Appendix 1 – LGBT Literature review

Sexual health of the lesbian, gay, bisexual and trans population: A review of the literature

A search of peer reviewed research, published since 2000 was conducted. Over 800 papers were extracted and searched to find relevant studies. The vast majority (approx. 80%) related to men who have sex with men with few papers relating to women who have sex with women or trans people. Grey literature was also searched and included where relevant.

Notes on terminology: the terms MSM (men who have sex with men) and WSW (women who have sex with women) have been used throughout this literature review. The terms gay, lesbian and bisexual are labels people apply to themselves and do not always describe sexual identity or behaviour. See box 1 for more information.

1. Sexual health of men who have sex with men

1.1 Rates of STI/HIV diagnoses

STI rates in the UK are highest in young heterosexuals and MSM. In England in 2012 STI diagnoses in MSM continued to rise, although to a lesser extent than reported in 2011. Among male GUM clinic attendees, 79% of syphilis diagnoses, 58% of gonorrhoea diagnoses, 17% of chlamydia diagnoses, 11% of genital herpes diagnoses and 9% of genital warts diagnoses were among MSM (PHE, 2013a). The outbreaks of Lymphogranuloma venereum (LGV), Shigella flexneri and Shigella sonnei and continued increases in new diagnoses of HIV strongly suggest that ongoing high levels of unsafe sex is leading to more STI transmission in this population. Increases in strains of antimicrobial resistant gonorrhoea is of particularly concern. However increases in diagnoses among MSM have also been affected by factors including changes in testing and swabbing procedures and improvements in recording of sexual orientation (PHE, 2013a).

MSM remain the group most affected by HIV with 47 per 1,000 living with the infection. This is equivalent to an estimated 41,000 (37,300–46,000) MSM living with HIV in 2012, of whom 7,300 (18%; 3,700-12,300) were unaware of their infection (18%). In the last decade, an estimated 2,400 (1,600-4,100) MSM per year acquired HIV. New diagnoses among MSM continued to rise and reached an all-time high of 3,250 in 2012. This reflects both on-going high levels of HIV transmission and an increase in HIV testing (PHE, 2013b).

A study by Birrell and colleagues (Birrell et al., 2013) used complex statistical methods to analyse national HIV surveillance data from England and Wales and examine trends in HIV incidence among MSM 2001-2010. They found a 3.7 fold expansion in HIV testing in MSM was mirrored by a decline in the estimated mean time-to-diagnosis. However, neither HIV incidence (2300–2500 annual infections) nor the number of undiagnosed HIV infections (7370 in 2001, and 7690 in 2010) changed throughout the decade. This was despite an increase in antiretroviral uptake from 69% in 2001 to 80% in 2010.

Of the 91 individuals resident in Warrington who access treatment and care for HIV in 2012, 45 (49%) were MSM. However the majority of new cases in that year were MSM, of the 12 new cases of HIV in Warrington residents in 2012, 10 acquired their infection through sex between men (Harris et al., 2013).

1.2 STI/HIV screening behaviour in MSM

BHIVA (2008) and NICE (2011) guidelines recommended the expansion of HIV testing in areas with a high prevalence of diagnosed HIV infection (> 2 per 1000), including the routine universal offer of HIV testing for
general medical admissions and new registrants in general practice, as well as the expansion of targeted outreach testing in community settings. However Warrington has an HIV prevalence lower than this threshold (Harris et al, 2013) so at this stage it is not necessary for testing to be increased in community settings.

There have been encouraging changes in HIV testing behaviour by MSM. A study by Flowers et al (2013) presented survey data collected from MSM without an HIV diagnosis in commercial gay venues across Scotland in 2000 and again in 2010. They report increases in HIV testing in MSM; among those sampled in 2000, 27% had been tested in the previous 12 months and 50% had never been tested. However, among those sampled in 2010, 57% had been tested in the previous 12 months, and 20% had never been tested. Respondents in 2010 reported greater perceived benefit and stronger testing norms however no changes were seen in measures of fear of a positive test result, clinic-related barriers and attitudes to sex with HIV-positive partners. Those who had never been tested were distinguished from those who had tested recently by greater fear of a positive HIV test result, by a weaker perceived norm for HIV testing, by more negative attitudes to sex with HIV-positive partners, and by weaker perceptions of the benefits of testing (Flowers, Knussen, Li, & McDaid, 2013).

The study by Birrell and colleagues (Birrell et al., 2013) that showed no reduction in HIV incidence in MSM from 2001 to 2010 concluded that although the evidence shows the benefit of treatment as prevention, the increased rates of testing and widened access to treatment have not controlled HIV transmission in MSM in England and Wales. They suggest the plausible explanation for lack of any sustained decline in incidence during this period is due to a resurgence in unsafe sexual behaviour (largely because of treatment optimism), and MSM not having HIV tests as frequently as needed. (Flowers et al., 2013)

A study in gay bars in Glasgow aimed to investigate HIV testing behaviour in the local MSM population. Around 57% (n = 391) had tested for HIV within the previous year, 23% (n = 155) had tested over one year previously and 20% (n = 137) had never tested. Those who had never tested and those who had tested over one year ago had had greater fear of a positive-HIV test result, a weaker norm for HIV testing, and were more likely to have had no anal sex partners at all within the previous year. Reported UAI did not vary among the HIV testing groups and testing was lower amongst older men. The authors suggest the results highlight the need to promote HIV testing in those over 45 years, those with high fear of testing, and those whose sexual behaviour puts them at risk. They recommend interventions to increase HIV testing should promote positive norms and challenge the fear of a positive result (Knussen, Flowers, & McDaid, 2014).

National guidance recommends targeted behavioural interventions and frequent HIV testing for men who have sex with men (MSM), however although testing is high in sexual health clinic attendees brief interventions are not always offered or taken up. In a case notes review of almost 600 notes of MSM attending 15 clinics in the UK HIV testing was high (92% one or more HIV test in last year). Brief interventions including safer sex advice, were offered to and accepted by 42% men. A low proportion of all MSM (21%) had a structured one-to-one brief intervention as recommended by national guidance. The authors conclude that reasons for not offering behavioural interventions to higher risk MSM, whether due to patient choice, a lack of staff training or resource shortage, need to be investigated and addressed (Desai et al., 2013).

1.3 STI/HIV prevention and sexual health promotion interventions for MSM

Table 1 summarises interventions that have been shown to have a positive impact on the sexual health of MSM through increasing screening, reducing risk-taking behaviour or improving knowledge. We have only included peer reviewed studies that found significant improvements or where some positive impact has been seen, even if only in the short-term. Interventions aimed specially at HIV positive MSM have been excluded, however interventions aimed at all MSM (which may include some who are HIV positive) are included. We have included studies published since 2000 and where interventions have taken place in the UK, Western Europe, North America and Australia/New Zealand. There has been much research in the last
five years focusing on MSM in China, however we have not included these studies due to the dramatic differences in culture, demographics and healthcare systems.

**Table 1. Effective interventions to improve the sexual health of MSM**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Intervention</th>
<th>Effectiveness</th>
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<tbody>
<tr>
<td><strong>Type of test/testing protocol</strong></td>
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<tr>
<td>Galvan et al, 2006</td>
<td>USA</td>
<td>HIV tests bundled with other tests (for other STI, alcohol and drug dependence and depression) offered in bars.</td>
<td>Comparison: HIV tests alone No significant difference in uptake between the two groups. However, there were some promising but non-significant trends among high-risk subgroups towards greater acceptance of the packaged tests compared with the HIV test alone.</td>
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<tr>
<td>Lorente et al, 2013</td>
<td>France</td>
<td>Comparison of HIV testing options:</td>
<td>Percentages of inconsistent condom use were similar in both offers. Those tested in the community venue had only one or no test in the previous two years, had a lower intentional avoidance score, and met more casual partners in saunas and backrooms than those tested in standard settings. The community rapid tests attracted MSM who exposed themselves more HIV-associated risks.</td>
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<tr>
<td>Spielberg et al, 2000</td>
<td>USA</td>
<td>Two types of HIV tests for home testing: (1) dried blood spot home collection, 3 cycles, bimonthly. (2) oral fluid home collection, 3 cycles, bimonthly.</td>
<td>High levels of adherence to both types of test.</td>
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<tr>
<td>Spielberg et al, 2005</td>
<td>USA</td>
<td>Four testing protocols offered in gay bathhouses. (1) Traditional serum testing and a return visit to receive results, with standard face-to-face counselling before testing; (2) rapid serum testing with same-day test results and single-session counselling; (3) oral fluid testing with standard counselling; (4) traditional serum testing with the choice of pre-test written materials or standard counselling.</td>
<td>Oral fluid testing and rapid blood testing at both outreach venues resulted in significantly more people receiving test results compared with traditional HIV testing. Making counselling optional increased testing at the needle exchange but not at the bathhouses.</td>
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<tr>
<td><strong>Peer education/recruitment and community settings</strong></td>
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<tr>
<td>Amirkhanian et al, 2005</td>
<td>Russia &amp; Bulgaria</td>
<td>Standard individual HIV risk-reduction educational counselling (20 min) + HIV prevention advice to young MSM, by trained network leaders. Participants reported mean of 6.1 conversations about AIDS and 8 about safer sex.</td>
<td>Young MSM participating in intervention were significantly less likely to report engaging in UAI than MSM in the control group at short-term follow up. Not found at 12 month follow up</td>
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<tr>
<td>Flowers et al, 2002</td>
<td>Scotland</td>
<td>Risk-reduction education in bars delivered by peer educators over 9 months. Peer educators received 2 days of training and support throughout the intervention. Training involved communication skills, role play and message delivery. Comparison: no</td>
<td>Significant differences in sexual health behaviours were observed across locations and across time, but the only significant intervention effects were amongst men who had direct contact with the intervention, with higher uptake of hepatitis B vaccination and</td>
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<tr>
<td>Year</td>
<td>Country</td>
<td>Study Description</td>
<td>Interventions</td>
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<td>2004</td>
<td>England</td>
<td>Course about sadomasochistic sex. Four group sessions of 7h (total 28h), by volunteers at community-based, volunteer-led organisation.</td>
<td>HIV testing. The intervention did not produce community-wide changes in sexual health behaviours.</td>
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<td>2009</td>
<td>USA</td>
<td>Intensive 3-day residential risk-reduction intervention led by trained black MSM peers. The intervention was conducted in a small group and focused on relationships, HIV risk, behaviour change, racism and homophobia. Comparison: waiting list.</td>
<td>A small but significant improvement in HIV testing rates among participants at the 6-month follow-up.</td>
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<tr>
<td>2002</td>
<td>England</td>
<td>Educational video (viewed online) designed to promote critical thinking about HIV risk.</td>
<td>Significant increase in HIV testing at the 3-month follow-up (and a substantial number of new diagnoses were made as a result). This finding is promising, although as the study is non-comparative, it does not permit strong conclusions to be drawn,</td>
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<tr>
<td>2002</td>
<td>England</td>
<td>Print media promoting testing at a specific venue, distributed regularly to gay venues by community outreach teams.</td>
<td>Substantial increase in HIV tests conducted in the targeted clinic. However, there are flaws in the design of the study and overall, the evidence for media campaigns must be regarded as inconclusive.</td>
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<tr>
<td>2012</td>
<td>USA</td>
<td>SMS intervention to reduce methamphetamine use and high-risk sexual behaviours among out-of-treatment MSM. Two-week intervention of social support and health education text messages transmitted in real-time.</td>
<td>At follow up participants reported reductions of unprotected anal intercourse with HIV-positive partners and with HIV-negative partners, participants reported fewer insertive and receptive episodes and reduced use of methamphetamine. However there was no control group so flaws in the design.</td>
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<tr>
<td>2011</td>
<td>Australia</td>
<td>SMS reminders were sent from the GUM clinic to MSM who have been screened and provided mobile number. Messages sent 9 months after original screening.</td>
<td>Intervention showed twice as many MSM in intervention group had been re-tested at 9 months compared to control groups. A single simple text message to MSM who have already accessed services can encourage regular screening.</td>
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<tr>
<td>2009 and 2011</td>
<td>Netherlands</td>
<td>Opt-out HIV testing policy in STI clinic.</td>
<td>Substantial increases in HIV tests among MSM after the introduction of the opt-out policy. A finding of concern in both these studies was that certain groups,</td>
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**Media and web based**

**STI clinics service delivery**
2. Sexual health of women who have sex with women

Due to the historical context of HIV in the MSM community, most research into the sexual health of LGBT people focuses on MSM. There is a dearth of evidence on the sexual health of women who have sex with women (WSW), especially compared to the needs of MSM and heterosexual women. Less than 10% of the papers we extracted related to WSW. However WSW are at risk of sexual ill-health, STI infection and experience barriers to accessing sexual health care. What studies exist are often observational and there are very few studies involving robust methods such as randomised controlled trials or cohort studies. Therefore this section about WSW includes more general discussion around the issues.

2.1 Rates of STI/HIV diagnoses

Public Health England recently started including figures on the number of women who have sex with women (WSW) who present at GUM. However these figures only represent women who had recently had exclusively female partners, and who disclosed this information to the clinic staff and this data is not collected by all clinics. Figures from 2012 reveal that 34,259 women who have sex with women attended a GUM or sexual health clinic in England and Wales in 2012. Of these, 13,486 (nearly 40%) received a diagnosis compared to 18.5% of women who have sex with men who received a diagnosis (LGF, 2014). This high diagnosis rate may indicate that WSW are more likely to attend GUM service only when they are symptomatic.

In a study of women attending a WSW sexual health clinic in London (Bailey, Farquhar, Owen, & Whittaker, 2003) 32% were diagnosed with bacterial vaginosis (BV) and 18% with candida. BV prevalence has also been shown to be higher in non-clinical settings in the UK; WSW recruited through community groups had higher prevalence of BV (26%) compared to heterosexual women recruited through a family planning clinic (14%) (Evans, Scally, Wellard, & Wilson, 2007). Diagnoses of BV have been shown to be more common in WSW (8%) attending a sexual health clinic in Australia compared to controls (women who only had sex with men; 5%) and genital herpes and genital warts rates were similar to controls (Fethers, Marks, Mindel, & Estcourt, 2000).

2.2 Sexual behaviour of WSW

There is some evidence on sexual behaviour of women who have sex with women. A large survey of 3,116 women from USA, UK, Canada or Australia who engaged in at least one sexual act with a woman in the previous year found WSW engaged in a variety of sexual practices that could transmit STIs; the majority of women reported genital rubbing (100%), vaginal fingering (99%), genital scissoring (91%), oral sex (99%) and vibrator use (74%). STI transmission is particularly likely in genital to genital contact (scissoring) and sharing sex toys. Less than a quarter of participants reported using barrier protection (Schick, Rosenberger, Herbenick, & Reece, 2012). Discussions around risks of transmission of STIs within these activities are mainly speculative as few studies which have explored STI rates in WSW have gathered precise information about sexual activities (McNair, 2005).

Many WSW also have sex with men which could have implications for STI/HIV risk and just because a woman will identify as a lesbian does not mean she does not also have sex with men. In a study in a sexual health clinic for WSW in London, 85% of women who identified as ‘lesbian’ reported at least one male sexual
partner in the past and of these women, only 23% report always using a condom with a male partner (Bailey et al., 2003). However, this study found no association between diagnosis of an STI and history of sex with men. As it cannot be presumed that a women who identifies as lesbian is not also engaging in sex with men, health professionals need to remember these women may be at the same risk as their heterosexual counterparts of acquiring HIV and STIs from men or becoming pregnant.

Barrier protection for women (dental dams) are not easily available (Stonewall, 2008) and the vast majority of WSW who report oral sex with a female partner have never used a dental dam (Bailey et al., 2003). Barrier methods are least prevalent during digital genital stimulation (11% ever used) and most prevalent during stimulation with a sex toy (34%) (Rowen et al., 2013). WSW also report inaccurate knowledge about the efficacy, appropriateness and availability of barrier methods for sex with other women (Muzny, Harbison, Pembleton, Hook, & Austin, 2013)

2.3 Accessing sexual health care

A large survey (over 6,000 respondents) of WSW in the UK (Stonewall, 2008) found that over half of respondents had never had a sexual health check and of those that had tested for STIs half of these had been diagnosed with an STI. Three quarters of those who have not been tested “don’t think I’m at risk” and one in ten were “too scared” to get tested. Worryingly 4% had been told by healthcare workers that they did not need a test (Stonewall, 2008).

WSW in the UK have a worse experience and access to sexual health services than MSM; 56% of WSW did not know where their local NHS sexual health clinic was compared to 23% of MSM and 46% of WSW felt being lesbian/gay meant they had less access to sexual health services, compared to 17% of MSM. On top of this, a high proportion of WSW (59%) report they find it difficult to find sexual health information that is relevant to them, compared to 16% of MSM (Sigma, 2000).

Low screening access may be due to WSW’s belief that they are not at risk of STIs as health materials rarely include WSW and health professionals are often unable to give advice specific to the needs of WSW (Fish & Bewley, 2010). There is very little health promotion specifically aimed at WSW and health professionals need better knowledge of the sexual health needs of WSW.

There has been a long history of viewing sex between women (and without men) as not ‘real sex’ (Formby, 2011). The language used by sexual health services and in sexual health promotion can also exclude lesbians. The term ‘sexual intercourse’ generally applies to genital penetrative sex and is usually regarded by WSW as relating to heterosexual sex. This term is best avoided when referring to sex between women (McNair, 2005). Heteronormative understandings of sex (and hence lesbian invisibility) dominate sexual health information and provision; this can also impact on women meaning they have assumptions about low risk and their subsequent sexual practices (Formby, 2011).

Qualitative data gathered during the largest UK survey of lesbian health (this survey led to the report Prescription for Change, Stonewall, 2008) also looked at experience of general healthcare by WSW. They found a number of barriers for lesbian and bisexual women accessing healthcare:

- The heteronormativity of the healthcare environment meant that lesbian and bisexual women were often invisible in clinical settings and they felt that the health service was set up to meet the needs of heterosexual women.
- A lack of accurate knowledge, or inaccurate medical information being given by a health professional was reported by some women.
- Being forced to ‘come out’ in uncomfortable situations (ie during examinations by a gynecologist) was found to be extremely distressing for some women.
- Women reported that often health professionals ignored the topic of their sexual orientation even after disclosure and they had to tell the same health professional more than once. This made them feel embarrassed and frustrated.
• The role of female partners were often ignored by health professionals (Fish & Bewley, 2010).

2.4 STI prevention and sexual health promotion interventions aimed at WSW
We found no peer reviewed studies of interventions that have been shown to have a positive impact on the sexual health of WSW. We searched for studies published since 2000 and where interventions have taken place in the UK, Western Europe, North America and Australia/New Zealand. We excluded studies aimed at increasing only cervical screening.

This dearth of evidence about interventions aimed at WSW, especially compared to interventions aimed at MSM and heterosexual women, is important in context of the STI rates in WSW discussed earlier.

3. Trans population
Of the over 800 peer reviewed journal articles we extracted less than 10% related to the sexual health of people who are trans. Much of the research about trans health focuses on HIV/STI risk and treatment in trans sex workers, especially in Thailand and India. There is a dearth of evidence on the sexual health of trans people in the UK or other high income countries.

In this review we will use the umbrella term ‘trans’ to refer to all individuals whose gender identity and/or gender expression differs from their birth sex.

“The terms ‘trans people’ and ‘transgender people’ are both often used as umbrella terms for people whose gender identity and/or gender expression differs from their birth sex, including transsexual people (those who intend to undergo, are undergoing or have undergone a process of gender reassignment to live permanently in their acquired gender), transvestite/cross-dressing people (those who wear clothing traditionally associated with the other gender either occasionally or more regularly), androgyne/polygender people (those who have non-binary gender identities and do not identify as male or female), and others who define as gender variant.”(Howarth & Mitchell, 2009)

3.1 Rates of STI/HIV diagnoses
Gender identity is not collected in national STI or HIV surveillance systems. Data recording procedures may complicate the way we understand HIV rates amongst people who are trans. For example a male-to-female transsexual who acquired HIV before transitioning may have a route of infection (MSM) that is not consistent with their recorded gender. A systematic review and meta-analysis published in 2013 reviewed 39 studies in 15 countries that explored infection burdens in transgender women (there was no data available for the UK). They found pooled HIV prevalence was 19% and was higher in high-income countries (22%). Across all 15 countries the chance of being infected with HIV was almost 50 times higher in transgender women compared with all adults of reproductive age and did not differ for those in low-income and middle-income countries compared with those in high-income countries (Baral et al., 2013). Therefore we can expect HIV prevalence to be higher in transgender women in the UK than in the general population.

3.2 Sexual health needs
There is little evidence on the sexual health needs or experiences of trans people in the UK. The little evidence there is on the health needs of trans people focuses on general health and wellbeing including mental health (Haas 2010, Shipherd et al, 2010), hate crime (Mitchell et al, 2009), experience of discrimination (Haas 2010, Whittle 2007), employment and housing (Reynolds and Dobson 2011) and gender reassignment surgery. Most research is qualitative and includes very small sample sizes.
Most research has included participants seeking gender reassignment surgery, mainly male to female transsexuals; therefore the sample is not representative and only includes those who choose to access services/go for gender reassignment.

Trans people can face problems accessing healthcare. In one UK study twenty nine per cent of trans people thought being trans adversely affected the way they were treated by healthcare professionals (Whittle 2007). GP practices need to keep accurate records of people’s gender to appropriately invite them for screening (i.e. cervical or prostate). Practice computer systems often cannot deal with this issue so people can be either never invited or repeatedly invited for inappropriate tests.

3.3 STI prevention and sexual health promotion interventions aimed at trans people
We found no peer reviewed studies of interventions that have been shown to have a positive impact on the sexual health of trans people. We searched for studies published since 2000 and where interventions have taken place in the UK, Western Europe, North America and Australia/New Zealand. Some studies have been published looking at interventions in Thailand and India but these were mainly aimed at sex workers so have been excluded. All of the interventions described in table 1 were aimed at men who have sex with men and either do not include any trans people or do not specify whether their definition of MSM could include trans people.

Like MSM, trans women experience persistent stigma and discrimination that increases their risk for HIV infection. Addressing HIV among transgender women requires culturally competent and effective HIV prevention campaigns (Cahill, Valadez, & Ibarrola, 2013).

There is currently a large randomised control study, funded by National Institutes of Health, being conducted in Boston and Chicago testing the impact of the LifeSkills programme. The programme aims to empower young trans women by helping them to “gain more knowledge about HIV and build the life skills needed to reduce HIV risk behavior and stop the spread of the virus. The program is led by trans women in Boston and Chicago and also includes HIV and sexually transmitted infection (STI) testing and counseling and assessment visits 4 times over a year-long period.” The results will not be available for at least a year but more information can be found here: www.projectlifeskills.org/project
4. Sexual health of young LGBT people

Research about young LGBT people is mainly focused on mental health (Stonewall 2008, Morrison & L’Heureux, 2001), coming out and discrimination (Perrin 2002, DH 2007). Much research about young people and sexual health does not separate young people of different sexual orientations and what research there is focuses on MSM. Condoms have been found to be inconsistent in young MSM and a lot of young MSM report sex with older men (Zou et al., 2014). Changes in technology have had an impact on sexual behaviour, and have led to more young MSM meeting their first sexual partners over the internet. A UK study published in 2007 (Bolding, Davis, Hart, Sherr, & Elford, 2007) found that between 1993-2002, there was a significant increase in the percentage of MSM who met their first male sexual partner through the Internet (2.6-61.0%) and a corresponding decrease in the percentage of men who met their first sexual partner at a gay venue and school. This study was conducted before the pervasiveness of social networking sites such as Facebook and apps such as Grindr (which has 1.4 million weekly active users worldwide).

4.1 Improving sexual health of young LGBT people

Peer influence and media greatly affects young people’s perceptions of norms (Potard, Courtois, & Rusch, 2008; Sieving, Eisenberg, Pettingell, & Skay, 2006). A study of youth media found that although sexual health was positively portrayed and aimed at encouraging discussions around consent and whether young couples were ready for a sexual relationship, there was a lack of positive images of lesbian and gay teenagers (Batchelor, Kitzinger, & Burtney, 2004). The intervention described in table 1 aimed at influencing peer groups of young MSM in Russia and Bulgaria showed a reduction in unprotected anal intercourse in young men (Amirkhanian et al., 2005).

A recent study in the US tested the efficacy of a brief, novel, theory-driven, self-guided, home-based intervention designed to promote condom use among young men who have sex with men (Emetu et al., 2014). Emetu and colleagues found forty-five percent of young MSM reported a reduced frequency of unprotected anal intercourse compared with baseline, consistency of condom use improved, as did motivation to use condoms correctly, condom use self-efficacy, and condom attitudes. However this was only a pilot study with no control group so these finding must be interpreted with caution.

Social media apps such as Grindr may be an ideal place for providing health promotion messages as young men using such services are at high risk of sexual ill-health (Landovitz et al., 2013) and are open to sexual health promotion through this channel (Holloway et al., 2014).

5. Sexual health of older LGBT people

There has been little research into the health of older LGBT people in the UK and even less into the sexual health of this group. Older people in the UK are a major consumer of health and social care services, but despite the fact that a significant proportion of them will be LGBT, research into older LGBT people in the UK has been limited, possibly due to difficulties in identifying a sufficiently large sample (Warner et al 2003). Older people are less likely than younger people to be open about their sexual orientation with health professionals (DH 2007). Actual, or perceived, discrimination and homophobia from health professionals discourage older LGBT people from attending services or disclosing their sexual orientation to healthcare workers. Health is affected, both positively and negatively, by the wider context of relationships, friendships and social or community networks and being unable to be open about sexuality or relationships can have a negative impact (Glover 2006).

The proportion of HIV positive people in the UK over 50 is increasing as effective treatment has changed HIV from a life threatening disease to a treatable chronic condition (PHE, 2013b). Much of the focus of research in older LGBT people has focused on older MSM living with HIV (Owen & Catalan, 2012, Sherr et al., 2009) and very little on improving the sexual health of the general older LGBT population. Some research in community venues in Scotland shows that HIV testing behavior is lower in older men (Knussen et al., 2014).
6. Holistic Sexual Health

The World Health Organisation definition of sexual health takes a holistic approach that includes physical, mental and social wellbeing and acknowledges the importance of pleasurable and safe sexual experiences (Glasier, Gulmezoglu, Schmid, Moreno, & Van Look, 2006). Therefore, it must be remembered that sexual health for all people, including LGBT people, is not just the absence of STIs and HIV. Inability to express emotional intimacy in public due to fears of homophobic abuse has been found to be a common obstacle in sexual health for LGB people (Sigma, 2000). It needs to be remembered that it is sexual behaviour, not purely sexual identity that is associated with increased risk of sexual ill-health. Other findings about sexual activities of LGBT people need to be addressed; twenty seven percent of MSM have regretted the sex they have had and 27% have agreed to sex they did not want. Eleven percent of MSM have been forced to have sex when they did not want to in the last year (Sigma 2000). This alarmingly high figure suggests a need for support and psychological services for those men who have been assaulted.
References


Appendix 2 - BME literature review

The sexual health of Black Minority Ethnic people

Black Minority Ethnic (BME) populations in the UK experience a disproportionate level of poor sexual health (Fenton, 2001). This includes higher rates of sexually transmitted infections (STIs), HIV and teenage pregnancy amongst certain groups and these varying experiences are influenced by a number of factors including socio-economic circumstances; experiences of disadvantage and discrimination; and, cultural perceptions and behaviours (Fenton, 2001, HPA, 2009). In addition, BME communities in the UK may also experience religious, political, linguistic, educational and cultural barriers which limit their access to health services (Weston, 2003).

The “Healthy People, Healthy Lives” white paper outlined The Government’s commitment to addressing health inequalities by “reaching across” to address the causes of poor health and wellbeing and “reaching out” to individuals and families most in need of support. This combines a rigorous professional and evidence based approach to health with a responsive system that is owned by communities and shaped by their needs (DH, 2010). The Framework for Sexual Health Improvement in England acknowledges that sexual health needs vary according to numerous factors such as gender, sexuality, age and ethnicity and that some groups are particularly at risk of poor sexual health. A specific ambition of the framework is to ensure that the needs of more vulnerable groups including young people, gay and bisexual men, people with learning disabilities and some black and minority ethnic groups are met. The Framework recommends that the needs of BME who are at high risk of STI and HIV acquisition and unwanted pregnancy should be targeted in service provision and planned for within Joint Health and Wellbeing Strategies (DH, 2013).

Sexual Health of BME Groups

Nationally, rates of STIs vary across ethnic groups, with the highest prevalence seen amongst those of black African and Caribbean ethnicity. In 2012, the rate of STI diagnosis in adults of black ethnicity was over four times higher than the rate among adults of white ethnicity, with 34,880 STI diagnoses representing 8% of the national total (PHE, 2013a). In addition, black African men and women continue to be disproportionately affected by HIV. In 2012, HIV prevalence was 26 per 1,000 black African men and 51 per 1,000 black African women compared to an overall national prevalence of 1.5 per 1,000 adult population (PHE, 2013b).

There is limited data on the number of teenage pregnancies and abortions among young BME women nationally. However, data suggests that young people of Bangladeshi, Pakistani and Black Caribbean ethnicity are disproportionately represented among teenage pregnancies (NICE, 2006). Data from the teenage pregnancy unit suggests that these pregnancies are more likely to occur in areas of high deprivation and between 25-35% will result in termination. A qualitative study of Bangladeshi, Indian and Jamaican mothers found that young women felt Sex and Relationship Education (SRE) and sexual health services were not sufficient for their needs and did not acknowledge the impact of cultural and religious factors on sexual behaviour. Young women with greater confidence and higher educational and career aspirations were more likely to delay pregnancy; suggesting that improving the sexual health of these young women must also consider addressing the wider causes of inequality such as education and employment opportunities (French et al, 2005).
Sexual risk taking and service use

Studies suggest that young men from Black African and Caribbean communities display higher levels of risky sexual behaviour; including having multiple sexual partners, an earlier sexual debut, and lower condom use at last sexual encounter (Jayakody et al, 2010; Simkhada et al, 2006; Fenton et al, 2005; Coleman, 2006; Ross et al, 2003). Higher levels of risk behaviour is also reported in black men who have sex with men (MSM) with men more likely to report female partners and unprotected anal intercourse with a casual partner in the past three months (Soni et al, 2008). Data from the National Survey of Sexual Attitudes and Lifestyles report that single black African and black Caribbean women report lower levels of contraception use compared to women of white ethnicity and women from all BME groups are more likely to be using barrier methods than hormonal or long acting methods (Saxena et al, 2006). Higher levels of risk behaviour are also reported among those of black ethnicity living with HIV; with both men and women reporting higher numbers of lifetime partners compared to national survey data, and men reporting increased numbers of partners in the past twelve months and a higher rate of partner change (Gerver et al, 2008).

A qualitative study of BME youth in three London boroughs suggests that risk behaviours are often influenced by gendered codes of meeting and flirting, with peer pressure playing a role in sexual activity and young women more likely to be influenced by religious considerations than young men (Sinha et al, 2007). Studies also suggest that there are gaps in knowledge of sexually transmitted infections and services (Connell, 2004). One study of BME youths in Bradford reports that two thirds of participants were aware of sexual health services and only one third had accessed them (Samangaya, 2007) while a London based study reported gaps in knowledge of STI symptoms, with women reporting higher knowledge than men (Coleman and Testa, 2008). Conversely, a study of five GUM clinics shows that black African and Caribbean men were the least likely to delay accessing care when symptomatic and black Caribbean men were less likely to access their GP before seeking GUM care (Gerruessu et al, 2012).

Studies amongst South Asian communities suggest lower levels of risk taking behaviour with fewer reported sexual partnerships, later sexual debut and lower STI prevalence (Fenton et al, 2005; Griffiths et al, 2009). Studies show that individuals from South Asian backgrounds are more likely to marry at an early age and have their sexual debut within marriage (Simkhada et al, 2006, Griffiths et al, 2009) with individuals from Indian and Pakistani communities more likely to consider religion very important and hold more conservative attitudes towards sex and marriage (Griffiths et al, 2009). Data from NASTAL show that sexually active married Pakistani and Indian women report the lowest level of contraception use nationally and lower use of hormonal or long acting methods (Saxena et al, 2006). Studies also indicate that young people from South Asian backgrounds are less likely to discuss sexual relationships with their parents with SRE in schools often the main source of information (Griffiths et al 2009, Coleman, 2006). Whilst research suggests numbers of young people who are unmarried but sexually active are lower among South Asian communities; this group have been shown to have distinct sexual health needs with young men reporting multiple sexual partners, poor condom use and evidence of anal sex as a means of contraception among men and women (Griffiths et al, 2008).

The evidence suggests that sexual health services need to be sensitive to the conflicting views of South Asian young people; balancing the traditional cultural values held by their parents and community with the norms of wider society (Griffiths et al, 2008). A questionnaire study found that South Asians were more likely to attend GUM clinics due to signposting from other services and South Asian women reported that they were more likely to delay their attendance to GUM if their symptoms were resolved (Dhar et al, 2010). South
Asian women also display mixed attitudes to screening, with procedures conflicting with cultural and religious norms of monogamy and fidelity (Macaffery et al, 2003). A qualitative study of Bangladeshi men identified four main barriers to accessing services; namely the relevance of the service to the community, difficulties discussing sexual health problems, confidentiality concerns, and problems with previous experiences of health promotion (Beck, 2005). Existing sexual health services were felt to be culturally insensitive by both community groups and patients with community values regarding sex outside marriage were an important underlying factor (Beck, 2005). There is very little published research on South Asian MSM in the UK, however a study involving a national sample of MSM attending GUM clinics found that South Asian MSM were more likely to report anxiety attending the clinic, feel uncomfortable in the waiting area, express concerns about being overheard and be afraid that people in their community would find out that they had sex with men (McKeowen et al, 2012).

Very little has been published on sexual attitudes among Chinese communities living in Western Countries. However, a systematic review by Yu (2009) suggests that Chinese youth show poorer sexual health knowledge than white youth in their country of residence; are more likely to disapprove of uncommitted sex, have a later sexual debut and fewer sexual partners. The author emphasises the importance of culturally aware services and education which takes account of varying sexual values and behaviours.

The sexual health youth charity Brook, has produced the following recommendations for BME sexual health services, based on a project with BME youth to identifying the barriers and drivers to accessing sexual health service access (Brook, 2010). Brook recommend sexual health services for BME youth should:

1) Avoid simplistic segregation of BME audiences
2) Ensure sexual health services are confidential
3) Incorporate cultural differences into sexual health promotion
4) Educate parents and carers on how to talk to young people about sexual health
5) Use other services to promote sexual health to young people
6) Promote sexual health messages via the internet and on social networking sites
7) Recruit peer-to-peer advisors to promote sexual health messages
8) Use schools as a platform to discuss sexual health service issues and normalise services
9) Show the benefits of visiting a sexual health service
10) Choose less obvious outlets to distribute advice and condoms to young people

Sexual Health Interventions with BME groups

Published sexual health interventions among BME groups are limited, with the majority of interventions being US based. Interventions tend to fall into two categories; HIV prevention and interventions aimed at BME youth with the majority of youth interventions also having HIV prevention as one of their primary aims. A summary of some of the available evidence is included below; this is limited to peer reviewed interventions published since 2000. Only interventions which demonstrated positive outcomes have been included.
<table>
<thead>
<tr>
<th>Reference</th>
<th>Country</th>
<th>Intervention</th>
<th>Effectiveness</th>
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<tr>
<td><strong>BME Youth</strong></td>
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<td>No data provided on the impact on pregnancy prevention but text message service was successful in recruiting at risk BME youth with a higher proportion of teenagers of a younger age, with an earlier sexual debut and concurrent sexual partners. Focus groups post intervention reported positive attitudes to the text messaging intervention.</td>
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<tr>
<td>Devine et al 2013</td>
<td>US</td>
<td>Recruitment of 96 BME teens to the existing Teenage Outreach Programme (TOP); (evidence based teenage pregnancy programme which combines weekly community development programme and community service) with an additional motivational/ health promotion text messaging service.</td>
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<td>Kirby et al 2004</td>
<td>US</td>
<td>Twenty schools randomly assigned to receive either Safer Choices vs standard HIV prevention programme. Safer choices was a 2 year programme which involved: 1) Formation of School Health Promotion Council 2) 9th and 10th grade specialist ciriculum led by in-class peer leaders 3) Student led peer resource team producing materials, drama etc. 4) Parent education programme 5) School-community link programme</td>
<td>Programme did not significantly delay the onset of sexual intercourse among black African students but did delay among Hispanic students. In all groups the frequency of sex without a condom reduced with increased condom use in the past three months.</td>
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<tr>
<td>Dimmitt-Champion and Collins 2011</td>
<td>US</td>
<td>Mexican-and-African American adolescent women aged 14–18 years with a history of abuse or sexually transmitted infection seeking sexual health care. Randomization into either control or intervention groups was conducted. Intervention participants received workshop, support group and individual counselling sessions. Control participants received abuse and enhanced clinical counselling.</td>
<td>Lower levels of sexually transmitted infections in intervention group compared with control.</td>
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<tr>
<td>DiClemente et al 2010</td>
<td>US</td>
<td>Pregnant African American adolescents attending a prenatal clinic received 2 4hr group sessions on safer sex practices and self-worth. Control received healthy nutrition session</td>
<td>Intervention participants reported greater condom use at last intercourse and consistent condom use, higher sexual communication frequency, enhanced ethnic pride,</td>
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<tr>
<td>Study</td>
<td>Country</td>
<td>Description</td>
<td>Result</td>
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<td>O’Donnell et al 2010</td>
<td>US</td>
<td>Randomized trial to test the effectiveness of Saving Sex for Later, a parent education program presented on three audio CDs, enrolled 846 families with fifth- and sixth-grade students in seven New York City schools.</td>
<td>Higher self-efficacy to refuse risky sex, and were less likely to fear abandonment as a result of negotiating safer sex.</td>
</tr>
<tr>
<td>DiClemente et al 2004</td>
<td>US</td>
<td>Randomized controlled trial of 522 sexually experienced African American girls aged 14 to 18 years at 4 community health agencies. Participants completed a self-administered questionnaire and an interview, demonstrated condom application skills, and provided specimens for STD testing.</td>
<td>Increased condom use reported in the 30 days preceding six month follow-up at consistently at 12 month follow-up. Participants were more likely to have used condoms at last intercourse and less likely to have a new vaginal partner in the past 30 days.</td>
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<tr>
<td>Dolcini et al 2010</td>
<td>US</td>
<td>RCT of friendship based HIV/STI prevention delivered to youth and their friendship groups at 4 community centres in San Francisco.</td>
<td>The programme reported mixed results with Program evidencing decreases in risky sex in the oldest Group at three month follow up, decreases in multiple partners in the middle age group and increases in HIV testing in the youngest group.</td>
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**HIV Prevention**

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<tr>
<th>Study</th>
<th>Country</th>
<th>Description</th>
<th>Result</th>
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<tr>
<td>Kelly et al (2006)</td>
<td>Bulgaria</td>
<td>Two armed RCT of 286 Roma men in Bulgarian city. All participants completed sexual risk behaviour baseline. Network leaders educated to lead community on risk prevention</td>
<td>Reported prevalence of unprotected intercourse in the intervention group fell more than in control group. Effects were greatest among men with casual sexual partners. Effects remained at follow up</td>
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<td>Wingood et al 2011</td>
<td>US</td>
<td>242 Latina women recruited to AMIGAS 4 session culturally appropriate workshops delivered by Latina health workers</td>
<td>Over the 6-month follow-up, AMIGAS participants reported more consistent condom use during the past 90 days and at last sexual encounter and a higher mean condom use than did control participants. AMIGAS participants reported fewer traditional views of</td>
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Appendix 2 Page 6

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<thead>
<tr>
<th>Study</th>
<th>Country</th>
<th>Intervention Description</th>
<th>Results</th>
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<tr>
<td>Koniak-Griffin et al, 2003</td>
<td>US</td>
<td>HIV intervention programme for young Latina mothers four interactive 2hr sessions delivered to promote healthy sexual behaviour, responsibility for sexual actions and political impacts of HIV on inner city areas.</td>
<td>Intervention group saw significant improvements in AIDS knowledge, fewer sexual partners at six month follow-up and increased intention to use condoms.</td>
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<td>Calsyn et al, 2013</td>
<td>US</td>
<td>Pilot of a culturally aware version of an existing “Real Men are Safe” intervention programme for men in substance abuse treatment, involving five 90 minute intervention sessions,</td>
<td>Participants were more likely to attend 3 or more of the culturally adapted sessions than BME groups within the original intervention programme. Number of unprotected sexual episodes in the past 90 days declined.</td>
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</tbody>
</table>

References

Beck A et al (2005) “We don’t really have cause to discuss these things, they don’t affect us”: a collaborative model for developing culturally appropriate sexual health services with the Bangladeshi community of Tower Hamlets. *Sex Transm Infect* 81: 158-162


