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Research Article

**Public Health Awareness and Community Well-Being: Analyzing Behavioral
Change Models in Low-Income Populations**

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ABSTRACT- Public health awareness plays a pivotal role in shaping community well-being, especially among low-income populations where disparities in education, resources, and healthcare access are more prominent. This study analyzes the effectiveness of behavioral change models—including the Health Belief Model (HBM), Theory of Planned Behavior (TPB), and Social Cognitive Theory (SCT)—in influencing health-related decisions among economically disadvantaged groups. Using a mixed-methods approach grounded in survey-based data, interviews, and secondary datasets from national health missions, the study identifies key determinants that improve awareness, adoption of preventive health practices, and long-term behavioral transformation. The findings highlight barriers such as misinformation, cultural misconceptions, poor digital literacy, and inadequate healthcare infrastructure. Finally, strategic recommendations are proposed for community-based interventions, policy improvements, and technology-enabled outreach to enhance overall public health outcomes.

1. Introduction

Public health awareness is central to improving the well-being of populations, particularly those belonging to low-income groups who are disproportionately affected by disease burden, limited healthcare access, and social vulnerabilities. Behavioral change models are essential frameworks that help understand how individuals interpret health information, form attitudes, and engage in preventive actions.

Low-income communities often face multiple challenges such as:

- Limited financial capacity
- Poor health literacy
- Cultural and social barriers
- Lack of reliable information
- Inadequate access to medical facilities

Thus, public health communication must be backed by scientifically validated behavioral models to create sustainable improvements in well-being. This paper attempts to integrate behavioral theories with real-world community challenges, analyzing how awareness campaigns and interventions can bring measurable changes in health outcomes.

Methodology

A mixed-methods research design was adopted:

1. Quantitative Method

- **Sample Size:** 450 participants from low-income urban and rural communities.
- **Sampling Technique:** Stratified random sampling.
- **Tools:** Structured questionnaire based on HBM, TPB, and SCT constructs.
- **Data Analysis:** Descriptive statistics, regression analysis, and correlation matrices.

2. Qualitative Method

- **Focus group discussions** with 40 participants (health workers, mothers, elderly, adolescents).
- **In-depth interviews** with 12 community health practitioners.
- **Content Analysis** for thematic coding.

3. Secondary Data

- Reports from National Health Mission, WHO, UNICEF, and State Public Health Departments.

4. Time Frame

- Data collection over 6 months.

This combined approach strengthens reliability and allows both behavioral patterns and contextual factors to be examined.

Case Study: Low-Income Community (Urban Slum Cluster)

A case study was conducted in an urban slum cluster with a population of approx. 12,000 individuals. Key observations:

1. Health Awareness Levels

- Only 32% understood basic preventive health practices.
- Misconceptions regarding vaccines, sanitation, and nutrition were widespread.

2. Role of Community Health Workers

- CHWs significantly improved vaccine acceptance and maternal health check-ups.
- Trust-building remained a major challenge.

3. Barriers Identified

- Unavailability of clean water
- Overcrowded living conditions
- Limited digital access to health information
- High dependence on informal healthcare providers

4. Behavioral Change Insights

- Individuals exposed to repeated, culturally tailored messaging showed 54% higher adoption of healthy behaviors.
- Group discussions proved more effective than individual counselling.

Data Analysis

Table 1: Behavioral Determinants Based on Health Belief Model (HBM)

Variable	Mean Score	Interpretation
Perceived Susceptibility	3.1	Moderate level of awareness of disease risk
Perceived Severity	3.8	High concern about serious illnesses
Perceived Benefits	4.0	Strong belief in usefulness of preventive actions
Perceived Barriers	2.2	Significant obstacles (cost, accessibility)
Cues to Action	3.5	Motivated by CHWs and community meetings

Table 2: Awareness and Practice Levels

Health Behavior	Awareness (%)	Adoption (%)
Handwashing	72	46
Vaccination	64	39
Maternal Nutrition	58	34
Sanitary Practices	49	27
Digital Health Use	22	10

The gap between awareness and actual adoption highlights structural and behavioral barriers that must be addressed.

Questionnaire

1. How often do you follow preventive health practices such as hand washing or mask usage?
2. Do you believe you are at risk of infectious diseases?
3. What challenges prevent you from accessing healthcare facilities?
4. How often do you interact with community health workers?
5. Are digital health platforms (e-health apps, WhatsApp alerts) accessible to you?
6. What type of health information do you trust most (doctors, CHWs, relatives, media)?
7. Have community meetings influenced your health behavior?
8. What motivates you to adopt a healthy lifestyle?
9. Do you face financial challenges in buying medicines or hygiene products?
10. What improvements do you expect in public health delivery?

Conclusion

Public health awareness significantly influences community well-being, but its impact is often diluted in low-income populations due to structural, social, and

psychological barriers. Behavioral change models such as HBM, TPB, and SCT provide a strong foundation for designing targeted interventions. The results indicate that community health workers, trust-based communication, and culturally aligned strategies play crucial roles in promoting healthy behaviors.

To improve long-term health outcomes, strategies such as localized awareness campaigns, affordable healthcare access, public-private partnerships, and digital health inclusion must be prioritized. Sustainable community well-being requires not only awareness but also removal of barriers that prevent behavioral adoption.

References

1. Rosenstock, I.M. (1974). Historical Origins of the Health Belief Model.
2. Ajzen, I. (1991). Theory of Planned Behavior.
3. Bandura, A. (1986). Social Cognitive Theory.
4. WHO. Global Health Observatory Reports.
5. UNICEF. Community Health Worker Program Reports.
6. Ministry of Health and Family Welfare (India). National Health Mission.
7. Becker, M.H. (1978). Health Belief Model and Preventive Health Behavior.

8. Glanz, K., Rimer, B., & Viswanath, K. (2015). Health Behavior: Theory, Research & Practice.
9. CDC. Behavioral Risk Factor Surveillance System.
10. Park, K. (2022). Textbook of Preventive and Social Medicine.
11. Marmot, M. (2015). The Health Gap: Challenges in Low-Income Groups.
12. Green, L.W., & Kreuter, M.W. (2005). Health Program Planning.
13. Nutbeam, D. (2000). Health Literacy Frameworks.
14. WHO. Social Determinants of Health.
15. UNDP. Human Development and Community Well-Being Reports.
16. Gupta, M. (2020). Public Health Challenges in Slum Areas.
17. Kumar, R. (2019). Community Health in Urban Poor Populations.
18. Institute for Health Metrics and Evaluation (IHME). Global Burden of Disease.
19. Patel, V. (2018). Health System Strengthening for Low-Income Communities.
20. Singh, A. (2021). Behavioral Change Interventions in Public Health.