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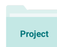

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RESEARCH ARTICLE

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Evaluation of a Brief Training of Police Constables in Recognizing Suicidal Behaviour in Lagos, Nigeria

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ABSTRACT

Background: Given the high frequency with which police officers encounter people challenged by mental health issues, including those at risk for suicide, a well-trained police force has the potential to play an important role in community-based suicide awareness and mental health prevention.

Objectives: This paper addresses the need to understand the effects of brief suicide intervention training for police constables on the participant's knowledge about suicide, self-rated confidence in enquiring about suicidal behaviours, and their attitudes towards suicidal behaviours.

Methods: A quasi-experimental design was employed to examine the changes from pre-test to post-tests with participants acting as their controls. Participants included 289 police constables who attended a 90-minute training and completed self-report surveys. The training included both didactic and experiential components. Paired t-test was used to compare means on variables across the pre-training and post-training. The significance level was set at ≤ 0.05.

Results: Although the training program was brief, significant improvement in perceived knowledge, t (288) = 3.45, $p < .001$; self-confidence to prevent suicide, t (288) = 3.5, $p < .001$, and attitudes toward suicidal patients were observed immediately after training t (288) = 4.6, $p < .001$.

Conclusion: The role of police officers as gatekeepers in suicide prevention is essential and often underestimated. A competent appearance and knowledge of suicidality can promote adequate interaction with those affected.

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Introduction

Suicidal behaviour is a leading cause of injury and death worldwide [1]. It comprises suicide ideation, suicide planning, suicide attempt, and suicide [1]. According to the World Health Organization, 75.5% of suicides in the world occur in low- and middle-income countries [2], and among those 44 years of age or younger, suicide is the second leading cause of death [2]. Suicide attempts are among the most important known predictors of completed suicide, and occur even more often [2]. This underscores the need for prevention of suicide in people with suicidal behaviour.

Available evidence shows that training and educating gatekeepers is a worthwhile investment in suicide prevention [3,4]. Gatekeepers play an important role in the identification and referral of people with suicidal behaviour. They can be among the first to screen and intervene for suicide risk as they may be in close contact with suicidal behaviour individuals and therefore have the opportunity to interrupt the ongoing suicidal behaviour process [4]. Community-based suicide intervention and prevention rely on gatekeepers-non-mental-health professionals such as teachers, clergy, and police officers who have a high probability of encountering at-risk individuals [5].

Police officers play a varied role in society, serving citizens in tasks ranging from crime fighting to order maintenance to service-related functions [6]. Deinstitutionalization policies coupled with a relative reduction in mental health spending have increasingly made the police a first and last resort for issues surrounding persons with mental illness [6,7]. Increasingly, police officers are being asked to manage persons with mental illness [7].

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A well-trained police force has the potential to play an important role in community-based suicide awareness and mental health prevention [8]. Along with other first responders, policemen and women often arrive at crises involving reported suicidal behaviors-including suicide threats, attempts, and deaths-before mental health professionals [9,10] and thus can influence the outcome of a mental health crisis [8]. Linsley et al. reported that close to 25% of individuals who die by suicide interacted with police in the 3 months before their death [11]. Given the number of contact policemen and women have with community members who are at risk for suicidal behaviours, improved training designed to heighten police recruit understanding of risk signs is greatly needed [12].

Amid the shift of mental illness from a public health problem to a demand on the police, administrators (e.g., police chiefs) are expressing concern that officers lack the requisite experience or training to properly manage and de-escalate encounters involving persons with mental illness [13,14]. Therefore, suicide intervention training for Policemen and women would be required to improve their confidence and competence.

Numerous studies on suicide intervention and mental health prevention training have demonstrated relationships between receiving training and positive outcomes in knowledge, attitudes, self-efficacy, and use of intervention behaviours [15,16]. Cross-sectional studies have established correlations between knowledge, attitudes, and behaviours, but longitudinal studies have been more informative in detecting interactions among training components [15]. Two studies have demonstrated the potential mediating effect of self-efficacy on the knowledge–skill relationship despite differences in training curricula and target audiences, but findings from other studies have been mixed regarding the relationship between attitudes and behaviour change for suicide intervention skills [17,18].

Regardless of the training protocol adopted, four factors for effective suicide intervention were identified by Osteen et al. [12] knowledge, attitudes, self-efficacy, and intervention behaviors. Availability of training is dependent upon police department awareness and commitment; additionally, training delivery methods can vary widely (e.g., face-to-face vs. online training) [12].

Given the high frequency with which police officers encounter people in the community with mental health issues, including those at risk for suicide, research is needed to evaluate the effect of brief training on suicide prevention strategies in the community. The purpose of the current study is to examine the effects of brief suicide intervention training for police constables on the participant's knowledge about suicide, self-rated confidence in enquiring about suicidal behaviours, and their attitudes towards suicidal behaviours.

Methods

Design

This study was quasi-experimental. The quantitative evaluation used a pretest/post-test design, with participants acting as their controls. The sample size for the main study was pragmatic and determined by how many participants the facilitators were able to train.

Setting

The study was conducted at the Nigerian Police College in Ikeja, Lagos, a city in the commercial center of Nigeria where all the training courses for newly recruited police constables of the institution take place.

Participants

To achieve the largest possible sample, the study cooperated with the police authorities in Lagos. They integrated suicide intervention training into their training courses and supported the data collection and working time for the training. The following criteria must be for participation; (1) Police constable undergoing training to become a police officer. (2) Adult Nigerians aged between 18 and 65 years. (3) Submit a signed consent form to participate in the training.

Measures

1. Socio-demography - age, gender, marital status, religion, level of education, history of suicidal behaviour, and psychological symptoms.
2. A subscale of the 14-item Question, Persuade and Refer questionnaire (QPR) was used to assess self-perceived knowledge about suicide.[19] Levels of knowledge were assessed using questions such as 'How do you rate your knowledge about suicide warning signs?'. Answers were given on a Likert scale ranging from 1 (very low) to 5 (very high). Responses were summed to provide a total score ranging from 7 to 35, with higher scores representing greater levels of self-perceived knowledge. The QPR has been shown to reliably assess the effects of training on self-perceived knowledge of suicide prevention [19-21].
3. The eight items of the Suicide Information Test (SIT) asking about warning signs and risk factors were used to assess knowledge about suicide more objectively [22]. The original questionnaire is comprised of 28 true-false items [22]. The questionnaire includes statements such as 'Suicidal tendencies are inherited, and suicide runs in families'. Participants could agree (score 1) or disagree (score 0) with the eight statements, resulting in total scores ranging from 0 (disagreed with all statements) to 8 (agreed with all statements). Higher scores thus reflect greater knowledge about warning signs and risk factors of suicide.
4. A subscale of the Confidence and Beliefs Questions (CBQ) was used to measure provider confidence in suicidal behaviour management [23]. The subscale consists of three items. Example: 'I am confident in my ability to successfully treat a suicidal patient'. Scoring occurs on a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. The subscale is summed to derive a total subscore ranging from 3 to 15, with higher scores indicating higher levels of confidence. The CBQ has been found to measure differences in confidence regarding suicide care [23].
5. Attitudes towards suicidal behaviour and suicidal patients were assessed using an adjusted version of the Attitudes Towards Suicide Questionnaire (ATTS) [24]. In this study, only the three items concerning the factor of willingness to help

were considered relevant. Example: 'It is a humane duty to try to stop someone from dying by suicide'. Responses are scored on a 5-point Likert scale from 1 (completely disagree) to 5 (completely agree). A sum score was calculated from 3 to 15, with higher scores reflecting more adaptive attitudes, i.e., greater willingness to help suicidal patients. The ATTS is a valid and reliable measure in clinical and community samples for determining attitudes towards suicidal behaviour, demonstrating high internal consistency and test-retest reliability [25].

Procedure

This study provided a 90-minute in-person suicide intervention training. It included both didactic components that focused on enhancing knowledge and changing attitudes, as well as experiential components focused on developing communication skills with potentially at-risk people. The didactic component consisted of education on suicide and other psychological symptoms prevalence, risk factors, warning signs, myths, and community resources. The training was delivered by a psychiatrist and it provided participants with education on how to ask questions about suicide and other psychological symptoms and refer people to resources, including specific decision trees and scripts that could be used.

Data collection

Data collection took place at two-time points: before and after the training. It was primarily by questionnaires. After giving informed consent, participants anonymously completed self-reports, covering socio-demographics and questionnaires.

Ethical consideration

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committee on human experimentation with the Helsinki Declaration of 1975, as revised in 2008. The study protocol was approved by the institutional review board of the participating institution. Informed consent was obtained from all participants.

Data analysis

Data were coded, entered into a statistical package for sociological sciences version 23, and cleaned. Categorical variables were summarized with frequencies and percentages while continuous variables were summarized with their mean, mode, range, and standard deviation.

Comparison of categorical variables will be done with the Chi-square test and Fischer's exact test between groups. Paired t-test was used to compare means on variables across the pre-training and post-training. The significance level was set at ≤ 0.05.

Results

A total of N= 289 police constables registered for the training. Complete baseline data are available from n = 289 (100% response rate). They all completed the training and participated in the post-training evaluation.

Characteristics of Participants

Majority were males (n = 218, 75.4%). Age groups between 18 and 36 years were well represented, with a mean age of 22.4 years (±2.3). Participants were predominantly of single marital status (n = 287, 99.3%) while majority were of Christian religion (n = 226, 78.2%). About half (n=164, 56.7%) reported having secondary education as their highest level of education. A greater proportion of them had secondary school as their highest level of education (56.7%). Six participants (2.1%) had a history of mental illness while two participants (0.7%) had a family history of mental illness. Please see Table 1 for the rest of the details

Table 1: Characteristics of the participants (N=289).

Variables	Mean (SD)	Range
Age (years)	22.4 (2.3)	18 - 36
	n (Frequency)	**Percentage (%)**
Gender		
Male	218	75.4
Female	71	24.6
Religion		
Christianity	226	78.2
Islam	63	21.8
Marital status		
Single	287	99.3
Married	2	0.7
Level of Education		
Secondary	164	56.7
Tertiary	125	43.3
History of mental illness		
No	283	97.9
Yes	6	2.1
Family history of mental illness		
No	287	99.3
Yes	2	0.7

SD, Standard deviation.

Baseline Results

Knowledge about suicide

Perceived knowledge

Pre-training scores of the subscale of the Question, Persuade, and Refer (QPR) questionnaire revealed a mean of 22 (SD= 5; range = 10 - 35). Furthermore, close to half of the participants (n=138, 47.8%) rated their knowledge of facts about suicide as either high or very high while 87 participants (30.1%) rated their knowledge about suicide warning signs as high or very high. Further details can be found in Table 2.

Actual knowledge

Pre-training scores of the Suicide Information Test (SIT) revealed a mean of 5.5 (SD= 0.6; range= 0 - 8). Majority of the participants (n=198, 68.5%) disagreed that there is no relationship between suicide and drugs/alcohol while 206 (71.3%) agreed that removing means of suicide will prevent many suicides. The rest of the details can be seen in Table 3.

Confidence in asking about current suicide ideation

As regards how confident participants are about asking people about suicidal ideation, the pre-training scores of the subscale of the Confidence and Beliefs Questions (CBQ) showed a mean of 11 (SD = 2.3; range= 3-15). About half of the participants (n= 151, 52.2%) reported being hesitant to ask people about current suicidal ideation. Other details can be seen in Table 4.

Attitudes toward suicide

Concerning attitudes toward suicide, the mean ATTS sub-score was 10 (SD= 2, range= 3-15). Majority of participants (n=251, 86.8%) favored interfering if someone wants to die by suicide while 234 (80.9%) participants agreed or completely agreed that they are willing to help a person in a suicide crisis by making contacts. Other details can be seen in Table 4.

Table 2: Descriptive statistics of the QPR questionnaire of participants (N= 289).

Variables	Frequency- n (%) (Pre-training)	Frequency- n (%) (Post-training)
Facts about suicide		
Very Low	34 (11.8)	19 (6.6)
Low	43 (14.9)	17 (5.9)
Neutral	74 (25.6)	47 (16.3)
High	104 (36)	105 (36.3)
Very High	34 (11.8)	101 (34.9)
Suicide warning signs		
Very Low	39 (13.5)	16 (5.5)
Low	71 (24.6)	39 (13.5)
Neutral	92 (31.8)	58 (20.1)
High	67 (23.2)	97 (33.6)
Very High	20 (6.9)	79 (27.3)
How to ask someone who may be suicidal		
Very Low	43 (14.9)	15 (5.2)
Low	80 (27.7)	33 (11.4)
Neutral	109 (37.7)	82 (28.4)
High	39 (13.5)	88 (30.4)
Very High	18 (6.2)	71 (24.6)
Persuading someone to get help		
Very Low	11 (3.8)	10 (3.5)
Low	47 (16.3)	28 (9.7)
Neutral	59 (20.4)	40 (13.8)
High	111 (38.4)	117 (40.5)
Very High	61 (21.1)	94 (32.5)
How to get help for someone who may be suicidal		
Very Low	24 (8.3)	11 (3.8)
Low	60 (20.8)	35 (12.1)
Neutral	84 (29.1)	55 (19)
High	77 (26.6)	90 (31.1)
Very High	44 (15.2)	98 (33.9)
Information about local resources for help with suicide		
Very Low	33 (11.4)	13 (4.5)
Low	62 (21.5)	38 (13.1)
Neutral	109 (37.7)	67 (23.2)
High	64 (22.1)	93 (32.2)
Very High	21 (7.3)	78 (27)
General knowledge about suicide and suicide prevention		
Very Low	12 (4.2)	10 (3.5)
Low	30 (10.4)	13 (4.5)
Neutral	95 (32.9)	58 (20.1)
High	105 (36.3)	101 (34.9)
Very High	47 (16.3)	107 (37)

Table 3: Descriptives of the SIT questionnaire of participants (N= 289).

Variables	Frequency- n (%) (Pre-training)	frequency- n (%) (Post-Training)
Suicide is always the act of a mentally ill or psychotic person		
Agree	185 (64)	50 (17.3)
Disagree	104 (36)	239 (82.7)
There is no relationship between suicide and drugs/alcohol		
Agree	91 (31.5)	25 (8.7)
Disagree	198 (68.5)	264 (91.3)
There are one/two causes or motives that explain most suicides		
Agree	265 (91.7)	47 (16.3)
Disagree	24 (8.3)	242 (83.7)
Removing the means of suicide will prevent many suicides		
Agree	206 (71.3)	257 (88.9)
Disagree	83 (28.7)	32 (11.1)
Suicidal tendencies are inherited and run in families		
Agree	81 (28)	244 (84.4)
Disagree	208 (72)	45 (15.6)
Everyone who commits suicide is depressed		
Agree	251 (86.9)	70 (24.2)
Disagree	38 (13.1)	219 (75.8)
People who make plans to commit suicide keep their thoughts to themselves and suicide occurs without warning		
Agree	133 (46)	81 (28)
Disagree	156 (54)	208 (72)
People who talk about suicide don't kill themselves		
Agree	133 (46)	41 (14.2)
Disagree	156 (54)	248 (85.8)

Table 4: Descriptive statistics of the CBQ and ATTS questionnaires of participants (N= 289).

Variables	Frequency- n (%) (Pre-training)	Frequency- n (%) (Post-training)
SELF-CONFIDENCE		
I am confident in my ability to assess suicidal persons		
Strongly disagree	18 (6.2)	1 (0.3)
Disagree	19 (6.6)	9 (3.1)
Undecided	39 (13.5)	15 (5.2)
Agree	159 (55)	158 (54.7)
Strongly agree	54 (18.7)	106 (36.7)

I am confident in my ability to treat suicidal persons		
Strongly disagree	14 (4.8)	56 (19.4)
Disagree	26 (9)	100 (34.6)
Undecided	59 (20.4)	37 (12.8)
Agree	158 (54.7)	69 (23.9)
Strongly agree	32 (11.1)	27 (9.3)
I am hesitant to ask a person if he / she is suicidal		
Strongly disagree	31 (10.7)	92 (31.8)
Disagree	45 (15.6)	63 (21.8)
Undecided	62 (21.5)	36 (12.5)
Agree	133 (46)	76 (26.3)
Strongly agree	18 (6.2)	22 (7.6)
ATTITUDES		
It is a human duty to try to stop someone from dying from suicide		
Completely disagree	16 (5.5)	3 (1.0)
Disagree	11 (3.8)	4 (1.4)
Undecided	11 (3.8)	13 (4.5)
Agree	91 (31.5)	88 (30.4)
Completely agree	160 (55.4)	181 (62.6)
If someone wants to commit suicide it's their business, we shouldn't interfere		
Completely disagree	190 (65.7)	218 (75.4)
Disagree	61 (21.1)	59 (18.7)
Undecided	21 (7.3)	9 (3.1)
Agree	9 (3.1)	4 (1.4)
Completely agree	8 (2.8)	4 (1.4)
I am prepared to help a person in a suicidal crisis by making contact		
Completely disagree	15 (5.2)	1 (0.3)
Disagree	11 (3.8)	8 (2.8)
Undecided	29 (10)	17 (5.9)
Agree	118 (40.8)	108 (37.4)
Completely agree	116 (40.1)	155 (53.6)

Post-training results

Knowledge about suicide

Perceived knowledge

The paired t-test was conducted on the pre-training and post-training scores of the QPR and SIT. There was a significant increase in the scores of the subscale of the Question, Persuade, and Refer (QPR) questionnaire among participants after the suicide intervention training (M= 26.4, SD= 6) compared to QPR subscale scores before the training (M= 22, SD= 5), t (288) = 3.45, $p < .001$.

Actual knowledge

For both pre-training (M= 5.5, SD= 0.6) and post-training (M= 5.5, SD= 0.8), t (288) = 0.3, $p = 0.8$ no significant results were found for the Suicide Information Test (SIT) scores.

Confidence in asking about current suicide ideation

Using the paired t-test, the results from the pre-training (M= 11, SD= 2.3) and post-training (M= 12, SD= 3) of the subscale of the Confidence and Beliefs Questions (CBQ) showed that the training resulted in an increase in self-confidence in asking about current suicide ideation, t (288) = 3.5, $p < .001$.

Attitudes toward suicide

For participants, a paired t-test was used to analyse their attitudes toward suicide before and after the training. There was a significant increase in the scores of the subscale of the Attitudes Towards Suicide Questionnaire ATTS among participants after the suicide intervention training (M= 13, SD= 3) compared to ATTS subscale scores before the training (M= 10, SD= 2), t (288) = 4.6, $p < .001$.

Discussion

This study aimed to evaluate the effect of a brief suicide intervention training program for police constables on the participant's knowledge about suicide, self-rated confidence in preventing suicide, and their attitudes towards suicidal behaviours. Although the training program was brief, significant improvement in perceived knowledge, self-confidence to prevent suicide, and attitudes toward suicidal patients were observed immediately after training.

In the study, we found a significant increase in perceived knowledge after completing the training. The results are in line with previous studies that also found a significant increase in police officers' knowledge through gatekeeper training [9,26]. However, there was no significant improvement in the actual knowledge about suicide, Possible explanation may be that the increase in perceived knowledge may be a result of the participants' confidence in the efficacy of the training program to improve their knowledge.

Our study found a significant increase in self-confidence to prevent suicide among participants and is a good indication of the training viability. This is essential in translating the perceived knowledge into behavior [27]. This finding is similar to results found in other studies [9,26]. Reasons for this change may be due to the increase in their perceived knowledge about suicide gained from the training. By imparting knowledge, the understanding of persons increased and negative assumptions were reduced, which in turn facilitates better handling of affected persons and also allows police officers to deal with situations more confidently [28]. With a broad knowledge of suicide prevention, police officers may gain confidence in dealing with challenging situations.

Also, we found significant improvement in the attitudes towards suicidal behaviour of participants after the training. It can be argued that improved knowledge about suicide can lead to positive attitudes through empathy, compassion, and acceptance [29]. Evidence of changing attitudes towards suicidal behaviour is limited in the available literature because it is believed that attitudes may be formed over a long time and be shaped by experiences [30].

The interpretation of findings should be done so cautiously and within the context of the study's limitations. The lack of a control group reduces the internal validity of the results. Generalizability is reduced based on the use of a convenience sample; we have no way of knowing if study participants differed in meaningful ways from police constables that did not participate in the study. Therefore, future studies should utilize longitudinal methods and randomized study designs.

Despite these limitations, there are notable strengths in the current study. First, this is one of the few identified studies from Nigeria looking at the effect of a brief suicide intervention training among gatekeepers. Second, this is one of the empirical study of the QPR police training. Third, this study yielded results consistent with prior studies showing improvements in knowledge, attitudes, and self-efficacy following suicide intervention training

Conclusion

The role of police officers as gatekeepers in suicide prevention is essential and often underestimated. A competent appearance and knowledge of suicidality can promote adequate interaction with those affected. However, while expanding job scope as well as responsibilities, coupled with the shortage of personnel, more police officers may suffer from burnout and psychological distress. Therefore, training itself is not sufficient for suicide prevention. Sustained improvement in the knowledge, confidence, and attitudes of police officers to prevent suicide requires a holistic approach that includes work environment and policy changes.

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