

## GUIDELINE

## UK national guideline on safer sex advice

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**Summary:** This guideline provides evidence-based guidance on the content of safer sex advice and the provision of brief behaviour change interventions deliverable in genitourinary (GU) medicine clinics. Much of the advice is applicable to other healthcare settings including general practice and clinics providing HIV care. Advice on condom use and effectiveness, oral sex and other sexual practices, testing for sexually transmitted infections (STI) and partner reduction is provided. Advice specific to the transmission of HIV infection including seroadaptive behaviours and negotiated safety is also included. An accompanying review of the evidence supporting the guideline with a complete reference list is available online. A patient information leaflet based on the advice statements developed is also available through the BASHH website.

**Keywords:** sexually transmitted diseases, safe sex, risk reduction behaviour, condoms, HIV infections

## SCOPE AND PURPOSE

The objective of this document is to provide guidance for practitioners in Level 3 genitourinary (GU) medicine services (Tier 5 in Scotland) on safer sex advice provided in sexually transmitted infection (STI) and HIV management consultations. The guideline consists of:

- Recommendations on the format and delivery of brief behaviour change interventions deliverable in GU medicine clinics;
- Recommendations on the content of safer sex advice given to individuals at continued risk of STI;
- Additional advice to be provided for those living with HIV, or from groups with higher rates of HIV incidence.

Much of the guidance is applicable in other sexual health and general practice settings, including HIV care services. The evidence base for the recommendations is summarized in an accompanying online document. Issues relating to implementation of behaviour change interventions in clinics, such as designing service structures and care pathways or the competencies required in different multidisciplinary staff groups, will be addressed in British Psychological Society (BPS) Good Practice Guidelines.<sup>1</sup> Safer sex advice and individual behaviour change interventions provided within clinics are elements of a combination prevention approach to STIs and HIV<sup>2,3</sup> that may also include group and community-based behavioural

interventions, structural and social changes and for HIV, biomedical interventions including postexposure prophylaxis for HIV following sexual exposure (PEPSE), pre-exposure prophylaxis (PrEP)<sup>4</sup> and the early initiation of antiretroviral therapy (ART).

## IDENTIFYING CANDIDATES FOR SAFER SEX ADVICE AND OTHER PREVENTION INTERVENTIONS

No systematic reviews, meta-analyses or original studies describing methods to systematically target potential candidates for interventions were found. The selection of patients for advice and behavioural interventions should be based on demographic group and individual history taking to identify recognised risk factors.<sup>5,6</sup> Guidance on eliciting risk factors is detailed in the BPS guidelines.<sup>1</sup> Those at increased risk may include:

- Adolescents;<sup>5,7,8</sup>
- People from, or who have visited countries with, high rates of HIV and/or other STIs;<sup>5,8</sup>
- Men who have sex with men (MSM).<sup>8,9</sup>

Also individuals with a history of:

- Frequent partner change or sex with multiple concurrent partners;<sup>8,9</sup>
- Early onset sexual activity;<sup>8</sup>
- Previous bacterial STI;<sup>7,10</sup>
- Attendance as a contact of STI;<sup>6,11</sup>
- Alcohol or substance abuse (the use of recreational and stimulant drugs has been associated with HIV

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seroconversion in MSM,<sup>12,13</sup> although a history of intravenous drug use [IVDU] has been associated with a lower risk of acute STI<sup>9</sup>).

A range of other demographic and behavioural factors may be used to identify groups believed to be at risk of poor sexual health outcomes, although good evidence of elevated risk of STI compared with other populations in the UK is lacking; these include those with poor mental health,<sup>14</sup> prisoners,<sup>15</sup> sex industry workers<sup>16,17</sup> and their clients,<sup>18</sup> looked after and accommodated adolescents,<sup>19</sup> those with learning disability and those with sexual compulsion and addiction.<sup>20,21</sup>

### **Recommendation**

Sexual history taking should be structured to identify risk factors for sexual ill health, sexual practices and behaviours and opportunities for brief behaviour change interventions (Evidence level IV, C).

## **EVIDENCE FOR BEHAVIOUR CHANGE INTERVENTIONS**

There is high-level evidence that behaviour change interventions can increase condom use and reduce partner numbers.<sup>22-24</sup> There is also some endpoint evidence showing reduction in STI incidence<sup>25-27</sup> but there are significant methodological problems in evaluating outcomes in many populations.<sup>28</sup> There are cost-effectiveness data for interventions preventing HIV in MSM,<sup>24</sup> but limited cost-effectiveness data directly applicable in other risk groups and other STIs,<sup>29</sup> to the provision of interventions in GU medicine clinics or data comparing interventions in clinics with community-based prevention interventions. Local protocols on the selection and prioritization of candidates for various levels of intervention and the interventions provided should be based on the relative prevalence of infection in different risk groups outlined above, staff competency, training capacity and local financial constraints.

Behaviour change interventions in routine consultations with GU medicine clinic patients can be effective at reducing STIs and increasing condom use,<sup>22,30</sup> particularly in young people.<sup>27</sup> Their effectiveness is related to the appropriateness of the intervention, its theoretical foundation, provider competency, cultural sensitivity and specificity and the provision of clear and unambiguous information, rather than length or intensity of intervention.<sup>31</sup> National Institute for Health and Clinical Excellence (NICE) guidance and cost estimates<sup>32,33</sup> are based on the provision of a single session of 15-20 minutes, but the most robust evidence applies to multisession interventions. The minimal intervention shown to reduce STIs and increase condom use in heterosexual GU medicine clinic attendees is two sessions each of 20 minutes, with the greatest observed effect in adolescents and those with prior STI.<sup>25</sup> A more extended course of 10 sessions reduced unsafe sex in MSM.<sup>26</sup> Such interventions are unlikely to be routinely delivered to all at-risk attendees in the UK GU medicine clinic setting, given training and competing demands on resources. However, condom use errors are directly associated with STI rates and are reduced with both experience and the provision of instruction.<sup>34,35</sup> Condom use also increases in the control arm of a number of studies, in which advice alone was provided; suggesting that giving safer sex advice may be an

effective intervention. For some individuals, increasing communication skills to enable successful negotiation of condom use may also be required.

A brief behaviour change intervention such as motivational interviewing (MI)<sup>36</sup> is no more time consuming and is more effective than simply giving advice.<sup>37</sup> MI is a collaborative, person-centred form of guidance aimed at eliciting and strengthening motivation for change. There is very good evidence for use of MI in the treatment of addiction, where a single session had effects over 12 months of follow-up<sup>38</sup> and for multiple sessions in sexual health.<sup>26,39</sup>

Hence a pragmatic approach involves enhancing the delivery of safer sex advice routinely given by all staff across clinics using a recognized brief behaviour change strategy, such as (but not exclusively) MI. More detailed but brief (15-20 minute) one-to-one interactive interventions using the same techniques and also delivered by clinic staff should be provided in line with NICE guidance to those at increased risk as listed above and tailored, intensive behavioural interventions involving two or more sessions should be provided to those at the highest continuing risk of acquisition and transmission of STIs including HIV. Good Practice Guidelines developed by the BPS will provide detail on the implementation of behaviour change interventions within services.

Proficiency in delivering MI can be achieved with training over 1.5 days with ongoing supervision, coaching and feedback, but a single lecture or workshop or self-directed learning was not effective.<sup>40</sup> Manual-directed MI may be less effective.<sup>41</sup>

### **Recommendations**

Intensive multi-session, evidence-based behaviour change interventions targeting individuals and focusing upon skills acquisition, enhancing communication skills and increasing motivation to adopt safer sexual behaviours should be available directly or by referral in all GU medicine clinics (Evidence level Ia, A).

MI techniques should be used as part of an intensive course of risk reduction counselling in MSM at high risk of HIV infection (Evidence level Ib, A).

Brief (15-20 minute) evidence-based behaviour change interventions targeting individuals and focusing upon skills acquisition, enhancing communication skills and increasing motivation to adopt safer sexual behaviours using techniques such as MI should be provided as part of routine care of those at elevated risk of STI and HIV in GU medicine clinics (Evidence level Ib, A).

The delivery of safer sex advice, including condom demonstration, based on the characteristics of effective brief behaviour change interventions, should be part of the routine care of all those at continued risk of infection/transmission in GU medicine clinics (Evidence level III, B).

The provision of accurate, detailed and tailored information on safer sex should form part of all sexual health consultations (Evidence level IV, C).

MI should be provided by clinic staff who have gained competency in its provision through training. (Evidence level IV, C).

## **INTERVENTION DELIVERY**

Computer-delivered interventions may offer consistency and reduce the demand on human resources. A Cochrane review of interactive computer-based interventions (ICBI) for sexual

health promotion found that ICBI were slightly more effective than face-to-face interventions in improving sexual health knowledge<sup>42</sup> and a meta-analysis showed an effect comparable with human interventions.<sup>43</sup> There is evidence that safer sex advice videos in waiting rooms reduce rates of subsequent STI diagnosis but the effect size was not sufficient to recommend that this intervention is routinely introduced across all clinics.<sup>44</sup>

### Recommendations

Computer-assisted interventions are comparable in effect and should be considered as an alternative or adjunct to human delivered interventions (Evidence level Ib, A).

Video shown in waiting rooms should be considered as an additional aid to promoting behaviour change (Evidence level IIb, B).

## SAFER SEX ADVICE

The content of advice given to all those at continued risk of STI should be tailored to the individual's needs and understanding based on the sexual history. Advice on condom use should be included in discussion with all clients (other than some women who have sex exclusively with women [WSW]) and should include verbal and written information on:

- Condom efficacy and limitations;
- Condom types, sizes;
- Determinants of condom effectiveness;
- Motivation for condom use.

Depending on HIV status, risk of future STI, sexual practices and partner gender, this may be supplemented in some individuals by skills building including condom demonstration and discussion of condom problems and condom sizing. Minimizing individual risk may involve providing information on:

- Oral sex and STI transmission;
- Other sexual practices;
- Hepatitis vaccination and the use of ART for HIV.

A combination approach, recognizing that the ideal of 100% condom use is not achievable for many individuals and supporting additional and alternative techniques is appropriate. Identification and recognition of risk reduction techniques already in use may be important in providing tailored advice on improving the effectiveness of, or advising on the limitations of techniques including:

- Partner reduction (or reduction in the number of unsafe sex partners);
- HIV seroadaptive behaviours including negotiated safety (NS), serosorting and strategic positioning/seropositioning;
- Repeat testing for STI including HIV.

Abstinence should not be promoted as the sole means of reducing sexual risk.

### Condom efficacy

There is good evidence that consistent use of the male latex condom reduces the transmission of HIV in heterosexual

couples, including those who have anal sex<sup>45</sup> and limited evidence for a comparable effect in MSM.<sup>46</sup> There is evidence of protection against chlamydia, gonorrhoea, syphilis and herpes simplex virus type 2 (HSV-2) in heterosexual men and women,<sup>47</sup> rectal chlamydial infection in MSM<sup>48</sup> and possibly trichomoniasis (TV) in women.<sup>47</sup> A Cochrane review of non-latex male condoms for prevention of pregnancy showed significantly higher rates of clinical breakage than latex counterparts.<sup>49</sup> Female condoms confer as much protection from STIs as male condoms.<sup>50,51</sup> and may be used for anal sex.<sup>52,53</sup>

### Recommendations

Hundred percent use of the male latex condom should be recommended to all those at risk of STIs including HIV (Evidence level III, B).

Non-latex condoms are an acceptable alternative to male latex condoms for vaginal sex but have higher rates of breakage (Evidence level Ia, A).

Female condoms are (at least) equivalent to male latex condoms in the prevention of STIs and should be offered as an alternative or supplement to male condoms to all women (Evidence level Ib, B).

Men should be made aware of the availability and use of female condoms (Evidence level IV, C).

Female condoms can be used as an alternative to male condoms for anal sex but are preferred to latex male condoms by a minority of MSM who have used them (Evidence level IIb, B).

## Determinants of condom effectiveness

Recent condom breakage, late application, early removal and condom errors are reported by up to a third of heterosexual men<sup>54</sup> and 17% of MSM.<sup>55</sup> Condom slippage and errors are strongly associated with lack of training on correct condom use.<sup>35</sup> Experiencing condom-associated erection loss is associated with lower rates of use.<sup>56</sup> Men with larger penile circumference experience more condom problems and like condoms less.<sup>34</sup> Condom breakage is less likely with a condom that is individually fitted to penis size than with standard condoms during vaginal or anal intercourse.<sup>57,58</sup> Although this is not currently possible in routine practice, providing a range of condom sizes is likely to be helpful. Lubricant use reduces the risk of condom breakage for anal<sup>59</sup> but not vaginal sex.<sup>57</sup> The risk of condom slippage may be doubled with the use of additional lubricant for vaginal sex and should be recommended only where dryness or discomfort is a problem.

### Recommendations

Less than 100% condom use will offer some protection – advise that using condoms as much as possible is better than not at all (Evidence level IIb, B).

MSM should be advised that thicker condoms are no less likely than standard condoms to break or slip off than standard condoms during anal sex (Evidence level Ib, A).

Non-oil-based lubricant should be applied all over the condom and inside the anus, but not inside the condom, before anal sex (Evidence level Ib, A).

There is no advantage, in terms of condom safety, in the routine use of lubricant use for vaginal sex (Evidence level IIb, B).

Both men and women should be instructed on the correct use of male condoms and the importance of applying a condom before penetration and avoiding early removal (Evidence level IIb, B).

Providing a range of condom sizes is a quick and more practical alternative to formal condom sizing (Evidence level IV, C).

### Motivation for condom use

Condoms are rarely applied specifically for STI prevention, and only 5.1% of STI clinic attendees used condoms on every occasion of intercourse in the year following an STI clinic visit.<sup>60</sup>

#### Recommendation

Advice should be based on an exploration of reasons for condom use and recognize that for heterosexual couples, the avoidance of pregnancy rather than STI is a major motivator (Evidence level III, B).

### Advice on oral sex

Human papillomavirus (HPV), HSV, gonorrhoea, chlamydia, syphilis, HIV, hepatitis B (HBV) and possibly hepatitis C are transmissible through oro-genital sex.<sup>61,62</sup> The risks associated with fellatio are likely to be greater than those with cunnilingus but oral sex is associated with significantly less risk of STI transmission than vaginal or anal sex. For HIV and viral infections other than HSV, available evidence suggests the risk to the oral partner is greater than that to the genital partner.<sup>63</sup> The risk of HIV transmission through oral sex remains unclear,<sup>64</sup> with data suggesting 2.6–8% of cases in MSM may be attributable to oral sex.<sup>42,65</sup> Condom use for oral sex is very low in all groups studied<sup>66–68</sup> so while routinely advocating condom use for oral sex is unrealistic, oral sex should not be promoted as risk free. Practitioners report an extremely low level of uptake and use of dental dams.

#### Recommendations

Safer sex advice should include information on the risks of oral sex, recognizing that individuals must make an informed decision on the level of risk that is acceptable to them, and supporting pragmatic alternative risk reduction techniques. The risk of transmission of bacterial and viral STIs, including HIV, applies to both oral and genital partners but the risk to the genital partner is thought to be considerably lower. The risks of transmission associated with oral sex are (considerably) lower than for unprotected vaginal or anal sex except in the case of HSV-1. Advice on further reducing risk includes:

- Avoiding oral sex with ejaculation reduces the risk of HIV and possibly other infections (Evidence level IV, C);
- Insertive fellatio is lower risk than receptive (Evidence IV, C);
- Avoiding brushing teeth or flossing before having oral sex reduces risk of HIV and possibly other infections (Evidence level III, B);
- Avoiding oral sex if you have oral cuts or sores, or a sore throat. (Evidence level IV, C);
- Using condoms for fellatio and dental dams for cunnilingus and oro-anal contact (Evidence level IV, C).

### Other sexual practices

No sexual practice can be regarded as without risk of transmission of any STI. Non-penetrative skin-to-skin contact (including body rubbing, [non-penetrative] mutual masturbation and tribadism) carries the risk of transmission of HPV<sup>69</sup> and HSV but a very low or zero risk of transmission of other STIs. Clinical experience and case reports relating to the non-sexual and accidental transmission of gonorrhoea,<sup>70</sup> chlamydia and syphilis<sup>71</sup> suggest that these infections may also occasionally be transmitted in this way, but the evidence base is poor. Deep kissing may rarely transmit HBV<sup>72</sup> and could theoretically transmit syphilis.<sup>73</sup> In penetrative practices including digital stimulation, use of sex toys and fisting, transmission risk is related to the degree of trauma. Sado-masochistic practices causing minor trauma to mucous membranes also increase risk, especially if followed by unprotected penetrative sex. Case reports suggest that the use of sex toys may be associated with the transmission of STIs including HIV<sup>74</sup> although there are few reports of transmission. WSW may have a variety of risks for STI transmission through penetrative practices. Risks may also include sex with men. There is an increased risk of bacterial vaginosis (BV) in WSW who give a history of sharing sex toys or whose partners have BV.<sup>75</sup> Fisting in MSM carries significant risk of hepatitis C<sup>76</sup> and is implicated in the transmission of lymphogranuloma venereum (LGV).<sup>77,78</sup>

#### Recommendations

No form of sexual contact is entirely without risk of STI transmission. Non-penetrative contact carries the lowest risk (Evidence level IV, C).

In penetrative sex (including fingering, using sex toys and fisting) the risk of transmission is related to the degree of trauma. The use of gloves should be recommended for traumatic digital penetrative sex (Evidence level IV, C).

### Abstinence

A systematic review of programmes to promote abstinence as an STI prevention intervention in high-income countries<sup>79</sup> showed no evidence of beneficial effects. Elective abstinence is chosen by a minority of people living with HIV (PLHIV)<sup>80</sup> as a means of preventing onward transmission.

#### Recommendation

The promotion of abstinence alone as a routine component of effective safer sex advice is not recommended (Evidence level 1a, A).

### Partner reduction

The spread of STIs depends on the rate of change of sexual partners, particularly concurrent partners. The number of oral sex partners has been associated with syphilis in MSM<sup>67</sup> and partner reduction has been implicated in reducing HIV prevalence.<sup>81</sup> Reduction in partner number may have a greater effect on the prevalence of infection than a similar proportionate increase in condom use, particularly for bacterial infections.<sup>82</sup>

#### Recommendation

Safer sex advice should include discussion regarding reduction in number of partners, or the number of unprotected sex

partners, in particular the risks associated with concurrent partnerships in those at increased risk of HIV infection. (Evidence level III, B).

Advice should include reduction in the number of partners with whom you have oral sex. (Evidence level IIb, B with respect to syphilis in MSM).

### Repeat testing for STIs

Prior infection with chlamydia is a risk factor for re-infection with chlamydia, gonorrhoea and TV in women,<sup>7</sup> with peak re-infection rates of 19–20% at 8–10 months postinfection.<sup>83</sup> Prior rectal chlamydia, gonorrhoea or syphilis infection is associated with incident HIV infection in MSM.<sup>10</sup> Ulcerative and non-ulcerative STIs affecting either HIV-positive or HIV-negative sexual partners increase HIV transmission and acquisition.<sup>84–86</sup> Although the role of HIV testing in HIV prevention is unclear, there is good evidence that people who know their HIV status do, in the short term at least, have less unprotected sexual intercourse.<sup>87</sup> In addition, risk reduction techniques including seroadaptive behaviours and the use of ART (as early ART, PEPSE or PrEP) to reduce HIV transmission risk depend upon accurate knowledge of current HIV status. Frequent retesting (as often as every 3 months) may be appropriate for those at the highest risk of HIV infection.<sup>88–90</sup>

### Recommendations

Retesting for asymptomatic STIs should be recommended to all individuals with a prior STI diagnosis including HIV (Evidence level III, B).

Screening for asymptomatic STIs should be recommended at least annually (and in some cases as frequently as every 3 months) to all individuals at risk of acquisition or transmission of HIV (Evidence level IV, C).

HIV testing should be routinely recommended to all individuals attending GU medicine or sexual health services. Pre- and post-test discussions and counselling support should be available (Evidence level IV, C).

### Hepatitis vaccination

Detailed information on sexually acquired hepatitis infection is contained in BASHH guidelines.<sup>91</sup> Outbreaks of hepatitis A (HAV) transmitted through oro-anal or digital-anal contact have been reported among MSM in large cities. BASHH guidelines recommend that clinics in these areas offer HAV vaccination to MSM and advice should be based on local clinic policy. Transmission of HBV occurs in unvaccinated MSM, intravenous drug users, sex workers and heterosexual partners of people from areas where HBV infection is endemic (i.e. outside western Europe, North America and Australasia). All those at risk should be advised to test for HBV and vaccination offered to all at continuing risk. Vaccination against HBV is also recommended in all non-immune HIV-infected adults.<sup>92</sup>

### Recommendation

Advice on the sexual transmission of HAV and HBV and the availability of vaccination should be given to all those at elevated risk of acquisition.

## ADVICE SPECIFIC TO THE PREVENTION OF SEXUAL TRANSMISSION OF HIV INFECTION

This guidance is applicable to those who are HIV-negative, HIV-positive and for those who as yet do not know their status. It is important that any discussion around HIV transmission acknowledges the complex issues relating to disclosure for those who are HIV-positive. Standards for the Psychological Support for Adults Living with HIV address these issues and describe a hierarchy of interventions that correlate with those described in this document.<sup>93</sup> Psychological factors affecting treatment adherence and safer sex behaviours may overlap and increase the risk of HIV transmission.<sup>94</sup> Detailed advice on sexual and reproductive health for PLHIV is given in guidelines by BHIVA, BASHH and FSRH.<sup>95</sup>

### HIV infectivity on ART

HIV transmission through peno-vaginal sex is rarely observed where the quantitative plasma viral load (VL) is below 400 copies/mL.<sup>96</sup> Most currently used laboratory assays detect levels of viraemia of 50 copies/mL or less and successful ART reduces plasma VL to below this level of detectability. However, a negative plasma VL cannot always be considered as a marker of an undetectable seminal VL<sup>97–99</sup> and there are reports of HIV transmission with undetectable plasma VL.<sup>96</sup> The residual transmission risk is likely to be higher for anal sex than for vaginal sex.<sup>100,101</sup> Irrespective of HIV status, couples might consider discontinuing use of condoms for a number of reasons, in long-term monogamous relationships, in the planning of a pregnancy *etc.* The Expert Advisory Group on AIDS provides additional guidance regarding disclosure of HIV status.<sup>102</sup>

### Recommendations

Advice to PLHIV, their sexual partners and those from groups with higher incidence of HIV infection should include:

Taking effective ART and having a quantitative plasma VL below the limit of detection of currently available assays significantly reduces the risk of HIV transmission. (Evidence level Ia, A);

Despite routine undetectable plasma VL measurements a residual risk of transmission is likely to exist (Evidence level IIb, B);

This residual risk is likely to be higher for anal sex than for vaginal or oral sex (Evidence level III, B);

The risks are increased with reduced ART adherence or the presence of STIs in either partner. The risks can be reduced by using condoms and having regular sexual health check ups (Evidence level IV, C);

Serodiscordant couples should receive detailed expert counselling and support on the transmission risks and other relevant issues (Evidence level IV, C).

### Initiation of ART to reduce transmission risk

A multinational randomized controlled trial (RCT) showed a 96% reduction in the risk of HIV transmission in heterosexual couples in which the infected partner was given immediate ART, compared with a deferred group.<sup>103</sup> Although there is currently no public health policy of treatment as prevention

in the UK, the early initiation of treatment to reduce the risk of onward transmission may be appropriate as part of a risk reduction approach for some individuals.

#### Recommendation

Discussion regarding the early initiation of ART to reduce the risk of HIV transmission should be considered as part of safer sex counselling for some PLHIV (Evidence level Ib, A).

### Seroadaptive behaviours including negotiated safety, serosorting and seropositioning

Seroadaptation includes serosorting (choosing partners with concordant HIV status), 'strategic positioning', also interchangeably termed 'seropositioning'<sup>104</sup> (choosing the position taken during sexual practices according to HIV status) and negotiated safety (NS). NS usually refers to the use or non-use of condoms according to partner's HIV status. These strategies have mainly been described in MSM, in whom 14–44% report serosorting and 6–35% seropositioning,<sup>105</sup> but also in heterosexual populations<sup>106,107</sup> and may be more common and better adhered to than consistent condom use.<sup>108</sup> Serosorting may be associated with a small decrease in the risk of seroconversion<sup>109,110</sup> and is almost certainly safer than unprotected anal intercourse (UAI) with unselected partners but less safe than avoiding UAI altogether.<sup>111</sup> It remains a controversial harm reduction technique<sup>112</sup> and has been characterized as 'seroguessing' because around 30% of men have been found to assume rather than know the status of partners.<sup>113</sup> There is also evidence that there may be an increase in other STIs when serosorting occurs.<sup>114</sup> Rectal infection with LGV is particularly associated with HIV infection in MSM,<sup>115</sup> with between 67% and 100% of cases being HIV co-infected. Acute infection with hepatitis C is associated with UAI and other unprotected sexual behaviours in HIV-positive MSM.<sup>116</sup>

#### Recommendations

NS and serosorting should be discussed with those who are known or suspected to be unable or unwilling to maintain 100% condom use (Evidence level IV, C).

MSM should be advised that serosorting is less effective than consistent condom use but more effective than non-selective non-use in preventing HIV acquisition or transmission (Evidence level III, B).

HIV-positive MSM should be advised of the risk of acquiring other STIs, in particular LGV and hepatitis C, through unprotected sex with other HIV-positive men. (Evidence level III, B).

### PEPSE and PrEP

BASHH guidance on PEPSE is available.<sup>117</sup> A joint BHIVA/BASHH statement on PrEP recommends that *ad hoc* prescribing is avoided, and that PrEP is only prescribed in the context of a clinical research study in the UK.<sup>118</sup>

#### Recommendation

All individuals at increased risk of HIV acquisition (including those in serodiscordant relationships, MSM and those from, or with partners from, populations with high HIV seroprevalence) and those at risk of transmission should receive verbal

and written advice on the indications for and availability of PEPSE (Evidence level IV,C).

### Male circumcision

Three RCTs have shown that male circumcision (MC) protects against the acquisition of HIV in men in the setting of a high prevalence (generalized) HIV epidemic.<sup>119</sup> There is currently no RCT evidence on the role of MC in countries of low HIV prevalence or for heterosexual or homosexual anal sexual intercourse.

#### Recommendation

There is currently no public health evidence to recommend MC as a strategy for HIV transmission reduction in the UK, either at a population or individual level (Evidence level IV, C).

## EVIDENCE AND CONSENSUS-BASED PATIENT ADVICE STATEMENTS

### Condom advice:

- Use a condom every time you have vaginal, oral or anal sex to minimize the risk of transmission of HIV and other STIs (Ia);
- Even if you do not use a condom every time, or for every type of sex, use one as often as possible – this is safer than not at all (IIb);
- Even if you occasionally did not use a condom, that does not mean it is not worth using a condom every time in future (IIb);
- Non-latex condoms are a bit more likely to break than latex condoms (Ia):
  - Use non-latex condoms if you have a latex allergy (or if you are using creams or treatments that damage latex condoms) (IV);
  - Some men prefer the feel of latex condoms and find that they are less likely to lose their erection (IV);
  - Some men find latex condoms easier to put on (IV).
- Female condoms are at least as good as male condoms at preventing STIs (Ia);
- You get better at using condoms the more you practice (IIb);
- Practising opening and using a condom alone, and in the dark, might make it easier to do when you have sex (IV);
- Make sure you use a condom of the right size. Condoms are more likely to split if too tight (IIa):
  - The girth (circumference) may be more important than condom length (IIa);
  - A fitted condom is more likely to slip off during withdrawal (IIa).
- There is no need to use extra lubricant with condoms for vaginal sex – lubricant increases the chance that the condom will slip off (IIb);
- It is not safe just to use a condom when you ejaculate (come) – infections including HIV are can be passed on without ejaculation (IV);
- Using two condoms is NOT better than one. They are more likely to break (IV);
- Avoid common condom errors. Make sure you:
  - Remove all the air from the condom before putting it on;
  - Hold the condom during withdrawal (pulling out);
  - Do not unroll it before putting it on;
  - Put the condom on before you start having sex;
  - If you put it on the wrong way by mistake, use another one, do not just flip it over.

**For anal sex:**

- Ordinary condoms are no more likely than thicker condoms to break or slip off during anal sex (Ib);
- Put water-based lubricant all over the condom and inside the anus, but not inside the condom, before anal sex (Ib);
- You can use female condoms instead of male condoms for anal sex: remove the ring at the end of the condom and place on the penis like a male condom (III).

**For HIV:**

- Taking effective ART and having an undetectable plasma or blood HIV VL significantly reduces the risk of HIV transmission during sex (Ia);
- Even with an undetectable VL, there is still a small risk of HIV transmission. This is higher for anal sex than for vaginal or oral sex (IIb);
- Continuing to use condoms for vaginal, anal and oral sex will further reduce any remaining risk of transmission (IV);
- Poor adherence (missing doses of ART) may increase the risk of HIV transmission (III);
- If you are living with HIV, or you have partners who are or may be HIV-positive, have an STI check at least once a year (IV).

**AUDIT STANDARDS**

Standards 1, 3 and 4 are derived from Healthcare Improvement Scotland Standards for HIV Services, July 2011.<sup>120</sup>

- (1) Information on HIV, which includes modes of transmission and ways of reducing HIV transmission risk, is provided in all settings where testing takes place and is provided to all patients having a first HIV test performed in a sexual health setting. (Standards: written information available in 100% of waiting areas; documented provision of written information or appropriate audio or visual alternative in 80% of patients having a first HIV test.)
- (2) Advice on safer sex is provided in an appropriate format to all those diagnosed with a STI. (Standard: provision of advice and/or written information documented in 80% of cases.)
- (3) A referral pathway for access to intensive, tailored behaviour change interventions is in place for those identified as presenting with ongoing HIV/STI higher risk behaviour throughout all services where sexual health and/or HIV consultations occur. (Standard: documented referral pathway is available in 100% of clinics)
- (4) All specialist sexual health and HIV clinics have a member of staff, available at each clinical session where STI testing occurs, who is trained in delivering a brief intervention shown to be effective in sexual risk reduction, and who is provided with regular ongoing supervision. (Standard: availability 95%; documentation of competency and ongoing supervision 100%).

**Conflict of interest:** None declared.

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**Levels and grading of evidence**

Recommendations have been graded according to the level of evidence, utilizing the US Department of Health and Human

Table A

Level	Type of evidence
Ia	Evidence obtained from meta-analysis of randomized controlled trials (RCTs)
Ib	Evidence obtained from at least one RCT
IIa	Evidence obtained from at least one well-designed controlled study without randomization
IIb	Evidence obtained from at least one type of well-designed quasi-experimental study
III	Evidence obtained from well-designed, non-experimental descriptive studies, such as comparative studies, correlation studies and case-control studies
IV	Evidence obtained from expert committee reports or opinions and/or clinical experience of respected authorities

Table B

Grade	Recommendation
A (Evidence levels Ia, Ib)	Requires at least one randomized controlled trial (RCT) as part of the body of literature of overall good quality and consistency addressing the specific recommendation
B (Evidence levels IIa, IIb, III)	Requires availability of well-conducted clinical studies but no RCTs on the topic of recommendation
C (Evidence level IV)	Requires evidence from expert committee reports or opinions and/or clinical experience of respected authorities. Indicates absence of directly applicable studies of good quality

Services agency for Healthcare Policy and Research (AHPCR) System.

**Rigour of development**

The guideline was developed by review of Cochrane Library, Medline, Embase and Conference reports and existing guidelines from 2000 to week 40 2008. Following consultation, main title searches and searches relating to seroadaptive behaviours and HIV transmission were repeated and updated to May 2011. Main title searches included keywords 'Condoms' (1762 citations), 'Behavioural interventions' and 'Motivational interviewing'. Other keyword searches included 'Sexual intervention', 'Intervention meta-analysis STI', 'Brief intervention sexual health', 'Safer sex behavioural intervention', 'CBT sexual health intervention', 'skill sexual', 'condom skill', 'STI prevention', 'combination prevention', 'safer sex', 'condom error/s', 'condom breakage', 'condom' and 'erectile dysfunction', 'female condom', 'partner reduction', 'abstinence', 'contraception', 'negotiated safety', 'serosorting', seroadaptive, 'testing in relationships', 'frequency AND rescreening', 'seminal viral load' and others.

'Oral sex', 'anal sex', 'digital', 'non-sexual', 'accidental', 'non-sexual' and 'kissing' were combined individually without mapping with sexually transmitted infections, HIV, syphilis, herpes, HSV, chlamydia, gonorrhoea, warts. 'STI risk' combined with 'sex workers', 'sex work', 'prisoners', 'looked after, accommodated, adolescents'. 'Sexual behaviour' combined with 'compulsion'. Title searches were used by individual co-authors to identify articles of relevance. Articles published in English only were included. In the absence of directly applicable evidence, recommendations are based on expert opinion and practice.

### **Qualifying statement**

The recommendations in this guideline may not be appropriate for use in all clinical situations. Decisions to follow these recommendations must be based on the professional judgement of the clinician and consideration of individual patient circumstances and available resource.

### **Writing group**

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