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Helping Aged Victims of Crime (the HAVoC Study): Common Crime, Older People and Mental Illness

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Backgound: Limited data suggest that crime may have a devastating impact on older people. Although identification and treatment may be beneficial, no well-designed studies

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have investigated the prevalence of mental disorder and the potential benefits of individual manualized CBT in older victims of crime. **Aims:** To identify mental health problems in older victims of common crime, provide preliminary data on its prevalence, and conduct a feasibility randomized controlled trial (RCT) using mixed methods. **Method:** Older victims, identified through police teams, were screened for symptoms of anxiety, depression or post-traumatic stress disorder (PTSD) one ($n = 581$) and 3 months ($n = 486$) after experiencing a crime. Screen positive participants were offered diagnostic interviews. Of these, 26 participants with DSM-IV diagnoses agreed to be randomized to Treatment As Usual (TAU) or TAU plus our manualized CBT informed Victim Improvement Package (VIP). The latter provided feedback on the VIP. **Results:** Recruitment, assessment and intervention are feasible and acceptable. At 3 months 120/486 screened as cases, 33 had DSM-IV criteria for a psychiatric disorder; 26 agreed to be randomized to a pilot trial. There were trends in favour of the VIP in all measures except PTSD at 6 months post crime. **Conclusions:** This feasibility RCT is the first step towards improving the lives of older victims of common crime. Without intervention, distress at 3 and 6 months after a crime remains high. However, the well-received VIP appeared promising for depressive and anxiety symptoms, but possibly not posttraumatic stress disorder.

Keywords: Crime, older adults, psychological distress, cognitive behavioural therapy, pilot randomized controlled trial

Introduction

Crime affects anyone; it is widely reported in the UK, with over 13% of media outputs being dedicated to the topic (Curran, Salovaara-Moring, Coen and Iyengar, 2010) and it is of major national interest in light of recent civil disturbance. The behavioural and psychological changes that victims experience following a crime may be devastating: 51% of people may avoid going out alone following a "common" crime (such as mugging, burglary or criminal damage) and 14% of all victims report feeling depressed (Morrall, Marshall, Pattison and Macdonald, 2010).

A reasonable awareness of crime may be adaptive, but when these fears become irrational they create a problem, with people feeling isolated and vulnerable (Moore and Trojanowicz, 1988). The quality of life of older adults may be disproportionately affected (Age Concern, 2003), with the 2001 British Crime Survey counting 43% of older adults as considering themselves "very likely" to be burgled in the following year (Age Concern, 2002). Older victims of crime may be particularly vulnerable to the effects of crime because of concurrent major life events such as family bereavements, physical ill health and financial difficulties often associated with retirement (Jackson, 2009). Cognitive models of trauma suggest that distress following adverse events such as crime may be more marked in people with vulnerability and inadequate social or family support due to related negative coping responses (Bifulco and Brown, 1996).

Our society is ageing: the number of people aged 85 or over is estimated to reach 3.2 million by 2033 in the UK (Office of National statistics, 2009) and the number of older victims of crime is also likely to increase. However, the amount of information available on older victims of crime is very limited, especially when considering common crimes. For older people who have been victims of violence, significant symptoms of depression and moderate levels of anxiety and post-traumatic stress disorder (PTSD) have been found ($n = 36$) at variable times (1–10 years) before evaluation (Gray and Acierno, 2002). Also among 2321 older adults surveyed, those who had experienced a violent crime were at a significantly

increased risk of being placed in a care home (OR = 2.1; 95% CI = 1.0–4.6), even after controlling for other predictive effects (Lachs et al., 2006). For older victims of burglary, in one study of 215 older adults, 9% had enough symptoms for a categorical diagnosis of PTSD one month later, reducing to 2.3% at 3 months (Thornton et al., 2003), and in another study 25 and 13% respectively of 84 older adult burglary victims experienced depression and anxiety following the incident (McGraw and Drennan, 2006). In a further study into the consequences of burglary, older victims were found to be 2.4 times more likely to have died or been moved into a care home than their non-victimized neighbours within 2 years of the event (Donaldson, 2003). Intervention studies in this population are few; there was a single, small controlled study in anxious or depressed older victims that has shown that a video-based intervention produced no significant benefit (Acierno, Rheingold, Resnick and Stark-Reimer, 2004).

Data provided by the Metropolitan Police (personal communication, 29 March 2011) indicates that in the boroughs selected for the present study, over 26,000 people aged over 55 years reported being victims of a common crime in the years 2009–2010, although this figure is likely to be considerably higher as the 2000 British Crime Survey suggests that over 60% of all crimes go unreported (MacDonald, 2002). In addition, only a small proportion of crime victims actually use help offered by formal support agencies, with most relying purely on informal networks of family and friends (McCart, Smith and Sawyer, 2010). Together these data suggest that there may be a large group of individuals who never receive help following a crime.

Aims

We aimed to investigate the impact of common crime on functioning and mental health in older people. This feasibility work required the development and use of new ways to identify, recruit and assess a London-based sample of people aged 55 years or more who were victims of "common" crime. We also wanted to explore the feasibility of performing a randomized controlled trial in this group using our CBT-based victim improvement package (VIP) that was specifically developed for the project, so as to inform a future large scale trial of the VIP in older victims of crime.

Method

Sample and diagnostic procedure

The study was undertaken across 7 London Boroughs. People aged 55 years or more who were victims of common crime reported to the police between January 2009 and April 2010 were contacted by letter within one month of the incident (n = 21,230), or by phone (n = 366) via Victim Support (a national charity for victims of crime in England and Wales) or the Metropolitan Police. Of these 1058 (4.9%) responded.

Screening

Initially a 13-point cut on the Kessler-6 (K6; Kessler et al., 2003) was used to determine possible inclusion. However, at interview over the phone, people seemed more clinically and emotionally distressed than indicated by this particular measure, so three additional tools

were added to enhance capture: the Primary-Care Post-Traumatic Stress Disorder Screen (PC-PTSD; Prins et al., 2004), the Generalized Anxiety Disorder Scale (GAD-2; Kroenke, Spitzer, Williams, Monahan and Lowe, 2007), the Patient Health Questionnaire (PHQ-2; Kroenke, Spitzer and Williams, 2003). Participants were contacted and screened again at 3 months post crime, and if they were cases on any of the scales, they were offered a diagnostic interview, and if they were cases on this they were then asked to consider consenting for the pilot trial.

Diagnostic interview and selection criteria for the pilot trial

Inclusion criteria: (a) diagnostic: depressive and/or anxiety disorder and/or PTSD or sub-threshold PTSD, using a shortened version of the Structured Clinical Interview for DSM-IV Axis I Disorders: Non-Patient Edition (SCID-I/NP); (b) distress identified by participants as directly related or substantially worsened by the crime.

Exclusion criteria: (a) <25 on the Mini Mental State Examination (MMSE; Folstein, Folstein and McHugh, 1975); (b) intense suicidal ideation; (c) a SCID-I/NP diagnosis of alcohol misuse or drug dependence; (d) a history of bipolar affective disorder; (e) the presence of hallucinations or delusions; (f) receipt of CBT within the last year; (g) insufficient English to engage in CBT, (h) if on neuroleptic medication then the dose not being stable for at least 2 months prior to randomization.

Pilot trial

Participants were randomized and stratified by age using a separate telephone service operated by the Centre for Healthcare Randomized Trials (CHaRT), University of Aberdeen. Group allocation was notified to an independent administrator, and assessors were blind to participant group until all follow-up periods had ended.

The primary outcome measure was the World Health Organization Disability Assessment Schedule II (WHODAS-II), a broad measure of disability associated with physical and mental disorders (Chwastiak and Von Korff, 2003). Secondary outcome measures were: (a) the Beck Depression Inventory II (BDI-II; Beck, Steer and Brown, 1996); (b) the Beck Anxiety Inventory (BAI; Beck and Steer, 1990); (c) the Post-Traumatic Stress Diagnostic Scale (PDS; Foa, Cashman, Jaycox and Perry, 1997).

Interventions

Treatment as Usual (TAU). Any intervention relevant to a participant's health. CBT from another source could not be withheld for ethical reasons, although any receipt of CBT would be documented.

TAU plus the Victim Improvement Package (VIP). Up to ten sessions of a specifically developed CBT-based manualized treatment (Serfaty, Ohlin and Blanchard, 2013) was delivered over 3 months, by a therapist accredited by the British Association for Behavioural and Cognitive Psychotherapies. The manual consisted of three sections devised through feedback from older victims of crime: (i) information about crime, its effects, therapist issues and adaptions of the therapeutic work for older victims of crime; (ii) the structure of the specific cognitive and behavioural interventions and lifestyle issues, which were broadly

as follows: Session 1: gathering a victim narrative of the crime and details of depressive, anxiety and PTSD symptoms. Session 2: psycho-education about crime and an introduction to the CBT model. Sessions 3–8: mood diaries identifying negative thinking and unhelpful behaviours, guided discovery to challenge beliefs about fear of crime, personal vulnerability and safety, and behavioural experiments to challenge unhealthy avoidances related to the crime. Sessions 9–10: relapse prevention work. (iii) materials that can be used for the intervention.

Qualitative feedback of VIP:

Semi-structured recorded interviews were conducted on all participants who had received the VIP. The areas covered included: helpfulness of therapy and therapist, enactment of techniques, satisfaction and recommendations for improvement, and blocks to receiving the VIP. At the end of the intervention period, the researcher sign-posted relevant local services to participants, including contact with general practitioners where necessary.

Statistics and analysis

Data were explored and analyzed using SPSS 20. Where appropriate, normally distributed data were analyses using the unpaired *t*-test and for categorical and skewed data the chi-squared and Wilcoxon rank sum test were used respectively. The mean WHODAS II scores in primary care for people with anxiety and depression is 11.55 (*SD* 4.69) (Means-Christensen, Sherbourne, Roy-Byrne, Craske and Stein, 2006). For a full trial at 90% power, $p<.05$, we predicted that 84 would be required in each group (assuming 0.5 *SD* change in mean score is regarded as clinically significant). Median scores and quartile ranges for our outcome measures for paired data (baseline and postintervention) only in the pilot RCT are presented, but between group comparisons would not be appropriate because of the small sample size

Results

Of the 1058 participants who initially responded to our approaches, 581 agreed to be screened and 26 participated in a pilot RCT. Participant flow is shown in Figure 1. The demographic characteristics of responders and participants who took part in the pilot RCT are presented in Table 1 . Only completer data for each item are presented. The demographic characteristics of these responders were compared with people aged 55 years or more in representative census data for the seven London boroughs (Office of National Statistics, 2001a, b). As shown in Table 1, we had similar numbers of ethnic minorities, fewer married people, and more people from tertiary education, owner occupiers and skilled people. Nearly half our responders had suffered from anxiety or depression on an occasion before the crime and of these nearly 70% had sought help for this in the past.

Table 2 shows that of the crimes experienced, 367 (60.7%) were against property, 76 (12.6%) against the person and 162 (26.8%) against both, with data comparing responders by type of crime, and with police recorded crime.

Of the 605 responders, 581 provided screening information within a month of a crime, 486/581 (84%) responded again. A detailed breakdown of screened cases at the two times is

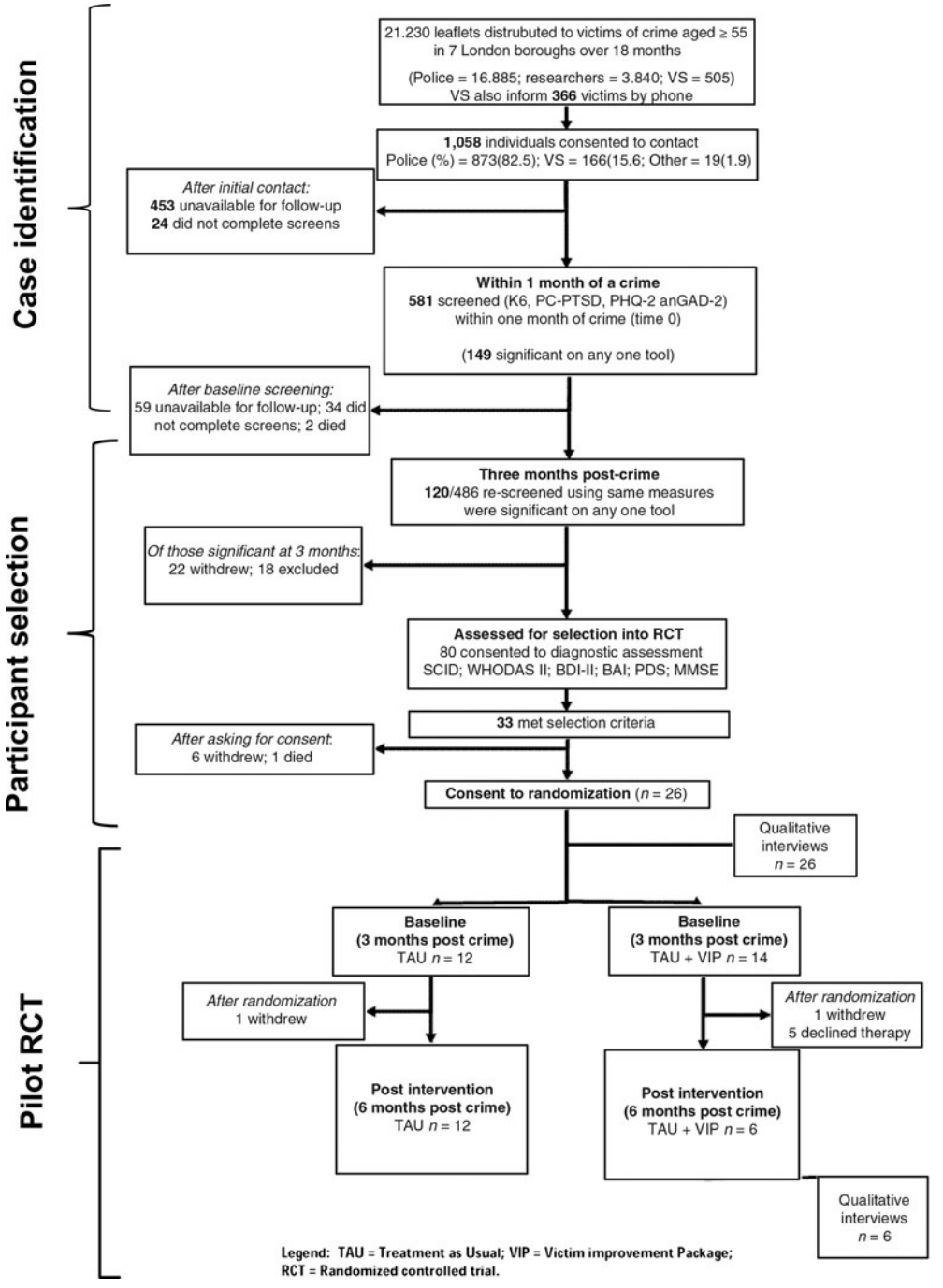

Figure 1. Participant flow

Table 1. Demographic characteristics 581 out of 605 who responded to at least one of screening tools (K6, PC-PTSD, GAD-2, PHQ-2) at one month after crime compared with borough census data for similar aged matched controls and demographic data for participants who took part in the pilot study.

Sample characteristics	Borough data 2001* 55+ *N* (%)	Responders to at least one of screening tools *N* (%)	Participants who took part in the pilot study. *N* (%)
Age		71.7; *SD* 9.0	69.1 ; *SD* 7.4
Gender	*n = 317,118*	*n = 581*	*n = 26*
Female	175,953 (55.5)	321 (55.2)	8 (30.8)
Male	141,165 (44.5)	260 (44.8)	18 (69.2)
Ethnicity	*Total n = 317,122 #*	*Total n = 575*	*n = 26*
White	262,975 (82.9)	500 (86.1)	21 (80.8)
Minority Ethnic	54,147 (17.1)	75 (12.9)	5 (19.2)
Marital Status†	Total *n* = 155,974	Total *n* = 578	*n* = 26
Married/cohabiting	80,638 (51.7)	224 (38.5)	9 (34.6)
Widow/Widower	35,406 (22.7)	147 (25.3)	7 (26.9)
Single	19,970 (12.8)	103 (17.7)	2 (7.7)
Divorced/separated	19,960 (12.8)	104 (17.9)	8 (30.8)
Level of education achieved †	*Total n = 229,041+*	*Total n = 577*	*n = 26*
Primary / Secondary (10–16 yrs)	122,240 (53.4)	185 (32.4)	5 (19.2)
Further (17–19 yrs)	61,879 (27)	130 (22.3)	11 (42.3)
Degree / Post-Graduate (21 yrs +)	44,922 (19.6)	262 (45.1)	10 (38.5)
Current living arrangements†	*Total n = 309,026*	*Total n = 580*	*n = 26*
Owner/occupier	171,168 (55.4)	398 (68.6)	13 (50.0)
Rented (privates/local auth./sheltered accom)	137,858 (44.6)	182 (28.4)	13 (50.0)
Previous occupation		*Total n = 570*	*n = 26*
Executive / professional		357 (63.1)	19 (73.1)
Skilled		126 (21.9)	5 (19.2)
Semi-skilled		46 (7.9)	2 (7.7)
Non-skilled		28 (4.9)	0 (0)
Volunteer		10 (1.7)	0 (0)
Unemployed		3 (0.5)	0 (0)
Additional Information		*N* (%)	
Do you have anyone close to you?		*Total n = 581*	*n = 26*
Yes		496 (85.4)	20 (76.9)
No		85 (14.6)	6 (23.1)
How do you know them?		*Total n = 496*	*n = 26*
Family		190 (38.3)	9 (34.6)
Spouse		171 (34.5)	6 (23.0)
Friend		107 (21.6)	5 (19.2)
Other		28 (5.6)	6 (19.2)
Have you seen a friend in the last week?		*Total n = 581*	*n = 26*
Yes		497 (85.5)	21 (80.8)
No		84 (14.5)	5 (19.2)

Table 1. Continued.

Sample characteristics	Borough data 2001* 55+ *N* (%)	Responders to at least one of screening tools *N* (%)	Participants who took part in the pilot study. *N* (%)
Have you ever suffered from depression or anxiety?		*Total n = 581*	*n = 26*
Yes		280 (48.2)	15 (57.7)
No		301 (51.8)	11 (42.3)
If yes, have you seen a doctor for this condition?		*Total n = 280*	*n = 26*
Yes		191 (68.2)	8 (30.8)
No			8 (30.8)
No response		89 (31.8)	10 (38.4)

†$p<.001$; non responders were excluded from analysis
* source: http://www.nomisweb.co.uk/ standard tables for seven boroughs
# source: www.lho.org.uk
+ borough data for those aged 55–74 only

given in Table 3. Of those who were cases at baseline, there was no reduction in caseness at 3 months for those positive on the PHQ-2 and GAD-2. Of those who responded, 268/412 (65.0%) felt that the crime continued to affect their daily life and 320/430 (77.7%) had never been a victim of crime before.

Of those who were rescreened at 3-months 134/486 (27.6%) were cases on one of the measures. Of these, 80/134 (59.7%) agreed to diagnostic assessment and 33/80 (40%) met DSM-IV criteria for a mental health disorder as a result of the crime. Of these, 18 were co-morbid for two or more disorders: 7/18 for a depressive disorder and sub-threshold PTSD; 4/18 for an anxiety disorder and sub-threshold PTSD; 4/18 for a depressive disorder and PTSD; 3/18 for an anxiety disorder and PTSD. Of the remaining 15/33, 8/15 only met criteria for sub-threshold PTSD; 5/15 for an anxiety disorder; 1/15 for a depressive disorder and 1/15 for mixed anxiety-depressive disorder.

Of the 134 participants who were positive on at least one of the screening tools (K6, PHQ-2, GAD-2 or PTSD), there were no differences in scores on these screening tools between those who participated in the trial ($n = 26$) and those who did not ($n = 108$). Twelve were allocated to TAU, and 14 allocated to the VIP, 2 withdraw before being notified of their group allocation and 3 refused therapy. Of the 12 allocated to the VIP and agreeable to follow-up, 9 took up at least one VIP session. Of those who received at least one session of VIP, a mean of 6.9 ($SD = 2.9$) out of 10 sessions were taken up. Although improvement was observed in all measures, remarkably there was a trend for greater improvement in all measures, except the PTSD diagnostic scale, in those receiving VIP (Table 4).

Qualitative feedback about VIP

The qualitative interviews suggested that although participants did not know what CBT was at the start of the study, they found therapy empowering, gained confidence, liked the here

Table 2. Police recorded crimes ($n = 25{,}175$) by type, compared with HAVoC responders within one month ($n = 605$), and HAVoC screened cases at 3 months ($n = 134$). Note that 581/605 completed screening tools within one month of the crime and 486/576 at 3 months. Chi square comparison compares Police recorded crime and HAVoC cases at 3 months

Crime type	Police recorded crime *N* (%)	Types of crimes for all responders within one month after crime $N = 605$ (%)	HAVoC cases at 3 months post crime $N = 134$ (%)	Chi square result and significance	Participants ($N = 26$) who participated in the pilot study (% of responders who were cases).
Burglary:/Attempted/Distraction	7556 (30.0)	181 (30.0)	42 (31.3)	0.04 $p = .84$	10 (14.9)
Pickpocket / snatch	3192 (12.7)	139 (23.0)	23 (17.2)	1.96 $p = .16$	4 (8.7)
Fraud*	996 (4)	72 (11.9)	11 (8.3)	**5.16 $p = .02$**	1 (16.7)
Criminal damage to property	1190 (4.7)	48 (7.9)	10 (8.2)	1.6 $p = .2$	3 (16.7)
Criminal damage to vehicle	1859 (7.4)	41 (6.8)	11 (8.3)	0.03 $p = .86$	2 (11.1)
Common Assault	1027 (4.1)	28 (4.6)	10 (8.2)	3.0 $p = .08$	3 (17.6)
Harassment*	1343 (5.3)	26 (4.3)	13 (9.7)	**4.1 $p = .04$**	0 (0)
Theft from motor vehicle	4447 (17.7)	22 (3.6)	2 (1.5)	NA	0 (0)
Actual Bodily Harm	1216 (4.8)	21 (3.5)	9 (6.7)	NA	2 (13.3)
Theft of motor vehicle	1300 (5.2)	17 (2.8)	3 (2.2)	NA	1 (2.5)
Theft of bicycle	627 (2.5)	6 (1.0)	0	NA	0 (0)
Motor Vehicle Interference/Tampering	311 (1.2)	3 (0.5)	0	NA	0 (0)
Sexual offence	111 (0.4)	1 (0.2)	0	NA	0 (0)

*indicates significant difference; Chi Square not applicable (NA) because of small cell size

Table 3. Screening tool scores within a month and at 3 months post crime

	Within a month of crime			At 3 months after the crime			Analysis	
Outcome measures	*N* =	Cases *N* (%)	Mean score (*SD*)		Cases *N* (%)	Mean score (*SD*)	*T* value	*p* value
(K6)	581	100 (17.2)	5.96 (6.26)	486	57 (11.7)	4.90 (5.55)	5.68	0.00
(PC-PTSD)	391	124 (31.7)	1.68 (1.45)	440	87 (19.8)	1.24 (1.33)	5.80	0.00
(PHQ-2)	373	77 (20.6)	1.37 (1.82)	411	74 (18.0)	1.12 (1.64)	1.92	0.06
(GAD-2)	373	99 (26.5)	1.78 (2.00)	411	84 (20.4)	1.46 (1.81)	1.49	0.14

K6 = Kessler-6; PC-PTSD = Primary-Care Post-Traumatic Stress Disorder Screen; PHQ-2 = Patient Health Questionnaire-2; GAD-2 = Generalizd Anxiety Disorder Scale

Table 4. Outcomes for pilot RCT

Outcome measures at 3 (baseline) and 6 months (postintervention) after the crime for participants randomized to TAU or VIP					
Measure	Intervention	*N*	Baseline (3 months post crime) median (QR Upper/lower)	Postintervention (6 months post crime) median (QR upper/lower)	Difference in medians (QR upper/lower)
World Health Organization Disability Assessment Schedule II (WHODAS-II)	TAU	12	67.0 (53.3/79.8)	65.0 (49.8/82.3)	−2.5 (10.8/12.0)
	TAU + VIP	12	60.5 (46.5/90.3)	51.5 (40.5/72.8)	−5.5 (−22.0/4.8)
Beck Depression Inventory II (BDI-II)	TAU	12	11.0 (9.3/20.5)	11.0 (5.3/18.3)	−2.0 (−5.3/1.5)
	TAU + VIP	12	12.5 (6.8/18.0)	8.0 (4.0/9.8)	−5.5 (−10.0/−0.3)
Beck Anxiety Inventory (BAI)	TAU	12	11.0 (8.0/28.0)	12.5 (4.3/18.0)	−3.5 (−7.5/6.8)
	TAU + VIP	12	12.0 (6.8/23.0)	9.0 (1.8/13.0)	−7.0 (−11.0/−0.5)
Post-Traumatic Stress Diagnostic Scale (PDS) symptom total	TAU	12	9.0 (6.5/11.0)	6.5 (2.8/9.0)	−3.0 (−3.0/−2.0)
	TAU + VIP	12	6.0 (4.3/11.8)	3.5 (1.3/5.8)	−2.5 (−5.5/−0.5)
Post-Traumatic Stress Diagnostic Scale (PDS) symptom severity	TAU	12	16.0 (13.3/23.0)	14.5 (5.3/18.8)	−6.0 (−9.8/−1.3)
	TAU + VIP	12	12.0 (6.0/25.0)	4.5 (1.5/10.5)	−7.0 (−12.0/−1.25)

TAU = Treatment As Usual; VIP = Victim Improvement Package; QR = Quartile Range

and now approach, and benefited from writing things down. They found the establishment of a link between thoughts, feelings and behaviours useful. The option of therapy in their own home was appreciated. Only one participant commented on the number of sessions available and would have liked more. Appreciation of the CBT approach and the therapist was not universal; one participant was opposed to CBT from the outset. People indicated CBT had helped to reduce anxiety and enabled them to view their experience from a different perspective and behave in a more constructive way. Views about the usefulness of the written materials were mixed. People also expressed some concern about the stigma of receiving therapy.

Discussion

This is the first study with older people to investigate the psychological impact of common crimes, the feasibility of recruitment into a randomized controlled trial testing and refining a CBT intervention. We found that of those who completed the two screenings, 27% continued to have significant psychological symptoms 3 months after the crime. One third of those interviewed met DSM-IV diagnostic criteria for a mental health disorder that they attributed to or felt had been significantly worsened by the crime. It was feasible to deliver a CBT-based intervention to these older victims, and outcomes indicated a trend towards a reduction in scores on all measures except PTSD-diagnosis. Quantitative data suggested that the VIP appears to be a promising intervention for anxiety and depression and qualitative interviews indicated that the intervention was well received.

As the response rate to our survey was low, caution is required when interpreting the data. Our population was not wholly representative when compared to 2001 census data (Office of National Statistics, 2001a, b) with which some equivalence may be expected. There were fewer people from ethnic minorities, fewer married and more single people, more graduates and post-graduate professionals and more owner-occupiers in this study. There also appears to be a cohort of older people with previous psychological problems for which they have sought help from mainstream services. Levels of depression, anxiety disorder and PTSD among the older crime victims appear to be greater than among an aged matched English older population (McManus, Meltzer, Brugha, Bebbington and Jenkins, 2009). These findings are consistent with existing data. Selection bias would explain demographic differences. Ethnic minorities and those with higher education are less and more likely respectively to access services and engage in research. There is also the likelihood that common crime has a significant impact in this vulnerable population. It is also notable that there was little change in these high levels of depression and anxiety over the 3 months after the crime, and although PTSD symptoms improved, they were still considerably higher (20.9%) than the general population.

Older people who responded to our survey and experienced, fraud or harassment were more likely to be distressed, suggesting that crimes that are a direct threat or deceit are associated with greater distress. Generally it is known that only 40–60% of crimes are actually reported to the police (MacDonald, 2002; Government of Canada, 2011) and there is evidence that older victims are more likely to blame themselves than younger ones and not to report crime (Acierno et al., 2002), so any work in this area that depends upon reported crime is likely to be an underestimate.

Although in depth qualitative interviews suggested that our intervention was acceptable and could be delivered, more information about therapists' adherence to the VIP would have been helpful. Whilst an adherence checklist was included in the VIP manual, this was used purely to help guide the therapist in this feasibility study as it would be difficult to interpret findings on adherence given the small sample – in a larger trial we would collect these data. Only 2 people felt that they needed to take up all 10 therapy sessions. In a larger trial we would also recommend collecting independent ratings of therapy using the Cognitive Therapy Scale-Revised (Blackburn et al., 2001).

Older people appear to be psychologically affected by common crime and it is concerning that without treatment there was little improvement in outcome measures 3 months and 6 months after the crime. It remains unclear whether a trans-diagnostic approach is better than an intervention targeting a specific diagnosis. On balance, targeting the main diagnostic problem provides a framework for treatment, although if participants had comorbidity, elements of different interventions, for example PTSD and depression, could be used at the therapists' discretion.

Improving recruitment:

Only 4.9% of older victims responded to leaflets about the study distributed by the police and victim support. While this is a very small response it is not untypical in UK studies on crime victims and mental health (Bebbington, Marsden and Brewin, 1997; Rose, Brewin, Andrews and Kirk, 1999). Better results were obtained by informing crime victims of the study over the phone (135/366, 36.8%). Data protection laws prevented the police and VS from passing on details of crime victims directly to the research team, and this impeded recruitment. In our reappraisal of the recruitment methods and following negotiations with the Research Ethical Committee and the Metropolitan Police, officers from two Safer Neighbourhood Teams (SNTs) in one borough had an excellent response rate, with 59/65 (90.8%) of the older victims they encountered over 8 weeks agreeing to be screened for psychological distress. A potential 36,000 participants could provide data over 18 months if all 138 SNTs in seven boroughs were involved. The four screening tools and demographic questionnaires were distributed directly by the three SNT officers as part of their routine interactions with those aged 55 or over who had been a victim of crime in the last month. Signposting of relevant local services was offered through information leaflets and the researcher's contact details were given. Twenty-three out of 59 (39%) who provided data were cases on any one of the screens K6 = 9 (15.2%); PC-PTSD = 17 (28.8%); PHQ-2 = 6 (10.2%); GAD-2 = 13 (22.0%). Seventy-eight percent lived in rented accommodation and 29% classed themselves as minority ethnic, quite a different population from leaflet responders. This method of data collection could therefore yield a larger, more representative sample if used in a future study.

Conclusions and direction for future research

This study suggests that the VIP can feasibly be delivered to this population, and the number of sessions taken up is consistent with other data (Serfaty et al., 2009). Although care is required when extrapolating results, this tailored intervention appears promising and realistic, for anxiety and/or depressive symptoms; a post hoc analysis suggests that in order to detect a "true" average difference of 0.5 on a standardized joint scale of the BDI-II and BAI, with 90%

power at $p<.05$ (2-sided), requires a total sample-size (N) of 168 participants for a full trial. However, trauma related symptoms appear particularly difficult to treat (Foa, Keane, Friedman and Cohen, 2009) and more sessions for this condition, as advocated by NICE (NICE, 2005), may be required.

A future RCT to demonstrate the clinical and cost effectiveness of the VIP could realistically be achieved. This is particularly relevant because of the reported increased risk of entering residential care among older victims of common crime. If effective, this approach could then be rolled out as part of a health detection and treatment strategy, with SNTs actively screening for psychological distress and significant cases being offered evidence-based intervention. These developments would also be consistent with initiatives for improved care for victims and the integration of services (Casey, 2011).

Significant outcomes

- Police Safer Neighbourhood Teams are a useful way to identify and assess older victims of crime for psychological distress - a difficult to access population.
- Anxiety, depression and PTSD are more frequent than in a similar aged matched population.
- It is possible to recruit older victims of crime into a randomized controlled trial and deliver a CBT based intervention.
- Preliminary evidence suggests that such an intervention may improve levels of depression and anxiety.

Limitations

- The group of older people identified was not wholly representative of the general population so further work on prevalence is required.
- This was a pilot study so effectiveness of the intervention remains to be fully established.

Declaration of interest

Anthony Kessel is also Director of International Public Health and Responsible Officer, Public Health England. The views expressed in this paper are the author's own and do not necessarily represent the views of the PHE.

The funders had no input into study design, collection, analysis, interpretation of data, the writing of the report or the decision to submit the paper for publication.

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