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ABSTRACT

Non-Consensual Sex and Help-Seeking Behavior Among PrEP Users in Belgium: Findings from an Online Survey

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ABSTRACT

Non-consensual sex poses a threat not only to sexual health but also to mental and physical health in general. HIV pre-exposure prophylaxis (PrEP) users might be particularly vulnerable to non-consensual sex because of interplaying factors such as mental health disorders, a high number of sex partners, engagement in chemsex, and the widespread use of dating apps. The objectives of this study were to assess the occurrence of non-consensual sex, its associated factors, and related help-seeking behavior among PrEP users. We analyzed data from an online survey among PrEP users in Belgium (09/2020-02/2022). Almost one in five participants (34/187, 18.2%) reported having ever experienced non-consensual sex. The most reported form was having sex against one's will, followed by having been given drugs against one's will, and having had sex without a condom against one's will. The vast majority of those who had experienced non-consensual sex (29/34, 85.3%) did not seek help afterward, mostly due to a lack of perceived need (21/29, 72.4%). Reported barriers to seeking help were shame (6/29, 20.7%) and lack of awareness of help services (3/29, 10.3%). Having experienced non-consensual sex in the past five years was associated with younger age and suicidal ideation in a multivariable logistic regression model. We conclude that addressing barriers to non-consensual sex help services is crucial to maximize their use and minimize the consequences of non-consensual sex experiences. PrEP consultations also represent an opportunity to offer such help given PrEP users are already familiar with these PrEP services and engaged in care.

Introduction

Human immunodeficiency virus (HIV) pre-exposure prophylaxis (PrEP) is a very effective biomedical intervention to prevent HIV acquisition, if taken correctly (O Murchu et al). Studies have shown that PrEP use can also improve sexual health by reducing fear of HIV and enhancing sexual satisfaction in general (Groves et al.; Zimmermann et al.). Moreover, it has allowed individuals engaging in sexual risk behavior to enroll in care and has improved sexual health knowledge (Groves et al.,). However, PrEP users are still disproportionately affected by a range of physical and psychological harms, such as higher rates of sexually transmitted infections (STIs), substance use disorders, and mental health issues (Nöstlinger et al.; Strong et al., ; Werner et al.). If we want to optimally support PrEP users in maintaining a safe and

healthy sexuality, we require more insights into how such needs can be better addressed.

As in other high-income countries, most PrEP users in Belgium are men who have sex with men (MSM; Hayes et al.; Sciensano). Previous studies have shown that MSM report non-consensual sex [Footnote¹](#) experiences more frequently than heterosexual populations (Coxell et al.; Finneran & Stephenson). Non-consensual sex includes all types of sexual experiences that occurred without consent or were against one's will (Drückler et al.; Ratner et al. It can take many forms such as sexual intercourse against one's will, forced condom removal, or verbal sexual harassment (Basile et al.). In a national representative sample of Belgian adults, 78% of non-heterosexual respondents reported some form of sexual victimization in their lifetime and they were two times more likely to have experienced non-consensual sexual victimization compared with heterosexual populations (Schapansky et al.). We hypothesized that some PrEP users might be particularly at risk to experience non-consensual sex due to a combination of a high number of sex partners, frequent engagement in chemsex (the use of stimulant drugs in a sexual context), a high prevalence of mental health disorders, and frequent use of dating apps (Hoenigl et al.; King et al.; Phillips et al.; Rotsaert, Reyniers, Jacobs et al.). However, to date the association between such factors and non-consensual sex experiences among PrEP users has not been explored. Such insights are important to identify PrEP users who may be the most at risk for non-consensual sex.

Victims of non-consensual sex are more likely to report sexual risk taking, substance use, mental health disorders, STIs, and HIV infections (Buller et al.; Jones et al.; Ratner et al.). Moreover, it has been shown that these factors can act as a syndemic, i.e., interact synergistically and therefore reinforce each other, leading to a higher burden of disease in PrEP users (Nöstlinger et al.; Stall et al.). Non-consensual sex experiences have also been associated with other short- and long-term mental and physical health harms such as smoking, obesity, suicidal ideation, or cardio-vascular diseases (Buller et al. Ratner et al.; Smith & Breiding). Being able to mitigate these harms is crucial. An important first step toward achieving this is to ensure that victims of non-consensual sex seek and receive help. Previous studies show that only a minority of those who have experienced non-consensual sex do so (Ansara & Hindin, [Citation2010](#); Martina Delle Donne et al.; Zinzow et al.). However, the help seeking behavior of PrEP users who are victims of non-consensual sex is currently not known.

The objectives of this study were to assess (1) the occurrence and forms of lifetime non-consensual sex, (2) the factors associated with recent experiences of non-consensual sex, and (3) the help-seeking behavior after non-consensual sex experiences among PrEP users in Belgium. Such insights are crucial to ensure adequate support and reduce the potential harms of non-consensual sex on PrEP users' health.

Method

Participants

We conducted an online survey among PrEP users in Belgium. We recruited participants through the social media of community organizations, HIV reference centers, and social/sexual networking applications. Eligibility criteria were: being at least 16 years old; reporting an HIV negative or unknown serostatus; living in Belgium; and having used PrEP in the six months preceding the baseline questionnaire. Three questionnaires were distributed at intervals of approximately six months (one baseline and two follow-up questionnaires) between September 2020 and January 2022. More details on the methodology of this survey have been published elsewhere.(Rotsaert, Reyniers, Vanhamel et al.) For the present study we selected participants who completed the second follow-up questionnaire, in which we asked questions pertaining to non-consensual sex, sexual behavior, STIs, and mental health. Socio-demographic characteristics were retrieved from the baseline questionnaire.

Measures

The first objective of this study was to assess the occurrence and forms of lifetime non-consensual sex among PrEP users. For that purpose, we used the question “Have you ever had sex that was partly or completely against your will or without your consent (non-consensual)? Non-consensual sex is any form of sexually transgressive behavior, verbal, physical, intentional, or unintentional, where there is clearly no mutual consent and/or which is not voluntary,” followed by some examples of non-consensual sex. We used filter logics in the questionnaire so that questions pertaining to non-consensual sex only needed to be answered among those reporting having experienced non-consensual sex. A list of different forms of non-consensual sex was shown (e.g.: I had sex against my will, I had sex without a condom against my will) and participants were asked to select the ones they had experienced, with a free text “other” option. The complete list of questions regarding non-consensual sex can be found in Table 1.

Table 1. Results of the survey questions regarding non-consensual sex (N = 187).

The second objective of this study was to explore factors associated with non-consensual sex among PrEP users. We assessed mental health issues using the Patient Health Questionnaire 2-item (PHQ-2) and Generalized Anxiety Disorder 2-item (GAD-2) screening tools, both including two questions with four items ranging from 0 to 3 (Kroenke et al.). As recommended, we used a cutoff of 3 to define major depression disorder and generalized anxiety disorder. We screened for suicidal ideation via the last question of the PHQ-9: “Over the last 2 weeks, how often have you been bothered by the following problems? Thoughts that you would be better off dead or of hurting yourself in some way” (Kroenke et al.). We dichotomized the

response options into “yes” for reporting any occurrence of such thoughts in the previous two weeks versus “no.” We assessed sexual behavior in the previous six months by inquiring about the number of occasional and anonymous partners, the frequency of condom use with such partners, and engagement in chemsex. We also asked about the occurrence of any STI and the use of recreational drugs in the previous six months. Other variables used in the present study were socio-demographic characteristics, including age, self-assigned gender, education level, country of birth, and social health insurance status.

The third objective of this study was to explore the help-seeking behavior of PrEP users having experienced non-consensual sex. For that purpose, we used the question “Have you ever sought help after experiencing non-consensual sex?.” As for the first question regarding non-consensual sex, we used filter logics in the questionnaire so that this question only needed to be answered among those reporting having experienced non-consensual sex. Lastly, we asked “Why did you NOT seek help after experiencing non-consensual sex?” to participants having answered “No” to the previous question. A list of different reasons for not seeking help was shown and participants were asked to select the ones that applied to them, with a free text “other” option.

Data Analysis

We described numerical variables using medians and interquartile ranges, and categorical variables using absolute numbers and proportions. We conducted logistic regression to identify associations between having experienced non-consensual sex in the past five years and socio-demographic factors, sexual behavior, mental health issues, and drug use. We first performed univariable logistic regression to select the variables to include in a multivariable logistic regression analysis. Variables significantly associated with non-consensual sex in the univariable regression analysis were selected using a likelihood ratio test with a significance level set at 0.1. The multivariable model was built using stepwise selection, based on likelihood ratio test and a significance level set at 0.05.

We used R studio version 4.2.0 for these analyses (R Core Team, [Citation2022](#)).

Ethical Approval and Consent

We received ethical approval from the Institutional Review Board of the Institute of Tropical Medicine (IRB 1380/20). All participants provided consent before participation in the study. All data were pseudonymized upon retrieval.

Results

Sample Description

A total of 187 participants completed the second follow-up questionnaire (Table 2). All but four participants self-identified as male (97.9%, 183/187), two participants as trans men, and two as trans women. Median age was 46 years old (IQR 38–53). The majority had been born in Belgium (86.1%, 161/187), had completed or were enrolled in higher education (80.2%, 150/187), and had social health insurance (97.9%, 183/187).

Table 2. Factors associated with non-consensual sex in the past 5 years, results from uni- and multi-variable logistic regression analysis (N = 187).

Occurrence and Forms of Non-Consensual Sex Experiences

A total of 34 participants (34/187, 18.2%) reported having ever experienced non-consensual sex (Table 1). For almost half of them (18/34, 52.9%), the last experience was more than five years ago and for about a quarter (9/34, 26.4%) less than one year ago. The most frequently reported form of non-consensual sex was having sex against one's will (19/34, 55.9%) followed by having been given drugs against one's will (8/34, 23.5%), and having had sex without a condom against one's will (7/34, 20.6%). Other forms of non-consensual sex were reported in free text such as forced penetration (2/34, 5.9%), being in pain and the partner refusing to stop (1/34, 2.9%), or not feeling capable of saying "no" (1/34, 2.9%). Around 40% of those having reported non-consensual sex were under the influence of alcohol or drugs when it occurred (14/34, 41.2%).

Factors Associated with Recent Non-Consensual Sex Experiences

In the univariable logistic regression analysis, participants having experienced non-consensual sex in the past five years were more likely to be younger [OR 0.95 (95%CI 0.89–0.99)] and, to have screened positive for anxiety [OR 3.23 (95%CI 0.83–10.59)] or suicidal ideation [OR 4.54 (95%CI 1.50–13.33)]. In the multivariable logistic regression model, only younger age [aOR 0.95 (95%CI 0.89–1)] and suicidal ideation [aOR 4.32 (95%CI 1.45–12.87)] remained significantly associated with non-consensual sex after controlling for other factors (Table 2).

Help-Seeking Behavior After Non-Consensual Sex Experiences

The vast majority did not seek help after experiencing non-consensual sex (29/34, 85.3%). The main reason for not seeking help was not feeling the need to do so (21/29, 72.4%), followed by being ashamed of what happened (6/29, 20.7%), and not knowing where to receive help (3/29, 10.3%). One trans woman respondent reported fearing for her job if she sought help and fearing she would be treated differently than other women. She reported having sought help only at the time she developed symptoms of HIV infection. Another respondent reported being 14 years

old when the non-consensual sex episode occurred and not realizing at that time that what happened was not acceptable.

Discussion

The objectives of the present study were three-fold: firstly, to assess the occurrence and forms of non-consensual sex among PrEP users in Belgium. With regard to this objective, we found that one in five PrEP users had ever experienced non-consensual sex, with having sex against one's will and being given drugs in a sexual context against one's will as the most frequent forms of non-consensual sex reported. Secondly, we aimed to assess factors associated with non-consensual sex. In our sample, non-consensual sex was significantly associated with younger age and suicidal ideation. Thirdly, we aimed to explore help-seeking behavior of PrEP users who had experienced non-consensual sex. The majority had not sought help due to not having felt the need to do so. However, some respondents reported lack of awareness about where to find help and shame as barriers to seeking help after non-consensual sex.

The frequency of non-consensual sex experiences varies between studies, depending on the population studied, the definition used, and the recall period (Finneran & Stephenson). We found a lower frequency of non-consensual sex than a recent Dutch study which reported a five-year incidence of 18.1% among MSM recruited through sexual networking applications (Drückler et al.). Several factors might explain the difference between our results and those of the Dutch study. The Dutch study recruited participants exclusively through sexual networking applications, which has been shown to facilitate some form of sexual violence (Henry & Powell), whereas we also recruited participants through community organizations and HIV reference centers. Furthermore, the Dutch study focused on MSM in Amsterdam, an exclusively urban setting, while our study was performed throughout Belgium. Nevertheless, the fact that one in five PrEP users reported non-consensual sex in our study is worrying, given the consequences non-consensual sex can have on health.

The second finding of our study, namely that recent non-consensual sex experiences was associated with younger age, is consistent with the findings of other studies (Drückler et al.; Finneran & Stephenson; Schapansky et al.). Several explanations for this finding have been proposed by Schapansky et al. Firstly, technology might have facilitated some forms of non-consensual sex, therefore exposing more threats to young adults rather than older adults. For instance, it has been shown that dating apps, mostly used by younger individuals, can facilitate sexual assault by multiple mechanisms such as facilitating meetings between victims and perpetrators (Henry & Powell, ; Valentine et al.). Secondly, younger individuals might have a higher awareness of consent in a sexual context due to the attention it has received (mostly online) in recent years, following the #metoo movement. Lastly, recall bias is more likely to occur in older individuals (Schapansky et al.). We also found an association between non-consensual sex and suicidal ideation. While this

type of association between mental health issues and non-consensual sex experiences has been discussed extensively (Buller et al.; Campbell et al.; Coxell et al.; Jones et al.; Walker et al.), determining causality would be impossible given the likely complexity of the relationship between these two factors. Mental health disorders have been described as both vulnerability factors and consequences of non-consensual sex (Ratner et al.; Stermac et al.; Zilkens et al.). Moreover, non-consensual sex and mental health seem to be intertwined at multiple ecological levels, making this relationship even more complex (Campbell et al.). Our findings underline that particular attention to non-consensual sex experiences and related issues should be given in PrEP users who present mental health disorders and those who are younger.

Regarding our last objective, the finding that the majority of participants who experienced non-consensual sex did not seek help resonates with the results of previous studies conducted among men (Martina Delle Donne et al.; Patterson et al.) and among lesbian, gay, bisexual, and queer individuals (Richardson et al.). While the main reason for not seeking help in our study was a lack of perceived need, some participants reported barriers to seeking help such as being ashamed of what had happened and not knowing where to do so. Barriers to non-consensual sex help services have been described at multiple levels (Martina Delle Donne et al.; Zinzow et al.). Individual-level barriers include shame and lack of acknowledgment of the event (Martina Delle Donne et al.; Zinzow et al.). At the social and societal levels, fear of negative reactions, lack of access or availability, and cultural and gender norms have been reported (Martina Delle Donne et al., ; Richardson et al.; Zinzow et al.). To address these barriers, several countries, including Belgium, have developed sexual assault care centers, where victims of non-consensual sex can receive medical, psychological, and legal support at one-stop centers (Baert & Keygnaert; Covers et al.; Peeters et al.). It is crucial that these services are well-known, low-threshold, and offer non-judgmental, multidisciplinary care in order to address these multiple barriers. In Belgium, PrEP users are followed up via HIV reference centers (Rotsaert, Reyniers, Jacobs et al.). Given that PrEP users are already familiar with and engaged in care at these HIV centers, the PrEP follow-up consultations also represent an opportunity to prevent, address, and counsel them on the issue of non-consensual sex. It has been shown that PrEP users prefer sexual health care professionals to address other problems frequently found in this population such as problematic chemsex (Glynn et al.). Moreover, the World Health Organization recently recommended integrating broader health interventions in the PrEP package of care for MSM, such as mental health or substance use disorder support (World Health Organization). Including support after non-consensual sex in the PrEP package of care could also be a way to improve broader health in PrEP users. However, further research is required to investigate how help services can be tailored to best address the needs of PrEP users with regard to non-consensual sex experiences.

Seeking help early after non-consensual sex can mitigate some of its short- and long-term consequences (Du Mont et al.). For example, providing post-exposure prophylaxis for HIV can avoid HIV seroconversions, which might be needed if PrEP

was not taken. It can also represent an opportunity to offer mental health support and organize a schedule of HIV and STI testing. It has also been shown that offering early interventions after sexual assault decreases the occurrence of mental health consequences (Oosterbaan et al.; Regehr et al.). Therefore, it is important to sensitize the public to the potential consequences of non-consensual sex and raise awareness about the importance of seeking help to encourage the victims to do so.

This study has several limitations: first, our analysis was based on a relatively small number of participants, which might affect the generalizability of our results. Nevertheless, we believe that our exploratory study offers some important insights on non-consensual sex experiences in PrEP users. Second, potential self-selection inherent to the online study design cannot be fully excluded. Hence, the sample may not be representative of the entire PrEP population. Third, the results might be subject to recall bias and, given the sensitive and intimate nature of the topics explored, participants might have been prone to social desirability bias, which could have led to underreporting. Finally, The PHQ-2 and GAD-2 tools were designed as screening tools, and positive results should be complemented by further investigations. Therefore, we might have overestimated the occurrence of mental health issues.

Conclusion

This study among PrEP users in Belgium aimed to assess the occurrence and forms of non-consensual sex, factors associated with recent non-consensual sex experiences, and help-seeking behavior after having experienced non-consensual sex. We found that one in five PrEP users had experienced non-consensual sex at some point in their lives. Younger age and suicidal ideation were associated with a recent non-consensual sex experience. The majority of PrEP users having experienced non-consensual sex did not seek help due to a lack of perceived need, shame, or not knowing where to find help. Raising awareness about this issue and ensuring help is available and accessible is important to mitigate the potential consequences of non-consensual sex on physical and mental health. This can be achieved through the existing one-stop sexual assault centers. Furthermore, we also recommend particular attention be given to topics such as non-consensual sex during PrEP clinic consultations, either preventively or to help address experiences that have already occurred.

Disclosure statement

No potential conflict of interest was reported by the authors.

Additional information

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Notes

1 Various terms are used in the literature such as non-consensual sex, sexual violence, sexual assault, etc. We have chosen to use non-consensual sex because it reflects a broader range of experiences than, for instance, “sexual assault”. Moreover, we chose this term to stay in line with recent publications on the topic among MSM (e.g., Drückler et al). However, when citing other studies, we have chosen to preserve the original study terminology.

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Table 2 – Factors associated with NCS, results from simple and multiple logistic regression analysis

	TOTAL (N=187, N(%))	NCS NO (N=153, N(%))	NCS YES (N=34, N(%))	SIMPLE LOGISTIC REGRESSION		MULTIPLE LOGISTIC REGRESSION	
				OR (95% CI)	p-value	aOR (95% CI)	p-value
<i>SOCIODEMOGRAPHIC CHARACTERISTICS</i>							
Median age (IQR)	46 (38-53)	46 (40-54)	39 (32-49)	0.95 (0.92-0.99)	0.01	0.95 (0.91-0.99)	0.01
Identified as male	183 (97.9)	151 (98.7)	32 (94.1)	0.21 (0.14-0.31)	0.34		
Born in Belgium	161 (86.1)	131 (85.6)	30 (88.2)	1.26 (0.44-4.54)	0.68		
Higher education completed	150 (80.2)	125 (81.7)	25 (73.5)	0.62 (0.27-1.54)	0.29		
Public health insurance	183 (97.9)	150 (98)	33 (97.1)	0.66 (0.08-13.57)	0.73		
<i>MENTAL HEALTH</i>							
GAD-2 score							
< 3	167 (89.3)	141 (92.2)	26 (76.5)	Ref.			
=> 3	20 (10.7)	12 (7.8)	8 (23.5)	3.62 (1.31-9.64)	0.015		
PHQ-2 score							
< 3	164 (87.7)	138 (90.2)	26 (76.5)	Ref.			
=> 3	23 (12.3)	15 (9.8)	8 (23.5)	2.83 (1.05-7.24)	0.04		
Thoughts of dying or hurt oneself (past 2 weeks)							
No	155 (82.69)	133 (86.9)	22 (14.2)	Ref.		Ref.	
Yes	32 (17.1)	20 (13.1)	12 (35.3)	3.63 (1.53-8.43)	<0.01	3.72 (1.54-9)	<0.01
<i>ALCOHOL USE, DRUG USE AND CHEMSEX</i>							
Alcohol use (6 months)							
No	19 (10.2%)	18 (11.8)	1 (2.9)	Ref.		Ref.	
Yes	168 (89.8%)	135 (88.2)	33 (97.1)	4.4 (0.86-80.57)	0.08	6.02 (0.74-48.71)	0.05
Drug use (past 6 months)							
No	108 (57.8)	87 (56.9)	21 (61.8)	Ref.			
Yes	79 (42.2)	66 (43.1)	13 (38.2)	0.82 (0.37-1.73)	0.60		
Engagement in chemsex (past 6 months)							
No	123 (65.8)	100 (65.4)	23 (67.6)	Ref.			
Yes	64 (34.2)	53 (34.6)	11 (32.4)	0.90 (0.40-1.96)	0.80		
<i>SEXUAL BEHAVIOR</i>							
Being paid for sex (past 6 months)							
No	178 (95.2)	145 (94.8)	33 (97.1)	Ref.			
Yes	9 (4.8)	8 (5.2)	1 (2.9)	0.55 (0.03-3.14)	0.55		
Having paid for sex (past 6 months)							
No	176 (94.1)	32 (94.1)	32 (94.1)	Ref.			
Yes	11 (5.9)	9 (5.9)	2 (5.9)	1 (0.15-4.12)	1		
Any STI diagnose (6 months)							
No	118 (63.1)	96 (62.7)	22 (64.7)	Ref.			
Yes	69 (36.9)	57 (37.3)	12 (35.3)	0.92 (0.41-1.97)	0.83		
Group sex (past 6 months)							
No	68 (36.4)	53 (34.6)	15 (44.1)	Ref.			
Yes	119 (63.6)	100 (65.4)	19 (55.9)	0.67 (0.32-1.44)	0.30		
N anonymous partners (past 6 months)							
<10	94 (50.3)	77 (50.3)	17 (50)	Ref.			
>=10	93 (49.7)	76 (49.7)	17 (50)	1.01 (0.48-2.14)	0.97		
N occasional partners (past 6 months)							
<5	106 (56.7)	86 (56.2)	20 (58.8)	Ref.			
>=5	81 (43.3)	67 (43.8)	14 (41.2)	0.89 (0.42-1.90)	0.78		
Condom use for							

anal sex with anonymous partners (past 6 months)*					
Always	11 (7.5)	8 (6.6)	3 (12)	Ref.	
Sometimes	71 (48.3)	61 (50)	10 (40)	0.44 (0.10-2.24)	
Never	65 (44.2)	53 (43.4)	12 (48)	0.60 (0.15-3.06)	0.53
Condom use for anal sex with occasional partners (past 6 months)*					
Always	3 (2.5)	3 (2.9)	0 (0)	Ref.	
Sometimes	46 (37.7)	40 (38.5)	6 (33.3%)		
Never	73 (59.8)	61 (58.7)	12 (66.7)		0.54

Table 1 – results of the survey questions regarding non consensual sex

	N (%)
Have you ever had sex that was partly or completely against your will or without your consent (non-consensual)?	
Yes	34 (18.2)
No	153 (81.8)
When was the last time this happened?	
More than 5y ago	18 (52.9)
Less than 5y ago	7 (20.6)
Less than a year ago	4 (11.8)
Less than 6 months ago	1 (2.9)
Less than 1 month ago	4 (11.8)
Which of these 'sex without consent'-scenarios have happened before?	
I had sex against my will	19 (55.9)
I had sex WITHOUT a condom against my will (while I wanted to use condoms)	7 (20.6)
I had been given drugs against my will in a sexual context	8 (23.5)
I was photographed or filmed against my will	4 (11.8)
I passed out and didn't know what was happening	3 (8.8)
Other	
Have you ever had non-consensual sex under the influence of alcohol or drugs?	
Yes	14 (41.2)
No	20 (58.8)
Have you ever sought help after experiencing non-consensual sex?	
Yes	5 (14.7)
No	29 (85.3)
Why did you NOT seek help after experiencing non-consensual sex?	
I didn't feel the need to do that	21 (72.4)
I didn't know where to get help	3 (10.3)
I was ashamed to report what had happened.	6 (20.7)
Other (Please specify)	2 (5.9)