OPEN ACCESS Clinical Images and Medical Case Reports

ISSN 2766-7820

Short Commentary

Open Access, Volume 3

Strategies and interventions (including behaviour modification) to reduce HIV transmission in the UK

*Corresponding Author: Ravi Patel

Department of Trauma and Orthopaedics, Hull Royal Infirmary, HU3 2JZ, Hull, United Kingdom.

Email: hyrp16@hyms.ac.uk

Received: Jun 15, 2022 Accepted: Jul 29, 2022 Published: Aug 05, 2022 Archived: www.jcimcr.org Copyright: © Patel R (2022).

DOI: www.doi.org/10.52768/2766-7820/1986

Introduction

Sexually transmitted infections (STIs) cause significant morbidity [1], and rates are increasing across the North West [2]. Partner notification (PN) is a public health mainstay in the United Kingdom (UK) for preventing the spread of STIs [3]. However, health services face several challenges when trying to implement PN.

Firstly, while several PN strategies are employed throughout the UK, it is unclear which is most effective, and there are advantages and disadvantages to each [1]. Secondly, there are patient-specific barriers to successful PN [4], and furthermore, there may be service- or clinician-specific barriers to PN [5]. Lastly, PN may involve disclosing confidential information [3], which introduces an ethical challenge.

Aims

The primary objective of the review was to identify current challenges to PN applicable to the UK.

Secondary objectives were to describe PN audit data, and to describe UK legal and professional frameworks for patient confidentiality.

Patient-led referrals under PN are more effective when supported by clinician guidance and resources, including leaflets [1]. Furthermore, this practice is recommended under NICE guidance [6]. Therefore, the overarching goal of the project was to produce an information leaflet on PN for patients with STIs.

This aims to fulfil the needs of patients with STIs in two ways:

- Directly, clarifying the PN process, addressing common concerns, and providing the information needed to encourage effective patient referral, and
- Indirectly, providing healthcare professionals a resource to help explain PN during consultation.

The intention of introducing such a leaflet into practice would be to increase successful PN referrals, and by extension, reduce STI transmission.

Literature search

To find national audit data and guidelines, the Public Health England (PHE), National Institute for Health and Care Excellence (NICE), and British Association for Sexual Health and HIV (BASSH) websites were searched in addition to the primary literature review.

Citation: Patel R. Strategies and interventions (including behaviour modification) to reduce HIV transmission in the UK. J Clin Images Med Case Rep. 2022; 3(8): 1986.

Search strategy

The literature search was performed through the EMBASE and PubMed databases. Search terms combined the concept of sexual health ("sexual health" or "sexual history" or "sexually transmitted infection" or "sexually transmitted disease" or "STI" or "STD") and partner notification ("partner notification" or "contact tracing" or "confidentiality").

Inclusion criteria

Articles were constrained to books and documents, clinical studies, meta-analyses, systematic reviews, and reviews.

Specific dates were not defined, as information on the history of partner notification was sought.

No exclusion criteria were defined.

Literature review

Sexual health contact tracing

Contact tracing is a process which identifies individuals who have been in contact with a person known to have a transmissible disease [1].

For STIs, contact tracing aims to inform current and past sexual partners of the index case that they are at risk of infection, a process known as "partner notification" (PN) [3].

STIs are often asymptomatic [7] but may still be transmissible and can lead to serious complications [8]. Therefore, PN aims to test and treat asymptomatic individuals to reduce infection sequalae, prevent re-infection of the original patient, and prevent further spread [8].

Partner notification strategies

Various strategies have been employed in facilitating PN (Table 1).

Table 1: Partner Notification Methods [1,7,8].

Strategy	Description
Simple patient referral	The patient is encouraged to notify relevant sexual partners.
Enhanced patient referral	As patient referral, with resources and/or counselling provided to facilitate explanation (e.g. information leaflets).
Provider referral	Healthcare professionals notify the partner(s) anonymously.
Contract referral	The patient is encouraged to notify their partner(s). If the partner does not attend an appointment within a specified timeframe, they will be contacted anonymously by healthcare professionals.
Expedited partner therapy	The patient offers treatment (e.g. a prescription) to their partner(s) without a medical consultation (N.B. this strategy was developed in the United States is not legal in the UK).

Efficacy

Evaluating the efficacy of PN empirically would require monitoring asymptomatic individuals exposed to STIs, which is not ethically feasible. However, dynamic modelling simulations sug-

gest that PN accounts for some reduction in the UK population prevalence of chlamydia and gonorrhoea infection [9].

Concerning different PN methods, a 2013 Cochrane systematic review of randomised controlled trials and a 2014 health technology assessment analysis drew similar conclusions [1,9]. There was moderate-quality evidence that expedited partner therapy decreases index case reinfection compared to simple patient referral [1]. However, it was not superior to enhanced patient referral [1]. Overall, the difference in rate of adverse effects between patient, provider, and contract referral methods was not statistically significant [1].

Separately, in a 2016 review of systematic reviews, it was concluded that patient counselling is important for enhanced patient referral, while there was no evidence to support didactic consultation [10].

Barriers to partner notification

Globally, barriers to PN are similar [4,11,12]. A 2010 systematic review on PN in developing countries found that for current partners, these include:

- embarrassment or stigma attached to an STI,
- fear of loss of respect,
- fear of rejection or divorce [4].

For casual partners, major barriers included being non-contactable and perceived lack of benefit [4].

A survey of 776 sexual health patients in South Africa drew similar conclusions, but additionally found that fear of a violent reaction was an important barrier for both men and women [11].

In a United States study from 2000, 79 people with STIs were interviewed about PN. Barriers included fear of gossip, rejection, or abuse, or the perception that the STI had been knowingly transmitted to them [12].

More broadly, a 2020 systematic review analysed barriers to engagement with contact tracing services (13). Barriers were categorised into five themes: concerns around privacy, mistrust, lack of support or information, worry of stigmatisation, and contact tracing system-specific challenges (13).

No studies on barriers to PN were found in the UK population.

Partner notification in the UK

NICE guidelines

In their 2007 recommendations, NICE advise that: "All (primary care) services should include arrangements for the notification, testing, treatment, and follow-up of partners of people who have an STI (partner notification)" [14]. Additionally, patient referral is encouraged as an initial strategy [14]. In a 2019 NICE quality standard, it is added that:

- commissioners should arrange PN services provision,
- service providers should establish pathways for PN, offering PN discussion, and specialist referral,

www.jcimcr.org Page 2

• healthcare professionals should understand local PN procedures and support their patients in this process (6).

BASHH guidelines

Nationally, procedural standards are set by BASHH [3].

This guidance lists infections requiring PN, and for patients with these infections, either a PN discussion or a reason for PN refusal should be documented (3). This discussion should clarify which partners will be notified and the method of notification (3).

Patient, partner, and contract referral are all acceptable in the UK (3), although patient referral is the most common (15). The method employed depends on local service provision and individual patient factors (3, 8). For example, provider referrals are generally carried out by sexual health advisers (15), as this process requires specific and documented competencies (3, 8).

PN is not necessary if a partner has already attended a consultation for the relevant infection, is considered untraceable due to inadequate information, or if it would put patient well-being at risk (3).

Audit data

In England, PN in 18–24-year-olds with chlamydia infection is audited against BASHH standards by Public Health England [5, 16]. The most recent report, published in 2020, examines data between 11th September and 23rd October 2019, covering 52% of upper tier local authorities [5].

In total, 93% of patients had a documented PN offer compared to the standard of 97%, which was a decrease from 94% in 2017 [5]. Rates varied between services, although general practice (GP) and genitourinary medicine (GUM) both offered PN in only 87% of cases (Figure 1) [5].

The commonest reasons for not offering PN were:



*Sexual and Reproductive/Contraception and Sexual Health services Information sourced from [5].

- "No documented evidence" (43%),
- "Other" (19%),
- No reason given (15%),
- "Lost to follow-up" (13%).

Less common reasons were patients attending other services, transferring care, or undertaking PN elsewhere.

Ethical challenges

In the UK, patients with STIs are not legally obliged to notify their partners [8] and may not wish information to be shared between healthcare services [3]. However, these are prerequisites for successful PN, which raises the ethical challenge of sharing confidential information [8].

Confidentiality laws

Confidentiality in medicine is governed by several laws, including common law, data protection law, and the Human Rights Act 1998 [17]. Legal confidentiality frameworks vary across different countries in the UK [17].

Concerning STIs, the NHS Trusts and Primary Care Trusts Directions 2000 (Sexually Transmitted Diseases) regulates practice in England [17]. This states that information identifying a patient with an STI may be disclosed to a treating medical professional or to prevent spread of disease [17].

Disclosing confidential information

These legal frameworks inform the General Medical Council (GMC) guidelines on confidentiality for doctors [17,18]. Paragraph 9 states that confidential information can be disclosed if either:

- i) the patient consents,
- ii) disclosure is in the best interests of someone who lacks capacity,
- iii) disclosure is required or approved by a legal framework, or
 - iv) disclosure is justifiable for the public interest (17).

Undertaking PN without patient consent falls under public interest disclosure (18).

Disclosure of serious communicable disease

The GMC additionally offer guidance on disclosing information about serious communicable diseases (18). A serious communicable disease is defined as: "any disease that can be transmitted from human to human and that can result in death or serious illness. It particularly applies to, but is not limited to, HIV, tuberculosis, and hepatitis B and C" (18).

Paragraphs 12-15 advise that:

- Patients should be told how they can protect others from infection (18).
- Close contacts of a patient with a serious communicable disease may be informed if:
- o there is a risk of infection likely to cause serious harm, and
 - o the patient will not inform them (18).
- If an adult at risk of serious harm from infection lacks the capacity to understand this information, this should be disclosed to an appropriate responsible person or authority (18).
- If practicable, the patient should be told before disclosing information and their identity should not be disclosed (18).

References

- Ferreira A, Young T, Mathews C, Zunza M, Low N. Strategies for partner notification for sexually transmitted infections, including HIV. Cochrane Database Syst Rev. 2013(10): CD002843.
- 2. Public Health England [PHE]. Spotlight on sexually transmitted

www.jcimcr.org Page 3

- infections in the North West, GW-732. 2018 [accessed 21 May 2021]. Available from: www.gov.uk/government/publications/sexually-transmitted-infections-north-west-data
- McClean H, Radcliffe K, Sullivan A, Ahmed-Jushuf I. 2012 BASHH statement on partner notification for sexually transmissible infections. Int J STD AIDS. 2013; 24(4): 253-61.
- Alam N, Chamot E, Vermund SH, Streatfield K, Kristensen S. Partner notification for sexually transmitted infections in developing countries: a systematic review. BMC Public Health. 2010; 10: 19.
- Public Health England [PHE]. 2019 report on audit of turnaround times, partner notification and re-testing standards. GW-1795.
 2020 [accessed 19 May 2021]. Available from: www.gov.uk/ government/publications/national-chlamydia-screening-programme-audit-report
- National Institute for Health and Care Excellence [NICE]. Sexual health. QS178. 2019 [accessed 6 May 2021]. Available from: https://www.nice.org.uk/guidance/qs178
- Mathews C, Coetzee N. Partner notification. BMJ Clin Evid. 2009; 2009.
- Ward H, Bell G. Partner notification. Medicine (Abingdon). 2014;
 42(6): 314-7.
- Althaus CL, Turner KM, Mercer CH, Auguste P, Roberts TE, Bell G, et al. Effectiveness and cost-effectiveness of traditional and new partner notification technologies for curable sexually transmitted infections: observational study, systematic reviews and mathematical modelling. Health Technol Assess. 2014; 18(2): 1-100, vii-viii.
- Hogben M, Collins D, Hoots B, O'Connor K. Partner services in sexually transmitted disease prevention programs: a review. Sex Transm Dis. 2016; 43(2 Suppl 1): S53-62.
- Kalichman SC, Mathews C, Kalichman M, Lurie MN, Dewing S. Perceived barriers to partner notification among sexually transmitted infection clinic patients, Cape Town, South Africa. J Public Health (Oxf). 2017; 39(2): 407-14.

- Gorbach PM, Aral SO, Celum C, Stoner BP, Whittington WL, Galea
 J, et al. To notify or not to notify: STD patients' perspectives of
 partner notification in Seattle. Sex Transm Dis. 2000; 27(4):193200.
- Megnin-Viggars O, Carter P, Melendez-Torres GJ, Weston D, Rubin GJ. Facilitators and barriers to engagement with contact tracing during infectious disease outbreaks: A rapid review of the evidence. PLoS One. 2020; 15(10): e0241473.
- National Institute for Health and Care Excellence [NICE]. Sexually transmitted infections and under-18 conceptions: prevention. PH3. 2007 [accessed 6 May 2021]. Available from: https://www.nice.org.uk/guidance/ph3.
- Society of Sexual Health Advisers [SSHA]. Guidance on partner notification. 2015 [accessed 19 May 2021]. Available from: ssha. info/wp-content/uploads/ssha-guidance-on-partner-notification-aug-2015.pdf.
- British Association for Sexual Health and HIV [BASHH]. Standards for the management of sexually transmitted infections (STIs).
 2019 [accessed 19 May 2021]. Available from: www.bashh.org/ about-bashh/publications/standards-for-the-management-ofstis/.
- General Medical Council [GMC]. Confidentiality: good practice in handling patient information. 2018 [accessed 19 May 2021]. Available from: www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/confidentiality.
- General Medical Council [GMC]. Disclosing information about serious communicable diseases. 2017 [accessed 19 May 2021].
 Available from: www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/confidentiality---disclosing-information-about-serious-communicable-diseases.

www.jcimcr.org Page 4