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Effectiveness of Depression – Suicidal Behaviour Gatekeeper Training among police officers in three European regions: Outcomes of the Optimising Suicide Prevention Programmes and Their Implementation in Europe (OSPI-Europe) study

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ABSTRACT

Background: Gatekeeper training for community facilitators, to identify and respond to those at risk of suicide, forms an important part of multilevel community-based suicide prevention programmes.

Aims: The current study examined the effects of gatekeeper training on attitudes, knowledge and confidence of police officers in dealing with persons at risk of suicide.

Methods: Eight-hundred and twenty-eight police officers across three European regions participated in a four-hour training programme which addressed the epidemiology of depression and suicidal behaviour, symptoms of depression, warning signs and risk factors associated with suicidal behaviour, motivating help-seeking behaviour, dealing with acute suicidal crisis and informing bereaved relatives. Participants completed internationally validated questionnaires assessing stigmatising attitudes, knowledge about depression and confidence in dealing with suicidal persons pre- and post-training.

Results: There were significant differences among countries in terms of previous exposure to suicidal persons and extent of previous training. Post-training evaluation demonstrated significant improvements in stigmatising attitudes, knowledge and confidence in all three countries.

Conclusions: The consistently positive effects of gatekeeper training of police officers across different regions supports inclusion of this type of training as a fundamental part of multi-level community-based suicide prevention programmes and roll out, nationally and internationally.

Keywords: Gatekeeper training, suicide, depression, police, community, prevention.

Introduction

Suicide is the most common type of violent death globally, with over 800,000 suicides occurring each year (WHO, 2014). There is a lack of consistent evidence to identify the most effective strategy to prevent suicide (Mann et al., 2005; Windfuhr, 2009). However, it is thought that due to the complexity of factors which are associated with suicidal behaviour, evidence-informed interventions which target the problem on multiple levels are the most effective (Althaus & Hegerl, 2003; Ono et al., 2008; Hegerl & Wittenburg, 2009; Van der Feltz-Cornelis et al., 2011). Educational programmes are one of five evidence-based interventions which also include screening, treatment interventions, means restriction and media and gatekeeper training (Mann et al., 2005; Shim & Compton, 2010). An example of an evidence-based intervention programme for suicide prevention at community level is gatekeeper training (Cross et al., 2007). The term "gatekeeper" refers to people who have primary contact with those at risk for suicide and can identify them by recognising suicidal risk factors (Isaac et al., 2009). Gatekeeper training "teaches specific groups of people to identify people at high risk for suicide and then to refer those people for treatment" (Isaac et al., 2009, p.261). While there is no consistent evidence to suggest that gatekeeper training alone decreases existing rates of suicide, such programmes are seen as one of the most important components of broader suicide prevention strategies (Hegerl et al., 2009; Isaac et al., 2009; Swanke & Buila, 2010). Gatekeeper training is often integrated into multi-faceted strategies aimed at educating community facilitators on identifying signs of depression and suicidal behaviour and referring to appropriate services (Cross et al., 2010; Hegerl et al., 2009; Knox et al., 2003).

Community facilitators represent a heterogeneous group of professionals, including teachers, police officers, social workers, pharmacists and clergy. Despite the fact that many of these people are confronted with depressed or suicidal persons in their daily work (Scheerder et al., 2010a; 2010b), they are rarely seen as a target group for public health interventions. Linsley et al. (2007) note that police officers are regularly in contact with those who take their own lives, with one-fifth of suicide cases having a documented contact with police in the three months leading up to the death. Furthermore, Vermette et al. (2005) underlined the important role that police officers play in relation to mental health. Officers working in law enforcement are often the first to respond to a mentally ill person in crisis, and

often have to make a decision about appropriate referrals for treatment. According to Borum (1998), professionals in law enforcement provide up to one-third of all emergency mental health referrals. Although these contacts provide opportunities for intervention (Linsley et al., 2007), few professionals receive adequate training for dealing with such situations effectively and efficiently (Linsley et al., 2007; Scheerder et al., 2010a). Previous studies which have included police officers as a target group in educational training programmes have addressed attitudes towards mental health, stigma and discrimination in the police force (Pinfold et al., 2003; Vermette et al., 2005; Compton et al., 2008 Dumesnil & Verger, 2009). Pinfold et al. (2003) introduced an educational intervention to reduce psychiatric stigma and discrimination in the English police force. The study observed improvements in stigmatising attitudes, but they found no difference in behavioural intentions, along with a negative change in attitude. Suicide prevention studies in the Canadian police force (Mishara & Martin, 2012), Norwegian military (Mehlum & Schwebs, 2001) and the US Air Force (Knox et al., 2003; Knox et al., 2010) are the only studies which tackle suicide prevention within organisations using a multi-level approach. However, in these studies members of the organisations are not trained as community gatekeepers and the primary aim of these educational programmes was to reduce suicide rates within the organisations themselves. Nevertheless, such studies have highlighted the effectiveness of these programmes in promoting awareness of depression and suicide (Mishara & Martin, 2012; Rozanov et al., 2002), thereby equipping gatekeepers with the knowledge to identify (and the motivation to intervene) with those showing signs of suicide risk.

Problems arise when evaluating suicide prevention studies, as the most objective measure of effectiveness is a reduction in the number of completed suicides (Swanke & Buila, 2010). Low incidence rates and resulting low statistical power preclude the assessment of suicide as a primary outcome. Therefore, intermediate outcome criteria have become the focus of measurement in a growing number of studies (Walker et al., 2005) such as decreases in risk or increases in protection (e.g. increased knowledge, awareness and perceived competence). The present study aimed to examine the effectiveness of a depression and suicide awareness gatekeeper training programme with police officers in improving attitudes and increasing knowledge and confidence in dealing with suicidal persons, as part of a multicentre suicide prevention programme, Optimising Suicide Prevention Programmes and

their Implementation in Europe (OSPI-Europe) (Hegerl et al., 2009). Coppens et al. (2014) previously reported on the effectiveness of this training programme among other types of community facilitators, including teachers, pharmacists, nurses, the clergy, social workers, counselors, managers, and carers for the elderly.

Methods

Design

The research design was a prospective single group pre-test and post-test evaluation. In order to determine pre-post training changes among participants of the OSPI-Europe Gatekeeper programme, a standardised procedure was used to collect data from participants attending the training programmes in 3 European regions. Semi-structured self-report questionnaires were administered among participants immediately before (pre) and after (post) training. A 4-month follow up was conducted in order to investigate changes after the post-training assessment and to enable investigation of sustainability of training effects. All participants were invited to participate in the evaluation.

Participants

The standardised Depression and Suicide Gatekeeper training programme was delivered to 828 police officers in three OSPI-Europe intervention regions: Limerick (Ireland, n=425 trained out of 643 active-duty officers), Amadora (Portugal, n=260 trained out of approximately 350 active-duty officers) and Leipzig (Germany, n=143 out of 1380 active-duty officers). The sample of officers in Leipzig was comprised mostly of officers-in-training, whereas the Portuguese and Irish participants were already working as police officers.

Study protocol

The OSPI-Europe programme was delivered in regions with diverse social and cultural backgrounds (Hegerl et al., 2009). To ensure a comparable method of implementation between different intervention regions, a collectively developed training programme was used, of which certain elements were defined as core training contents to be applied consistently across all intervention regions. Adaptation of training materials to a regional context was also encouraged. Moreover, in order to meet local needs, the mode of delivery of the training programme was also open to some local flexibility. In Ireland and in Germany, peer-led training [train-the-trainer (TTT)] was employed. In Portugal, no TTT sessions occurred and the training was delivered directly by members of the OSPI team. In Ireland, the personnel

delivering training were senior police officers whereas in Germany, the trainer was a physician who worked within the police force.

In Ireland, an initial three- to four-hour standard gatekeeper programme was delivered to senior police officers with a background in general police training. Subsequently, a nine-hour TTT programme was conducted with core training personnel who had attended the standard gatekeeper programme so that they could then undertake the subsequent roll-out of the 'standard/model' gatekeeper training course to their peers. Based around a detailed resource pack, the TTT programme provided the trainers with the information and resources needed to deliver gatekeeper training sessions. The training provided trainers with presentation slides, extensive background information, suggested formats for the training, guidance and advice on delivery. In Germany, an eight-hour TTT programme was conducted with comparable material by the OSPI-Europe project coordinator and a co-worker with extended experience in TTT workshops within the multi-level suicide prevention approach used in OSPI-Europe. These trainers conducted the gatekeeper training programme. Following completion of the TTT programme, in both regions the trained trainers delivered the four-hour gatekeeper programme with supervision provided by members of the OSPI-Europe team. In Portugal, all gatekeeper training programmes were delivered by members of the OSPI-Europe team, with expertise in psychiatry and psychology.

The content of the four-hour OSPI gatekeeper programme is designed to provide participants with an overview of the extent of depression and suicidal behaviour, symptoms of depression, warning signs and risk factors associated with suicidal behaviour, motivating help-seeking behaviour, dealing with acute suicidal crisis and informing bereaved relatives. The programme concludes with gatekeeper role plays to practice asking an at-risk person about suicide risk factors, responding appropriately to disclosures, and referring to appropriate services. The duration of the gatekeeper training was four hours in all centres. The group size ranged from a maximum of 15 participants in Limerick to a maximum of 25 in Leipzig and Amadora.

Measures

Evaluation questionnaires included internationally validated items and questionnaires relating to standard socio-demographic information, previous experience of training related areas, previous

experience of contact with people at risk of suicide in a professional capacity, stigma towards depression; knowledge about suicide interventions and confidence in recognising suicide risk.

Stigma towards depression was measured utilising the Depression Stigma Scale (DSS) (Griffiths et al., 2004). The DSS contains 18 items and is made up of two subscales: personal depression stigma and perceived depression stigma. Nine items measuring "personal depression stigma" ask respondents to rate how strongly they feel personally about statements relating to depression Nine items also measure "perceived depression stigma" and require respondents to rate how they think other people feel about the same issues. The scale has been used previously to examine pre-post changes following educational interventions (Finkelstein & Lapshin, 2007; Griffiths et al., 2004) and was shown to have adequate reliability. In this sample, the Personal Depression Stigma subscale was used and had a Cronbach's alpha value of 0.7. The items from the DSS were aggregated to give total maximum score of 36.

Knowledge in relation to suicide intervention was assessed using a modified version of the Suicide Intervention Knowledge Test (IKT) (Tierney, 1994), which is designed to measure knowledge components directly related to suicide intervention. The original test had a split-half reliability of .59 (Pearson), indicating a moderate level of internal consistency, and a test-retest Pearson correlation coefficient of .67, indicating moderate stability (Tierney, 1994). The items from the IKT were aggregated to give total maximum score of 9.

Confidence to identify suicide risk was assessed by one item from the Confidence Scale developed by Morriss et al. (1999) and adapted by Capp et al. (2001): "I feel confident that I could identify a person at-risk for suicide". The item is scored using a 10 cm visual analogue scale. A minimum score indicates "not being at all confident" whereas a maximum score indicates being "very confident".

Procedure

At the start of each training session an introductory letter, regarding the evaluation of the training, a consent form and baseline questionnaires were distributed among the participants by an independent researcher. Immediately after the training programme the post-training questionnaires were distributed.

In Ireland and Germany, participants who consented to be contacted for the follow-up received an explanatory letter and follow-up questionnaire 4 months after the post-training assessment either by post or email. For participants who had not returned the 4-month follow-up questionnaire within 3-6 weeks, a reminder email was sent out.

Ethics statement

The study was approved by the relevant research ethics committees in the participating intervention regions (Ethics Commission of the Medical Faculty, University of Leipzig, Germany; Ethics Research Committee of the Mid-West Regional Hospital, Limerick City and County, Ireland; Ethical Committee of the Faculty of Medical Sciences, New University of Lisbon, Portugal). The study was performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments.

Data analysis

Statistical analyses were conducted using SPSS 18.0. Pre-post-training effects were analysed using mixed-between analysis of variance (ANOVA) tests and to assess associations between the magnitude of change for each of the outcome measures and socio-demographic characteristics. The assumptions for mixed between-within ANOVA were met. The results of the ANOVA tests were adjusted for the following variables: country of the participant, age of the participant and number of year's professional experience (<4years, 4-10 years and 10+ years). Chi square tests and independent-sample t-tests were used to test for differences in outcome measure scores between participants who had received previous training and those who had not.

Results

Response rate

The overall post-training response rate for police officers was high (90%, n=748) and consistent across the three countries. However, the 4-month follow-up rate for a postal questionnaire was low across all countries (6%, n=46), therefore the main statistical analysis is limited to pre-training and post-training scores only.

Socio-demographic characteristics

The majority of the participants were male (80.1%). Portugal had the highest proportion of male participants (91.9%), compared with Germany (81.1%) and Ireland (72.5%) (Table 1). This distribution is in keeping with the general prevalence of males among police officers.

Most of the participants were under 45 years of age (82.7%). In Germany, 96.4% of participants were under the age of 45. This is higher than both Ireland (76.4%) and Portugal (85.7%, and reflects the fact that most of the participants were officers-in-training.

Depression stigma, suicide prevention knowledge and confidence to detect persons at risk

Of the 828 participants, 94.7% (n=748) completed the personal depression stigma subscale of the DSS both before and immediately after training (pre-and post-training respectively). Multivariate analysis (Table 2) demonstrated main effects at for the intervention, and country and gender at baseline, on DSS scores. A significant increase in mean scores on the DSS occurred after the training session (M=32.99, SD=4.6 vs. M=35.18, SD=4.8; F=100.23, p<0.001). At baseline, participants in Ireland had significantly higher scores on the DSS Personal subscale (M=34.22, SD=4.4), indicating less personal depression stigma, on the scale than participants in either Portugal (M= 31.77, SD= 4.4) or Germany (M=30.87, SD=4.3) (F=27.72, p<0.001). At baseline, females held less stigmatising attitudes than males (M= 35.36, SD=4.5 vs. M= 32.42, SD=4.5; F=31.95, p<0.001).

Table 1: Baseline characteristics of participants in police officer depression/suicidal behaviour awareness training

Characteristic		**Germany (n=143)**	**Ireland (n=525)**	**Portugal (n=260)**	**Overall (n=828)**
Gender	Male	81.1%	72.5%	91.9%	80.1%
	Female	18.9%	27.5%	8.1%	19.9%
Age	<31 years	94.2%	38.1%	43.8%	49.3%
	31-45 years	2.2%	38.3%	41.9%	33.4%
	>45 years	3.6%	23.6%	14.2%	17.3%
Years in school	<13 years	22.9%	33.9%	51.4%	37.7%

	13-16 years	71.4%	40.3%	41.7%	46.3%
	>16 years	5.7%	25.8%	6.9%	16.1%
Years of professional experience	<4 years	87.5%	24.6%	27.3%	35.0%
	4-10 years	5.8%	39.6%	31.6%	31.9%
	>10 years	6.7%	35.8%	41.0%	33.1%
Received previous training	Overall	17.7%	57.5%	30.0%	42.3%
Type of previous training	Depression	7.7%	20.2%	15.0%	16.6%
	Self-harm	1.5%	14.1%	15.0%	12.4%
	Suicide	10.8%	29.2%	15.0%	21.7%
	Crisis	8.5%	49.2%	21.2%	33.6%
Experienced suicidality in professional capacity		6.2%	52.6%	24.2%	36.2%
Discussed their concerns with the distressed person		34.6%	80.9%	63.7%	73.1%
Asked about suicidal thoughts		23.1%	73.7%	53.9%	65.0%

The Suicide IKT was completed by 80.3% (n=665) of the participants both pre-and post-training. In multivariate analysis (Table 2), there was a significant main effect for the intervention, as well as for country and years of professional experience at baseline, on IKT scores. There was a significant change in mean scores on the IKT (M=3.88, SD=1.3; M=4.35, SD=1.3, F=28.27, p<0.001), indicating increasing knowledge. At baseline, participants in Portugal (M=3.47, SD=1.12) had significantly lower knowledge scores than participants in Ireland (M= 4.09, SD=1.30) or Germany (M=4.15, SD=1.25) (F=31.76, p<0.001). There was a significant interaction between country and time

(*F*=4.05, p=0.018), suggesting that the effects of training on knowledge scores were greater for Ireland (mean score difference: +0.58) than for Germany (mean score difference: +0.48) or Portugal (mean score difference: +0.31) (see Figure 1). At baseline, years of experience was associated with level of knowledge (*F*=7.37, p<0.001*)*, such that those with more than 10 years of experience had significantly lower scores, indicating less knowledge (*M*=3.88, *SD*=1.23), than those with less than 4 years of experience (*M*=3.92, *SD*=1.3) or those with between 4-10 years of experience (*M*=4.12, *SD*=1.3).

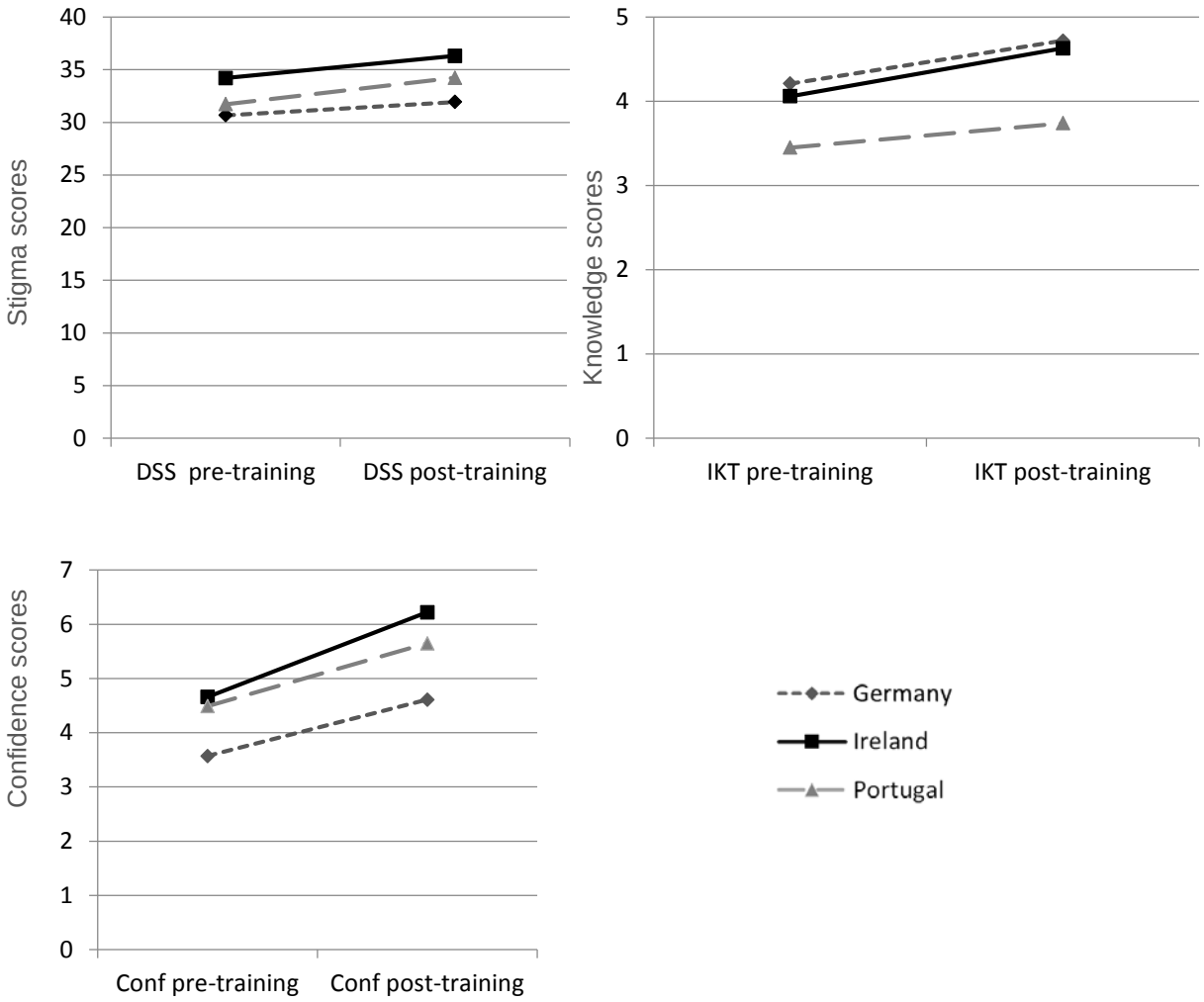
Of the 828 participants, 89.9% (n=744) completed the confidence scale pre-and post-training. There was a significant main effect for the intervention on confidence scores (*M*=4.48, *SD*=1.8 vs. *M*=5.85, *SD*=1.8; *F*=248.61, p<0.001), indicating increasing confidence. Moreover, there were significant main effects for country (*F*=28.5, p<0.001) and years of experience (*F*=6.34, p<0.001). At baseline, Germany (*M*=3.64, *SD*=1.7) had significantly lower scores than either Portugal (*M*= 4.49, *SD*=1.9) or Ireland (*M*=4.69, *SD*=1.8). There was a significant interaction between country and time (*F*=4.54, p=0.011), suggesting that the effects of training on knowledge scores were greater for Ireland (mean score difference: +1.55) than for Germany (mean score difference: +1.09) or Portugal (mean score difference: +1.17) (see Figure 1). Baseline confidence was highest for those with less than four years of experience (*M*=4.50, *SD*=1.8) followed by 4-10 years' experience (*M*=4.69, *SD*=1.7), and finally more than 10 years (*M*=4.25, *SD*=1.9).

Table 2: Effects of the training on DSS, IKT and Confidence measures, adjusted for country, gender and years of professional experience

Outcome	Mean Score Baseline (SD)	Mean Score Follow-up (SD)	F Statistic	p-value	Effect size
Depression Stigma Score (DSS)	32.99 (4.62)	35.18 (4.81)	100.23	<0.001	0.123
Country			27.72	<0.001	0.072
Ireland	34.22 (4.44)	36.38 (4.48)			
Portugal	31.77 (4.42)	34.30 (4.60)			
Germany	30.87 (4.29)	32.34 (5.03)			
Gender			31.95	<0.001	0.043
Male	32.42 (4.48)	34.71 (4.78)			

Female	35.36 (4.45)	37.10 (4.47)			
Suicide Intervention Knowledge Test (IKT)	3.88 (1.27)	4.35 (1.34)	28.27	<0.001	0.043
Country			31.76	<0.001	0.091
Ireland	4.09 (1.30)	4.44 (1.22)			
Portugal	3.47 (1.12)	3.72 (1.16)			
Germany	4.15 (1.25)	3.83 (2.19)			
*Time*Country*			4.05	0.018	0.013
Years of professional experience			7.37	<0.001	0.023
<4 years	3.92 (1.31)	4.38 (1.38)			
4-10 years	4.12 (1.25)	4.56 (1.35)			
10+ years	3.61 (1.18)	4.12 (1.27)			
Confidence Scale	4.48 (1.82)	5.85 (1.80)	248.61	<0.001	0.259
Country			28.47	<0.001	0.074
Ireland	4.69 (1.75)	6.24 (1.64)			
Portugal	4.49 (1.90)	5.66 (1.80)			
Germany	3.64 (1.69)	4.73 (1.89)			
*Time*Country*			4.54	0.011	0.013
Years of professional experience			6.34	0.002	0.018
<4 years	4.50 (1.83)	5.71 (1.90)			
4-10 years	4.69 (1.72)	6.12 (1.67)			
10+ years	4.25 (1.89)	5.74 (1.80)			

Figure 1: Effects of the training on stigma, knowledge, and confidence in the three intervention centers



Experience, previous training and exposure to suicidal behaviour

Approximately one-third of participants (33.1%) had more than 10 years of experience as a police officer. Given that most of the German participants were officers-in-training, the number of years' experience was lower in the German sample – only 6.7% of participants had more than 10 years of experience. In contrast, 35.8% of Irish participants and 41% of Portuguese participants had over 10 years of experience (Table 1).

Overall, 42.3% of all participants had received some training in crises and suicidal behaviour in their professional career. Specifically, 33.6% of all participants had previously received training in responding to a crisis, 21.7% had attended previous training in suicide awareness and suicide prevention, 16.6% and 12.4% had received training in depression and self-harm awareness respectively. Ireland had the highest percentage of police officers who had received previous training (57.5%), most commonly crisis training (49.2%).

At baseline, 36.2% of participants had experience with individuals at risk for suicide in a professional capacity in the previous 12 months. Of these 73.1% discussed their concerns with the individual and 65.0% asked the individual if they had thoughts of harming themselves. Of those officers who had some form of previous training on depression and/or suicidal behaviour, 85.8% had discussed their concerns with the person at risk of suicide, compared with just 59.1% of those with no previous training (χ^2=29.95, p<0.001). Similarly, 73.3% of those with previous training had asked someone about suicidal thoughts, compared with 53.6% of those with no training (χ^2=16.7, p<0.001). Compared to those without previous training, those with previous training had lower mean baseline scores on depression stigma (*M*=32.28, SD=4.64 vs. *M*=33.65, *SD*=4.51, *t*=4.13, p<0.001), higher scores on knowledge (*M*= 4.11, *SD*=1.28 vs. *M*=3.71, *SD*=1.27, *t*=4.10, p<0.001), and higher scores on confidence to detect persons at risk (*M*= 4.80, *SD*=1.67 vs. *M*=4.15, *SD*=1.85, *t*= 5.16, p<0.001).

Four-month follow-up

The response rate for four-month follow-up for a postal questionnaire was just 6% (n=46). These responses were received from German (n=37) and Irish (n=11) participants only. At follow-up, mean scores on the personal depression stigma subscale of the DSS (*M*=31.57, *SD*=5.1) were lower

than recorded at both baseline (*M*=33.01, *SD*=5.6) and post-training (*M*=35.15, *SD*=4.8). Scores on the Suicide IKT (*M*=3.95, *SD*=1.3) were lower than those recorded post-training (*M*=4.27, *SD*=1.3), yet higher than those recorded at baseline (*M*=3.82, *SD*=1.3). Similarly, confidence scores (*M*=4.58, *SD*=1.8) at follow-up were lower than those recorded post-training (*M*=5.84, *SD*=1.8) but higher than those recorded at baseline (*M*=4.48, *SD*=1.8).

Discussion

The present study shows that the effectiveness of a depression and suicidal behaviour awareness gatekeeper training programme with police officers improves outcomes relating to awareness of and attitudes towards depression and suicidal behaviour. After completing the training, police officers in all three centres had significantly lower levels of stigmatising attitudes. In addition, they had significantly increased levels of knowledge around suicidal behaviour and depression and felt significantly more confident in dealing with these issues. The study findings indicated that using gatekeeper trainings with police officers may lead to positive changes in the future behavioural responses of participants when confronted with an individual in crisis.

Previous research in this area is limited. Recent findings from the OSPI-Europe study found that this training programme improved the competencies of a range of other community facilitators (including teachers, pharmacists, nurses, the clergy, social workers, counselors, managers, and carers) (Coppens et al, 2014). Where suicide awareness training has been undertaken with police officers, the aim has often been to reduce suicide within the police force itself, rather than recognising the potential gatekeeper role that police officers can play within the community. This gatekeeper role is particularly supported by our finding that over a third of participants had experienced suicidal behaviour in a professional capacity as well as recent research indicating that a significant proportion of those who die by suicide have had recent contact with the police (Arensman et al., 2013; Linsley et al., 2007). There are many possible scenarios of encountering suicidal behaviour in the course of police work, including assisting psychiatric hospitalisations (Llewellin et al., 2011), encountering suicidal behaviour among those in police custody (McDonald & Thomson, 1993), and rare cases of "suicide by police" (Best et al., 2004), as well as the general finding that those with mental health problems are more likely to be victims and perpetrators of crime (Choe et al., 2008).

Therefore, equipping police officers with the knowledge and confidence to deal with such acute situations effectively should form part of broader efforts to engage community facilitators in recognising and responding to suicide risk. The current training programme has several added benefits. It was standardised across several intervention centres as part of OSPI-Europe, is sustainable in its peer-

led approach, and was subject to a rigorous evaluation. The OSPI-Europe project facilitated the recruitment of a large sample of police officers, which supports the external validity of the current findings. However, due to the absence of a controlled design, we cannot assume a direct link between the implementation of the training and its impact on evaluation outcomes. Nevertheless, qualitative feedback on the questionnaire underlined the benefits to officers, indicating appreciation of the training, perception of the training as being of high quality, and acknowledging the usefulness and necessity of such training.

Our findings demonstrate cross-national differences on several characteristics of police officers. Over half of the police officers in the Irish centre had been exposed to suicidal behaviour, compared with just over 6% of those in the German centre. The participants in the training in Germany were officers-in-training, which might help to explain country differences that emerged. There may also be differing expectations and roles associated with police work in different countries. Bayerl et al. (2014) reported within- and between-country differences in police officers' views of their roles. For example, police in the Netherlands viewed their role as "professional service-providers", and police in the UK viewed it as "hands-on enforcers". Such cross-cultural differences have important implications for the roll-out of community-based suicide prevention programmes, as the intervention may need to be tailored to the local context depending on how police are expected to respond to suicidal behaviour in the community. Similarly, intervention centres varied greatly in the proportion of police officers who had received previous training, which again could be a reflection of the type of participants recruited. Despite the strengths of the current approach in terms of its effectiveness, standardisation and sustainability, there were some challenges in this intervention programme.

There was a four-month follow-up of community facilitators but the follow-up rate was just 6% so it was not feasible to examine the longer-term attitude and behavioural changes associated with the intervention. The follow-up results showed a decrease in mean scores across all three measures compared to post-training. However scores on the Suicide IKT and confidence measures were still higher than baseline scores. A previous study using different community facilitators found that the training effect was sustained at both three- and six- month follow-up (Coppens et al., 2014). It may be that the low response rate is attributable to the fact that the training was implemented through trained

trainers, rather than the research team which conducted the follow-up. Certainly, response rates appear to be higher when the previous contact with the participants is more extensive (Scott et al., 2011). Therefore, further research is required to evaluate whether the positive changes in attitudes are sustained in the longer term. While it is a positive outcome that attitudes improved after the intervention, the ultimate aim of such a programme is to reduce suicide by changing behaviour, namely increasing intervention and referral of suicidal persons by police officers.

The current study demonstrates the effectiveness of gatekeeper training for police officers, echoing similar effects of multilevel interventions with the Norwegian military (Mehlum & Schwebs, 2001) and the US Air Force (Knox et al., 2003; Knox et al., 2010). The police force is a key part of the community in terms of their exposure to the most vulnerable and distressed persons in the community. Consequently, any intervention that is intended to encourage gatekeeping among community facilitators should include police officers as a target group. By equipping them to recognise and respond to suicidal behaviour, suicide prevention programmes create additional pathways to services for those who may be otherwise reluctant to seek help. Moreover, the training increased the police officers' confidence in dealing with suicidal crises, helping them to identify effective ways of dealing with these situations or validating how they had responded in the past (Harris et al., 2013). As well as positive effects on police officers' ability to respond to suicidal behaviour among members of the public, supporting police officers in this way is also likely to have positive effects on police officers' ability to respond to suicidal behaviour among colleagues within the police force. An additional process evaluation of the intervention (Harris et al., 2013) suggested that the police officers valued the additional skills and confidence arising from the training.

The overall positive outcomes ~~success~~ of the current intervention opens the door for further training of police officers on a variety of mental health issues likely to be encountered in the professional sphere. The consistent pattern of the training effects in Germany, Portugal and Ireland support the feasibility of implementing the OSPI-Europe Depression – Suicidal Behaviour Gatekeeper Training programme among the police force in different countries.

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Conflict of Interest Statement

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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