing with your own sexuality can be difficult and that’s the case for many people whether they are heterosexual, gay, lesbian, bisexual, or transgendered.” By going on and encouraging them to respond to “how do you feel about your own sexuality? Have you ever encountered any difficulties in your sex life or around your issues relating to your sexuality?” is facilitating. However the questions are raised, it is important to give individuals and couples permission to bring up their anxieties and concerns. Clinicians must avoid being distracted or embarrassed by the responses and for those areas where it is difficult to understand or appreciate because of the professional’s own life experiences, it is helpful to encourage the patient to talk and describe the issues to the clinician rather than assume “all knowingness” and thereby getting it wrong.

An article that is directed particularly toward human sexuality education professionals provides some useful identification of factors to allow systemic change within both organizations and at

ground floor worker level to dismantle heterosexism and to move from the rhetoric of inclusion into actual inclusion. Shared leadership, inclusive policies, practices and pedagogy, resources, a plan, and ongoing and inclusive communication allows systemic transformation and culture change. This may be useful in both team development and in the supervision setting to allow change to be made possible particularly for those clinicians who are uncomfortable or find difficulties in working with gay or lesbian individuals [43].

It is important to remember that the assumption that problems that are brought to consultation should not be assumed as necessarily directly associated with sexual orientation. Where orientation issues are part of the presenting complaint, the clinical problems often arise from either attempting to develop or to live within a hostile culture or from attempting to develop and sustain relationships with other people of the same gender where socialization has been focused on heterosexual relationships [44].

The lack of support or recognition for the existence of lesbian women or gay men within educational facilities, including universities, can bring about a sense of isolation and self-destructive, self-negating behaviors including substance misuse and self-harming behavior. These in turn are often assumed by the individual as confirming the inherent truth that all of the issues are because of their mental health [44]. Some of the reasons for seeking counseling and therapy may be very much around developing and maintaining intimate relationships, dealing with emotional satisfaction from several relationships at one time; accepting sexual attraction to others beyond the primary partner, and exploring the morality issues around acting upon such attraction, potentially destroying the primary relationship. Issues of self-hatred within internalized homophobia preventing healthy psychosexual development and especially issues involving the disclosure of homosexual orientation with friends, peers, and family can bring people into therapy.

Patients may present with any of the sexual problems or relationship issues that bring heterosexual patients and couples to our clinics. There is often great anxiety as to whether the clinical interventions and interactions will be different with same-sex couples or gay or lesbian individuals. Since sexuality affects general health, it may be necessary to spend more time looking at issues

around social isolation, feeling isolated and stigmatized, and poor self-esteem and shamefulness, which can affect social relationships.

When dealing with individuals and couples with sexual problems, it is important to establish early on whether the presenting issue is indeed a problem. When genital touching and function is not of primacy within many relationships, it may be necessary to look beyond the stated problem to establish potential issues that could be worthy of exploration. In lesbian women, it has been suggested that some women may be reluctant to be seen as taking on the more dominant or lead role or to be seen as the sexually dominant partner. Issues around equality and intimacy may be much stronger issues that need exploration. In men, there is often a need to demonstrate either the macho aggressive male character with hard firm erections, and so issues of erectile instability, rapid ejaculation, or concerns about penile size or girth can bring about substantial distress. Likewise, concerns about infection, particularly in secondary or casual relationships, can result in problem areas within the primary relationship. Established forms of intervention are effective with gay couples although the specific needs of gay and lesbian people may need to be addressed by the therapist [45].

A study by Means-Christensen et al. [46] found that psychometric profiles of cohabiting same gender and opposite gender couples were more similar to nondistressed married heterosexual couples from the general community than to couples in therapy when using the marital satisfaction inventory-revised.

Although gay male and lesbian couples are more similar than different from heterosexual couples, the impact of homophobia and heterosexism on gay and lesbian couples must be acknowledged separately from external legal and social sanctions. Many gay men and lesbian women have unfounded negative views regarding their own potential for enduring and fulfilling intimate relationships because of their own socialization experiences. In addition, it is important to remember that stereotypic gender role attitudes and cognitive emotional and interpersonal styles reflecting feminization or masculinity warrant examination in any couple regardless of sexual orientation.

There is epidemiological evidence that individuals who identify themselves as homosexual

have an increased use of mental health-care services. Cochran and Mays [47] compared data from a U.S. National Household Survey of Drug Use and compared sexually active individuals who had a heterosexual partner with individuals having a homosexual partner during the last 12 months. Six psychiatric syndromes were investigated (major depression, generalized anxiety disorder, panic attacks, agoraphobia, and drug and/or alcohol dependency) as well as the use of mental health services. Although nearly three-quarters of homosexually active individuals did not meet the criteria for any of the six syndromes assessed, the authors found an increased risk in homosexual men to have major depression and panic attacks, and in the case of lesbians, an increased risk of alcohol or substance dependence syndromes. While it is likely that these associations are the result of social factors, the clinician should take special care to identify and properly address these issues.

It is particularly important to examine issues of gender role with gay male and lesbian couples. Dealing with men's socialization with competitiveness, assertiveness, autonomy, self-confidence, instrumentality, and the tendency not to express intimate feelings in comparison to women's socialization with an emphasis on nurturance, emotional expressiveness, verbal exploration of emotions, and warmth means that since both partners within the couple are likely to share similar socialization histories, same gender partners may initially have greater familiarity for their partners' gender-linked emotional and interpersonal styles [48].

Sexual Dysfunction and Homosexual Orientation

Compared to the amount of information available on a variety of sexual dysfunctions among the heterosexual population, the scarcity of literature addressing sexual dysfunction issues among the homosexual population is notable. Masters and Johnson published their observations on their effort to treat sexual dysfunction on homosexual couples in a report in 1979 [49]. They state that according to their observations, the sexual capacities of the body "function in identical ways, whether we are interacting heterosexually or homosexually" (pp. 404–405). Therefore, they supported the concept that "sexual dysfunction be treated with the same therapeutic principles and techniques regardless of the sexual orientation of the distressed individual" (p. 406).

Subsequent reports followed the line put forward by Masters and Johnson. These reports were characteristically expert opinion-based. For instance, McWhirter and Mattison, in 1980 [50], echoed the views of Masters and Johnson when they consider that sex therapy with homosexual couples and individuals is not significantly different from therapy for heterosexuals; however, they comment that a critical issue for the proper management of sexual problems is the lack of homophobia in the part of the professional.

In a more recent appraisal on the subject, Nichols [51], while maintaining the basic assertion that sex therapy with people with homosexual orientation is not so different from sex therapy with heterosexual clients, except insofar the former usually involved specific issues such as sexual identity, alternative lifestyles, and the nature of some of the sexual practices that become focus of treatment.

The prevalence of sexual dysfunction among homosexual individuals has not been properly investigated. Using a convenience sample of 197 homosexual men who attended a health seminar, Rosser et al. [52] found sexual dysfunction and concerns to be a common problem; almost all men reported some degree of sexual difficulty in their lifetime. Interestingly, a common complaint in this sample was the presence of painful receptive anal intercourse.

In contrast, the frequency of sexual dysfunction on HIV-positive homosexual or bisexual men has been investigated in several reports. Lallemand et al. studied a group of 156 ambulatory HIV-infected homosexual and bisexual men to assess the prevalence of sexual dysfunction using the International Index of Erectile Function and five sections of the Derogatis Sexual Functioning Inventory [53]. A total of 71% of the patients reported some degree of sexual dysfunction. Of these, 89% reported decrease or loss of libido, 68% orgasmic problems, 86% erectile dysfunction, and 79% ejaculation problems.

There is a clear lack of evidence-based knowledge when it comes to assessing the prevalence and treatment effectiveness of sexual dysfunction among the homosexual patients. The initial systematic exclusion of homosexual behavior in the measures to assess treatment effectiveness as well as the exclusion of homosexual persons from trials investigating the modern pharmacological treatments for erectile dysfunction needs to be acknowledged and corrected. The same holds true

for other sexual dysfunctions. As sexual medicine continues to broaden its perspectives, the need for understanding the similarities and differences of special populations continues to increase.

Conclusions

The professional of sexual medicine needs to be aware of the various topics reviewed in this article as his or her involvement in the area of sexuality can create the expectation on the part of the patients of knowingness of all aspects of human sexuality.

Sexual orientation is a complex area but considerable understanding has fortunately been achieved in many issues in reference to homosexuality and heterosexuality. Clinicians should be aware of the current state of knowledge so their interventions maximize the opportunities for health promotion in all patients, regardless of patient sexual orientation.

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References

- 1 Pan American Health Organization-World Health Organization. Promotion sexual health of recommendations for action. Proceedings of a regional consultation convened by Pan American Health Organization (PAHO) World Health Organization (WHO) In collaboration with the World Association for Sexology (WAS) in Antigua Guatemala, Guatemala May 19-22, 2000.
- 2 Ellis H. Studies in the psychology of sex. Volume 1. New York: Random House; 1936.
- 3 Leitenberg H. Handbook of behavior modification and behavior therapy. Englewood Cliffs: Prentice-Hall; 1976.
- 4 Bell AP, Weinberg MS, Hammersmith SK. Sexual preference: Its development in men and women. Bloomington: Indiana University Press; 1981.
- 5 Pathela P, Hajat A, Schillinger J, Blank S, Sell R, Mostashari F. Discordance between sexual behavior and self-reported sexual identity: A population-based survey of New York city men. *Ann Intern Med* 2006;145:416-25.
- 6 UNAIDS Joint United Nations Programme on HIV/AIDS. Men who have sex with men. Available at: <http://www.unaids.org/en/PolicyandPractice/KeyPopulations/MenSexMen/> (accessed January 26, 2008).
- 7 Kinsey AC, Pomeroy WB, Martin CE. Sexual behavior in the human male. Philadelphia and London: Saunders and Co.; 1948.
- 8 Kinsey AC, Pomeroy WB, Martin CE, Genhard PH. Sexual behavior in the human female. Philadelphia and London: Saunders and Co.; 1953.
- 9 Bailey JM, Pillard RC. Genetics of human sexual orientation. *Annu Rev Sex Res* 1995;6:126-50.
- 10 Bailey JM, Pillard RC, Neale C, Agyei Y. Heritable factors influence sexual orientation in women. *Arch Gen Psychiatry* 1993;50:217-23.
- 11 Hamer DH, Hu S, Magnuson VL, Hu N, Pattatucci AML. A linkage between DNA markers on the X chromosome and male sexual orientation. *Science* 1993;261:320-6.
- 12 Hu S, Pattatucci AM, Patterson C, Li L, Fulker DW, Cherny SS, Kruglyak L, Hamer DH. Linkage between sexual orientation and chromosome Xq28 in males but not in females. *Nat Genet* 1995;11:248-56.
- 13 Brocklandt S, Hamer DH. Beyond hormones: A novel hypothesis for the biological basis of male sexual orientation. *J Endocrinol Invest* 2003;26(3 suppl):8-12.
- 14 Otis MS, Skinner WF. An exploratory study of differences in views of factors affecting sexual orientation for a sample of lesbians and gay men. *Psychol Rep* 2004;94(3 pt 2):1173-9.
- 15 Mustanski BS, Dupree MG, Nievergelt CM, Bocklandt S, Schork NJ, Hamer DH. A genomewide scan of male sexual orientation. *Hum Genet* 2005; 116:272-8.
- 16 Bocklandt S, Horvath S, Vilain E, Hamer DH. Extreme skewing of X chromosome inactivation in

- mothers of homosexual men. *Hum Genet* 2006; 118:691–4.
- 17 Camperio-Ciani A, Corna F, Capiluppi C. Evidence for maternally inherited factors favouring male homosexuality and promoting female fecundity. *Proc Biol Sci* 2004;271:2217–21.
 - 18 Bogaert AF, Blanchard R, Crosthwait LE. Interaction of birthorder, handedness and sexual orientation in the Kinsey interview data. *Behav Neurosci* 2007;121:845–53.
 - 19 Bogaert AF. Biological versus nonbiological older brothers and men's sexual orientation. *Am J Hum Biol* 2004;16:151–7.
 - 20 Bocklandt S, Vilain E. Sex differences in brain and behaviour: Hormones versus genes. *Adv Genet* 2007;59:245–66.
 - 21 Ellis L, Ficek C, Burke D, Das S. Eye colour, hair type, blood type, and the rhesus factor: Exploring possible genetic links to sexual orientation. *Arch Sex Behav* 2008;37:145–9.
 - 22 Waddington CH. Canalization of development and the inheritance of acquired characters. *Nature* 1942; 150:563–6.
 - 23 Hall PA, Schaeff CM. Sexual orientation and fluctuating asymmetry in men and women. *Arch Sex Behav* 2008;37:158–65.
 - 24 Byne W, Tober S, Mattiace LA, Lasco MS, Kemether E, Edgar MA, Morgello S, Buchsbaum MS, Jones LB. The interstitial nuclei of the human anterior hypothalamus: An investigation of variation with sex, sexual orientation, and HIV status. *Horm Behav* 2001;40:86–92.
 - 25 Roselli CE, Larkin K, Resko JA, Stellflug JN, Stormshak F. The volume of a sexually dimorphic nucleus in the ovine medial preoptic area/anterior hypothalamus varies with sexual partner preference. *Endocrinology* 2003;145:478–83.
 - 26 Marmor J. Homosexuality and the issue of mental illness. In: Marmor J, ed. *Homosexual behavior: A modern reappraisal*. New York: Basic Books; 1980.
 - 27 Hooker E. The adjustment of the male overt homosexual. *J Proj Tech* 1957;21:18–31.
 - 28 Bell AP, Weinberg MS. *Homosexualities: A study of diversity among men and women*. New York: Simon and Schuster; 1978.
 - 29 Jeffries WL. A comparative analysis of homosexual behaviors, sex role preferences, and anal sex proclivities in Latino and Non-Latino men. *Arch Sex Behav* 2007 Oct 30 [Epub ahead of print].
 - 30 Schwarcz S, Scheer S, McFarland W. Prevalence of HIV infection and predictors of high-transmission sexual risk behaviors among men who have sex with men. *Am J Public Health* 2007;97:1067–75.
 - 31 Rosen RC, Catania JA, Ehrhardt AA, Burnett AL, Lue TF, McKenna K, Heiman JR, Schwarcz S, Ostrow DG, Hirshfield S, Purcell DW, Fisher WA, Stall R, Halkitis PN, Latini DM, Elford J, Laumann EO, Sonenstein FL, Greenblatt DJ, Kloner RA, Lee J, Malebranche D, Janssen E, Diaz R, Klausner JD, Caplan AL, Jackson G, Shabsigh R, Khalsa JH, Stoff DM, Goldmeier D, Lamba H, Richardson D, Sadeghi-Nejad H. The Bolger conference on PDE-5 inhibition and HIV risk: Implications for health policy and prevention. *J Sex Med* 2006;3: 960–75.
 - 32 Lue TF, Giuliano F, Montorsi F, Rosen RC, Andersson KE, Althof S, Christ G, Hatzichristou D, Hirsch M, Kimoto Y, Lewis R, McKenna K, MacMahon C, Morales A, Mulcahy J, Padma-Nathan H, Pryor J, Saenz de Tejada I, Shabsigh R, Wagner G. Summary of the recommendations on sexual dysfunctions in men. *J Sex Med* 2004;1:6–23.
 - 33 Friedman RC, Downey JL. *Sexual orientation and psychoanalysis: Sexual science and clinical practice*. New York: Columbia University Press; 2002.
 - 34 Hereck G. Beyond homophobia: A social psychological perspective on the attitudes toward lesbian and gay men. In: DeCecco J, ed. *Bashers, baiters and bigots: Homophobia in American society*. New York: Harrington Park; 1985.
 - 35 Patterson CJ. Children of lesbian and gay parents. *Curr Dir Psychol Sci* 2006;15:241–4.
 - 36 Bailey JM, Bobrow D, Wolfe M, Mikach S. Sexual orientation of adult sons of gay fathers. *Dev Psychol* 1995;31:124–9.
 - 37 Green R. Sexual identity of 37 children raised by homosexual or transsexual parents. *Am J Psychiatry* 1978;135:692–7.
 - 38 Ammon O. Der ursprung der homosexualitat und die deszendenzlehre. *Archiv fur Rassen-und Gesellschaftsbiologie* 1909;6:649–78.
 - 39 Murphy TF. Brief history of a recurring nightmare. *The Gay & Lesbian Review* 2008;15:17–20
 - 40 King M, Bartlett A. British psychiatry and homosexuality. *Br J Psychiatry* 1999;175:106–13.
 - 41 Spitzer RL. Can some gay men and lesbians change their sexual orientation? 200 participants reporting a change from homosexual to heterosexual orientation. *Ach Sex Behav* 2003;32:403–17.
 - 42 American Psychological Association APA-ONLINE answers to your questions: For a better understanding of sexual orientation & homosexuality. Available at: <http://www.apa.org/topics/orientation.html> (accessed February 19, 2008).
 - 43 Friend RA. Undoing heterosexism and homophobia; moving from “talking to talk” to “walking the talk.” *J Sex Educ Ther* 1998;23:94–104.
 - 44 Hawkins RO. Educating sexuality professionals to work with homoerotic and amberotic people in counselling and therapy; a voice form the trenches. *J Sex Educ Ther* 1998;23:48–54.

- 45 Ussher JM. Family and couples therapy with gay and lesbian clients; acknowledging the forgotten minority. *J Fam Ther* 1991;13:131–48.
- 46 Means-Christensen AJ, Snyder DK, Negy C. Assessing non-traditional couples; validity of the marital satisfaction inventory—Revised with gay, lesbian and cohabiting heterosexual couples. *J Marital Fam Ther* 2003;29:69–83.
- 47 Cochran SD, Mays M. Relation between psychiatric syndromes and behaviorally defined sexual orientation in a sample of the US population. *Am J Epidemiol* 2000;151:516–23.
- 48 MacCoby EE. Gender and relationships. *Am Psychol* 1990;45:513–20.
- 49 Masters WH, Johnson VE. Homosexuality in perspective. Boston: Little Brown and Company; 1979.
- 50 McWhirter DP, Mattison AM. Treatment of sexual dysfunction in homosexual male couples. In: Lieblum SR, Pervin LA, eds. *Principles and practice of sex therapy*. New York: The Guilford Press; 1980.
- 51 Nichols M. Therapy with sexual minorities. In: Lieblum SR, Rosen RR, eds. *Principles and practice of sex therapy*. 3rd edition. New York: The Guilford Press; 2000.
- 52 Rosser BR, Metz ME, Bockting WO, Buroker T. Sexual difficulties, concerns, and satisfaction in homosexual men: An empirical study with implications for HIV prevention. *J Sex Marital Ther* 1997; 23:61–73.
- 53 Lallemand F, Salhi Y, Linard F, Giami A, Rozenbaum W. Sexual dysfunction in 156 ambulatory HIV-infected men receiving highly active antiretroviral therapy combinations with and without protease inhibitors. *J Acquir Immune Defic Syndr* 2002;30:187–90.