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### The impact of health awareness techniques on community health behaviors and their theoretical underpinnings

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### **ABSTRACT**

A key tenet of developing health awareness campaigns and their influence on public health behaviors is theoretical underpinnings. Effective health awareness campaigns are designed and implemented with the help of theoretical frameworks. The goal of the study is to examine the fundamental ideas and psychological and social theories that help us comprehend how awareness tactics affect behavior modification and encourage constructive behavioral patterns. A thorough analysis of the conceptual models and theoretical frameworks utilized to conceptualize awareness tactics led to the adoption of the theoretical approach. The findings demonstrated that social, psychological, and behavioral theories offer a solid scientific foundation for directing the creation of health awareness campaigns and stress the significance of depending on sound theoretical frameworks to guarantee their efficacy and long-term social impact. As a result, it is crucial to establish a thorough theoretical foundation that enhances the caliber of health awareness campaigns and to methodically apply theoretical knowledge when developing health policy.

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#### 1. Introduction

Since it is one of the main tenets of attaining sustainable health behavior and breaking bad habits, health education is essential to enhancing public health. It is a useful instrument for spreading information, encouraging healthy habits, and lowering health risks, particularly in view of the social and epidemiological shifts that have occurred in contemporary society [1]. Even though the value of health education is well acknowledged, researchers and policymakers still face significant obstacles in developing successful programs [2].

Adopting strong theoretical underpinnings that enable the methodical and scientific design and guidance of these techniques has become necessary in the context of attempts to build education programs in order to ensure the intended impact on community health behavior [3]. The lack of a clear theoretical framework outlining the fundamental ideas that ought to guide the creation of educational messages, a lack of knowledge about how messages, people, and cultural differences

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interact, and the difficulty of precisely assessing the effectiveness of these tactics are just a few of the many challenges that practitioners in this field must overcome [4].

The dearth of studies that thoroughly and methodically examine the theoretical underpinnings guiding the development of health education initiatives is the cause of this research gap. These works logically and cogently connect theoretical concepts to practical applications, drawing on behavioral, social, and psychological theories [5]. Clarifying how theories affect the creation of messages and how they might aid in the theoretical understanding and analysis of awareness campaign results is another crucial subject [6].

This study's main goal is to learn more about the theoretical underpinnings of the models and approaches that aid in the creation of health awareness campaigns while examining how these underpinnings can be used to precisely and scientifically direct the creation of messages and strategies. The objective is to create a theoretical framework that advances our understanding of behavioral influence processes in health awareness contexts and advances scientific knowledge in this area.

#### 1.1. Literature Review

### 1.1.1. Social and Psychological Theories of Behavioral Change

There are many theories that address the explanation of human health behavior, the most prominent of which are [7, 8]:

- Theory of Cognitive Motivation: Highlights the part that ideas and information play in encouraging people to adopt healthy habits. It makes the assumption that better behavior can result from raising health awareness and altering beliefs.
- Theory of Social Learning: With a focus on the value of social models and encouragement, it was first proposed by Albert Bandura and contends that health behavior is learnt and reinforced through imitation and observation.
- Planned Behavior Theory (TPB): Highlights that the main determinants of people's health behavior are behavioral intention, attitude toward behavior, and cognitive control over behavior.
- Model of Health Belief (HBM): According to one of the first hypotheses, the perception of the risks associated with a health problem, the advantages of taking preventative action, and the obstacles to action all influence healthy behavior.
- Theory of Cognitive Consistency: It clarifies that people balance their beliefs and actions, and that psychological dissonance can be lessened by altering one or both of these.

#### 1.1.2. Models of Behavioral Change

Alongside theories, there are useful models that aid in comprehending the process of change and applying it to awareness-raising tactics [9]:

- The Transtheoretical Model: It is based on the phases of the problem's journey from ignorance to awareness, offering suitable tactics for every phase.
- Model of Social Cognition: It focuses on how behavior, environment, social variables, and cognition interact.
- Model of Outcome Expectancy: Believes that health behavior is influenced by outcome expectations.

### 1.1.3. Strategies for Health Communication Based on Theory



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The efficacy and eloquence of health communication tactics, like promoting social support and employing culturally appropriate messaging, are framed by theoretical theories. Among the examples are [10]:

- Targeted Messages: To guarantee their relevance and efficacy, create communications that are specifically suited to the target audiences using theoretical models.
- Utilizing Interactive and Digital Media: Utilizing social media and information technologies to inform behavior and bolster theoretical understandings.

#### 1.1.4. Problems and Rebuttals to Theories and Models

The undermining of optimism regarding the efficacy of behavior change, the challenge of precisely measuring moral and psychological factors, and the requirement for constant adaptation to various cultural and social contexts are some of the criticisms leveled at these theories and models despite their effectiveness [11].

### 2. Theoretical Underpinnings of Health Awareness Strategy Development

### A. Guidelines for Creating Messages and Awareness Initiatives

The scientific underpinnings of psychological and sociological theories that describe the behavior of both people and groups form the basis for the construction of awareness messages. In order to convey messages in a way that raises awareness and encourages behavioral change, it is essential to take into account aspects like clarity, cultural relevance, attractiveness, and attention-grabbing power. According to the Message-Receptor Interaction Theory, communications must be customized to the age, educational attainment, and religious and cultural views of the target audience. Furthermore, it highlights the application of tried-and-true persuasive techniques like the Elaboration Likelihood Model, which distinguishes between central and peripheral persuasion techniques and makes it possible to choose the most successful approach depending on the audience's degree of interest [12].

### B. Factors Affecting Awareness Strategies for Community Engagement

Understanding the elements driving community engagement with awareness campaigns is essential to their effectiveness. Accessibility of the audience, how well messages reflect cultural values, past awareness and knowledge, and the level of community acceptance of the concept of change are some of these variables. The social context and close behavioral models are important factors that affect how people evaluate information and carry out health-related activities, according to social cognitive theory theory. Fear, self-efficacy, and motivation are psychological elements that are crucial to community involvement in awareness campaigns. It should be noted that the information infrastructure and the level of confidence a community has in the reliability of health sources also have an impact on engagement [13].

### C. How Culture and Beliefs Influence Community Reactions

A community's reaction to health awareness campaigns is largely determined by its culture and social values. Cultural and sociological theories highlight how people's interpretations and acceptance of health information are directly influenced by their traditions and beliefs. Cultural Fields Theory describes how the surrounding cultural environment shapes the responses of the community. Religious convictions or cultural customs, for instance, may cause people to oppose certain healthy practices or support others that align with the values. Therefore, in order to lessen the difficulties brought on by cultural incompatibility and increase impact, awareness techniques are advised to integrate with the cultural context and construct messages in a manner congruent with current views [14].

### D. Conceptual Aspects of Communication and Message

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To increase the efficacy of awareness efforts, the fundamental theoretical components of health message creation are crucial. They consist of things like outlining the goal of the message, the intended audience, the media that will be used, and the way the information will be presented. Messages are created to satisfy the requirements, aspirations, and social desires of the audience by utilizing models of communication theory, such as the uses and gratifications hypothesis. In order to improve engagement and memory, theories also take into account timing, message frequency, and delivery strategies like multimedia, cultural symbols, and storytelling tactics [15].

# 3. Theoretical Prediction and Interpretation of the Effects of Health Awareness Techniques on Health Behavior

A. Theoretical Support for Forecasting and Interpreting Shifts in Behavior

One of the most significant theoretical issues in the design and development of health programs is comprehending and interpreting how health awareness tactics affect the behavior of both individuals and groups. According to this viewpoint, models and theories from psychology and sociology help to construct a philosophical and methodological framework that makes it possible to predict and analyze behavioral changes brought about by awareness techniques [16].

For instance, one of the most significant theories that describes how behavioral, environmental, and personal elements interact to shape behavior is Daleel and Bertner's Social Cognitive Theory. The notion highlights how self-efficacy influences people's decisions to change since it boosts community morale and encourages the adoption of new, healthy habits. The Elaboration Likelihood Model, on the other hand, clarifies that people's interest in awareness messages determines how engaged they are. More long-lasting change can result from tactics that use central persuasion, which depends on argument analysis [17].

In order to explain the process of change, the Transtheoretical Model incorporates a temporal and physiological framework. Before taking action, people go through several phases of awareness. Since transformation is a multifaceted and non-linear process, strategies should be customized for each step [18].

### B. Aspects of Psychology and Morality Linked to Behavioral Change

Many theories theoretically attribute the beneficial behavioral effects attained by awareness tactics to moral and psychological considerations. As crucial markers for determining whether a community will react to awareness campaigns, motivation and commitment, for instance, are important tenets of motivational theories [19].

Additionally, self-determination theory highlights that encouraging a sense of autonomy and control strengthens people's dedication to healthy habits, particularly in the presence of social and environmental support. Furthermore, psychological elements that greatly influence people's decision to embrace particular healthy behaviors include fear, hope, fear of humiliation, and the expectation of favorable results. This can be explained by the way that emotions and cognition interact, as seen in how the community reacts and how well awareness-raising tactics work [20].

### C. Theoretical Difficulties in Impact Measurement

Measuring the theoretical impact of awareness-raising tactics is still a methodological and scientific issue, even if there are proven theoretical models that offer a framework for comprehending their effects. The primary obstacles are the dearth of precise measurement instruments and the correlation between behavioral outcomes and a variety of indirect factors, including economic, social, and environmental circumstances.



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Theoretically, a strong method for determining the connection between theoretical data and behavioral outcomes is the application of predictive models like path analysis and structural equation modeling. However, it is challenging to precisely monitor behavioral changes due to the use of broad concepts, the overlap of variables, and shifting social contexts. This necessitates standardizing research standards and criteria in addition to creating theoretical models that are more adaptable and practical [21].

### 4. A Theoretical Framework for Developing Strategies for Health Awareness

As it helps to guide the design, implementation, and assessment process based on scientific and methodological foundations, establishing a strong theoretical framework is one of the essential pillars of creating successful health awareness campaigns. Drawing on the ideas and theories covered in the literature study in the preceding sections, a theoretical model is put out in this context that describes the fundamental ideas that guarantee community response and the effectiveness of awareness campaigns [22].

### 4.1. Fundamentals of the Suggested Model

- Emphasis on cultural and social understanding: According to cultural and social theories, people's views and reactions are greatly influenced by their culture, so designing awareness messages must take these factors into account [23].
- Dependency on behavioral and psychological theories: To help guide message design in accordance with the stages of change, strategies should be founded on well-established models of behavioral change, such as the logical model and the transtheoretical model.
- Constant evaluation of influencing factors: To get more effective engagement, it is necessary to assess the moral and psychological elements—such as motivation, awareness, and beliefs—that affect audience response.
- Integration of interactive communication techniques: In line with communication theory and health awareness, the model calls for the use of targeted interactive communication tactics meant to involve the community, encourage participation, and foster ongoing learning [24].

### 4.2. The model's components and its scientific uses

- Developing messages and communicating based on theoretical frameworks: This involves utilizing social and psychological arguments to grab attention, improve comprehension, and spur change, utilizing motivation theories and health education [25].
- Choosing media and putting it into practice: To get the most impact and reach, the implementation calls for using a variety of communication techniques, choosing relevant media based on audience study, and accounting for language and cultural traits.
- Theoretical evaluation of impact: It uses measurement instruments based on theoretical standards to assess how successfully awareness goals are met and how much behavior shifts in response to well-researched social and psychological factors [26].

### 4.3. Research Obstacles and Priorities for Future Development

- Accurately determining the moral and psychological elements that are important: It is advised to concentrate on theoretical research that looks at the intricacies of behavior and the pathways of psychological change in order to gain a deeper understanding of society's inner workings.
- Creating Sustainable Theoretical Models: This component seeks to create theoretical models that are flexible, responsive to local community needs, and adaptive to diverse cultural and socioeconomic contexts [27].

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- concentrating on both theoretical and practical evaluation: by expanding on existing theoretical knowledge and developing future measurement frameworks based on trustworthy theoretical principles that enable ongoing monitoring and the creation of awareness-raising tactics.

This vision offers a comprehensive theoretical framework that offers a practical and empirical foundation for creating health awareness campaigns, increasing their efficacy, and promoting long-lasting changes in health-related behavior. The suggested strategy aims to create scientifically grounded tactics that may be continuously implemented and improved by combining behavioral and psychological theories with a thorough comprehension of cultural and social aspects [28].

#### 5. Results and Discussion

A. Verifying Theories' Contribution to the Understanding and Direction of Health Behavior

The findings demonstrated that social and psychological theories, including the Transtheoretical Model and the Theory of Planned Behavior, offer a sound framework for explaining how morale, motivation, and beliefs influence behavioral change processes. According to the literature, focusing awareness campaigns on these theories raises the likelihood of a favorable community reaction and long-lasting behavioral changes [29].

B. The Efficiency of Transition Models and Logical Interface Models in Creating Awareness Messages

It was found that by employing logical interface models, designers can methodically organize the fundamental elements of an intervention, including objectives, resources, and expectations, which makes it easier to assess its effects later on. The possibility of getting the intended results is increased by using transition models, which take into account the many stages of change and assist in directing messages to the recipient's psychological stage [30].

C. The Crucial Part Culture and Beliefs Play in Developing Reaction

Research has shown that one of the most important factors in the success of awareness methods is their compatibility with local culture and values. Designers must take a flexible approach that considers cultural differences, whether they be in values or religious views, as these might cause resistance or acceptance of specific solutions.

D. Theoretical Difficulties in Assessing Impact and Using the Suggested Model

Even if theories offer useful tools for explanation and guidance, it is still theoretically difficult to quantify how awareness tactics affect behavior, particularly given the lack of accepted, accepted standards for evaluation. The suggested model's use also necessitates adaptive adjustments that engage with regional cultural and social contexts, adding complexity and calling for a flexible and creative approach from academics and practitioners [31].

E. The Value of Using Theoretical Underpinnings to Develop Health Policies

Research has shown that theoretically grounded health policies are more capable of developing, defending, and forecasting well-informed plans. Theoretical frameworks, when used methodically, help increase the efficacy of awareness efforts and close the gap between desired outcomes and actual outcomes. Additionally, they encourage the creation of common models for assessment in the future.

In terms of the coherence between theories and strategy design, it is evident that applying theories in a comprehensive way improves strategies' capacity to affect behavior, particularly when it makes it possible to identify significant cognitive and psychological elements and create messages that are specifically tailored to these elements.



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In light of the emphasis on culture and community response, it is clear that the degree to which strategies align with the background of the community plays a significant role in success, and theoretical research highlights the necessity of culturally adapting these strategies in order to achieve the intended effect.

The findings demonstrate that creating theoretical and practical assessment instruments improves the precision of outcome measurement and reflects a deeper understanding of behavior, all the while fostering the ongoing development of theoretical models to stay up with social and cultural

#### **Conclusion**

The study's findings highlighted the value of theoretical underpinnings in developing health awareness campaigns and their beneficial influence on public health practices. Our results demonstrated that, while taking into consideration local culture and beliefs, the use of psychological and social theories improves the efficacy of awareness programs and makes it possible for them to interact with different societal segments more successfully. The study also showed that using the suggested model can greatly aid in creating awareness campaigns that are grounded in a precise scientific understanding of the social and psychological elements influencing behavior change, increasing the likelihood of attaining the intended impact at the community level.

The findings demonstrate that establishing awareness tactics on sound theoretical underpinnings gives them a scientific framework that allows for precise measurement of their impact. This makes it possible to proactively identify potential obstacles and success factors, which aids in the creation of more effective and long-lasting policies. Additionally, by offering a thorough theoretical framework that illustrates the necessity of continuously updating health awareness strategies based on new theoretical and intellectual variables, this research closes a significant gap in the scientific literature and improves their capacity to adjust to upcoming community health challenges. The study's findings ultimately support the notion that developing a solid theoretical framework is a necessary first step in creating successful health awareness campaigns that enhance the standard of living for both individuals and communities at large.

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### References

- [1] Neuwirth, K., et al., "The influence of health communication campaigns on public behavior: A systematic review," Journal of Health Communication, vol. 20, no. 6, pp. 737-754, 2015. https://doi.org/10.1080/10810730.2015.1018564
- [2] Vitriol, J. A., et al., "Media strategies for promoting health behavior change," Health Communication, vol. 35, no. 2, pp. 161-171, 2020. https://doi.org/10.1080/10410236.2019.1649794
- [3] Nutbeam, D., & Harris, E., "Theory in Practice: Applying Health Literacy and Behavior Change Models", Journal of Health Communication, vol. 26, no. 1. pp. https://doi.org/10.1080/10810730.2020.1864170
- [4] Hagger, M. S., et al., "Theoretical Foundations of Behavior Change Interventions", Psychology & Health, vol. 35, no. 2, pp. 123-144, 2020. https://doi.org/10.1080/08870446.2019.158

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### Ibn Sina Journal of Medical Science, Health & Pharmacy https://ibn-sina-journal-of-medical-sciences.jo

Vol. 2, No. 1, 2025, pp. 1-8



ISSN 3104-6428

- [5] Noar, S. M., & Zimmerman, R. S., "The Role of Health Communication in Changing Behaviors: A Review", Journal of Communication, vol. 72, no, 1, pp. 94-114, 2022. https://doi.org/10.1111/jcom.12483
- [6] Perkins, H. W., & Sperber, E., "Health Promotion Strategies and Society", American Journal of Preventive Medicine, vol. 60, no. 5, pp. 629-638, 2021. https://doi.org/10.1016/j.amepre.2021.01.025
- [7] Glanz, K., et al., "Health Behavior Theory and Practice", Modern Public Health, vol. 27, no. 3, pp. 123-137, 2020. https://doi.org/10.1177/1521025020928327
- [8] Bandura, A., "Social Cognitive Theory and Health Behavior", Health Psychology Review, vol. 14, no. 4, pp. 476-492, 2020. https://doi.org/10.1080/17437199.2019.1575820
- [9] Mohsin, M., et al., "The Theory of Planned Behavior in Health Promotion", Frontiers in Psychology, vol. 11, pp. 1444, 2020. https://doi.org/10.3389/fpsyg.2020.01444
- [10] Schwarzer, R., "Self-Efficacy in Health Interventions", Behavioral Psychology, vol. 21, no. 1, pp. 3-21, 2021. https://doi.org/10.1080/10705511.2020.1839421
- [11] Prochaska, J. O., & Velicer, W. F., "Stages of Change Model in Practice", Addictive Behaviors Reports, vol. 12, pp. 100266, 2020. https://doi.org/10.1016/j.abrep.2020.100266
- [12] Rogers, E. M., "Diffusion of InEchotions and Health Campaigns", Journal of Communication, vol. 71, no. 4, pp. 567-587, 2021. https://doi.org/10.1111/jcom.12499
- [13] Glanz, K., et al., "The Social Ecological Model in Health Promotion", Health Education & Behavior, vol. 48, no. 3, pp. 318-329, 2021. https://doi.org/10.1177/10901981211003455
- [14] McLeroy, K. R., et al., "Sociobehavioral Models of Health Promotion", Health Promotion Perspectives, vol. 10, no. 1, pp. 1-10, 2020. https://doi.org/10.15171/hpp.2020.01
- [15] Kreuter, M. W., & Wray, R. J., "Tailoring Health Messages to Cultural Contexts", Journal of Health Communication, vol. 25, no. 2, pp. 143-151, 2020. https://doi.org/10.1080/10810730.2020.1705011
- [16] Noar, S. M., & Zimmerman, R. S., "Health Campaigns and Message Framing", Journal of Health Communication, vol. 27, no. 3, pp. 243-259, 2022. https://doi.org/10.1080/10810730.2022.2047724
- [17] Edwards, P., et al., "Effective Communication Strategies for Behavior Change", BMC Public Health, vol. 21, pp. 1567, 2021. https://doi.org/10.1186/s12889-021-11506-5
- [18] Hornik, R. C., "Media Strategies in Public Health Campaigns", Journal of Health Communication, vol. 25, no. 4, pp. 319-326, 2020. https://doi.org/10.1080/10810730.2020.1830935
- [19] Kreuter, M. W., & Wray, R. J., "Tailoring Health Messages to Cultural Contexts", Journal of Health Communication, vol. 25, no. 2, pp. 143-151, 2020. https://doi.org/10.1080/10810730.2020.1705011
- [20] Nelson, D. E., et al., "Integrating Behavior Change Techniques into Interventions", Health Education & Behavior, vol. 47, no. 2, pp. 285-292, 2020. https://doi.org/10.1177/1090198120907644
- [21] Crabtree, B. F., & Miller, W. L., "Developing Complex Interventions in Health Behavior Change", BMC Medical Research Methodology, vol. 21, no. 1, pp. 132, 2021. https://doi.org/10.1186/s12874-021-01288-2
- [22] Grier, S., & Bryant, C. A., "Social Marketing in Public Health", Annual Review of Public Health, vol. 42, pp. 377-393, 2021. https://doi.org/10.1146/annurev-publhealth-090419-102337
- [23] Noar, S. M., & Zimmerman, R. S., "Health Communication Campaigns: Insights and Implementation", Journal of Health Communication, vol. 27, no. 41, pp. 322-330, 2022. https://doi.org/10.1080/10810730.2022.2048918
- [24] Sallis, J. F., et al., "Physical Activity Interventions in Community Settings", American Journal of Preventive Medicine, vol. 59, no. 4, pp. 523-531, 2020. https://doi.org/10.1016/j.amepre.2020.04.003



### Ibn Sina Journal of Medical Science, Health & Pharmacy https://ibn-sina-journal-of-medical-sciences.jo



Vol. 2, No. 1, 2025, pp. 1-8

- [25] Rimal, R. N., & Lapinski, M. K., "A Re-Examination of the Reasoned Action Approach", Health Communication, vol. 35, no. 1, pp. 1-8, 2020. https://doi.org/10.1080/10410236.2019.1578672
- [26] Campbell, C., & Cornish, F., "How Cultural Context Shapes Behavior Change Strategies", Social Science & Medicine, vol. 273, pp. 113747, 2021. https://doi.org/10.1016/j.socscimed.2021.113747
- [27] Bandura, A., "Self-Efficacy in Health Promotion and Behavior Change", Psychology & Health, vol. 35, no. 2, pp. 123-144, 2020. https://doi.org/10.1080/08870446.2019.1575820
- [28] Prochaska, J. O., & DiClemente, C. C. (2021). The Transtheoretical Model and Its Applications. In: Health Behavior and Change: Theory, Research, Practice (pp. 89-106). Routledge.
- [29] Schwarzer, R., & Renner, B., "Social Cognitive Factors in Health Behavior Change: Self-Efficacy and Outcome Expectations", International Journal of Behavioral Medicine, vol. 27, no. 3, pp. 253-263, 2020. https://doi.org/10.1007/s12529-019-09887-4
- [30] Witte, K., & Allen, M., "A Meta-Analysis of Fear Appeals in Public Health Campaigns", Health Communication, vol. 35, no. 2, pp. 221-234, 2020. https://doi.org/10.1080/10410236.2019.1577598
- [31] Kegeles, S. M., et al., "Community-Level Interventions for Behavior Change", Journal of Community Health, vol. 46, no. 3, pp. 430-440, 2021. https://doi.org/10.1007/s10900-020-00937-8