

Standardized Suicide Prevention Program for Gatekeeper Intervention of North Korean Defectors in South Korea

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Objective North Korean defectors (NKDs) have experienced substantial difficulties during the migration and settlement in South Korea. They have a high prevalence of depression, post-traumatic stress disorder, and suicidal behaviors. The high prevalence of mental disorders among NKDs can lead to a high suicide rate. However, there are no suicide prevention programs for NKDs. This study aims to customize a suicide prevention program with content suitable for NKDs' particular circumstances.

Methods A multidisciplinary research team developed this program based on domestic and international gatekeeper training programs for suicide prevention and articles related to suicide prevention.

Results We developed a multi-part gatekeeper training program, "Suicide CARE for NKDs." In the "Introduction," trainees learn about the need for the program and its importance. In "Careful observation," trainees learn to recognize linguistic, behavioral, and situational signals of suicide risk. In "Active listening," trainees learn how to ask about suicidal thoughts and to listen empathetically. In "Risk evaluation and expert referral," trainees learn to evaluate suicide risk and to connect NKDs with institutes or services.

 Conclusion
 We expect this program to become useful for training gatekeepers to prevent suicide among NKD. A future follow-up study is needed to confirm the efficacy of the program.

 Psychiatry Investig 2023;20(5):452-460

Keywords Suicide; Prevention; Gatekeeper; North Korean Defectors.

INTRODUCTION

The number of North Korean defectors (NKDs) who leave North Korea and enter South Korea has continued to increase since 2000 and was estimated to be 33,834 as of 2022.¹ NKDs experience various difficulties during migration and settlement in South Korea. As a result, NKDs have a higher prevalence of depression and post-traumatic stress disorder (PTSD) than South Koreans, and they have a higher rate of suicidal behaviors, including suicidal ideation, in two years after de-

Received: January 9, 2023 Revised: January 25, 2023 Accepted: January 29, 2023

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fection.²⁻⁴ Approximately 31.3% of NKDs display suicidal behaviors, which is higher than the approximately 0.9% to 27.3% reported for other refugees in Western and Asian countries.^{2,5-8} Suicidal behaviors were strongly related to subsequent completed suicide in previous studies.^{9,10} The high suicide behaviors rate of NKDs can lead to a high suicide rate. To prevent suicide among NKDs, it is necessary to identify situational problems and the various mental health difficulties specific to this population and put in place necessary interventions accordingly.

Despite this need, there is currently no suicide prevention program for NKDs. A multidisciplinary team of psychiatrists, psychologists, and social workers was formed to create "Suicide CARE for NKDs," a gatekeeper training program specifically for NKDs. In this study, "gatekeepers" refer to NKDs who receive training to identify other NKDs at risk for suicide in their community and offer them assistance. We developed the "Suicide CARE for NKDs," gatekeeper education program, based on the existing "Suicide CARE" program for South Korean suicide prevention, domestic and international gatekeeper training programs, and articles related to suicide prevention and suicide.

METHODS

The multidisciplinary research team worked to develop "Suicide CARE for NKDs" from June to December 2020. During the production process, we first reviewed previous domestic and international gatekeeper training programs for suicide prevention. Second, we reviewed articles related to suicide prevention and suicide. Based on the existing program, "Suicide CARE, version 2.0,"^{11,12} the authors developed "Suicide CARE for NKDs," comprising the following sections: "Introduction," "Careful observation," "Active listening," and "Risk evaluation and expert referral." This study approved by the Institutional Review Board of the Soonchunhyang University Cheonan Hospital (No. 2020-07-003).

Literature review

As noted, we reviewed various studies related to suicide prevention to produce an effective gatekeeper training program. First, we reviewed existing domestic and international gatekeeper training programs to understand their general characteristics.^{13,14} The review process for the domestic and international gatekeeper training programs is well organized by Park et al.¹⁵ Second, to confirm psychological characteristics common to refugees, we reviewed previous articles related to NKDs or refugees.^{34,15-22}

RESULTS

Review of previous studies

In their study on NKDs, Lee et al.⁴ reported a lifetime PTSD prevalence of 15.3%, which is nine times higher than that for South Koreans (1.7%). Further, this prevalence among NKDs was significantly higher than the PTSD prevalence among refugees migrating to the United States and Europe (9%).¹⁶ In North Korea, it is mandatory to witness public executions, which may be related to the high prevalence of PTD among NKDs; 36.7% of the participating NKDs in the study of Lee et al.⁴ reported that their most common traumatic experience was "seeing someone seriously injured or dying terribly." Regarding PTSD comorbidities among NKDs, Lee et al.4 found that major depressive disorder was the most common (41.3%), which is similar to the results found in other research on refugees.¹⁷ After relocating to South Korea, NKDs also commonly experience agoraphobia, social phobia, and panic disorder^{3,4} as well as difficulties in adapting to the capitalist system, discrimination, increased stress due to cultural differences, and a lack of internal and external resources.^{18,19} Previous studies^{3,20} have found that as the duration of settlement in South Korea increases, the prevalence of symptoms related to depression and trauma significantly increases and resilience significantly decreases. This is because NKDs are less affected by the trauma of the defection process than by the stress of settling in South Korea, which can increase mental health problems and decrease life satisfaction.^{3,23} Moreover, interest and support for NKDs are needed at the national level to help reduce the loneliness that is often experienced by these new residents when settling in South Korea.

Gatekeeper programs have been developed in various countries.^{15,24} Although the short-term effectiveness of gatekeeper programs for suicide prevention has been confirmed, longterm systematic studies are still lacking.^{21,22} Furthermore, to promote positive long-term effects, ideological and sociocultural components should be included.²¹ To that end, we developed "Suicide CARE for NKDs," a suicide prevention program tailored to NKDs that includes content suitable to their special circumstances.

Composition of the "Suicide CARE for NKDs" program

The multidisciplinary team reviewed previous domestic and international gatekeeper training programs for suicide prevention, and previous articles related to NKDs. With reference to these, we developed "Suicide CARE for NKDs" based on an existing program, "Suicide CARE, version 2.0."^{11,12} "Suicide CARE for NKDs" comprises the following sections, "Introduction," "Careful observation," "Active listening," and "Risk

Item	Core content
Introduction to careful observation	Trainees spend time learning to recognize signals of suicide risk, how to express interest in the at-risk person's well-being, and how to be ready to approach them.
Undetected suicide signals	- 92% of NKDs who die by suicide expressed risk signals when alive, but 77% of the people around them were unaware.
	- The importance of paying attention and recognizing suicide risk signals in high-risk groups is emphasized.
The process of - The three steps involved in suicide are explained: suicidal thoughts, suicide plan, and suicide	
reaching suicide	- Suicide attempts are not something that happen suddenly one day. Suicidal thoughts can arise from experiencing overwhelming stress.
	- Personal beliefs, experiences, and precious things are generally protective factors that prevent suicide attempts when suicidal thoughts are present.
	- When a person's difficulties reach an unbearable point, they may plan suicide because they think that suicide is the only solution due to their impaired judgement.
	- When a suicide plan is firm, a person at risk for suicide will experience hopelessness and impulsivity simultaneously and will attempt suicide.
	- It is important to recognize and intervene for high-risk factors during the suicidal thought or suicide planning stages, that is, before a suicide attempt.
Linguistic signals	- According to a study that analyzed suicide deaths, people at risk for suicide frequently talked about death such as by suicide, complained of physical discomfort, and used self-deprecating language.
	 They wrote down death-related expressions in letters, notes, social media posts, etc., asked how to attempt suicide, talked about people who died by suicide, and admired the afterlife.
	 In particular, it is emphasized that talk about death and complaints of physical discomfort are characteristic linguistic signals for NKDs.
Behavioral signals	- Those who are contemplating suicide display unusual behavioral signals that were not observed before they began considering suicide.
	- Aggressive/impulsive behavior
	Frequent angry or violent appearance
	- Signs of self-harm wounds on the wrist, etc.
	- Preparatory behaviors
	Settling their affairs and giving things away
	They settle on a suicide method and make a plan to carry it out
	- Emotional changes
	Crying, anxiety, and irritability - Alcohol/drug misuse
	Sudden increase in alcohol or drug usage
	- Depressive symptoms
	Changes in eating and sleeping patterns
	Helplessness, social phobia, and loss of interest
	Difficulty concentrating and making decisions, even small ones
	Indifferent to appearance management
	- It is emphasized that emotional changes, alcohol or drug misuse, and depressive symptoms are characteristic of NKDs.
Situational signals	- Situational signals are risk factors that exacerbate suicidal thoughts during extreme stress.
	- The main types of situational signals
	Mental health problems
	Job-related problems
	Physical health problems
	Economic problems
	Family-related problems
	Relationship and dating problems
	Interpersonal relationship problems
	Ignorance and discrimination

Table 1. Subsections and core content of "Careful observation" (c	continued)
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Item	Core content	
	- It is emphasized that mental and physical health problems, job-related problems, and economic problems are characteristic of NKDs.	
	- People who die by suicide are affected by an average of 3.9 lifetime stress events before death.	
	- There are many different stressors that lead to suicide.	
	- Suicide prevention begins by recognizing people struggling with this stress and providing assistance to them.	
Video on "Careful observation"	- The case of a female NKD who has been in South Korea for 5 years and died by suicide, is presented. She had suicidal thoughts due to changes in the personal circumstances of family members living in North Korea, economic difficulties, and weakening support systems.	
	- Linguistic signals: verbally expressing physical difficulties, indirectly referencing suicide, and making statements indicating the settling of their human relationships.	
	- Behavioral signals: decreased volition, dark and angry appearance, changes in diet and sleep, alcohol misuse, and difficulty in concentration.	
	- Situational signals: changes in the personal circumstance of family members living in North Korea, existing debta and difficulties with new loans, and suicide of a hometown friend.	
	- Ultimately, the people around her could not recognize these risk signals.	
What should we do?	- After watching videos on failing to practice "Careful observation," trainees begin to think about what to do if the observe someone at risk for suicide.	
	- Trainees are then motivated to learn "Active listening."	

evaluation and expert referral," which are discussed below.

Introduction

The purpose of the "Introduction" section is to establish the necessity and importance of gatekeeper training for suicide prevention. This section includes the following: an overview of "Suicide CARE for NKDs," the introduction video, "comparing suicide statistics and traffic accident statistics," "introduction of Suicide CARE for NKDs," and "necessity of gatekeeper programs." In the introduction video, several questions are presented to encourage trainees to consider the mental states of those who die by suicide, and they are provided with basic suicide prevention education. In "comparing suicide statistics and traffic accident statistics," trainees learn that 13,799 people died by suicide in South Korea in 2019, 4.1 times higher than the number of traffic accident deaths, which was 3,349. They learn that an average of 37.5 people per day die from suicide in South Korea. Trainers explain that improving social awareness through suicide prevention campaigns, reinforcing accessibility through support for medical expenses and expansion of mental health promotion facilities, and gatekeeper training can lead to a reduced suicide rate. In the "introduction of Suicide CARE for NKDs," trainees learn that this is the first suicide prevention education program for NKDs. Finally, the "necessity of gatekeeper programs" includes teaching trainees that, according to an analysis of the effectiveness of South Korea's "Suicide CARE" gatekeeper program, 20% of trained gatekeepers have met someone at risk of suicide, 95% have asked someone about suicide and listened to their replies, and 71.5% have provided helpful information and connections to experts. The trainers emphasize the necessity and importance of gatekeeper education for suicide prevention.

Careful observation

In "Careful observation," gatekeepers are taught to see and recognize signals indicative of high-risk suicide situations. It comprises eight subsections (Table 1). First, "introduction to careful observation," discusses the importance of recognizing signals of suicide risk, being interested in the at-risk person, and being ready to approach them. "Undetected suicide signals" emphasizes how important it is to pay attention and recognize suicide risk signals in high-risk groups. According to a 2018 report from Korea Psychological Autopsy Center, 92% of those who die by suicide expressed suicide risk signals when they were alive. However, 77% of those around them were unaware of these signals. "The process of reaching suicide" shows trainees the three stages of suicide: suicidal thoughts, suicide plan, and suicide attempt. They learn the importance of recognizing and intervening for high-risk factors during the suicidal thoughts or plan stages, before suicide is actively attempted. "Linguistic signals" visually shows the danger signals most often presented by people who ultimately died by suicide-primarily, talk of death such as suicide, complaints of physical discomfort, and self-deprecating language. In addition, suicide risk signals such as expressing a desire to be dead (e.g., in letters, notes, and social media posts), asking how to die by suicide, talking about people who have died by

suicide, and admiring the afterlife are described. In particular, it is emphasized that talk of death and complaints of physical discomfort are characteristic linguistic signals for NKDs. The "behavioral signals" subsection alert trainees to unusual behavioral signals commonly preceding suicide deaths among NKDs, including changes in aggressive/impulsive behavior, signs of self-harm, preparatory acts, emotional changes, sudden alcohol or drug abuse, and depressive symptoms. Mental and physical health problems, job-related problems, and economic problems are important situational difficulties reported in NKDs who died by suicide. In the next subsection, a video is used to present the case of a female NKD who had been

Table 2. Subsections and core content of "Active listening"

in South Korea for five years who died by suicide. After watching the video, including the bad ending, the last subsection, "what should we do?," is presented. Trainees are given time to think about how the people around the female in the video should have responded.

Active listening

"Active listening" consists of nine subsections (Table 2). The first, "introduction to active listening" briefly introduces this section to trainees. "Asking about suicidal thoughts" emphasizes that trainees should directly ask other NKDs about suicide. This section was developed using evidence-based re-

Item	Core content
Introduction to active listening	- Trainees learn about asking someone about their suicidal thoughts and actively listen to their reasons for wanting to die.
Asking about suicidal thoughts	 Trainees are taught to ask directly and accurately about suicide. Asking about suicidal thoughts does not promote suicide or increase the risk of suicide. By using the value-neutral word "suicide," trainees can maintain a non-judgmental attitude and engage in dialogue. Because some trainees may be uncomfortable asking directly about suicide, they need to practice together and recognize the importance of asking questions.
The listener's mind	 Listeners may be shocked and want to avoid the situation when they know that someone has suicidal thoughts. Trainees are taught that it is natural for listeners to experience anger, sadness, and a desire to deny that someone has suicidal thoughts.
Unhelpful listening	 Trainees are taught that responding to their own emotions as a listener, rather than to the emotions of the person in danger of suicide, does not help. It is necessary to explain everything in detail periodically to provide a sense of security, because trainees may be afraid that their intervention may increase the risk of suicide. It is necessary to explain that gatekeepers should avoid promising secrecy to people at high-risk for suicide. It should be emphasized that human life and safety is more important than confidentiality.
Helpful listening	 Trainees are taught that it is helpful to listen and accept the heart of a person with suicidal thoughts. Trainees are taught that gatekeepers need to understand the minds of people with suicidal thoughts (feeling of being a burden, feelings of isolation, hopelessness, etc.). Trainees are taught to ask sincerely and warmly why the person thought of suicide and listen to their story empathetically.
Listening skill: active listening	 It is necessary to create a comfortable atmosphere in which high-risk people can tell their stories honestly. It is necessary to have a non-judgmental attitude and accept the person as they are. Gatekeepers are taught to allow a person with suicidal thoughts to speak as much as they want to and how to verbally and nonverbally indicate that they are listening the story.
Empathetic reaction	 It is necessary to practice active listening so that the skill can be applied in practice. Examples of empathetic reactions "Things were so hard for you that you wanted to die." "You were having too hard of a time. I'm sorry I haven't been able to help you in the meantime." "Thank you very much for telling a story that was difficult to tell honestly." Trainees pair up and practice thinking about and expressing empathy directly together.
Ambivalence	 People who think of attempting suicide may also still have a desire to live. Reasons to live can be powerful and can encourage people with suicidal thoughts not to attempt suicide.
Asking about the meaning of life	 Asking people with suicidal thoughts to list a reason for living can remind them of the thoughts about life that they have in their minds. Ironically, the meaning in their lives and the willingness to live can be recognized by them through talking about death or the reason they want to die.

Table 2 Subsections and core content of	"Pick evaluation and export referral"
Table 3. Subsections and core content of	Risk evaluation and expert relenal

Item	Core content
Video on	- Situational signals: unemployment, longing for family in North Korea, financial difficulties, and death by suicide
"Risk evaluation and	of close acquaintances.
expert referral"	- Behavioral signals: decreased concentration, frequent mistakes in the workplace, physical discomfort such as
	chest tightness and headaches, and preparatory behaviors such as deleting photos and contacts from mobile
	phones.
	- Linguistic signals: direct/indirect expressions of desire for death and expressions of hopelessness.
Checking suicide risk	- Asking questions to see if someone has a suicide plan or is looking for ways to attempt suicide
	• "Have you ever thought about how to attempt suicide?"
	• "Have you ever thought about when and where you would attempt suicide?"
	- Trainee understands that the presence of a detailed suicide plan indicates an emergency situation requiring
	immediate intervention
	- Checking for previous suicide attempt history
	• "Have you ever attempted suicide before?"
	• "When, where, and how have you attempted suicide (if at all)?"
	- Trainee understands that a recent suicide attempt indicates an emergency situation
Helping safely	- Securing safety
107	Request assistance from family, acquaintances, and Hana Center
	• Do not leave the person alone
	Remove the lethal means with the person's consent
	Refer them to a psychiatric department for treatment and/or hospitalization
	- Recommend that they abstain from alcohol while at risk for suicide
	• Some 52.6% of people who attempt suicide and 34% who die from suicide were drinking alcohol at the time.
Understanding	- Confirmation of mental health disorders, including depression
depression	• North Korean defectors who have died by suicide often experienced depression.
1	• Treatment for depression shows improvement in symptoms by 50%–70% or more
	• It is important to improve understanding and awareness of depression
	-Introduction to the symptoms of depression
	• Symptoms such as depressed mood persisting for more than 2 weeks
	• Poor functioning in school, at work, and at home
	• Identifying depression using PHQ-9
Piece together a puzzles	-Introduction of people, institutes, and services the person can ask for help
of hope	• Family, friends, and colleagues
	Suicide Prevention Counseling Call-in (tel: 1393); Ministry of Health & Welfare's 24-hour suicide prevention
	hotline (tel: 1577-0199): regional Hana Centers
	Korea Suicide Prevention Center, Mental Health Welfare Centers
	• Korea Youth Counseling Institute (tel: 1388), Lifeline Korea (tel: 1588-9191)
	• Bokjiro, Employment Welfare Plus (+) Center, Worknet
	• One-stop Credit Support Center (tel: 1397)
	Korea Hana Foundation, Hope Welfare Support Group
	Healthcare facilities (Mental Health Department, Emergency Medicine)
	Health and Welfare Counseling Center (tel: 129), Korea Legal Aid Corporation (tel: 132), Korea Center on
	Gambling Problems (tel: 1336)
	-"I (gatekeeper)" connecting various resources
Key contacts	- Ministry of Health & Welfare Suicide prevention counseling call-in at the (tel: 1393)
	- Ministry of Health & Welfare 24-hour suicide prevention hotline of the (tel: 1577-0199)
	- Regional Hana Centers
	- Other information on various welfare services in the South Korea

Item	Core content
Good ending	- You can reduce a suicidal person's risk for suicide by doing the following:
	Asking questions about suicide
	• Listening empathetically and actively
	• Asking them to list the reasons they are considering suicide, are making suicide plans, or are considering or
	have attempted suicide, and why they think about death
	 Asking them to list the reasons that they may still want to live and listening carefully
	• Recommending they call-in for a suicide prevention counseling session by phone (tel: 1393)
	 Prohibiting alcohol, removing lethal means together, and promising to live safely
Role playing	- Female North Korean defector: role-playing together with trainees based on the "good ending" script
Wrap-up	- Wrap-up the core content of the "Suicide CARE for North Korean defectors" gateway program.

Table 3. Subsections and core content of "Risk evaluation and e	xpert referral"	(continued)
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PHQ-9, Patient Health Questionnaire-9

search. Asking someone about suicidal thoughts does not increase their risk of suicide, but it may offer them some relief if they are having suicidal thoughts. Thus, it is important to directly ask NKDs if they have been having suicidal thoughts. "The listener's mind" deals with a variety of emotions, such as shock and a desire to avoid, that are experienced by gatekeepers who confirm that another NKD has a suicidal intention. "Unhelpful listening" teaches trainees that it is most helpful to follow the emotions of a person at risk of suicide while listening to them rather than reacting to the emotions the story evokes in oneself. This subsection also emphasizes that human life and safety are more important than confidentiality. "Helpful listening" shows that to listen and accept the heart of a person with suicidal thoughts is the most basic mindset gatekeepers need. Trainers show them that empathizing with people at risk of suicide begins with asking them why they think they should attempt suicide. "Listening skill: active listening" demonstrates how to create a comfortable atmosphere in which high-risk people can tell their stories honestly and how to listen to their stories through empathetic listening with a non-judgmental attitude. "Empathetic response" teaches trainees how to improve their active listening skills so that these skills can be applied in practice. Trainees pair up and practice empathetic responses, such as "If you have ever contemplated suicide, you must have been going through lots of hard time," "I'm sorry for not being able to help you because I didn't know you were so heartbroken," and "Thank you very much for telling a story that is difficult to tell honestly." "Ambivalence" helps trainees understand that people who consider attempting suicide may also have the desire to live. Finally, "asking about the meaning of life" explains that asking the right questions can remind people of the importance of their lives.

Risk evaluation and expert referral

"Risk evaluation and expert referral" consists of nine sub-

sections (Table 3). First, "video on risk evaluation and expert referral," comprehensively shows the situational, behavioral, and linguistic signals of people at risk of suicide. In "checking for suicide risk," trainees are taught what questions to use to identify suicide plans, suicide methods, and a history of suicide attempts. "Helping safely" shows how to secure the safety of people at risk of suicide, such as not leaving them alone and recommending they do not drink alcohol. "Understanding depression" introduces mental health disorders, including depression, and explains the symptoms. "Piece together a puzzle of hope" introduces people, institutions, and services that people at risk of suicide can look to for help. "Key contacts" discusses South Korea's representative suicide prevention services (e.g., 24-hour suicide prevention hotline 1577-0199) and the regional Hanacenter. The "good ending" focuses on a middle-aged female NKD at risk of suicide who receives help from acquaintances after she asks them about suicide, and they empathetically and actively listen to her story. Further, she is referred to the appropriate suicide prevention service before she makes a suicide attempt. It is emphasized that a good ending can be accomplished by making use of all the skills the trainee has learned. In "role play," trainees act out a scene based on the "good ending" script. In "wrap-up," the core content of the program is summarized and completed.

DISCUSSION

NKDs have high stress and high vulnerability to mental health disorders, and their suicide risk after entering South Korea can be high. Thus, we formed a multidisciplinary research team and developed "Suicide CARE for NKDs" a gatekeeper training program customized for NKDs.

"Suicide CARE for NKDs" has two important strengths. First, it is the suicide prevention program developed specifically for NKDs. Given that gatekeeper training has shown promise in specific populations, such as the military or schools,²⁵

training NKDs as gatekeepers would be effective in reducing the suicide rates of NKDs. In addition, training familiar faces within their communities who have experienced similar defection processes and settlement facilitates early identification of those at risk for suicide. Second, suicide risk signals among NKDs consisted of previous suicide prevention programs and related articles for NKDs with a multidisciplinary research team.13-20,26,27 "Suicide CARE for NKDs" was customized based on the specific difficulties NKDs currently face. It comes from the importance of understanding the cultural context of circumstances and their characteristics in suicide prevention. In a previous study exploring participants' experiences and perceptions of gatekeeper training for refugees and asylum seekers, they reported that equipping workers with skills and knowledge in culturally tailored and evidencebased suicide prevention can lead to an increased sense of hope, optimism, and confidence.²⁸ We hope this program contributes to lowering the suicide rate for this population.

For "Suicide CARE for NKDs" to effectively educate gatekeepers to raise suicide prevention awareness and promote early detection and intervention for high-risk groups, some efforts are required. First, we should encourage as many NKDs as possible to participate in this program and continue to provide maintenance training for gatekeepers. Some studies evaluating the mental health of refugees and asylum seekers^{29,30} have reported that refugees may have barriers to seeking mental health care due to beliefs that there is no treatment and cultural values surrounding silence and disclosure. The NKDs are likely to be similar to refugees, so it is essential to encourage them to participate. Second, periodic updates should be made when implementing the program to compensate for the shortcomings and to reflect the trend of the times. Further research into the effectiveness of the "Suicide CARE for NKDs" and the participants' experiences is needed for updates. To accomplish these things and to maintain and update this program at the national level, adequate economic support is essential.

Availability of Data and Material

The datasets generated or analyzed during the study are available from the corresponding author on reasonable request.

Conflicts of Interest

Jong-Woo Paik and Hong Jin Jeon, a contributing editor of the Psychiatry Investigation, were not involved in the editorial evaluation or decision to publish this article. All remaining authors have declared no conflicts of interest.

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Funding Statement

This work was supported by a study on the development of a gatekeeper education program for suicide prevention among North Korean defectors and a development grant from the Korea Suicide Prevention Center and the Settlement Support Center for North Korean Refugees (Hanawon). This work was also supported by the Korea Psychological Autopsy Center and the Soonchunhyang University Research Fund.

Acknowledgments

We would like to express our sincere gratitude to Professor Se-Won Lim for his dedication to the development of "Suicide CARE" versions 1.0 and 1.6.

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