



Opening doors to life: A suicidal behavior prevention program involving Gatekeeper teachers

Abriendo puertas para la vida: Programa de prevención de conductas suicidas a través de docentes Gatekeepers

Abrindo portas para a vida: Programa de prevenção ao comportamento suicida por meio de professores Gatekeepers

María Camila Solarte^{1*} orcid.org/0000-0001-5600-0737

Omaira Lucely Araujo¹ orcid.org/0000-0003-4375-5617

Diego Fernando Muñoz¹ orcid.org/0000-0003-2375-4019

Fredy Hernán Villalobos¹ orcid.org/0000-0002-2602-0283

Ana Karen Ceballos² orcid.org/0000-0002-4980-4056

Edwin Gerardo Luna³ orcid.org/0000-0002-6916-8579

1. Psychology and Health Group, Psychology Program, University of Nariño. Pasto, Colombia.
2. Psychology and Health Group, Health Promotion Technology Program, University of Nariño. Pasto, Colombia.
3. Department of Education of Valle del Cauca. Valle del Cauca, Colombia.

Received: Oct 08 - 2021

Revised: Jul 15 - 2022

Accepted: Apr 22 - 2024

Published: May 16 - 2024

Citation: Solarte MC, Araujo OL, Muñoz DF, Villalobos FH, Ceballos AK, Luna EG. *Opening doors to life: A suicidal behavior prevention program involving Gatekeeper teachers*. Univ. Salud. 2024; 26(2):A10-A18. DOI: [10.22267/rus.242602.325](https://doi.org/10.22267/rus.242602.325)

Abstract

Introduction: Suicide is the third cause of death in young people aged between 15 to 19 years. Thus, school environments can promote mental health of adolescents through early identification of risk factors and prevention of suicidal behaviors. One prevention strategy is the training of "gatekeepers". **Objective:** To determine the impact of the "Opening Doors to Life" program on the knowledge, attitudes, and practices regarding prevention of suicidal behavior in a set of high school teachers from an educational institution in San Juan de Pasto, Colombia. **Materials and methods:** A pre-experimental study with an intervention group and pre- and post-follow-up measurements. Nine volunteer teachers participated during two training sessions. **Results:** Positive changes regarding knowledge, attitudes, and practices of the participants during pretest and posttest were observed for the majority of evaluated sub-dimensions. However, after three years, the positive measures prevailed only for knowledge about suicidal behavior and attitudes toward prevention. **Conclusion:** The "Opening Doors to Life" program showed effectiveness and relevance. However, maintaining its impact requires follow-up actions and support of trained teachers.

Keywords: Suicide; program; teachers; students; mental health; referral and consultation. (Source: DeCS, Bireme).

Resumen

Introducción: El suicidio es la tercera causa de muerte de jóvenes entre 15 y 19 años. Ante esto, los ambientes escolares pueden favorecer el fomento de la salud mental de los adolescentes, permitir la identificación temprana de factores de riesgo y aportar en la prevención de conductas suicidas. Una de las estrategias de prevención es el entrenamiento de "gatekeepers". **Objetivo:** Determinar el efecto del programa "Abriendo Puertas para la Vida" sobre conocimientos, actitudes y prácticas en prevención de conductas suicidas en un grupo de profesores de secundaria de una institución educativa de San Juan de Pasto, Colombia. **Materiales y métodos:** Estudio preexperimental, con un grupo de intervención y medidas pre y pos-seguimiento. Participaron nueve docentes voluntarios durante dos jornadas de formación. **Resultados:** Se identificaron cambios positivos en conocimientos, actitudes y prácticas de los participantes entre pretest y posttest, en la mayoría de las subdimensiones evaluadas; sin embargo, tres años después, estos cambios se mantuvieron tan solo en conocimientos sobre las conductas suicidas y en actitudes hacia la prevención. **Conclusión:** El programa "Abriendo Puertas para la Vida" evidenció efectividad y pertinencia, sin embargo, el mantenimiento de sus efectos requiere de acciones de seguimiento y acompañamiento a los docentes formados.

Palabras clave: Suicidio; programa; docentes; estudiantes; salud mental; derivación y consulta. (Fuente: DeCS, Bireme).

Resumo

Introdução: O suicídio é a terceira causa de morte de jovens entre 15 e 19 anos. Diante disso, os ambientes escolares podem promover a promoção da saúde mental em adolescentes, permitir a identificação precoce de fatores de risco e contribuir para a prevenção do comportamento suicida. Uma das estratégias de prevenção é a formação de "gatekeepers". **Objetivo:** Determinar o efeito do programa "Abrindo Portas para a Vida" nos conhecimentos, atitudes e práticas na prevenção do comportamento suicida em um grupo de professores do ensino médio de uma instituição educacional em San Juan de Pasto, Colômbia. **Materiais e métodos:** Estudo pré-experimental, com grupo de intervenção e medidas pré e pós-acompanhamento. Nove professores voluntários participaram durante dois dias de treinamento. **Resultados:** Foram identificadas mudanças positivas nos conhecimentos, atitudes e práticas dos participantes entre o pré-teste e o pós-teste, na maioria das subdimensões avaliadas; porém, três anos depois, essas mudanças se mantiveram apenas no conhecimento sobre comportamentos suicidas e atitudes frente à prevenção. **Conclusão:** O programa "Abrindo Portas para a Vida" mostrou efetividade e relevância, porém, a manutenção de seus efeitos requer ações de acompanhamento e apoio a professores capacitados.

Palavras chave: Suicídio; programa; docentes; estudantes; saúde mental; encaminhamento e consulta. (Fonte: DeCS, Bireme).

*Corresponding Author:

María Camila Solarte
e-mail: mariacamilasolarte96@gmail.com

Several elements could explain the effects mentioned above. First of all, the components included in the ODL program (information and myths about suicide, crisis situations and how to face them, and channeling routes for risk situations (Table 1) must be taken into account, as they were focused on their possible application in an educational context. It is likely that teachers felt a greater level of self-efficacy and confidence in their knowledge and skills after the participation in this program⁽³¹⁾. Furthermore, it has been shown that gatekeepers training induces a significant increase in knowledge about suicidal behaviors, a reduction in reluctance to intervene, and an increase in perceived self-efficacy for future interventions^(7,31).

Secondly, it is necessary to consider the fact that teachers participated voluntarily in the program. Previous studies on prevention of suicidal behaviors suggest that there is a relationship between the personal involvement of teachers in this type of activities and their willingness to learn, acquire, strengthen their skills, as well as to apply them to prevent suicide in their students^(32,33).

Finally, the characteristics of the provided information is a third aspect to take into account. Indeed, for a process focused on eliciting novel behaviors to have a demonstrable effect, the information provided must be concise, specific, and clear⁽³⁴⁾. Given that the participants of the program were not health experts, the addressed contents, the information given in each thematic core, and the provided instructions were concrete, specific and they described the expected behavior in the proposed hypothetical situations⁽³⁵⁾. Even though these programs are considered low-threshold strategies and carried out with actors from the educational community, all the elements described above are important since the GTP is an efficient and cost-effective option for mobilizing, addressing, and preventing self-harmful behaviors⁽³⁶⁾.

Conclusions

The ODL program focused on teachers led to a significant and positive increment in their knowledge, attitudes, and practices on aspects such as risk factors, prevention factors, and actions to prevent suicidal behaviors. Although there was a favorable change between pretest and post-test measurements in the general components of attitudes and practices, as well as in some subdimensions of knowledge and attitudes, the achieved levels were not maintained until the follow-up assessment period. This observation highlights the need for monitoring and reinforcing actions targeted towards trained gatekeepers.

The design of future multicenter studies is recommended, which could facilitate access to this type of intervention programs. The inclusion of a "waiting list" strategy could expand the number of participants and strengthen the corresponding statistical analysis. Likewise, it is necessary not only to carry out more frequent assessments (3, 6, and 12 months) but also to continue with multimodal

interventions that improve the maintenance of the achieved changes. Finally, a time-stable institutional strategy is key for teachers to continue with prevention processes and feel that they are essential actors for these processes.

The results achieved in this study may not be generalized as the number of participants was limited. Nonetheless, this work offers important information about observations that could be replicated in studies with a larger number of participants. Also, this is a relevant work because the generation and implementation of these types of programs is highly required in educational communities.

Conflicts of interest: None declared by the authors.

References

1. World Health Organization (OMS). Suicide [Internet]. 2019 [cited 2022 Dec 4]. Available from: <https://www.who.int/es/news-room/fact-sheets/detail/suicide>
2. Instituto Nacional de Medicina Legal y Ciencias Forenses, Grupo Centro de Referencia Nacional sobre Violencia Forense: Datos para la vida. Bogotá D.C (COL); 2021 [cited 2023 Oct 15]. Available from: https://www.medicinalegal.gov.co/documents/20143/878249/Forensis_2021.pdf
3. Villalobos-Galvis FH, Ojeda-Rosero DE, Luna-Tascón EG. Characterization of suicidal behaviors in adolescents from the area of influence of the Galeras volcano, Nariño, Colombia. *Informes Psicol* [Internet]. 2019 [cited 2022 Oct 4]; 19(2):163-180. Available from: <https://dialnet.unirioja.es/servlet/articulo?codigo=7044259>
4. Dávila-Cervantes CA, Luna-Contreras M. Suicide attempt in teenagers: Associated factors. *Rev Chil Pediatr* [Internet]. 2019 [cited 2022 Oct 4]; 90(6):606-616. Available from: https://www.scielo.cl/scielo.php?script=sci_arttext&pid=S0370-41062019000600606
5. Moreno-Carmona ND, Andrade-Palos P, Betancourt-Ocampo D. Strengths in Colombian and Mexican teens that have never attempted suicide. *Rev Latinoam Cienc Soc Niñez Juv* [Internet]. 2018 [cited 2021 Oct 4]; 16(2):797-807. DOI: 10.11600/1692715x.16210
6. Benavides-Mora VK, Villota-Melo NG, Villalobos-Galvis FH. Conducta suicida en Colombia: Una revisión sistemática. *Rev Psicopatol Psicol Clin* [Internet]. 2019 [cited 2021 Oct 4]; 24(3):181-195. DOI: 10.5944/rppc.24251
7. Holmes G, Clacy A, Hermens DF, Lagopoulos J. The long term efficacy of suicide prevention gatekeeper training: a systematic review. *Arch Suicide Res* [Internet]. 2019 [cited 2021 Oct 4]; 25(2):117-207. DOI: 10.1080/13811118.2019.1690608
8. Institute of Medicine, Board on Neuroscience and Behavioral Health, Committee on Pathophysiology and Prevention of Adolescent and Adult Suicide, Goldsmith SK, Pellmar TC, Kleinman AM, Bunney WE. Reducing suicide: A national imperative. Washington D.C (USA): The National Academies Press; 2002 [cited 2023 Mar 16]. DOI: 10.17226/10398
9. Chehil S, Kutcher SP. Suicide Risk Management: A Manual for Health Professionals. 2nd ed. Hoboken (USA): Wiley-Blackwell; 2012 [cited 2021 May 13]. Available from: <https://www.wiley.com/en-ca/Suicide+Risk+Management%3A+A+Manual+for+Health+Professionals%2C+2nd+Edition-p-9780470978566>
10. Alonso D, Popescu M, Zubayoglu-loannides P. Training non-mental health professionals to assess and manage suicide risk: community level intervention for suicide prevention in Guatemala. *Int J Soc Psychiatry* [Internet]. 2021 [cited 2021 Oct 4]; 67(6):705-712. DOI: 10.1177/0020764020970237
11. Barrueto C, Gaete J, Bustamante F, Pizarro M. Self-perceived knowledge and skills of teachers for prevention of suicidal behavior in adolescents pre and post-intervention. *Rev Chil*

- Neuro-Psiquiatr [Internet]. 2017 [cited 2021 Oct 4]; 55(3):170-178. DOI: 10.4067/s0717-92272017000300170
12. Gask L, Coupe N, McElvenny D, Green G. Pilot study evaluation of suicide prevention gatekeeper training utilising STORM in a British university setting. Br J Guid Couns [Internet]. 2017 [cited 2021 Oct 4]; 45(5):593-605. Available from: <https://www.tandfonline.com/doi/abs/10.1080/03069885.2017.1335391>
 13. Katz C, Bolton SL, Katz LY, Issak C, Tilson-Jones T, Sarren J. A systematic review of school-based suicide prevention programs. Depress Anxiety [Internet]. 2013 [cited 2021 Oct 4]; 30(10):1030-1045. DOI: 10.1002/da.22114
 14. Wolitzky-Taylor K, LeBeau RT, Perez M, Gong-Guy E, Fong T. Suicide prevention on college campuses: What works and what are the existing gaps? A systematic review and meta-analysis. J Am Coll Health [Internet]. 2019 [cited 2021 Oct 4]; 68(4):419-429. DOI: 10.1080/07448481.2019.1577861
 15. Bailey E, Spittal MJ, Pirkis J, Gould M, Robinson J. Universal suicide prevention in young people. Crisis [Internet]. 2017 [cited 2021 Oct 4]; 38(5):300-308. DOI: 10.1027/0227-5910/a000465
 16. Litteken C, Sale E. Long-Term Effectiveness of the Question, Persuade, Refer (QPR) suicide prevention gatekeeper training program: Lessons from Missouri. Community Ment Health J [Internet]. 2018 [cited 2021 Oct 4]; 54(3):282-292. DOI: 10.1007/s10597-017-0158-z
 17. Reiff M, Kumar M, Bvunzawabaya B, Madabhushi S, Spiegel A, Bolnick B. I CARE: Development and Evaluation of a Campus Gatekeeper Training Program for Mental Health Promotion and Suicide Prevention. J Coll Stud Psychother [Internet]. 2019 [cited 2021 Oct 4]; 33(2):107-130. DOI: 10.1080/87568225.2018.1433570
 18. Breux P, Boccio DE. Improving Schools' Readiness for Involvement in Suicide Prevention: An Evaluation of the Creating Suicide Safety in Schools (CSSS) Workshop. Int J Environ Res Public Health [Internet]. 2019 [cited 2021 Oct 4]; 16(12):2165. DOI: 10.3390/ijerph16122165
 19. Villalobos-Galvis FH, Ceballos-Mora AK, Luna-Tascón EG, Araujo-Rosero L, Muñoz-Muñoz DF, Solarte-Tobar MC. Prevención de la conducta suicida en contextos escolares. Una revisión de los tipos de intervención. Rev Asoc Esp Neuropsiq [Internet]. 2023 [cited 2023 Oct 14]; 43(143):217-236. Available from: <https://scielo.isciii.es/pdf/neuropsiq/v43n143/2340-2733-raen-43-143-0217.pdf>
 20. Torok M, Calear AL, Smart A, Nicolopoulos A, Wong Q. Preventing adolescent suicide: A systematic review of the effectiveness and change mechanisms of suicide prevention gatekeeping training programs for teachers and parents. J Adolesc [Internet]. 2019 [cited 2023 Oct 14]; 73(1):100-112. DOI: 10.1016/j.adolescence.2019.04.005
 21. Hernández-Sampieri R, Fernández-Collado C, Baptista-Lucio MP. Metodología de la investigación. 6th ed. México D.F (MEX): McGraw Hill; 2014 [cited 2021 Oct 4]. Available from: <https://dialnet.unirioja.es/servlet/libro?codigo=775008>
 22. Des-Jarlais DC, Lyles C, Crepaz N, the TREND Group. Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: The TREND statement. Am J Public Health [Internet]. 2004 [cited 2021 Oct 4]; 94:361-366. DOI: 10.2105/AJPH.94.3.361
 23. Goss-Sampson MA. Análisis estadístico en JASP: Una guía para estudiantes. Barcelona (ESP): FUOC; 2019 [cited 2023 jun 20]. Available from: <https://static.jasp-stats.org/JASPGuideEspanol.pdf>
 24. Ley 1090 de 2006: Por la cual se reglamenta el ejercicio de la profesión de Psicología, se dicta el Código Deontológico y Bioético y otras disposiciones. Bogotá D.C (COL): Congreso de la República de Colombia; 2006 [cited 2019 Oct 3]. Available from: <https://www.colpsic.org.co/wp-content/uploads/2021/03/Ley-1090-de-2006-anotaciones-jurisprudencia.pdf>
 25. Resolución 8430. Por la cual se establecen las normas científicas, técnicas y administrativas para la investigación en salud [Internet]. Bogotá D.C (COL): Ministerio de Salud; 1993 [cited 2019 Oct 3]. Available from: <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/DE/DIJ/RESOLUCION-8430-DE-1993.PDF>
 26. Diamond G, Ogunkua L, Atte T, Rosen P, Wintersteen M, Gallop R. The Effectiveness of the More Than Sad School-based Gatekeeper Training Program. Sch Ment Health [Internet]. 2021 [cited 2022 Feb 16]; 13:655-666. DOI: 10.1007/s12310-021-09444-8
 27. Arias M, Marcos S, Martín M, Arias J, Deronceré O. Modificación de conocimientos sobre conducta suicida en adolescentes y adultos jóvenes con riesgo. Medisan [Internet]. 2009 [cited 2022 Dic 13]; 13(1). Available from: <http://scielo.sld.cu/pdf/san/v13n4/san05109.pdf>
 28. Westfeld JS, Jenks Kettmann JD, Lovmo C, Hey C. High School Suicide: Knowledge and Opinions of Teachers. J Loss Trauma [Internet]. 2007 [cited 2022 Dic 13]; 12(1):33-44. DOI: 10.1080/15325020600757839
 29. Soto-Salcedo A, Villarroel-Gruner P, Véliz-Burgos A, Moreno-Leiva G, Estay-Sepúlveda JG. Intervenciones para la prevención del suicidio en adolescentes y jóvenes. Revisión sistemática. REE [Internet]. 2021 [cited 2022 Oct 24]; 15(3):145-161. Available from: <http://eugenioespejo.unach.edu.ec/index.php/EE/article/view/332>
 30. King KA, Strunk CM, Sorter MT. Preliminary effectiveness of surviving the Teens® Suicide Prevention and Depression Awareness Program on adolescents' suicidality and self-efficacy in performing help-seeking behaviors. J Sch Health [Internet]. 2011 [cited 2022 Ago 17]; 81(9):581-590. DOI: 10.1111/j.1746-1561.2011.00630.x
 31. Haugen J, Sutter CC, Tinstman-Jones JL, Campbell LO. Teachers as Youth Suicide Prevention Gatekeepers: An Examination of Suicide Prevention Training and Exposure to Students at Risk of Suicide. Child Youth Care Forum [Internet]. 2023 [cited 2023 Oct 14]; 52:583-601. DOI: 10.1007/s10566-022-09699-5
 32. Pérez-Reyna E, Hernández-Trujillo A, Pérez-Reyna M, Cardero-Montoya D, Beatón-Lobaina YB. Modificación de conocimientos en profesores de la Escuela de Instructores de Arte "Pepito Tey" sobre la prevención del intento suicida en adolescentes. Medisan [Internet]. 2008 [cited 2022 Dic 12]; 12(4). Available from: <https://www.redalyc.org/articulo.oa?id=368445249002>
 33. Serra-Taylor J, Jiménez-Chafey MI, Irizarry-Robles CY. Diseño y evaluación de un adiestramiento para profesionales de ayuda sobre identificación y manejo de riesgo suicida en estudiantes universitarios. Univ Psychol [Internet]. 2016 [cited 2022 Dic 12]; 15(1):271-280. DOI: 10.11144/Javeriana.upsy15-1.deap
 34. Miltenberg RG. Modificación de la conducta: principios y procedimientos. 6ta ed. (ESP): ABA España; 2020 [cited 2022 Dic 14]. DOI: 10.26741/2020.Milt
 35. Sánchez-Arbex C. Guía metodológica para la implementación de una intervención preventiva selectiva e indicada en drogodependencias. Madrid (ESP): ADES; 2013 [cited 2023 Ene 29]. Available from: https://www.observatoriodelainfancia.es/olia/esp/documentos_ficha.aspx?id=4855
 36. World Health Organization (WHO). Vivir la Vida. Guía de aplicación para la prevención del suicidio en los países. Resumen ejecutivo [Internet]. 2021 [cited 2022 Dic 12]. Available from: <https://apps.who.int/iris/bitstream/handle/10665/343054/9789240029668-spa.pdf>