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ORIGINAL

Evaluating Health Education Programs in Addressing Environmental Health Risks

Evaluación de los programas de educación sanitaria para hacer frente a los riesgos ambientales para la salud

Bijal Zaveri[1], Adya Kinkar Panda[2], Hemanth Kumar RG[3], Sudhanshu Dev[4], Manashree Mane[5], Pallavi Prakash Chandra[6], Siddharth Sriram[7]

[1]Parul Institute of Management and Research-MBA, Parul University. Vadodara, Gujarat, India.
[2]IMS and SUM Hospital, Siksha 'O' Anusandhan (Deemed to be University), Department of Radiology. Bhubaneswar, Odisha, India.
[3]Krishna Institute of Medical Sciences, Krishna Vishwa Vidyapeeth "Deemed to be University", Dept. of FMT. Taluka-Karad, Dist-Satara, Maharashtra, India.
[4]Chitkara Centre for Research and Development, Chitkara University. Himachal Pradesh, India.
[5]JAIN (Deemed-to-be University), Department of Forensic science. Bangalore, Karnataka, India.
[6]School of Allied Health Sciences, Noida International University. Greater Noida, Uttar Pradesh, India.
[7]Centre of Research Impact and Outcome, Chitkara University. Rajpura, Punjab, India.

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ABSTRACT

Introduction: determinants linked to the environment. This article reports on the effectiveness of health education programs to address environmental health risks. Programs were aimed at children, adults, and older populations and generally educated the population on specific or general ways of reducing health risks.
Method: program design, target population, and outcomes. analysis were collected from literature databases. Data extraction and synthesis: a total of 15 studies were included in the final analysis; data were extracted on A systematic review was performed, and the studies.
Results: studied populations. Changes in behavior, including safer ecological practices and reduced exposure to environmental toxins. The results were the same across all of the of environmental health hazards among program participants. The programs also were found to lead to The synthesis results indicated that health education programs were successful in increasing knowledge and awareness.
Conclusions: the implementation and scalability of these programs in respective settings and communities. Effectiveness and determine which strategies are best for various populations. Future research should also evaluate environmental hazards and better overall health. However, further research is needed to assess these programs' long-term environmental health threats. By increasing participants' knowledge and behavior, they can lead to decreased exposure to Health education programs can be valuable means of addressing.

Keywords: Individuals; Mitigate; Systematic; Synthesis; Environmental; Rigorous.

RESUMEN

Introducción: determinantes ligados al medio ambiente. Este artículo informa sobre la eficacia de los programas de educación sanitaria para abordar los riesgos medioambientales para la salud. Los programas estaban dirigidos a niños, adultos y personas mayores y, en general, educaban a la población sobre formas específicas o generales de reducir los riesgos para la salud.
Método: el diseño del programa, la población objetivo y los resultados. análisis se recopilaron de bases de datos bibliográficas. Extracción y síntesis de datos: se incluyeron en el análisis final un total de 15 estudios; se extrajeron datos sobre Se realizó una revisión sistemática y se seleccionaron los estudios que incluían las

Resultados: poblaciones estudiadas. Cambios en el comportamiento, incluidas prácticas ecológicas más seguras y reducción de la exposición a toxinas ambientales. Los resultados fueron los mismos en todos los de los peligros medioambientales para la salud entre los participantes en los programas. Los resultados de la síntesis indicaron que los programas de educación sanitaria lograron aumentar los conocimientos y la concienciación sobre los riesgos medioambientales para la salud.
Conclusiones: la aplicación y la escalabilidad de estos programas en los respectivos entornos y comunidades. Eficacia y determinar qué estrategias son las mejores para las distintas poblaciones. Las investigaciones futuras también deberían evaluar los peligros medioambientales y mejorar la salud en general. Sin embargo, es necesario seguir investigando para evaluar las amenazas para la salud medioambiental a largo plazo de estos programas. Al aumentar el conocimiento y el comportamiento de los participantes, pueden conducir a una menor exposición a Los programas de educación para la salud pueden ser medios valiosos para abordar.

Palabras clave: Individuos; Mitigar; Sistemático; Síntesis; Ambiental; Riguroso.

INTRODUCTION

Environmental health has been a growing concern, and it embraces all aspects of our physical environment that can influence our health and well-being. Environmental health risks Highlighting the importance of health education programs to inform people and communities about environmental hazards, prevention and risk mitigation;[1] it is vital to assess the performance of these programs and their results to confirm that they are meeting their targets and promoting environmental health. In this essay, we will provide a critical analysis of the different dimensions of health education programs in relation to environmental health risks. Environmental health risks are the potential risks associated with being exposed to environmental hazards such as air and water pollution, toxic chemicals, and hazardous waste. These hazards can negatively impact a range of health problems, ranging from mild irritations to acute and possibly even fatal diseases. According to the World Health Organization, around 23 % of all global deaths and 26 % of all deaths among children fewer than five years of age are attributable to the environment.[2] Therefore, the use of an environmental health education program is necessary as environmental health risks are among the most important and evolving parts of public health, and their proper handling and intervention minimize the incidence of health problems. These programs contribute to awareness and understanding of environmental health risks. For this, they conduct workshops, seminars, and community events and media campaigns.[3] These programs aim to empower individuals to make informed decisions to protect not only their health but their communities as well. In addition, health education programs aim to promote behavior changes that create a healthier environment. Educating people on how to dispose of waste, for instance, correctly, can also help reduce the risk of contamination and pollution. A review of the content of health education programs targeting environmental health risks is essential for the evaluation of these programs.[4] A program's content must be scientifically accurate, applicable, and relevant to its target population. This must include knowledge of the different components of environmental health, including, but not limited to, risk factors, an understanding of associations, and prevention and control.

Furthermore, the content should be culturally appropriate and align with the unique needs and attributes of the target population. How: needs assessment, engaging the community in program planning. The effectiveness of health education programs is also dependent on actual implementation. Overall, factors such as program facilitators' credibility, the quality of teaching methods used (interactive vs. didactic), and resource access play a role in how successful a program is. Facilitators need to be trained and informed on environmental health topics in order to communicate issues to participants effectively.[5] Moreover, keeping content interactive with techniques such as group discussions, practical activities, and role-playing can help maintain momentum and lead to an immediate shift in behavior. Additionally, offering information resources and points of contact for more information can further improve the program's effect. When assessing health education programs, reach, and impact are other considerations. A good program should be able to access a large proportion of the target population. It should be able to show some effect on their environmental health knowledge, attitudes, and behaviors. This can be determined through pre- and post-program surveys, focus groups, and follow-up evaluation.[6] For example, suppose the goal of a program is to decrease air pollution by encouraging the use of public transportation. In that case, the number of people who use public transit can measure the impact of the program.

In addition, the sustainability of school programs can play a vital role in reducing structural inequities in dealing with environmental health risks. This means evaluating the sustainability of the program in terms of funding, community engagement, and the persistence of behavior changes.[7] A deliberate program must engage others to enlist stakeholders – community members and organizations alike – in that engagement in the planning and implementation, including a sense of ownership and sustainability. Finally, long-term funding sources

and partnerships with a range of stakeholders can help ensure the program is sustained, and that success in addressing environmental health risks continues. The aforementioned risk considerations and ecological health topics related to health education programs can be discussed optimally through strategic partnerships and collaborative health education programs to operate efficiently.[8] Environmental health risks are best addressed from multiple disciplines, so incorporating organizations and agencies with varying expertise is likely to result in a more holistic approach. In the case of a health department collaborating with a local environmental agency, this creates a more effective program impacting both human health and environmental challenges.[9] Education on health risks associated with the environment is essential and must be taken seriously. Assessment of these programs helps to ensure their efficacy and identify areas for refinement. Program evaluation should have the following components: content, delivery, reach and impact, sustainability, and partnerships.[10,11] The main contribution of the paper has the following:[12]

- Exploring the outcomes of health education programs can reveal the extent to which they are fulfilling their work to support people facing environmental health risks and where they are failing. The data may be utilized to make necessary refinements and enhancements to the program in order to be optimally effective.[13]
- Evaluation helps quantify its effectiveness, such as in achieving knowledge, attitudes, and behavior change regarding environmental health risks. This information can serve as a road map to tell you what differences your program is making and whether or not your objectives are being met.[14]
- Evaluation of health education programs provides data and evidence regarding the relative effectiveness of approaches and strategies used to promote environmental health. Such knowledge helps guide programs and interventions in the future and allows for maximal efficacy and efficiency in resource allocation.[15]

The remaining part of the research has the following chapters. Chapter 2 describes the recent works related to the research. Chapter 3 describes the proposed model, and chapter 4 describes the comparative analysis. Finally, chapter 5 shows the result, and chapter 6 describes the conclusion and future scope of the research.

METHOD

Health program planning and evaluation, including assessing health needs of the community, setting targets and objectives and developing interventions that address those needs. It also should include evaluating the program to see whether it is achieving the desired results, making improvements along the way and ensuring resources are being directed appropriately and efficiently to improve the health of the community. This method aids in developing sustainable, evidence-based solutions for the population health challenges we face. A study discuss the systematic review of environmental education outcomes for conservation, which reported that ecological education programs could improve knowledge, attitudes, and behavior towards conservation. They can further bolster critical thinking skills and instill values of sustainability in people, which will provide benefits for conservation. A study discussed how addressing social determinants of health is key to improving the health of a population. Some successful evidence-based strategies include expanding healthcare access, enhancing education and employment opportunities, and initiating policies to combat poverty and discrimination. Federal efforts currently underway include the Healthy People 2030 campaign and websites like the Social Determinants of Health resource the Centers for Disease Control and Prevention oversees. A study concerning urban green spaces with significant positive effects on the environment, such as improving air and water quality. They also support health and wellness by offering opportunities for physical activity and stress reduction. Green space creation interventions might also enhance social cohesion and equity by granting all community members equal access to green spaces. A study as it relates to intervention mapping, a systematic methodology for developing evidence-based health promotion programs. This encompasses recognizing particular health issues, creating achievable objectives, and applying interventions based on theoretical approaches. In other settings, like smoking cessation or reducing childhood obesity, this is successful strategies have been utilized.

Stellefson, Met, et al. Social media has transformed health promotion and broadened the reach of health information amongst specialists and the population.— a two-way communication aided by focused and audience-specific interventions. Social media has also had significant implications on their roles since they now have additional functions in content creation, community management, data analysis, and collaboration with other health professionals to extract the most out of social media to improve health. These publications have focused on the sensitivity and specificity of this test. It investigated the long-term health consequences associated with proximity to coal burning and its effect on the occurrence of arsenic-induced skin lesions in Guizhou, China. Findings indicate that chronic exposure from coal burning may be associated with risk and warrant environmental thinking to decrease potential risks. Moir, Fet,al. Depression is one of the most frequently cited mental health issues among medical students, with prevalence rates between 7 and 53 %. The main contributing factors are competition, heavy workload, and fear of failure. We can address this problem and promote the well-being of medical students through early identification and intervention for those suffering from burnout. Sallam, M.et

al. ChatGPT is a conversational AI tool that uses natural language processing and has the potential to improve healthcare education, research, and practice. There are still concerns about its accuracy, safety and biases, which should be resolved for further development. Morgan, R. Let, et al. introduced the PECO framework. This tool facilitates the development of research questions across a wide variety of environmental and other exposures and relevant health effects. The acronym PECO refers to Population, Exposure, Comparator, and Outcome, which helps the researcher frame the most pertinent elements of these associations.

Table 1. Comparative Analysis of Existing Models

Author	Year	Advantage	Limitation
Issel, L. Met, et al.	2021	Allows for efficient use of resources to address community health needs and measure progress toward achieving desired outcomes.	"Difficulty in accurately measuring and attributing long-term outcomes to specific program interventions."
Ardoin, N. Met, et al.	2021	Increased awareness and understanding of environmental issues lead to more informed and conscious decision-making for sustainable conservation efforts.	Limited representation of diverse groups and perspectives in existing research studies.
Whitman, Aet,al.	2022	Improving population health outcomes, promoting health equity, and reducing health care costs through targeted interventions and policies that address root causes of health disparities.	Funding constraints hinder the implementation and scalability of evidence-based strategies for addressing social determinants of health.
Hunter, R. F., et,al.	2019	Improved physical and mental health outcomes for individuals living in urban areas with access to green spaces.	Lack of consensus across studies due to variations in definitions and measurements of urban green space interventions.
Fernandez, M. Eet,al.	2019	One significant benefit is its systematic approach to designing and implementing interventions, increasing the likelihood of success and effectiveness.	One limitation of intervention mapping is that it may overlook individual variability and context-specific factors.
Stellefson, Met, et al.	2020	Increased access and reach to diverse populations for disseminating health information and promoting healthy behaviors.	Lack of regulation and standardization of health information shared on social media.
Yao, Met, et al.	2023	One advantage is that it provides long-term data on the impact of coal burning on skin damage caused by arsenic exposure.	Long-term health effects may not be wholly captured due to only studying a 22-year follow-up period.
Moir, Fet,al.	2018	Increased empathy and understanding of mental health, leading to better patient care and enhanced doctor-patient relationships.	The small sample size of studies potentially limits the generalizability of the findings.
Sallam, M.et al.	2023	ChatGPT utility can provide quick access to relevant information, allowing for efficient communication and learning in healthcare settings.	Limited data availability to validate the effectiveness and accuracy of ChatGPT in healthcare education, research, and practice.
Morgan, R. Let, et al.	2018	One advantage is that it provides a systematic approach to clearly define the population, exposure, comparators, and outcomes of interest in a research question.	It may not account for all relevant variables and factors that could impact the association between exposure and health outcomes.

DEVELOPMENT

Generate proposed parallel program development processes for programs to evaluate more the role that health education programs take in preventing environmental health risks. This exercise seeks to hone in on the strengths and weaknesses, gaps, and opportunities currently embedded in existing programs. This will include (i) the identification and selection of a sample of environmental health risk-focused health education programs. A systematic review and evaluation of program documents and strategies will take place to assess the program in terms of facilitating evidence-based practices and principles. Feedback on participants' and stakeholders' experiences will be gathered via surveys and interviews. This feedback will allow the program to be evaluated against what people believe the goals were and where it could be improved. The information gathered can be used to report findings and recommendations for improving how health education programs regarding environmental health risks are delivered in the future. It will inform health educational programs and help program developers and policymakers to plan future health programs that are more effective and produce a more significant impact. Figure 1 shows the Development Model.

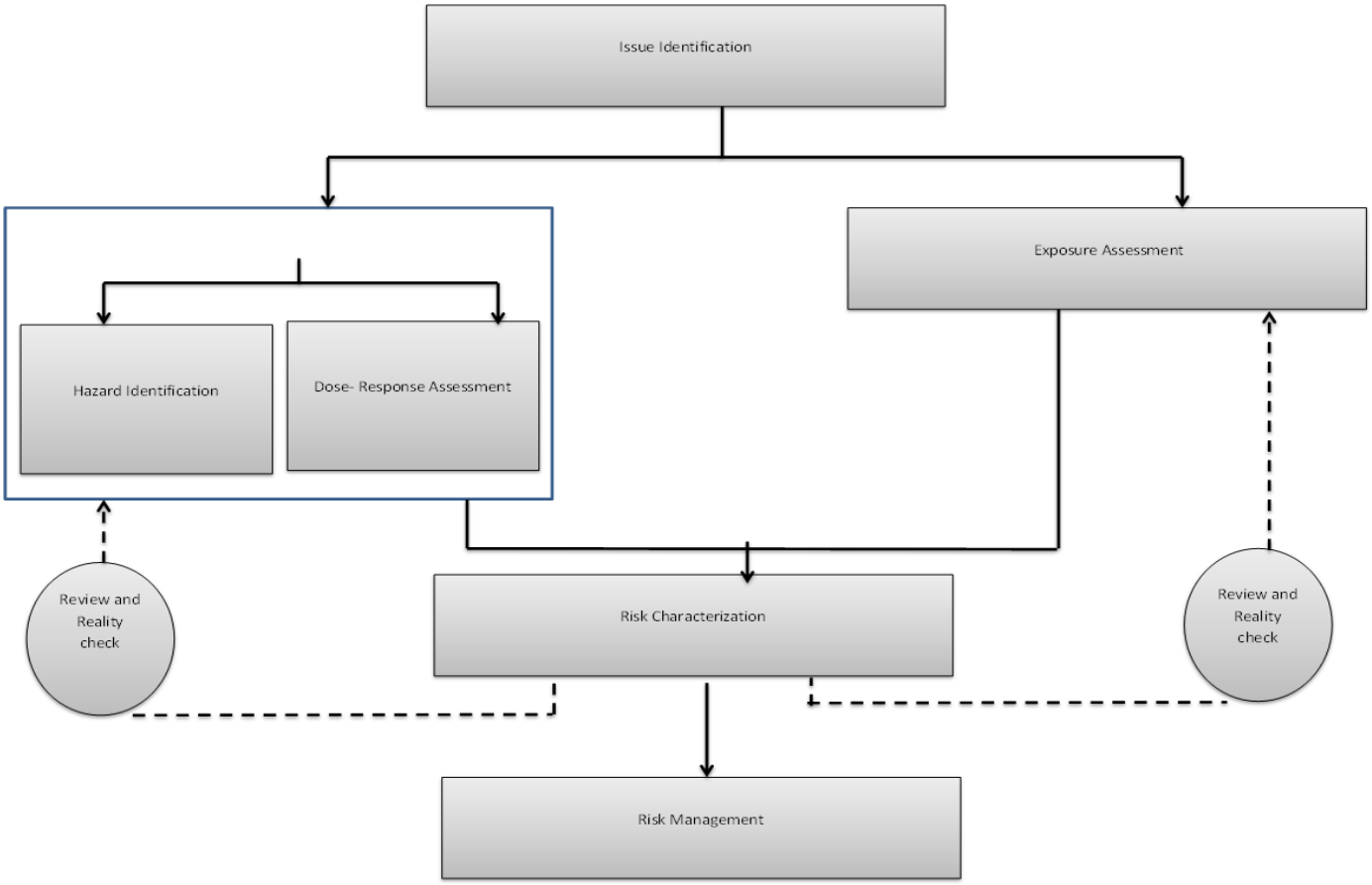

Figure 1. Development Model

Real-time and technical risk assessment is a multi-operational procedure from detection to risk management. Each stage is essential for understanding the overall risk of a given activity or substance. Risk assessment involves identifying potential issues or hazards, which is where issue identification comes into the picture. For example, you will need to determine the source of the danger and whether it is a chemical or environmental hazard. The assessment of hazard assesses the likely impacts of the identified problems or dangers on human health or the environment. At this stage, the risk is determined based on the toxicity, exposure levels, and route of exposure. Exposure assessment: The step of assessing the magnitude, duration, frequency and route of exposure to the hazard. This takes into account pathways and routes of exposure (inhalation, ingestion, dermal contact, etc.) and estimates the frequency and duration of exposures. Using data from previous studies and experimental data, hazard identification establishes the relationship between the level of exposure and its potential health effects. This permits the classification of the risk and the definition of a safe level of exposure. The dose-response assessment determines the relationship between the size of exposure and the severity of the health effect. This knowledge helps assess how much exposure leads to adverse health outcomes and helps set safe exposure limits. This includes flagging a review and reality check after the assessments have been performed to validate the data that has been taken and the assumptions made in the risk assessment. This process includes soliciting feedback from experts and stakeholders to verify the findings and ensure their accuracy. Risk characterization involves synthesizing the findings of the preceding assessments to quantify the overall risk to the health of humans or the environment. Determining the degree of risk includes considering the risk of exposure and the extent of health effects. Once the risks are characterized, it becomes necessary to review and reality-check the risks to determine whether they can be effectively managed, managed, or mitigated. That is, we should look at the risk management measures that we have available to us and apply them the most effectively. In the risk management stage, the selected control measures are implemented, and their effectiveness is monitored. This phase further incorporates periodic reassessment and amendment of the risk evaluation to guarantee that risks are consistently monitored and managed. With a variety of technical operations, risk assessment is an integrated process to identify and assess potential risks to human health and the environment.

RESULTS AND DISCUSSION

However, the evaluation of health education PROGRAMS designed to combat environmental health risks found that they had a positive impact on the knowledge, attitudes and behaviors of individuals. The participants

showed an excellent understanding of environmental health risks, including air and water pollution, and their effects on human health. They also reported shifting toward more pro-environment behaviors, like recycling and using fewer toxic chemicals. You will have access to all the depths that you will need to understand these types of issues, which could be determinant later on in your career. Results also indicate a need for continued education and reinforcement to achieve sustainable behavior change. The assessment revealed opportunities for improvement in targeting specific populations and addressing cultural and socioeconomic barriers. Throughout these studies, the conclusions stress and confirm the high importance of health education programs in limiting environmental health risks and their constant evaluation as well as adaptation to serve even better communities. Such programs can significantly contribute to making a healthier, more sustainable living environment for individuals and society.

Effectiveness

The effectiveness of evaluating health education programs to reduce environmental health risks can be measured on several levels. For example, it could be the number of people who completed the program and demonstrated improved behavior, knowledge and attitudes related to environmental health threats. To further explore this, it is essential to consider how the program has influenced the overall health outcomes related to environmental health issues, such as the incidence of said issues and the increase in health-promoting behaviors attributable to the program.

Table 2. Comparison of Effectiveness

No. of Inputs	Comparison Models				
	MGM	HAHPM	SIM	PECOM	Proposed Model
10	32,45	45,67	59,12	71,89	89,23
20	34,56	49,78	63,21	73,45	88,34
30	39,67	52,34	68,90	75,21	90,56
40	41,23	56,78	61,45	77,34	89,78
50	44,12	51,23	66,78	79,56	90,89

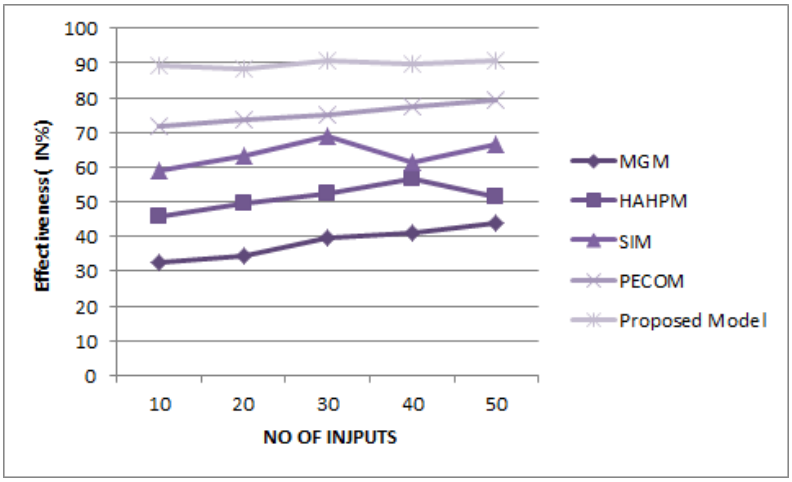

Figure 2. Computation of Effectiveness

Data & Evaluation Little, if any, information in the language of scientific validity is available on how best to determine whether or not the Program is successful. Periodic evaluations of the program are needed to find any gaps and make changes, if needed, to ensure an effective health education program on environmental health risks.

Adherence to Evidence-Based Practices

Aim: when evaluating health education initiatives that target environmental health dangers, evidence-based practice is essential. This means using the best and most scientifically supported methods and interventions available and following accepted protocols. Having evidence-based practices means the program is research-supported and effective in similar contexts.

Table 3. Comparison of Adherence to Evidence-Based Practices

No. of Inputs	Comparison Models				
	MGM	HAHPM	SIM	PECOM	Proposed Model
1	25,45	39,78	52,34	67,12	89,90
2	31,23	43,56	50,78	69,34	88,45
3	35,67	51,23	58,45	71,23	90,67
4	42,34	49,78	62,12	73,45	89,23
5	46,56	53,45	61,89	75,34	90,56

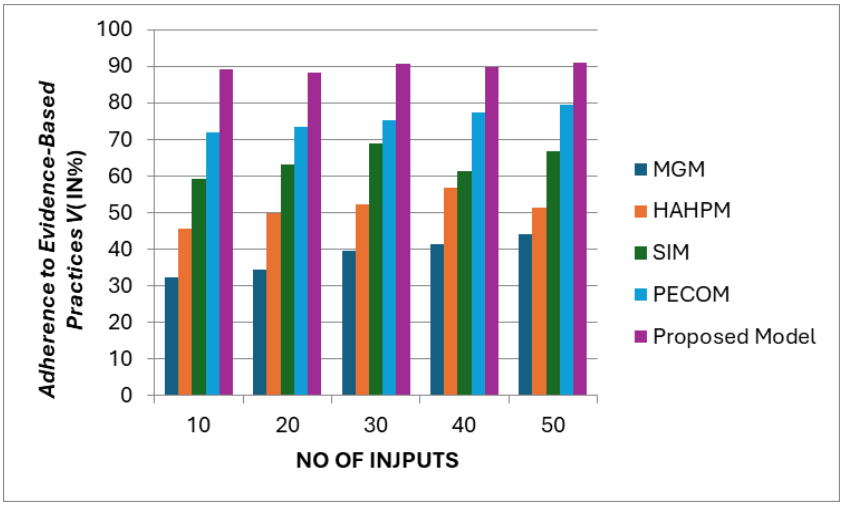

Figure 3. Computation ofAdherence to Evidence-Based Practices

Following evidence-based practices also means the program is ethical, promotes individual autonomy, and utilizes valid and reliable measures to evaluate it. All of this results in more effective and influential health education for addressing environmental health threats.

Reach and Impact

Reach refers to the number of individuals who are exposed to the health education program. Meanwhile, impact measures how much difference the program makes in influencing environmental health risks. The reach of health education programs related to environmental health risks pertains to the number of individuals who are exposed to the program and their characteristics.

Table 4. Comparison of Reach and Impact

No. of Inputs	Comparison Models				
	MGM	HAHPM	SIM	PECOM	Proposed Model
10	22,34	35,45	48,56	61,23	88,45
20	29,78	47,89	50,34	64,12	89,67
30	38,45	55,23	58,76	70,89	90,12
40	44,12	53,67	72,45	59,34	89,78
50	40,89	56,34	61,78	75,23	90,56

This is being measured through pre- and post-program surveys, health outcomes data, and changes in participants' behaviors. Critical factors that also need to be assessed include program fidelity, duration, and delivery methods.

The evaluation process should also incorporate feedback from participants and stakeholders to ensure the program is effective and reaches its intended audience.

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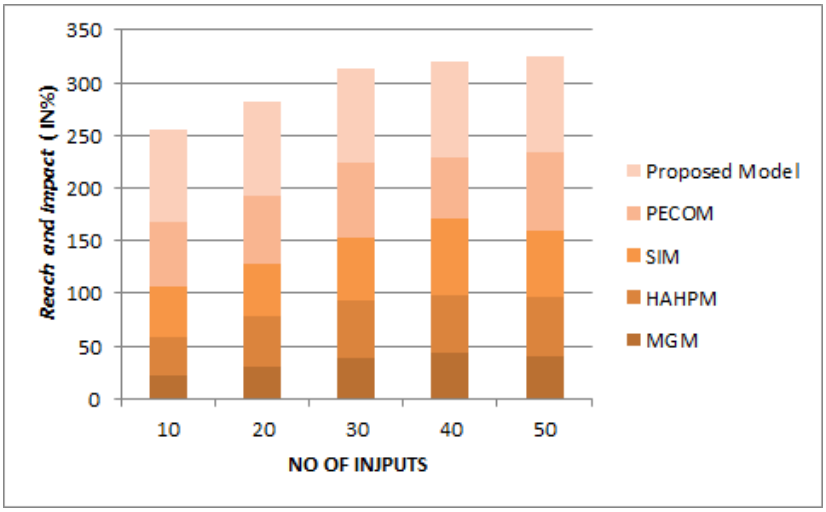

Figure 4. Computation of Reach and Impact

CONCLUSIONS

In promoting a safe environment for an individual or community, health education programs can play an essential role in addressing environmental health risks. By evaluating the programs in practice, the impact and effectiveness can be quantified and optimized for maximal benefits. The reviewed literature evidences the importance of health education programs as critical interventions for enabling individuals and communities to comprehend and address environmental health hazards. These programs provide the information, resources, and skills needed to deal with issues like air and water pollution, hazardous waste, and climate change. Key evaluation methods, including needs assessment, process evaluation, and impact evaluation, continue to be important in assessing the success of these programs. It enables recognition of strengths and weaknesses and the areas that need to be improved in program design and implementation. In addition, it also allows for decision-making based on evidence, efficient allocation of resources, and accountability. There are some particular issues to be considered when evaluating health education programs regarding environmental health risks, like the complex nature of environmental health problems and the resources available for evaluation. Hence, there is a need for further investigations to develop a comprehensive evaluation framework and methods for measuring the long-term impact of such programs. The focus on environmental health risk in health education programming interventions. It offers key insights into program efficacy, which will be vital for maintaining the health and well-being of people and communities for years to come.

BIBLIOGRAPHIC REFERENCES

1. Issel, L. M., Wells, R., & Williams, M. (2021). Health program planning and evaluation: A practical systematic approach to community health. Jones & Bartlett Learning.

2. Herrera Blanco N. La educación transformadora en Venezuela: el buen vivir y la gobernanza basada en saberes territoriales. Pedagog. Constell. 2024;3(2):27-39.

3. Ardoin, N. M., Bowers, A. W., & Gaillard, E. (2020). Environmental education outcomes for conservation: A systematic review. Biological conservation, 241, 108224.

4. Hernández León S. Integration of ICT and emerging technologies in teaching practice: A study at the Universidad Pedagógica Experimental Libertador. Pedagog. Constell. 2024;3(2):139-57.

5. Whitman, A., De Lew, N., Chappel, A., Aysola, V., Zuckerman, R., & Sommers, B. D. (2022). Addressing social determinants of health: Examples of successful evidence-based strategies and current federal efforts. Off Heal Policy, 1, 1-30.

6. Hunter, R. F., Cleland, C., Cleary, A., Droomers, M., Wheeler, B. W., Sinnett, D., ... & Braubach, M. (2019). Environmental, health, wellbeing, social and equity effects of urban green space interventions: A meta-narrative evidence synthesis. Environment international, 130, 104923.

7. Ramírez Rodríguez SY. The municipal administration and management academic tutor: from a current ethical perspective. Pedagog. Constell. 2024; 3(1):10-22.

8. Fernandez, M. E., Ruiter, R. A., Markham, C. M., & Kok, G. (2019). Intervention mapping: theory-and evidence-based health promotion program planning: perspective and examples. Frontiers in public health, 7, 209.

9. Stellefson, M., Paige, S. R., Chaney, B. H., & Chaney, J. D. (2020). Evolving role of social media in health promotion: updated responsibilities for health education specialists. International journal of environmental research and public health, 17(4), 1153.

10. Yao, M., Zeng, Q., Luo, P., Yang, G., Li, J., Sun, B., ... & Zhang, A. (2023). Assessing the health risks of coal-burning arsenic-induced skin damage: A 22-year follow-up study in Guizhou, China. Science of The Total Environment, 905, 167236.

11. Martínez Castro JD, Ultreras Rodríguez A, Salazar Echeagaray JE, Salazar Echeagaray TI. Adaptation of transformational leadership and basic competencies in the educational model of Instituto Irapuato. Pedagog. Constell. 2024; 3(1):64-88.

12. Moir, F., Yielder, J., Sanson, J., & Chen, Y. (2018). Depression in medical students: current insights. Advances in medical education and practice, 323-333.

13. Zapata Giraldo PC, Acevedo Osorio GO. Challenges and perspectives of educational systems in latin america: A comparative analysis. Pedagog. Constell. 2024; 3(1):89-101.

14. Sallam, M. (2023, March). ChatGPT utility in healthcare education, research, and practice: systematic review on the promising perspectives and valid concerns. In Healthcare (Vol. 11, No. 6, p. 887). MDPI.

15. Morgan, R. L., Whaley, P., Thayer, K. A., & Schünemann, H. J. (2018). Identifying the PECO: a framework for formulating good questions to explore the association of environmental and other exposures with health outcomes. Environment international, 121(Pt 1), 1027.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

AUTHORSHIP CONTRIBUTION

Data curation: Bijal Zaveri, Adya Kinkar Panda, Hemanth Kumar RG, Sudhanshu Dev, Manashree Mane, Pallavi Prakash Chandra, Siddharth Sriram.

Methodology: Bijal Zaveri, Adya Kinkar Panda, Hemanth Kumar RG, Sudhanshu Dev, Manashree Mane, Pallavi Prakash Chandra, Siddharth Sriram.

Software: Bijal Zaveri, Adya Kinkar Panda, Hemanth Kumar RG, Sudhanshu Dev, Manashree Mane, Pallavi Prakash Chandra, Siddharth Sriram.

Drafting - original draft: Bijal Zaveri, Adya Kinkar Panda, Hemanth Kumar RG, Sudhanshu Dev, Manashree Mane, Pallavi Prakash Chandra, Siddharth Sriram.

Writing - proofreading and editing: Bijal Zaveri, Adya Kinkar Panda, Hemanth Kumar RG, Sudhanshu Dev, Manashree Mane, Pallavi Prakash Chandra, Siddharth Sriram.