Challenges in conducting sexual health and violence research in older adults beyond the General Data Protection Regulation: a Belgian case study

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Abstract

Background

Because of a growing older population, the sexual health (SH) of older adults, including sexual violence (SV), is becoming an increasingly important public health concern. Yet, reliable SV prevalence rates and risk factors are lacking, due to methodological shortcomings in current studies. SV research involves challenges regarding safety and disclosure, especially in older adults. In this paper we reflect on the methods used in a SH&V study in older adults balancing between privacy rules imposed by the General Data Protection Regulation (GDPR) and ethical and safety guidelines.

Methods

To ensure the acceptability of the questionnaire, it was tested in a two-phase pilot study. To maximize SV disclosure, the questionnaire built up gradually towards the more sensitive SV modules. Interviewers were trained to approach participants in a non-judgmental manner. Due to GDPR, our data collection method was changed from a random sampling via the National Register to a cluster random probability sampling with a random walk finding approach.

Results

Older adults were willing to discuss SH&V during a structured face-to-face interview with trained interviewers. Following strict safety guidelines, no major incidents were reported. The cluster random probability sampling with random walk finding approach provided an adequate sampling frame, but was inefficient and time-consuming.

Conclusion

Doing research on SH&V in older adults is feasible, but requires a substantial investment of time and the challenges involved may incur greater costs. In order to guarantee further research on sensitive topics in older adults, we recommend that an interdisciplinary expert group consisting of researchers, donors, and policy makers investigates how GDPR and public health research in hard-to-reach populations can be better matched.

Keywords

Privacy, sampling, methodology, ageing, sexuality, elder abuse and neglect

1. Introduction

As the older population in Europe and Belgium expands (Eurostat, 2017; Statbel, 2019), the sexual health (SH) of older adults, including sexual violence (SV), is becoming an increasing public health concern. According to recent meta-analyses, 0.9% of older adults and 2.2% of older women worldwide were sexually victimized in the past year (Yon et al. 2019, Yon et al. 2017). Lifetime SV prevalence was estimated at 6% (Vandenberg et al., 1998). However, these numbers are likely to be underestimated because of methodological shortcomings. Therefore, reliable SV prevalence numbers and associated risk factors in older adults are currently unavailable (Nobels et al., 2020).

When doing SV research, protecting the participants and interviewers from potential violence by the assailant is of the utmost importance. When the topic of the study becomes known – either within the household or in the wider community- the assailant may find out the nature of the study, leading to possible safety issues for the participant or interviewer. Therefore, the World Health Organization (WHO) developed ethical and safety recommendations for SV research (WHO, 2016). Also, as victims experience many barriers for SV disclosure (Dartnall et al., 2013), study designs should facilitate disclosure. This could be extra challenging in older adults, as society considers them asexual (Gewirtz-Meydan et al., 2018; Kessel, 2001; Lai et al., 2011). Older adults may internalize this stereotypical societal image of ‘the asexual older adult’, impacting SV disclosure (Bodner et al., 2018). In addition, discussing SH and SV with older adults is considered by some to be inappropriate (Goldblatt et al., 2020; Gott et al., 2004; Saunamäki et al., 2014).

Further, since May 25th 2018, the General Data Protection Regulation (GDPR) (EU) 2016/679 (European Parliament, 2018) imposes strict rules regarding collecting, storing and accessing personal data. The GDPR is a regulation in European Union (EU) law addressing data protection and privacy in the EU and the European Economic Area (EEA), and transfer of personal data outside the EU and EEA areas. Its primary aim is to give control to individuals over their personal data. In this study the implementation of the GDPR has led to an adaptation of the data collection procedure. In the original study design the Belgian National Register (NR) would serve as the sampling frame. This sampling frame closely overlaps with the target population and contains information on all Belgian residents (Demarest et al., 2013). Yet, since the implementation of GDPR, the NR only shares personal details of possible participants of scientific research via an active opt-in procedure. This generated drastic changes in the study protocol of this population-based study on SV in older adults.

In this paper we describe the methodology of the first SV prevalence study in older adults in Belgium. This study was a part of the the first gender- and age-sensitive SV prevalence study in Belgium (Keygnaert et al., 2018). With this article we illustrate the efforts we took to make

the questionnaire acceptable to older adults. The validation of our questionnaire in the Belgian population, including older adults, is available elsewhere (Depraetere et al., 2020).

Furthermore, we reflect on the challenges in conducting research on a sensitive topic in a hard-to-reach population keeping the balance between the privacy rules imposed by the GDPR and the ethical and safety guidelines for violence research. Based on our experiences, we formulate recommendations for future research and policies.

2. Methods

2.1 Used SV definition

In this study we adopted the WHO definition of SV which includes sexual harassment, sexual abuse with physical contact without penetration and (attempted) rape (WHO, 2002; WHO, 2017). Based on recent insights in the field of SV in older adults, this definition was expanded with sexual neglect (Leading Practice to Counter the Mistreatment of Older Adults et al., 2017; Nobels et al., 2020).

2.2 The questionnaire

This study was a part of a large SV prevalence study in the Belgian population between 16 and 100 years old. The questionnaire used in the population of 70 years and older was identical to the one in the population between 16 and 69 years old. However, we applied different data collection methods. Whereas in the population between 16 and 69 years old the questionnaire was administered through an online self-reported questionnaire, in the older adults, trained interviewers performed structured face-to-face interviews. The questions were read out loud to the respondents.

The questionnaire development comprised a multi-step process of discussion and consultation. The multidisciplinary research team developed a first draft of the questionnaire following an extensive review of literature and pre-existing study instruments (Buysse et al., 2013; European Union Agency for Fundamental Rights, 2014; Koss et al., 1985; Krahé et al., 2015; Naughton et al., 2010). This draft was reviewed by the expert steering committee consisting of national and international researchers, policy makers and practitioners in the field of SV or elder abuse and neglect. The questionnaire aimed to maximize SV disclosure. To that extent, the questionnaire started with questions on less sensitive topics and built up towards the modules on SV victimization and perpetration. All questions on SV and its consequences were phrased in a supportive and non-judgmental manner (WHO, 2016). To assess SV experiences, behaviorally specific questions based on the Sexual Experience Survey (SES) (Koss et al., 1985), the Sexual Aggression and Victimization Scale (SAV-S) (Krahé et al., 2015) and the Senperforte questionnaire (Keygnaert et al., 2015) were used, which were adapted to the Belgian social and legal context (Depraetere et al. 2020). An

overview of the SV outcome measures can be found in Appendix 1. More details on the validation of the questionnaire in the Belgian population, including older adults, are available elsewhere (Depraetere et al., 2020).

In order to test the acceptability and feasibility of the questionnaire in older adults, we performed a two-phase pilot study. In the first face validity phase we measured the extent to which the questionnaire appeared relevant, important and interesting to our target population (Holden, 2010). We discussed the questionnaire with 12 older adults and consulted ten experts in assessing SH and SV in older adults. Based on their recommendations, we added extra questions on family life and SH at the beginning of the questionnaire to ease respondents in and adapted the questions on rape myths and gender norms. This adapted draft and the applied data collection procedure were tested in the second phase of the pilot study. We performed 50 structured face-to-face interviews with community-dwelling older adults. Based on participants' recommendations and interviewers' experiences we deleted the module on gender norms and reduced the number of follow-up questions in the SV perpetration module. The final questionnaire consisted of 13 modules (see Figure 1).

Figure 1

Flow of the Questionnaire

TOPICS COVERED BY THE QUESTIONNAIRE	
Section 1	Sociodemographic characteristics
Section 2	Sexuality and gender identity
Section 3	Relationships and family life
Section 4	Quality of life and (mental) health
Section 5	Attitudes towards rape myths
Section 6	Sexual victimisation
Section 7	Disclosure and help seeking behaviour following sexual victimisation
Section 8	Perceived consequences of sexual victimisation
Section 9	Indirect exposure to sexual violence
Section 10	Sexual violence perpetration
Section 11	Disclosure and help seeking behaviour following sexual violence perpetration
Section 12	Minority Stress
Section 13	Closure and respondent feedback

2.3 Interviewers

Interviews were performed by the first author and 48 external interviewers (67% female, 33% male, mean age of 43 years). All interviewers were carefully selected and received specialized training (WHO, 2016). During the selection process, specific attention was given to experience with older adults, social skills, experiences with and attitudes towards SV and coping mechanisms. After a first selection round, all interviewers participated in a multi-day training by the researchers and the coordinator of the study. Considering that rates of reported SV can be influenced by a suggestion of judgement or blame, the training confronted the interviewers with their own attitudes, fears and stereotypes towards SV and older adults and gave them the opportunity to come to terms with their own (direct or indirect) exposure towards SV (WHO, 2016). The training comprised the following modules: SV (definition, prevalence and myths), discussing sensitive topics, communication skills, interview techniques, handling confidential information, and ethical and safety procedures. Interviewers had to familiarize themselves with the questionnaire during small group sessions, which helped them to feel at ease discussing SV.

Interviewers received close guidance from the research team. The researchers were always available to be contacted by phone or email to discuss difficulties experienced or questions during the fieldwork. Interviewers were instructed to call after the first day of interviewing and in the case of encountering a dangerous situation. In addition, all interviewers participated in at least two debriefing meetings. If necessary individual discussions with the researchers were arranged. Furthermore, we used a social media group in which interviewers indicated their progress, concerns and questions and a weekly newsletter, discussing the progress, pitfalls and recommendations for the fieldwork.

2.4 Data collection

2.4.1 Impact of GDPR on data collection procedure

Due to the GDPR, we changed our data collection procedure from a random sampling to a cluster random probability sampling with a random walk finding approach (Ahmed, 2009). Originally, the intention was to acquire the contact details (name and address) of a representative sample of older adults living in Belgium through the National Register (NR). This sampling frame closely overlaps with the target population (Demarest et al., 2013). However, since the implementation of the GDPR, the NR can only share personal details of possible participants of scientific research via an active opt-in procedure. A representative sample of potential participants would be contacted by the NR, informing them of the study's goals and asking them to provide their written consent and contact details to the research team. This procedure could lead to bias in participation, endangering the representativeness of the sample and the validity of the research results (Bijleveld, 2015) as it encourages people with pronounced opinions on SV to participate (Galea et al., 2007) and excludes vulnerable older adults (e.g. older adults who cannot physically reach the mail box due to illness or

disability). In addition, when participants need help to provide their written consent to the research team, there is a risk the assailant may find out the nature of the study, leading to safety issues for the participant (WHO, 2016). Applying a cluster random probability sampling with random walk finding approach, researchers don't need contact details to contact older adults. Furthermore, the interviewer can assess the safety of the participant in real time when calling at their door.

2.4.2 Applying the cluster random probability sampling

To guarantee precise and reliable estimates, 845 interviews needed to be performed (see Figure 2). Compared to the original procedure, the assumed design effect of the clustered sampling doubled the sample size of the study. Since valid SV prevalence number in older adults are currently lacking (Nobels et al., 2020), we based our sample size calculation on the 10% SV life time prevalence found in previous studies conducted in Belgium on younger populations (Buysse et al., 2013; Krahé et al., 2015) (see Figure 2). Considering the spread of older adults is normally distributed on the municipality level in Belgium, 141 clusters of 6 interviews, geographically covering all regions, were randomly selected. Selection was based on the proportion of older adults of 70 years and older living in each municipality (Skinner, 2014).

Figure 2

Sample Size Calculation

SAMPLE SIZE CALCULATION	
Formula	$n = Z_{\alpha}^2 \left(\frac{P(1-P)}{e^2} \right)$
Z-value for a 95% confidence interval (Z_{α})	1.96
Estimated proportion of sexual victimisation (P)	0.10
Margin of error (e)	0.03
Estimated sample size random sampling (n)	384
Design effect	2
Estimated sample size clustered sampling	768
10% extra to correct for missing values	77
Total sample size	845

Note. Because the design effect is unknown in current literature, we assumed a design effect of two.

Participants had to be 70 years or older, live in Belgium, and have sufficient cognitive ability to complete the interview. Both older adults living in the community and older adults living in nursing homes or assisted living facilities were included. Cognitive status was not formally assessed but was evaluated based on the ability to maintain attention during the interview and the consistency of the participant's answer by means of a control question comparing the participant's birth year and age (Boaz et al., 2018). Eligible participants within each cluster

were identified using a random walk finding approach (Lewis-Beck et al., 2003). Interviewers were provided with a randomly selected starting address and followed a strict set of rules that guided the selection of subsequent houses at pre-specified intervals (see Figure 3).

Figure 3

Flowchart Random Walk Procedure

Note. Interviewers called upon every house on their route. After conducting an interview or making an appointment, they called on the 5th house. At every crossing, they alternated between left and right. Every household was only invited once to participate.

In nursing homes and assisted living facilities we randomly invited one person per unit using the Kisch selection method (Lavrakas, 2008a).

Face-to-face interviews were carried out in the participant's home. Only one older adult per household could participate and proxy respondents were not allowed. If there was more than one eligible participant present, we used the late birthday selection rule to select our respondent (Lavrakas, 2008b). Responses were collected using a tablet or computer. Interviews were conducted in Dutch, French or English. Interviewers were instructed to take a break of a few hours to a few days in between interviews in case of interviewee fatigue or at the request of the participant. Participants received some chocolates or cookies to thank them for their participation.

2.5 Ethical considerations

Ethical approval was obtained from the ethical committee of Ghent University/University Hospital (B670201837542). As is ethically sound in SV research (WHO, 2016), we presented the study as the “Belgian Survey on Health, Sexuality and Well-being”. All participants gave their informed consent before participating in the study. In line with the GDPR all data were pseudonymised. Documents containing personal data were kept separately from the answers to the questionnaire. Only the researchers working on the project had access to the personal data. All interviewers were trained in handling confidential information. In case of an acute dangerous situation (e.g., ongoing (sexual) violence), a multi-step safety procedure was in place in accordance to article 458 of Belgian criminal law. At the end of each interview, participants received a brochure containing contact details of several helplines.

3. Results

The data collection started on the 8th of July 2019 and was stopped on the 12th of March 2020, due to the COVID-19 pandemic and associated lockdown measures.

3.1 Outcome random walk procedure

An overview of the random walk outcome can be found in Table 1. We completed 513 interviews across Belgium, 116 (26%) were done by appointment, meaning that interviewers had to come back to the same household at least two times. Average duration of an interview was 54 minutes (range: 21-168 min, SD: 23 min). In order to complete 513 interviews, interviewers spent 320 days recruiting participants. They conducted 1.2 interviews a day on average. Yet, on 105 days no participants were found. In total 15,599 households were contacted, of which 1,805 (12%) were eligible to participate. Interviewers spent 515h 57min calling at doors. In order to complete one interview, interviewers called on average on 37 doors (SD: 31 doors) and spent 88min (SD: 97min). Participation rate in the different clusters ranged from 5% to 100%. Mean participation rate was 34% (SD: 19%).

Table 1

Outcome of the Random Walk Procedure

	Variable	Description (n)
Procedure ^a	Days spent on data collection	320
	Days without interview	105
	Interviews per day (mean (SD), range)	1.2 (0.8), 0.2- 4
	Households contacted	15 599
	Households eligible for participation	1 805
	Housesholds contacted per interview (mean (SD), range)	37 (31), 2-138
Time spent ^b	Total time spent ^c	515h 57min
	Time spent calling at doors per interview ^c (mean (SD), range)	88min (97min), 12min – 632min
	Interview duration ^d (mean (SD), range)	54 min (23min), 21min – 168min
	Interviews done on appointment ^a	116 (26%)
Participation rate ^a	Participation rate per cluster ^e (mean (SD), range)	34% (19%), 5% - 100%

Note. SD= standard deviation

^aData from 84 clusters (equivalent to 451 interviews). Due to incomplete reporting, data from 12 clusters (equivalent to 62 interviews) could not be included in the analysis.

^bData from 77 clusters. Due to incomplete reporting, an additional 7 clusters were not included in the analysis of the time spent.

^cThis does not include transportation time, interview time and lunch break (min 30min).

^dData of 513 interviews.

^eA cluster was completed after 6 interviews. Due to the sudden halt in interviewing as a result of the COVID-19 pandemic, 11 clusters were not completed.

3.2 Socio-demographics

Table 2 describes the sociodemographic characteristics of the study population in comparison to the Belgian population of 70 years and older. The random probability sampling method and random walk finding approach provided us with a study sample which is a valid representation of the Belgian older population. The distribution regarding gender, age and relationship status of our sample are comparable to those of the Belgian population of 70 years and older (Statbel, 2019), however the number of nursing home residents is lower in our sample (RIZIV/INAMI, 2019). For education level we can only compare with the numbers of the Belgian population between 15 and 64 years old (Statbel, 2019). Regarding country of origin, our study reports on country of birth while the Belgian authorities describe nationality (Statbel, 2019). Considering sexual orientation, 7.4% of the study population labelled themselves as non-heterosexual. This group contains participants who labelled themselves as homosexual, bisexual, pansexual, asexual or other. In this last group, several participants labelled themselves as “normal”. Since it was not clear whether they had difficulties understanding the different terms defining sexual orientation or whether they indeed labelled

their sexual orientation as “other”, we decided to classify these participants as non-heterosexual.

Table 2

Sociodemographic Characteristics of the Study Population (n=513) compared to the Belgian Population of 70 Years and Older

	Variable	n (%) study population	% Belgian population ≥70 y
Sex at birth	Female	299 (58.3)	57.5 ^a
	Male	214 (41.7)	42.2 ^a
Age (mean 79y)	70-79y	283 (55.2)	58.3 ^a
	80-89y	201 (39.2)	34.5 ^a
	90-99y	29 (5.7)	7.2 ^a
Living situation	Community-dwelling	462 (89.8)	
	Assisted living facility	25 (4.9)	
Country of origin	Nursing home	27 (5.3)	8.5 ^b
	Belgium	464 (90.4) ^c	94.0 ^c
	Other	49 (9.6) ^c	6.0 ^c
Education level	No formal education	10 (1.9)	
	Primary education	117 (22.8)	
	Secondary education	116 (22.6)	
	Technical or vocational education	109 (21.2)	Higher education: 32.9 ^d
	Religious school	1 (0.2)	
Sexual orientation	Higher education	160 (31.2)	
	Heterosexual	475 (92.6)	96.7 ^f
	Non-heterosexual	38 (7.4) ^e	3.3 ^f
Relationship status	Living together with partner	225 (44.0)	Married: 52.8 ^a
	Relationship. but living apart	32 (6.3)	
	No relationship/ partner	254 (49.7)	Unmarried/widowed/divorced: 47.2 ^a

Note.

^aNumbers from Belgian Population Statistics 01/01/2019 (Statbel, 2019).

^b% of Belgian population of 65 years and older receiving long term residential care in 2019 (RIZIV/INAMI, 2019).

^cNumbers of Belgian Population Statistics describe nationality, while our questionnaire asked about country of birth.

^dNumbers on education only available for Belgian population between 15 and 64 years old (Statbel, 2019).

^eThis group contains participants who labelled themselves as: homosexual, bisexual, pansexual, asexual or other. In this last group, several participants labelled themselves as “normal”. Since it was not clear whether they had difficulties understanding the different terms defining sexual orientation or whether they indeed labelled their sexual orientation as “other”, we decided to classify these participants as non-heterosexual.

^fNumbers based on Sexpert study (Buysse et al., 2013).

3.3 Interviewer's feedback

During the debriefing meetings the interviewers rated the overall experience as rewarding. However, many interviewers experienced the door-to-door approach as challenging. Interviewers described feelings of disappointment, rejection and despair when the door-to-door approach was not successful. This led to a premature drop out of 21 interviewers (43%). As a consequence, a second pool of eight interviewers was recruited and trained. The close follow-up was highly praised by the interviewers. The social media group in particular helped them to feel safe and stay motivated during the fieldwork. The group served as an accessible communication tool between the interviewers and the researchers and was used to exchange tips on interview techniques and practical questions. Besides the majority of interviewers having positive attitudes towards the social media group, some interviewers felt pressured when reading success stories from others. Interviewers received positive feedback from respondents. Participants expressed their appreciations about the study and felt treated with respect. Participants openly discussed SH and SV with both same and opposite sex interviewers and 59.9% of victims disclosed their SV experience for the first time.

3.4 Ethical and safety issues

During the fieldwork no acute dangerous situations were reported. Three interviewers became a victim of hands-off SV while interviewing. Every case was discussed in detail with the interviewers, the researchers and the coordinator of the study, upon which the interviewers found that no further actions needed to be taken. Two interviewers received an unwanted phone call by a respondent after the interview. As the informed consent form required both the name and signature of the interviewer, participants were able to retrieve the interviewers' contact details via an internet search. They were not contacted again after having informed the callers to contact the coordinator instead of the interviewer.

4. Discussion

In this paper we outlined the methodology of a population-based study on SV in older adults in Belgium taking safety, ethical and privacy guidelines into consideration. We described how we made a questionnaire on SH and SV acceptable to older adults. Moreover, we discussed how GDPR required us to change from a random sampling via the NR to a cluster random probability sampling and how we applied this procedure. Further, we explained how this change in sampling impacted the outcome of the study. In the discussion section we deliberate on the lessons learned and formulate recommendations for future studies.

When conducting this study, the research team had to overcome several challenges. First, we had to ensure older adults felt comfortable discussing SH and SV during a face-to-face interview. To maximize SV disclosure, the questionnaire built up towards the SV modules. Questions on SV and its consequences were phrased in a supportive and non-judgmental manner (WHO, 2016). Since older adults may internalize the stereotypical societal image of ‘the asexual older adult’ (Bodner, 2018; Gewirtz-Meydan et al., 2018; Kessel, 2001; Lai et al., 2011) and talking about SH and SV with older adults is considered by some to be inappropriate (Goldblatt et al., 2020; Gott et al., 2004; Saunamäki et al., 2014), we took extra care to make the questionnaire acceptable to the target population. Our questionnaire was rigorously tested during a two-phase pilot study. This pilot study showed that allowing certain deviations off topic and discussing family life and SH at the beginning of the questionnaire, allowed participants to create a bond of trust with the interviewers. This helped participants to disclose SV later on. Furthermore, we carefully selected our interviewers and provided them with specialized training. Apart from introducing the questionnaire, the main goal of the training was to confront interviewers with their own attitudes, fears and stereotypes towards SV and older adults (WHO, 2016). This helped them to minimize suggestion of judgement or blame when interviewing and to create a safe place to disclose SV. As a result, we received positive feedback from many participants. They felt they were treated respectfully and openly discussed SH and SV with both same and opposite sex interviewers, leading us to believe that same sex interviewers are not needed when interviewers are trained in non-judgmental communication. The majority of SV victims disclosed their experiences for the first time.

Secondly, we had to ensure our data collection method did not endanger the safety of both participants and interviewers while being GDPR compliant. Since the opt-in procedure of the NR would lead to bias in participation and possible safety issues for respondents, we changed our sampling procedure to a cluster random probability sampling with a random walk finding approach. When going from door-to-door, protecting the safety of participants and interviewers was of the utmost importance. To that extent we took several actions: (1) every household could only be contacted once, (2) in nursing homes we contacted only one person per unit, (3) when conducting an interview or making an appointment, interviewers called on the 5th house on their route, (4) only one person per household could participate, (5) proxy

respondents were not allowed, (6) the study was introduced as the “Belgian Survey on Health, Sexuality and Well-being” and (7) in case of an acute dangerous situation, a multi-step safety procedure was in place in accordance with article 458 of Belgian criminal law. In addition, we provided interviewers with close support via email, telephone, social media and debriefing meetings. Based on our experiences, social media are adequate tools to facilitate the contact between the research team and the interviewers, but also between interviewers. Interviewers reported feeling safe and supported by the group while interviewing. However, some interviewers felt pressured by the progress of others. Therefore, we recommend always providing individual coaching for interviewers. During the fieldwork the safety of the participants was never endangered. In three out of 513 interviews, interviewers were exposed to hands-off SV. Two interviewers received an unwanted call of a participant. Close supervision of the interviewers ensured there were no major consequences. We recommend future studies on (sexual) violence to always take the WHO guidelines on violence research as a basis in designing the study. To protect the privacy of interviewers, we advise ethical committees to allow interviewers to sign the informed consent form with the name of the research group, without having to write down their own name.

The random probability sampling method and random walk finding approach provided us with a study sample which is a valid representation of the Belgian older population. The participation rate in our study was 34%, which is similar to the participation rates of previous studies on SH and elder abuse and neglect in Belgium and Europe (Buysse et al., 2013; Luoma et al., 2011; Vandenberg et al., 1998) but lower than an Irish study on elder abuse and neglect using a multi-contacts approach (Naughton et al., 2012). Nonetheless, the random probability sampling method has proven to be time consuming and inefficient, especially given the specific safety constraints in SV research. As a result, we completed just 60% of the 845 planned interviews. Only 12% of the 15,599 contacted households were eligible for participation. Time spent going from-door-to-door eclipsed time spent interviewing. In order to conduct one interview, interviewers had to contact on average 37 households and spent on average 88min. In total we spent approximately 68 working days only calling at doors. As a result, the door-to-door approach was perceived as very challenging, leading to a premature drop-out of 21 interviewers and the need for additional recruitment and training. In addition, compared to random sampling via the NR, clustered sampling needs bigger samples to achieve the same level of representativeness. In our study, we needed to conduct twice as many interviews as originally planned, leading to much higher costs.

Given the GDPR regulation, our findings are specific for Belgium and Europe. Yet, as privacy regulations tend to become more strict around the globe, the challenges we faced may resonate and inspire researchers beyond Belgium and Europe. Based on our experiences we recommend future researchers to take the WHO guidelines for violence research (WHO, 2016) as a basis when designing their questionnaire and data collection together with some extra insights provided by our study. First, our study shows that assessing SH and SV in older

adults is possible without offending them. A careful selection and extensive training and guidance of interviewers are key to the success of the study. Training interviewers in non-judgmental communication, makes the need for same-sex interviewers obsolete. In order to ensure the privacy and safety of the interviewers, we advise not to have their name appear on any document related to the study. Furthermore, the random probability sampling method and random walk finding approach has proven to be a very time-consuming, inefficient and non-cost-effective method to reach a representative sample of older adults. As a result, this method should not be recommended to conduct research on sensitive topics in hard-to-reach populations. However, given the current privacy constraints by the GDPR, an alternative method to reach a representative sample is not yet available. To overcome this and to guarantee further research on sensitive topics in older adults, we would recommend that an interdisciplinary expert group consisting of researchers, donors, and policy makers investigates how GDPR and public health research in hard-to-reach populations can be better matched.

5. Conclusion

Our study shows that doing research on SH and SV in older adults is feasible, taking safety, ethical and strict privacy guidelines into account. Older adults are willing to discuss SH and SV during a face-to-face interview by trained interviewers. The cluster random probability sampling method provides a good sampling frame to reach a diverse group of older adults resembling the actual older population. However, the method is inefficient and time-consuming resulting in a more expensive procedure. Adequate training and close supervision of interviewers is key to the success of the study.

In order to guarantee further research on sensitive topics in older adults, we recommend that an interdisciplinary expert group consisting of researchers, donors, and policy makers investigates how GDPR and public health research in hard-to-reach populations can be better matched.

6. Declarations

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9. Appendix

Appendix 1. Detailed outcome measurements sexual victimisation

Hands-off sexual victimisation (no physical contact):

- *Sexual staring:* Someone stared at me in a sexual way or looked at my intimate body parts (e.g., breasts, vagina, penis, anus) when I didn't want it to happen.
- *Sexual innuendo:* Someone made teasing comments of a sexual nature about my body or appearance even though I didn't want it to happen.
- *Showing sexual images:* Someone showed me sexual or obscene materials such as pictures, videos, directly or over the internet (including email, social networks and chat platforms) even though I didn't want to look at them. This does not include mass mailings or spam.
- *Sexual calls or texts:* Someone made unwelcome sexual or obscene phone calls or texts to me.
- *Voyeurism:* I caught someone watching me, taking photos or filming me when I didn't want it to happen while I was undressing, nude or having sex.
- *Distribution of sexual images:* Someone distributed naked pictures or videos of me directly or over the internet (including email, social networks and chat platforms) when I didn't want it to happen.

- *Exhibitionism*: Someone showed their intimate body parts (e.g., breasts, vagina, penis, anus) to me in a sexual way and/or masturbated in front of me when I didn't want to see it.
- *Forcing to show intimate body parts*: Someone made me show my intimate body parts (e.g., breasts, vagina, penis, anus) online or face-to-face when I didn't want to do it.

Hands-on sexual victimisation

Sexual abuse (physical contact but no penetration):

- *Kissing*: Someone kissed me against my will.
- *Touching in care*: Someone touched my intimate body parts (e.g., breasts, vagina, penis, anus) during care against my will.
- *Fondling/rubbing*: Someone fondled or rubbed up against my intimate body parts (e.g., breasts, vagina, penis, anus) against my will.
- *Forced undressing*: Someone removed (some of) my clothes against my will.

Rape and attempted rape (physical contact with attempted or completed penetration):

- *Oral penetration*: Someone had oral sex with me or made me give oral sex against my will.
- *Attempt of oral penetration*: Someone tried, but did not succeed, to have oral sex with me or tried to make me give oral sex against my will.
- *Vaginal or anal penetration*: Someone put their penis, finger(s) or object(s) into my vagina or anus against my will.
- *Attempt of vaginal or anal penetration*: Someone tried, but did not succeed to put their penis, finger(s) or object(s) into my vagina or anus against my will.
- *Forcing to penetrate*: Someone made me put my penis, finger(s) or object(s) into their (or someone's) vagina or anus against my will.