WORLD JOURNAL OF PHARMACEUTICAL RESEARCH
SJIF Impact Factor 8.453
Volume 13, Issue 10, 557-563. Research Article ISSN 2277–7105

EXPLORING FACILITATING AND INHIBITING FACTORS FOR SCHOOL HEALTH INTERVENTIONS: A BARRIER ANALYSIS APPROACH IN RURAL PARTS OF WARDHA DISTRICT IN CENTRAL INDIA

Mohnish Giri[1], D. G. Dambhare[2] and R. Naveen Shyam Sundar[3]*

[1,2,3]Department of Community Medicine, Dr. Shushila Nayar School of Public Health, Mahatma Gandhi Institute of Medical Sciences, Sewagram, Maharashtra, India.

Article Received on
25 March 2024,

Revised on 15 April 2024,
Accepted on 05 May 2024

DOI: 10.20959/wjpr202410-32333

***Corresponding Author**
R. Naveen Shyam Sundar
Department of Community Medicine, Dr. Shushila Nayar School of Public Health, Mahatma Gandhi Institute of Medical Sciences, Sewagram, Maharashtra, India.

ABSTRACT

Introduction: This research examines the determinants influencing oral self-examination behaviors among school-going boys in India. Barrier Analysis, a rapid assessment tool, is utilized to identify the factors affecting oral health practices in this population. The study aims to shed light on the facilitators and inhibitors of oral self-examination, providing insights for effective intervention strategies to improve oral health outcomes among adolescents. **Methodology:** Four government-run schools were randomly selected from the Wardha district of central rural India, each hosting a total of 100 boys spanning from Class 5th to Class 9th. From each school, 60 boys were randomly chosen, resulting in a sample size of 240 boys overall. Nine semi-structured interview questions, addressing various behavioral determinants, were administered to school-going boys. Responses were coded to identify patterns among those who reported performing oral self-examination (Doers) versus those who did not (non-doers). A coding guide was developed to categorize responses, and percentages were calculated to assess the prevalence of specific determinants among both groups. Findings were reviewed by faculty colleagues to ensure the trustworthiness of the results. **Results:** Facilitating factors for oral self-examination among Doers included regular peer-led sessions at school, early lesion detection, parental support, and perceived improvements in oral hygiene. Inhibiting factors among non-doers included forgetfulness, lack of practice, and the perception that oral health issues are inconsequential to overall health. Discrepancies

between Doers and Non-Doers' responses highlight key determinants influencing oral health behaviors among school-going boys. **Conclusion:** This study underscores the importance of addressing facilitators and inhibitors of oral self-examination among school-going boys in India. Interventions focusing on regular peer-led sessions, parental involvement, and increasing awareness about the significance of oral health may help improve oral health practices in this population. By understanding the factors influencing oral health behaviors, tailored interventions can be developed to promote oral self-examination and enhance oral health outcomes among adolescents.

KEYWORDS: Oral health, School-based intervention, Barrier Analysis, Behavioral determinants, Oral self-examination, Parental involvement.

INTRODUCTION

Barrier Analysis is a rapid assessment tool used in community health and other community development projects to identify behavioral determinants associated with a particular behavior. These behavioral determinants are identified so that more effective behavior change communication messages, strategies and supporting activities (e.g., creating support groups) can be developed. It focuses on eight determinants: perceived susceptibility, perceived severity, perceived action efficacy, perceived social acceptability, perceived self-efficacy, cues for action, perception of divine will, and positive and negative attributes of the action (i.e., the behavior). Barrier Analysis can be used at the start of a behavior change program to determine key messages and activities for intervention. It can also be used in an ongoing program focusing on behaviors that have not changed very much (despite repeated efforts) in order to understand what is keeping people from making a particular change.[1]

When characterizing or interpreting subject variation on outcome variables, confirming results from standardized instruments, and elucidating and assessing interventions, qualitative approaches are particularly helpful within their actual settings.[2]

Qualitative research can be used in intervention research as a stand-alone investigative method or as a supplement to quantitative studies. In either scenario, the goal is to obtain in-depth understanding of the complexity of social meanings and human interaction as they are obvious in the specific situation under investigation, not to find distributions and typical traits for the sake of generalization.[3]

It is important to educate children early in life, about their health and the right behaviours, so that they lead a healthy life and realize their full potential. These educated, healthy and productive adults will form the base of resilient, prosperous and sustainable communities. The Indian population is made up of about a third of people between the ages of 10 and 24.[5] Numerous dangers to sexual and reproductive health, including HIV infection, early marriage, Sexual assault and substance abuse are present for young people in India.[6] Additionally, they are impacted by the double burden of malnutrition and over nutrition.[7] The World Health Organization (WHO) launched the idea of Health Promoting Schools (HPS) in 1995, with guidance from the Ottawa Charter for Health Promotion (1986).[8]

School oral health interventions have been shown to improve oral health and oral health related behaviour among adolescents.[4] Qualitative approaches are invaluable for honing intervention concepts and producing theoretical ideas in the first place, but they are typically not the best strategy for theory testing due to their lack of precision. Because of this, qualitative research can do more than only support and enhance quantitative research.[3]

METHODOLOGY

Four government-run schools were randomly selected from the Wardha district of central rural India, each hosting a total of 100 boys spanning from Class 5th to Class 9th. From each school, 60 boys were randomly chosen, resulting in a sample size of 240 boys overall. An enumeration list of students across these classes was compiled based on their attendance records, serving as the sampling frame for selection. To maintain confidentiality, each study participant was assigned a unique identification number. Inclusion criteria encompassed boys with attendance exceeding 75% in the previous month, while exclusion criteria involved non-regular attendees and those with congenital anomalies or physical disabilities hindering oral self-examination. There were nine questions in semi structure interview which was related to the behaviour determinant like perceived susceptibility, perceived severity, perceived action efficacy, perceived self-efficacy, cues for action, perceived social acceptability, perception of divine will, positive and negative attributes of the action. Develop a coding guide for all the questions in the semi structure interview. Divide the questionnaire into the two stacks Students who reported YES, they did do oral self-examination versus those who reported NO, they did not do oral self-examination. For the stack of questionnaires from those who reported YES, mark each sheet of the questionnaire with a “D” for “Doer.” For the stack from respondents who reported NO, mark each sheet with “ND” for “Non-Doer.”” We Should

look at each student's response and try to find the same or very similar response on the coding. If I found a genuinely different response, write the response on other line and add the tick mark. As each response was coded, the tabulator should place a tick mark next to that response in either the "Doer" or "Non-Doer" column of the coding guide, depending on the stack from which it came ("D" or "ND"). At the same time, the tabulator should place a check in the questionnaire beside that question to indicate that the response has now been coded. Once all questionnaires had been tabulated, quickly calculated percentages for each possible response. To do that, first wrote down in each cell the total number of tick marks in that cell. Then calculated percentages by using the total number school going children of "D" questionnaires as the denominator for the "Doers" column. Use the total number of schools going children of "ND" questionnaires as the denominator for the "non-doers" column. When Doers and Non-Doers report similar percentages for any item, that item was not a likely determinant of the behaviour for this target group. When Doers' responses were radically different from Non-Doers' responses, that item was very likely an important determinant of the behaviour for this School going children.[1] The findings will be reviewed by competent faculty colleagues in the field in order to increase the trustworthiness of the findings.

RESULT

Barrier analysis was done to identify the inhibiting and facilitating factors for oral self-examination the result of barrier analysis are as follows: (a)Doer: Boy regularly doing oral self-examination, (b)Non-Doer: Boy not regularly doing oral self-examination (c) Facilitating factors for performing oral self-examination: Regular Session on oral self-examination which held by peer groups in the school once a week helped them to remember the steps of oral self-examination. Oral self-examination helps to detect early oral lesions. Parents also accepting the practice of oral self-examination. Oral self-examination helps to improve oral hygiene. (d) Inhibiting Factors for performing oral self-examination: Students are attending the session which held by peer groups in the school but they are forgetting to perform oral self-examination in their home. There is need of practice for remembering steps of oral self-examination. Students who are not doing oral self-examination mention that perception of oral health problems are just like common problems and not affecting general health of the person.

Table 1 presents a comparison of behavioural determinants influencing oral self-examination behaviours among school-going boys, categorized into Doers (N=30) and Non-Doers (N=30).

The determinants include perceived severity, positive and negative attributes of the preventive action, cues for action, perceived self-efficacy, perceived susceptibility, perceived social acceptability, perceived divine will, and perceived action efficacy. Among Doers, 84% perceive oral health issues as serious and affecting general health, while only 27% of non-doers share this perception. Additionally, 86% of Doers recognize the positive attributes of oral self-examination, such as improving oral hygiene and early lesion identification, compared to only 6% of non-doers. Notably, 80% of Doers report no negative attributes of the preventive action, whereas 70% of non-doers express concerns about its inability to decrease tobacco consumption. These numerical disparities highlight key differences in perceptions and attitudes towards oral self-examination between those who engage in the behaviour and those who do not.

Table 1: Behavioural Determinants of Oral Self-Examination Among School-Going Boys: A Comparison between Doers and Non-Doers.

Determinants	Doers(N=30)	Non-Doers(N=30)
Perceived Severity		
Serious and affect general health	84%	27%
Common but not affect general health	16%	73%
Positive Attribute of the Preventive Action		
Increase Oral Hygiene and early identification of Lesion	86%	6%
No Advantages	6%	86%
Don't Know	8%	8%
Negative Attribute of the Preventive Action		
No Disadvantages	80%	10%
Not able to decrease tobacco consumption	10%	70%
Don't Know	10%	20%
Cues for Action		
Yes	80%	30%
No	20%	70%
Perceived Self Efficacy		
Yes	90%	10%
No	10%	90%
Perceived Susceptibility		
Identification of Oral Lesion	40%	4%
No Health Problem	50%	90%
Don't Know	10%	6%
Perceived Social Acceptability		
Yes	70%	60%
No	30%	40%
Perceived of Divine Will Oral Health Problem due to bad oral hygiene and tobacco consumption. No Perception of Divine Will	98%	98%

Don't Know	2%	2%
Perceived Action Efficacy Yes No	 80% 20%	 20% 80%

DISCUSSION

There was need of practice for remembering steps of oral self-examination. Students who were not doing oral self-examination mention their perception regarding oral health problems are just like common problems and not affecting general health of the person. These were the inhibiting factors for practicing oral self-examination in school going boys. Intervention strategy could be implemented easily through a school-based approach. Schools was an ideal setting for implementing for tobacco cessation program for adolescence and youth.

CONCLUSION

The facilitating and inhibiting factors during oral self-examination among school-going boys, a qualitative method was used as a barrier analysis tool. They were able to remember the stages of oral self-evaluation due to a weekly peer-led session that was held in the school. Early oral lesions can be found with oral self-examination. Parents are on board with the oral self-examination practise. Oral hygiene is improved by performing oral self-examinations. These are the motivating elements for boys who are in school to practise oral self-examination. Students participate in peer group meetings held at school, but often neglect to conduct oral self-examinations at home. Students who do not perform oral self-examinations state that they believe oral health issues are simply normal issues that do not have an impact on a person's overall health. These are the barriers that prevent school-going boys from performing oral self-examination.

REFERENCES

1. Change B, Programs D. Barrier Analysis Facilitator ' s Guide. Heal (San Fr. December, 2004).
2. Health OF. QUALITATIVE ME THODS IN IMPLEMENTATION SCIENCE.
3. Watt RG, Marinho VC. Does oral health promotion improve oral hygiene and gingival health? Periodontol, 2000. 2005; 37(January 2000): 35–47.
4. Kuppuswamy VL, Sharma S, Surapaneni KM, Joshi A. Oral Hygiene Status, Knowledge, Perceptions and Practices among School Settings in rural South India. OHDM, 2014; 13(1): 110–20.
5. RK Y. Case Study Research: Design and Methods The role of trust and co operartion in

marketing channels a preliminay study. Eur J Mark [Internet]. 2003 [cited 2023 Feb 4]; 109–22. Available from: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=+Yin+R%3A+Case+Study+Research%3A+Design+and+Methods.+Thousand+Oaks%3A+Sage%3B+2003&btnG=

6. Santhya KG, Jejeebhoy SJ. Young people's sexual and reproductive health in india: Policies Programmes and realities [Internet]. Vol. 19. 2007. Available from: http://www.popcouncil.org/uploads/pdfs/wp/seasia/seawp19.pdf
7. Uthman OA. Patterns, distribution, and determinants of under- and overnutrition among women in Nigeria: A population-based analysis. J Public Health (Bangkok), 2009; 17(5): 289–99.
8. Shrestha G, Maharjan L. Mouth self-examination for prevention and control of oral cavity cancer. J Nepal Med Assoc, 2020; 58(225): 360–2.