### **ORIGINAL ARTICLE**

# Determinants of disclosure of genital herpes to partners

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**Objective:** To identify factors which determine whether and when patients will disclose infection with genital herpes to sexual partners.

**Methods:** The sample was 26 women and 24 men attending a herpes clinic in a sexually transmitted disease clinic. Semistructured interviews yielded quantitative data and also qualitative data which were subjected to content analysis.

Results: Characteristics of partners were very important in determining whether disclosure occurred. Respondents were less likely to tell partners regarded as casual. Perception of the likely reaction of partners was important in deciding whether to tell. Many respondents assumed that they were not infectious if they were not currently having an attack or if they were taking antiviral medication. The decision whether to tell tended to be based on considerations of likely discovery and of honesty towards the partner rather than control of transmission. Of patient characteristics only self rated depressed mood was related to disclosure to the most recent partner.

**Conclusions:** Perception of the partner and anticipated partner response is crucially important in determining whether and when disclosure of genital herpes infection occurs.

enital herpes simplex virus (HSV) infection is a stigmatised disease associated with a severe psychological disturbance in some patients and with fears of transmission to partners.<sup>1 2</sup>

Transmission can occur via asymptomatic or subclinical shedding of virus.<sup>3,4</sup> Patients cannot predict when there is a transmission risk to partners. It is not clear to what extent antivirals suppress infectivity.<sup>4,5</sup>

The issue of telling partners is an important one for many patients and something they often ask for advice on. However, little is known about the determinants or manner of disclosure.

#### METHODS Sample

A convenience sample of 24 male and 26 female patients attending a herpes clinic at St Mary's Hospital, London was studied. Median sample age was 34 (range 19–68 years). All patients had had herpes for at least 1 year, 12 less than 5 years, 20 for 5–10 years, and 18 over 10 years. Mean annual reported attack frequency when not taking antiviral drugs was 9.4 (SD 6.2), median attack duration was 7 days. At interview 45 patients were taking antiviral medication and all had had antiviral experience; 57% reported being recurrence free on medication.

#### Methodology

Respondents were given a semistructured interview schedule covering demographics, disease duration, attack frequency, perceived trigger factors, perceived impact on health, and experience with antiviral treatment. They were asked to report on their last three sexual partners since having contracted genital herpes, including the nature of the relationship, whether they had informed them, what had influenced their decision to tell, the reaction of their partners, and what the impact was on the relationship in the longer term. Not all patients had three such partners but all had at least one.

Sessions were tape recorded and transcripts entered into the NUDIST program and a content analysis carried out. Emergent categories were identified by the rater from the transcripts, a sample of categorisations was then checked by a second rater and any disagreements resolved.

Quantitative data analysis was implemented using STATA statistical software. Logistic regression analyses were implemented of whether disclosure took place using partner type, length of relationship, and partner order as covariates. Correlation between the responses relating to different partners of the same subject was adjusted for using the approach of marginal models using generalised estimating equations with robust standard errors. Both univariate analyses, looking at each factor in relation to outcome separately and a single multivariate analysis in which all factors were included in the model, were implemented.

The study had local ethics committee approval.

#### **RESULTS**

## Relationship characteristics and disclosure: quantitative data

Respondents identified 87 "regular" partners and 37 "casual" partners. Respondents had informed 54/87 regular partners and 8/37 casual partners.

The results of analyses of disclosure of herpes status to partner are shown in table 1. In the initial univariate analysis the nature of the relationship (p<0.001) and duration (p=0.03) were significant but the order of relationships was not (p=0.62). Entering partner type, duration of relationship, and length of relationship jointly into the multivariate analysis, however, altered the pattern slightly. Length of relationship was of only borderline significance (p=0.08) and order of partners became significant (p=0.04) such that the most recent partner was less likely to be informed than either of the previous two. Partner type remained a highly significant predictor of disclosure (p=0.003).

#### Individual characteristics and disclosure

Separate univariate logistic regression analyses of disclosure status were implemented to examine the relationship with respondents' self esteem, control over disease, depression, concern about risk of infecting partners and whether they felt it was "OK" to have herpes while on medication. Of these variables only the level of reported depression was a significant predictor of disclosure status (OR 0.19; 95% CI 0.05 to 0.72, p=0.02).

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Table 1	Logistic regression of whether di	isclosure took place on ty	ype of relationship, l	length of relationship,	and partner
sequence	e (n = 121)				

	Unadjusted results			Adjusted results		
Variable, category	Odds ratio	95% CI	p Value	Odds ratio	95% CI	p Value
Type of relationship						
Regular	1		< 0.001	1		0.003
Casual	0.179	0.070 to 0.453		0.161	0.049 to 0.532	
Length of relationship	1.005	1.001 to 1.009	0.03	1.003	0.9997 to 1.005	0.08
Partner order						
Most recent partner	1		0.62	1		0.04
Middle partner	1.388	0.640 to 3.012		2.603	1.034 to 6.553	
Earliest partner	1.381	0.628 to 3.035		2.769	1.108 to 6.920	

The most recent partner percentage of males disclosing did not differ significantly from percentage of females disclosing (56% versus 44%;  $p=0.27 \chi^2$ ).

#### Impact on selection of relationships

Seventeen respondents had not entered a relationship because of herpes, 10 reported having herpes had affected the sort of sexual partner they chose, five reported having herpes had prevented them from leaving a relationship.

## Relationship characteristics and disclosure: qualitative data

Two responses made up the bulk of reasons for non-disclosure identified. Twenty one of 29 respondents said that they did not feel that they had to tell casual partners.

"...you're not going to tell someone if it's casual you are just going to be off (sex during an attack)..." (Interview 10)

The other main reason given for not telling was the possible reaction of the partner (16 respondents):

"Um... because ... I know him really well now, and I know he's quite um ... he's ... I just don't think he would accept it basically ... I constantly think about telling him" (Interview 24)

Eleven respondents felt unable to judge the likely reaction of the partner or were too uncertain to take a risk.

"deep down inside me I'm sure that if I told him he'd be OK about it but I don't want to take that risk" (Interview 20)

Respondents were also sometimes concerned their partner might not be discreet and that if other people generally knew about their infection they would regard them unfavourably:

"I think people's conception of me would change if I said I had herpes" (Interview 25)

Some expressed the added concern that their partner might feel that they were promiscuous or unfaithful.

Some respondents took the view that they were not actually putting partners at risk and so disclosure was unnecessary. They did not feel that herpes was uninfectious; their own experience showed that this was not the case:

"It's sexually transmissible, highly contagious" (Interview 24)

However, they had various reasons for feeling that they were not creating a risk. No respondent gave existing partner infection as a reason. Twenty respondents reported using condoms, 19 always or mostly. Condoms were seen as eliminating risk:

"It was a momentary fling using condoms, and I thought it was irrelevant" (Interview 21)

In other cases respondents felt the disease "was under control" (19 respondents) because they were on medication.

"The way I see it is that if I am in control of the herpes and I can control it with my tablets and I know how I am dealing with it then I don't feel I have to tell it" (Interview 17)

Eight of the respondents made a specific link between non-use of condoms and being on medication. Others avoided sex during attack or prodrome:

"I knew that I didn't have an episode, didn't have any herpes at all, and he knew that so we just decided that (we wouldn't use condoms) . . ." (Interview 29)

Standard clinic practice was to inform all respondents that they could infect others asymptomatically and that medication could not be guaranteed to prevent transmission.

Others did feel there was a risk:

"... what I am saying is that if you are going to have sex with someone then you need to inform them ..." (Interview 12)

However, for most respondents relationship issues not infection control were the key to disclosure.

Eighteen respondents identified moving in to live together with a partner as the immediate impetus for disclosure. It raised practical issues such as problems avoiding the partner finding out about attacks or medication. Moving in together is also symbolic of greater commitment between a couple—and an accompanying feeling by respondents that they needed to be fully honest and frank with their partner.

"I would just say there is something I have to tell you and I think you need to know before we get married I don't think it's going to make any difference but I believe there is nothing we (should) be hiding from each other . . ." (Interview 17)

Or they expected to discontinue condom use, such discontinuation being common in long term relationships<sup>s</sup>:

"With the herpes I felt bad, I did, I felt anxious about telling him and it came to a point where we had . . . you know, deep feelings for each other, so we were talking about stopping using condoms" (Interview 21)

The stress of having a "guilty secret" was sometimes an issue:

"It's completely ruining my life actually. [Laughs] I've got to tell him sooner or later 'cos not telling him's driving me crazy" (Interview 40)

The issue was most simply summed up by one respondent:

(I told him) ... "because I loved him" (Interview 14)

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Table 2 Strategies used in telling partners about infection

Strategy	Percentage reporting
Keep the issue "low key"	48%
Choose a relaxed environment	34%
Depends on person	18%
"Spontaneous approaches"	10%
Suggest they go to GUM clinic for check	12%
Check out partner's feelings about herpes generally before telling	12%

A developing relationship was not always the reason for disclosure, the immediate trigger for telling was sometimes a recurrence (10 respondents).

It is important to recognise that some individuals are likely to use condoms not to protect their partner against HSV but themselves against other STDs and for contraception. Four respondents only used condoms with casual partners.

#### **Telling partners**

Respondents were asked what strategies they adopted in telling partners. Table 2 shows the results. By far the most common approach was to try to keep the issue low key.

Providing information was important but wasn't always

"they know very little about it and they think they can catch it when you don't have an attack" (Interview 10)

There were a variety of other strategies including wanting partners to go to GUM clinics, letting partners find out indirectly by leaving medication around, or by engineering a "spontaneous" discussion about herpes.

Many respondents sought to "test out" the ground before disclosure, seeking to find out what the partner's views and likely response was.

Twenty two respondents reported good reactions from partners and only five reported having had an adverse reaction. This may reflect selection by respondents of disclosees.

#### **DISCUSSION**

Relationship factors were strong predictors of disclosure in this study but the characteristics of individuals, at least those we measured, were generally not predictors with the exception of depression. If the characteristics of the respondent were the main determinant of disclosure one would expect consistency, but there was little. Of 43 respondents who were able to identity more than one partner post-herpes, 27 had told some partners but not others. Disclosure largely occurred because individuals felt that they needed to be honest with a partner with whom they had formed a long lasting emotionally close relationship or if they felt the partner might find out

#### Key messages

- 1 Patients were more likely to disclose to regular than casual
- Disclosure tended to occur later in the relationship particularly when planning cohabitation
- 3 Individual characteristics were less important than relationship variables
- 4 Some respondents underestimated transmission risks

anyway, particularly if they were living together. It is also possible that longer relationships allowed respondents to better predict partner response. In previous work we have shown that safer sex in women generally is strongly related to perception of partner and relationship.8

Infection control was less of an issue for many because condom use, antivirals, or avoiding sex during attacks/prodrome was perceived to lower risk. Absence of symptoms on medication might have made the infection less salient.

There are some important implications for patient management in this study. Some respondents had inaccurate information and it is clearly important for healthcare staff to give clear information and guidance as a basis for disclosure and discussion with partners even if it does not affect probability of disclosure in itself.

#### **CONTRIBUTORS**

All authors were involved in the design of the study and the writing of the paper except JH who was involved in the revision of the paper; JS and SF conducted data collection; OU carried out the statistical analysis; Robin Bell, although not an author, assisted with advice and sup-

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#### **REFERENCES**

- Green J, Kocsis A. Psychological factors in recurrent genital herpes. Genitourin Med 1997;**73**:253–9. 2 **Silver PS**, Auerbach SM, Vishniavsky N, *et al.* Psychological factors in
- recurrent genital herpes infection: stress, coping style, social support, emotional dysfunction and symptom recurrence. J Psychosom Res 1986;**30**:163-71.
- Mertz GJ, Benedetti J, Ashley RA, et al. Risk factors for the sexual transmission of genital herpes. Ann Intern Med 1992;116:197–202
   Barton SE, Munday PE, Patel RJ. Asymptomatic shedding of herpes
- simplex virus from the genital tract: uncertainty in its consequences for patient management. *Int J STD AIDS* 1996;**7**:229–32.
- 5 **Barton S**, Green J. The psychological impact of genital herpes. London: Mosby-Wolfe, 1999.
- 6 Stata Corporation. Stata Statistical Software, release 5. College Station, Texas: Stata Press, 1997
- 7 Liang K-Y, Zeger SL. Longitudinal data analysis using generalized linear models. Biometrika 1986;73:13–22.

  8 Green J, Fulop N, Kocsis AE. Determinants of unsafe sex in women. Int J
- STD AIDS 2000;11:777-83.