Original Research Article

Chronic Noncommunicable Diseases of South Asian Bangladeshi Immigrants Aged >55 Years living in Toronto: Gender and Sociodemographic Perspective

ABSTRACT

Objectives: The study investigated chronic noncommunicable diseases (NCDs) among South Asian Bangladeshis > 55 years, accessibility to health workshops about NCDs, and the types of support needed to control and manage their NCDs.

Method: The study sample size was 191, and the study period was from January to March 2020. Pretested structured and semi-structured questionnaires were applied to collect the information. The study used chi-square and logistic regression for data analysis.

Results: Among the participants, males were 44.0%(84), and women were 56.0% (107), half of them (53.4%, 102) aged > 60 years, and the majority (69.6%, 133) lived in Canada more than five years. The frequently mentioned chronic noncommunicable diseases were diabetes ((men vs. female: 51.2% vs. 57.9%), high blood pressure (men vs. female: 48.8% vs. 54.2%), and high cholesterol (men vs. female: 33.3% vs. 36.4%). They also mentioned arthritis/ chronic joint pain (22.0%, 44), anxiety and depression (16.2%, 31), and heart disease (15.2%, 29). A higher proportion of participants (55.5%, 106) had multiple chronic diseases. The seniors aged > 60 years were 2.53 times more likely to have multiple NCDs than those who were < 60 years (95% CI: 1.34, 4.77). Also, females, compared to men and the participants who arrived in Canada in five years compared to the group more than five years, were more likely to have multiple chronic diseases, such as AOR= 1.62, 95% CI: 0.86, 3.04, and AOR=1.42, 95% CI: 0.72, 2.83), respectively. Furthermore, 51.8% (99) of participants had no access to health workshops about NCDs. However, the participants who were volunteers had a higher proportion of accessibility to health workshops than those who were not volunteers (81.0% vs. 38.9%, p=0.001). Most needed caregiver support from family members (59.7%, 114) to manage NCDs. Also, they required accompaniment support to go to health care providers (40.3%, 77), needed a doctor's cooperation (34.0%, 65), prescription management support (28.3%, 54), and home support (26.7%, 51) for managing the diseases.

Conclusion: High blood pressure, diabetes, and high cholesterol were common NCDs in South Asian Bangladeshis > 55 years. Many had more than one chronic disease, and women over 60 were more likely to have multiple NCDs. Participants needed better health information access and family care support to manage NCDs. Besides men's health, we should focus on female health extensively. Local community services come forward to help seniors for managing chronic diseases by applying a community-based home and caregiver support approach.

Keywords: Chronic diseases, diabetes, blood pressure, cholesterol, Bangladeshi seniors

1. INTRODUCTION

According to World Health Organization (WHO), yearly, about 41 million out of 55 million global deaths occur (71%) due to noncommunicable diseases (NCDs) such as cardiovascular, cancer, respiratory, and diabetes; among them, 17 million people die before the age of 70 [1]. Most NCD death (77%) occurs in low- and middle-income countries [1]. However, a high-income country like Canada is not exceptional because one in three Canadian adults lives with at least one chronic noncommunicable disease, and NCDs are estimated to account for 88% of all deaths [2, 3].

Recently, Canada increased adverse noncommunicable outcomes among immigrants despite having national noncommunicable strategies [2, 4]. South Asian immigrants (significant visible minority) have a higher incidence and prevalence of NCDs such as cardiovascular disease (CVD), diabetes, and hypertension than white Canadians [5]. South Asians are physically inactive, consume higher carbohydrate-related food, and lack adequate knowledge of NCDs, which are considered risk factors for noncommunicable diseases [1, 5]. In general, immigrants are often healthier when they first migrate to a country than native-born citizens, and immigrants' health gets worst significantly with the time of living [6,7,8]. Integrating immigrants into a new country and healthcare system might require a long time.

However, Canada has the opportunity to address the NCDs adequately. Recently, the governments increased the annual budget for the direct cost of chronic conditions by about 58% of healthcare spending [9]. Also, the Public Health Agency of Canada's World Health Organization (WHO) and the Pan American Health Organization (PAHO) work together to analyze data, create policies, and implement procedures for managing noncommunicable diseases in institutions and communities [10]. They focus on the immigrants' health and NCD to get helpful information, develop policies for ethnic communities/ immigrants based on the evidence, and reduce health challenges. However, South Asian Bangladeshi immigrants are missing in their research. South Asian Bangladeshi communities are increasing and adding to the Canadian population. We need to get available information about chronic noncommunicable of the Bangladeshi community. This information gap demands further investigation.

Bangladeshi-Canadian Community Services (BCS), an ethnic organization in Toronto, usually offers social and well-being services for South Asian Bangladeshi senior immigrants. It took the initiative (a study) to investigate the noncommunicable diseases of South Asian Bangladeshi people (who attended BCS for services) with their baseline information. The study had three research questions. (1) what were the chronic noncommunicable diseases of South Asian Bangladeshi seniors aged > 55 living in Toronto? (2) Did the seniors access health information to control and manage NCD? and (3) what support they needed to control and manage chronic noncommunicable disorders at home? The study also investigated the noncommunicable diseases of seniors by gender and sociodemographic variables. These variables influence noncommunicable conditions [11].

The study results help inform stakeholders, policymakers, and healthcare providers for developing policies, and programs, identifying the gap, for finding out opportunities to work to achieve sustainable development goals of WHO as Canada is a signatory. The World Health Organization's goal is to reduce the prevalence of noncommunicable diseases by one-fourth by 2025. Again, the study results could help ethnic community organizations take community-based interventions to achieve the goals of WHO.

2. METHODS

2.1 STUDY SETTING AND DESIGN

The study completed the data collection in Toronto, Ontario. The study recruited South Asian Bangladeshi participants aged > 55 who attended Bangladeshi-Canadian Community Services (BCS) for services. Bangladeshi-Canadian Community Services (BCS), an ethnic non-profit organization, is situated in Danforth, Toronto, and serves any South Asian immigrants. It began its activity in Toronto in 2000 [12]. South Asian immigrants represent the most significant visible minority (almost 5% of the population) and are from India, Pakistan, Sri Lanka, Bangladesh, and Nepal [13]. According to BCS's policy, Bangladeshi immigrants aged 55 or older can take services as seniors. Anyone across Toronto can come to the BCS to receive services. BCS provides the community with government information, youth events, afterschool program, health workshops, medical escort services, home services, and social connections. It also helps newcomers settle smoothly in Canadian society. We used quantitative research in the study. The study used structured and semi-structured questionnaires to collect information from the respondents. The study collected data from the respondents in the Bengali language because half of the participants aged >55 had language barriers. The study collected information from them from January to March 2020.

2.2 SAMPLE AND SAMPLING TECHNIQUE

We did not have lists of Bangladeshi people aged more than 55 years living in Toronto, so we applied a purposive sampling technique. We used the list of those who attended BCS and received service from January to March 2020. The interviewers collected information from them at BCS/agency. We planned to collect data from January to June to get a good sample size. However, due to the COVID pandemic, the agency/ BCS stopped its in-person services at the end of March 2020, which hampered data collection, too. From January to March, we got 219 aged > 55 years. The interviewers contacted them further and informed them about the study and its purposes over the phone. Finally, the study was able to collect information from 191 participants. The interviewers scheduled the interview based on the participant's availability to attend BCS/ agency in person. BCS provided the study participants with public transportation costs (bus/ subway, streetcar, etc.) to come to the agency for the interviews if they lived far. For the participants who could not come alone, BCS sent volunteers to help participants come to BCS. The study participants originated from Bangladesh and migrated to Canada with family members, such as sons and daughters.

2.3 DATA COLLECTION PROCEDURES

2.1.1 INTERVIEWER'S RECRUITMENT AND TRAINING

The study recruited three interviewers with social studies backgrounds, and they had past experiences in data collection. The principal investigator (PI) developed training guidelines for the interviewers, and the interviewers received a 2-day intensive training consisting of didactic lectures, mock interviews, and role play.

2.1.2 QUESTIONAIRE DEVELOPMENT

The study used a structured and semi-structured questionnaire to collect information from the participants. The PI invited five community members while developing the questionnaire for data collection. The PI developed the questionnaire (in Bengali) based on a review of the literature on chronic diseases of immigrants and community people's experiences. The PI pre-tested the questionnaire with ten volunteers aged >55 years. The pre-testing purpose was to check consistency, culturally appropriate language, sequencing of questions, and understanding of the data collection procedure. After the pre-test, the PI edited, modified, updated the questionnaire, and finalized the survey. The interviewers collected data on the sociodemographic profile. Furthermore, the study collected data on chronic disease profiles, accessibility to health workshops, and the types of support or needs required by participants to manage chronic diseases from a gender and sociodemographic perspective.

2.1.3 DATA COLLECTION

The PI formed a research team that consisted of three interviewers and a supervisor. The interviewers contacted the targeted participants on the phone, explained the study's purpose and ethical issues, and scheduled interviews with them. Any interested participant could not come to the agency for the interview, and the interviewer went to their homes with permission to collect the data. In this situation, the PI also sent an official letter to the study participants to consider their safety issues. Before the final interview, the interviewers talked to the participants on the phone several times to build rapport and make the respondents comfortable with providing the information during the interview. The interviewers had taken written consent from the participants before starting the interview.

Moreover, the supervisor observed and supervised the data collection procedures, techniques, ethical issues, and quality of data collection. The supervisor checked for any inconsistencies in the data in the questionnaire. Furthermore, with the discussion with the PI, the supervisor immediately organized the re-interviewer to complete the information and secure valid data.

2.4 ANALYSIS

Two youth volunteers of BCS received training on entering data on IBM SPSS (version 26.0) and cleaned, edited, and coded the data under the supervision of the principal investigator. The PI computed the mean for continuous variables such as age, years of schooling, and years living in Canada and calculated the proportion for categorical variables. Also, the PI did the statistical tests (Chi-square- χ^2) and logistic regression to estimate Odds ratios for categorical data along with 95 % confidence intervals (CI).

3 RESULTS

The study included 84 (44.0%) males and 107 (56.0%) females (Table 1). A more significant proportion of participants (53.4%, 102) were aged more than 60 years. Many (44.5%, 85) did not complete 12 grades of schooling. More than two-thirds of participants (69.6%, 133) had been in Canada for more than five years, and more portions were Canadian citizens (61.8%, 118). One-third of them (35.1%, 67) depended on others in healthcare decisions. About 47% (90) reported having no income sources in Canada. Every one in five (22%) had volunteering experience in the last three months. Half of the participants (50.3%, 96) reported about their English language barrier. Most of them (61.3%,117) lived nearby BCS agency.

Table 1. Demographic characteristics of the study participants (N=191)

Demographic characteristics		% (n)
Gender	Male	44.0 (84)
	Female	56.0 (107)
Age in years	55-59	46.3 (89)
	60+	53.4 (102)
	Mean (± standard deviation)	60.7 (± 5.9)
Completed School	12 grades	44.5 (85)
	Diploma/University	55.5 (106)
Living in Canada (years)	1-5	30.4 (58)
	5+	69.6 (133)
	Mean (± standard deviation)	11.1 (± 8.9)
Immigration status	Permanent residence (PR)	38.2 (73)
	Citizenship	61.8 (118)
Dependent on health care decision	Yes	35.1 (67)
	No	64.9 (124)
Income source	Dependent on others	47.1 (90)
	Government supports	34.0 (65)
	Job	18.8 (36)
Living close to BCS agency	Yes	61.3 (117)
	No	38.7 (74)
Community volunteer experience	Yes	22.0 (42)
	No	78.0 (149)
English language barrier	Yes	50.3 (96)
	No	49.7 (95)

In Table 2, the specific chronic noncommunicable disease among the participants was diabetes (55.0%, 105), followed by high blood pressure (51.8%, 99) and high cholesterol (35.1%, 67). Every one in five participants reported arthritis (22.0%, 44). Some participants (15.0-16.0%) reported chronic anxiety and depression (16.2%, 31) and heart diseases (15.2%, 29). Compared to males, females had little higher proportions of diabetes (51.2% vs. 57.9%, p=0.38 or not significant), high blood pressure (48.8% vs. 54.2%, p=0.47 or not significant), high cholesterol (33.3% vs. 36.4%, p=0.76 or not significant), and arthritis (14.3% vs.28.0%, p=0.03 or significant). Also, with increasing age, high blood pressure significantly increased among participants (p=0.04). The participants who lived in Canada for less than five years had higher proportions of diabetes and high blood pressure than those who lived more than five years, but they were not statistically significant.

Table 2: Self-reported chronic non communicable disease by gender, age, and years living in Canada (N=191)

Chronic diseases	Gender %(n)		χ^2 test	Age %(n)		χ^2 test	Years in Canada % (n)		χ^2 test	Total %(n)
	Male	Female	p-value	55-59	60+	p-value	< 5	5+	p-value	
High blood pressure	48.8 (41)	54.2 (58)	0.47^{+}	43.8 (39)	58.8 (60)	0.04*	58.6 (34)	48.9 (65)	0.27^{+}	51.8 (99)
Diabetes	51.2 (43)	57.9 (62)	0.38^{+}	50.6 (45)	58.8 (60)	0.31^{+}	65.5 (38)	50.4 (67)	0.06^{+}	55.0 (105)
High Blood cholesterol	33.3 (28)	36.4 (39)	0.76^{+}	34.8 (31)	35.3 (36)	0.96^{+}	36.2 (21)	34.6 (46)	0.87^{+}	35.1 (67)
Heart diseases	22.2 (17)	11.2 (12)	0.11^{+}	12.4 (11)	17.6 (18)	0.42^{+}	12.1 (7)	16.5 (22)	0.52^{+}	15.2 (29)
Arthritis	14.3 (12)	28.0 (30)	0.03*	19.1 (17)	24.5 (25)	0.39^{+}	22.4 (13)	21.8 (29)	0.93^{+}	22.0 (42)
Psychological	20.2 (17)	13.1 (14)	0.24^{+}	16.9 (15)	15.7 (16)	0.85^{+}	10.3 (6)	18.8 (25)	0.20^{+}	16.2 (31)

$^{+}$ not significant, * significant

In Table 3, female participants were more likely to have multiple chronic noncommunicable diseases (more than one chronic disease) than males (AOR= 1.62, 95% CI: 0.86, 3.04). Again, the participants older than 60 were 2.53 times more likely to have multiple chronic diseases than those below 60 (95% CI: 1.34, 4.77). Moreover, the participants who depended on others to make healthcare decisions were more like to have multiple chronic diseases than non-dependent seniors (AOR=1.48, 95% CI: 0.75, 2.92). Furthermore, the participants who lived in Canada for less than five years were more likely to have multiple chronic diseases than those who lived more than five years (AOR=1.42, 95% CI: 0.72, 2.83).

Table 3. Odds ratio for the more than one chronic noncommunicable disease by sociodemographic variables

Sociodemographic variables		Chronic diseases		χ^2 test	Adjusted Odds Ratio (AOR)	95% CI	
		Single	More than one			Lower	Upper
Gender	Male (ref)	50.0 (42)	50.0 (42)	0.19[+]	1	0.86	3.04
	Female	40.2 (43)	59.8 (64)		1.62		
Age (years)	55-59 (ref)	56.2 (50)	43.8 (39)	0.02[*]	1	1.34	4.77
	60+	34.3 (35)	65.7 (67)		2.53		
Living in Canada (Years)	6 and more (ref)	48.9 (65)	51.1 (68)	0.08[+]	1	0.715	2.83
	5 and less	34.5 (20)	65.5 (38)		1.42		
Dependent status	Non-dependent (ref)	50.0 (62)	50.0 (62)	0.05[+]	1	0.747	2.92
	Dependent	34.3 (23)	65.7 (44)		1.48		
Volunteer	Non-volunteer (ref)	46.3 (69)	53.7 (80)	0.38[+]	1	0.769	3.45
	Volunteer	38.1 (16)	61.9 (26)		1.63		
Total		44.5 (85)	55.5 (106)				

[+] not significant, [*] significant

In Table 4, only 48.2% (92) of participants had access to health workshops about chronic diseases. Among them, more females (56.1%, 60) had access to health workshops than men (38.1%, 32; p=0.02). Also, the participants who volunteered in the community had a higher proportion of accessibility to health workshops than those who were not volunteers (81.0% vs. 38.9%, p=0.02). Again, the participants having multiple chronic diseases had more accessibility (56.6%, 60) compared to the participants having single chronic conditions (37.6%, 32) (p=0.01). The participants who had anxiety and depression had less access to the health workshops than the participants who had no psychological problems (25.8% vs. 52.5%, p=0.01)

Table 4. Accessibility of seniors to health information by sociodemographic and disease variables

Sociodemographic and disease profiles		Accessibility to health workshops % (n)		χ^2 test p-value
		Yes	No	
Gender	Male	38.1 (32)	61.9 (52)	0.02*
	Female	56.1 (60)	43.9 (47)	
Volunteer	Yes	81.0 (34)	8.1 (8)	0.02*
	No	38.9 (58)	61.1 (91)	
Years in Canada	Less than 5	48.3 (28)	51.7 (30)	0.98+
	5+	48.1 (64)	51.9 (69)	
Age in years	55-59	44.6 (41)	48.5 (48)	0.66+
	60+	55.4 (51)	51.5 (51)	
Chronic diseases				
	High blood pressure	55.6 (55)	44.4 (44)	0.04*
	No blood pressure	40.2 (37)	59.8 (55)	
	Diabetes	54.3 (57)	45.7 (48)	0.08+
	No diabetes	40.7 (35)	59.3(51)	
	Have high cholesterol	49.3 (33)	50.7 (34)	0.88+
	No cholesterol	47.6 (59)	52.4 (65)	
	Have heart diseases	58.6 (17)	41.4(12)	0.23+
	No heat diseases	46.3 (75)	53.7 (87)	
	Have arthritis	66.7 (28)	33.3 (14)	0.01*
	No arthritis	43.0 (64)	57 (85)	
	Have psychological problem	25.8 (8)	74.2 (23)	0.01*
	No problem	52.5 (84)	47.5 (76)	
	Multiple chronic diseases	56.6 (60)	43.4 (46)	0.01
	Single chronic disease	37.6 (32)	62.4 (53)	

+ not significant, * significant

In Table 5, a higher proportion of participants (59.7%, 114) needed family support or caregiver support by family members to manage their chronic diseases. A significant proportion of participants aged more than 60+ years (47.1%, 48) and the participants who lived in Canada for less than five years (60.3%, 35) needed accompaniment support to go to the healthcare system, such as a family physician, hospitals, and laboratories for testing. Compared to men, women needed little higher proportion of doctor's cooperation (35.5% *vs.* 32.1%, p=0.65), medicine management support (29.9% *vs.* 26.2%, p=0.63), and home support to get their work done (29.0% *vs.* 23.8%, p=0.50).

Table 5: Type of supports towards chronic noncommunicable diseases by gender, age, and years living in Canada (N=191)

Types of support	Gender %(n)		χ^2 test	Age %(n)		χ^2 test	Years in Canada % (n)		χ^2 test	Total %(n)
	Male	Female	p-value	55-59	60+	p-value	< 5 years	5+	p-value	
Family support	61.9 (52)	57.9 (62)	0.66^{+}	65.2 (58)	54.9 (56)	0.18^{+}	53.4 (31)	62.4 (83)	0.27^{+}	59.7 (114)
Accompaniment support	39.3 (33)	41.1 (44)	0.88^{+}	32.6 (29)	47.1 (48)	0.05^{+}	60.3 (35)	31.6 (42)	0.00*	40.3 (77)
Doctor's cooperation	32.1 (27)	35.5 (38)	0.65^{+}	40.4 (36)	28.4 (29)	0.09^{+}	34.5 (20)	33.8 (45)	0.97^{+}	34.0 (65)
Medicine management support	26.2 (22)	29.9 (32)	0.63^{+}	24.7 (22)	31.4 (32)	0.34^{+}	31.0 (18)	27.1 (36)	0.60*	28.3 (54)
Home support	23.8 (20)	29.0 (31)	0.50^{+}	27.0 (24)	26.5 (27)	0.94^{+}	22.4 (13)	28.6 (38)	0.45*	26.7 (51)

+ not significant, * significant

4. DISCUSSION

The study investigated noncommunicable diseases by gender and sociodemographic variables. The most common noncommunicable diseases among South Asian Bangladeshi immigrants > 55 years were diabetes or high sugar, high blood pressure, and high cholesterol. Women over 60 years were more likely to have multiple chronic noncommunicable diseases than men. Also, the Bangladeshi participants developed more than one chronic disease within five years of arrival in Canada. In addition, many did not have access to the health workshops organized by community services for information on managing chronic health at home. Women needed little more family support, home support, prescription, or medicine management support to manage chronic diseases than men. The study indicates that besides men, women also need attention in managing chronic noncommunicable diseases. The implication of the findings is described below.

The study found that diabetes, hypertension, and high cholesterol were common in Bangladeshi immigrants of more than 55 years living in Toronto. They are not exceptional from other South Asian immigrants [14]. A few ethnic community organizations offer services for the South Asian Bangladeshi community in Toronto. They could create awareness among Bangladeshi immigrants about chronic noncommunicable disorders through comprehensive training or workshops in their language (Bengali) to understand the extent of the diseases and the challenges that hinder their healthy living. Toronto Public Health should collaborate with local ethnic organizations to design relevant programs and implement them effectively. The Public Health Agency of Canada (PHAC) and other funding agencies should allocate more funding to ethnic organizations to focus on risk factors and healthy living practices.

In our study, women over 60 were more likely to develop multiple chronic noncommunicable diseases than men. However, women are often ignored in managing noncommunicable diseases because people perceive NCDs mainly as being considered diseases of men [15,16]. Two in every three deaths among women are caused by noncommunicable diseases (NCDs), and the death rate of women from NCDs is almost similar to men [16]. Government policy should focus on women's health, too. Also, the government should work with ethnic organizations to ensure accessibility of South Asian Bangladeshi women to the healthcare system without any barrier, ensure treatment adherence and give more responsibilities to ethnic community organizations to address the issues of women's health.

Also, we found in our study that Bangladeshi immigrants > 55 years developed more than one chronic disease within five years of arrival in Canada. It is almost typical for other immigrants, too. We can explain in such a way that immigrants who come to a new country must prove that they are healthy through immigration health screening requirements or medical screening tests (17). However, when they arrive, they face difficulties adjusting to the new environment, have stress, and adopt risky health behaviors with increasing arrival time (18-21). Ethnic organizations should develop robust outreach strategies to reach newcomer immigrants and engage them in culturally appropriate healthy living activities. Local organizations must ensure access to community activities free from discrimination, no language issues, etc.).

Ethnic organizations also deliver health information to Bangladeshi immigrants in Toronto. This study found that Bangladeshi immigrants aged more than 55 years had poor access to health workshops. Compared to females, men had less accessibility to health workshops. The ethnic organizations must revise the socioeconomic factors like participants' time, distance from the organizations, family support, transportation cost, and workshop quality. These factors sometimes inhibit them from joining the workshops. Again, the study found

that Bangladeshi immigrants aged > 55 emphasized family support to manage chronic noncommunicable diseases, indicating that they need caregiver support from family members. Ethnic organizations provide family members with caregiver training to help seniors manage their health diseases adequately. Also, local community organizations could be involved in creating volunteer support (like caregiver support) if family support is unavailable.

The study has limitations. We had a small sample size (n=191), so we could not draw firm conclusions about the study results. Also, we took a convenient sample, so it could not be generalized. Furthermore, the participants reported their noncommunicable diseases (self-reported diseases), and they could be biased. However, the study findings can help design further research and investigation for large-scale research for South Asian communities. Again, in the study, we could not apply different methods for triangulation or more clarification because of the pandemic, shortage of resources, and lack of funding. However, we set the guidelines to maintain the data quality at different levels, such as training for interviewers, data collection, record-keeping system, and re-interview. They all ensured the data's validity and reliability.

In conclusion, chronic noncommunicable diseases like hypertension, diabetes, and high cholesterol are common among South Asian Bangladeshi immigrants in Toronto. The proportions are a little higher in women than in men, and women were more vulnerable to having more than one chronic disease than men. Furthermore, South Asian Bangladeshi immigrants >55 had less access to health workshops about noncommunicable diseases and needed family caregiver support to manage NCDs. Among South Asian Bangladeshi immigrants, besides men, women needed attention in managing chronic diseases. Local community services should come forward to help seniors for managing chronic diseases by applying a community-based home support approach.

ETHICAL APPROVAL

The internal ethical board of Bangladeshi-Canadian Community Services (BCS) approved the study. There is no medical approach to human subjects, so we did not require rigorous ethical issues. We obtained consent from the study participants verbally. Here we maintained the Helsinki Declaration of Ethical Principles for Human Subjects and maintained confidentiality strictly. After receiving permission from the participants, the interviewers started interviewing.

Furthermore, the participant's answers were anonymous because we did not write their names on the questionnaire form. The interviewer told the participants that they had the right to refuse to answer any question, to stop giving information at any point, or to withdraw from the interview. The interviewers kept information in a separate area, so only the principal investigator accessed the information.

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