

Mothers' Role in Dental Health Behaviors of Their Children in the Low-Income Community, Blitar Rural Area

Thalca Hamid¹, Satiti Kuntari²

1. Orthodontics Department, Faculty of Dental Medicine, Universitas Airlangga.
2. Pediatric Dentistry, Faculty of Dental Medicine, Universitas Airlangga.

Abstract

This report is based on a study that aimed to identify socio-cultural values in the field of health concerning the development and growth of oral health, as well as to reveal how to model knowledge about the health status of children's oral cavity with an appropriate gender perspective for low-income communities in Blitar Rural Area, East Java.

This research was carried out in regencies in East Java, namely in low-income community areas in Blitar Regency. This study is a 'action research' in the sense that it employs qualitative methodologies supplemented by quantitative data and takes a gender perspective approach. Mothers with children under the age of five, as well as health professionals from Public Health Centres and local community leaders in low-income neighborhoods at the research locations, are the subjects of this study. Methods of data gathering included questionnaire interviews with mothers with children aged five to 100 in each district analyzed. The study's ultimate outcome is a model of women's empowerment in maximizing the growth and development of children in low-income areas in East Java from a gender viewpoint.

According to the research, moms should be well-versed in oral health because they are the primary caregivers for their children. However, the impoverished women were so preoccupied with earning money that the children were neglected.

To improve the oral health of children, it is vital to raise mothers' knowledge through frequent dental health education. This requires rules for socialization phases to optimize dental growth and development in children, as well as a "policy brief" or academic script to be incorporated into children's oral health policies.

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Introduction

Oral health is an important component of overall health and plays an important part in a child's life. Dental caries is one of the world's most serious oral health issues. Dental caries was once minimal in most developing nations, but it is currently on the rise. Oral caries poses substantial hazards to the physical, psychological, and social well-being of young children by causing dental discomfort and subsequent tooth loss, which makes eating, speaking, sleeping,

and socializing difficult.¹ Mothers, in particular, serve as the key model for behavior development. Children develop their first childhood routines and habits during their early years of life. As a result, developing fundamental excellent oral health behaviors is critical for establishing suitable dental standards that will be maintained into adulthood. Thus, assessing moms' knowledge and practice may be the first step in identifying areas of weakness and attempting to improve behaviors.^{2,3}

Perceptions of dental health is about healthy teeth for several moms, the relationship between the quality of the child's teeth and the influence on general health was obvious: 'If your teeth are healthy, your entire health is better.' Other advantages of having good teeth stated were the function that teeth play in eating, attractiveness, and consequent social advantage

*Corresponding author:

Thalca Hamid
Orthodontics Department, Faculty of Dental Medicine,
Universitas Airlangga.
E-mail: thalca@fkg.unair.ac.id

'I think they would be at a disadvantage if they had dreadful looking teeth', as well as financial gain.⁴

In 2015, the Indonesian Ministry of Health set a target of eliminating dental caries in Indonesian children aged 12 by 2030. The government, commercial sector, and society all supported this decision. The first step toward eradicating dental caries in Indonesia by 2030 is to focus on preventative measures for children's tooth decay and oral hygiene. 76.8 percent of mothers with toddlers lacked adequate knowledge about their children's dental and oral health, 84.1 percent lacked the necessary attitude, and 89.0 percent lacked the necessary action to maintain their children's dental health in Ciputat and Pasar Minggu, Jakarta.⁵

Purworejo Village in Wates, Blitar is one of the "pre-prosperous" communities in Blitar (source: SLHD Blitar regency 2010 based on statistics from Women Empowerment and Family Planning of Blitar Regency). Because of this town lacks a public health center, socialization about dental and oral hygiene among mothers and children is less than ideal. Thus, this report aimed to identify socio-cultural values in the field of health concerning the development and growth of oral health, as well as to reveal how to model knowledge about the health status of children's oral cavity with an appropriate gender perspective for low-income communities in Blitar Rural Area, East Java.

Materials and methods

This study was quantitative research with cross-sectional study approach. This was carried out in regencies Purworejo Village, Wates, Blitar, East Java, Indonesia, namely in low-income community areas in Blitar Regency. This study is a 'action research' in the sense that it employs qualitative methodologies supplemented by quantitative data and takes a gender perspective approach. Mothers with children under the age of five, as well as health professionals from Public Health Centres and local community leaders in low-income neighborhoods at the research locations, are the subjects of this study. Methods of data gathering included questionnaire interviews with mothers with children aged five to 100 in each district analyzed.

100 randomly-selected mothers of toddlers. They have a common characteristic of

being in the middle-to-lower social status.

The research instrument used questionnaire amounted to 90 statement items that were filled independently by the respondents. The questionnaire was designed to analyze the behavior of mothers of toddler regarding the management of children's dental hygiene. The theoretical basis used is based on the theory of behavior of Lawrence-Green, in which the theory is described that the behavior of a person (Bf), will appear as a function of factors supporting the emergence of behaviors such as predisposing factor (Pf), enabling factor (Ef), and reinforcing factor (Rf). As the enrichment of the discussion, in this study was also conducted in-depth interviews in purposive samples on 10 samples to trace the pattern of pregnant women and / or mothers of toddler related to the management of children's dental health. After the questionnaires were filled, recapitulation of behavioral support factors with coding techniques was performed and descriptive data were analyzed to see the global distribution of data related to the needs of respondents based on Lawrence-Green theory study (Table 1). Furthermore, each of the predisposing factor (Pf), enabling factor (E), and reinforcing factor (Rf) were correlated with behavioral data using Statistical Package for Social Science (SPSS) (IBM corporation, US). The study's ultimate outcome is a model of women's empowerment in maximizing the growth and development of children in low-income areas in East Java from a gender viewpoint.

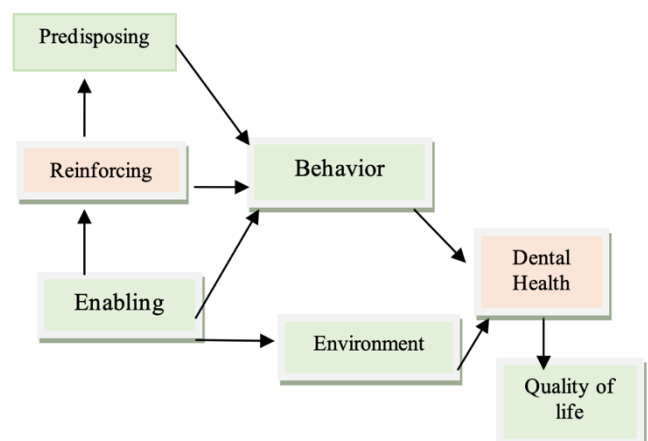


Table 1. The Precede-Proceed model for Dental Health.⁶

Results

This research looked at the behavior of mothers in Purworejo Village. The findings of the mother's behavior on the oral and dental health of toddlers revealed that 81% need assistance and 19% could be self-sufficient (Figure 1). Predisposing factors (beliefs, attitudes and behaviors, knowledge) were found to be present in 75% of the individuals, but not in 25%. Despite not getting dental and oral health knowledge from the Public Health Center, maternal knowledge of dental and oral health of children in Blitar is good, comparable to 75%, owing to likely information gained from television (Figure 2).

Behaviour (Lawrence Green)

Mother's behaviour

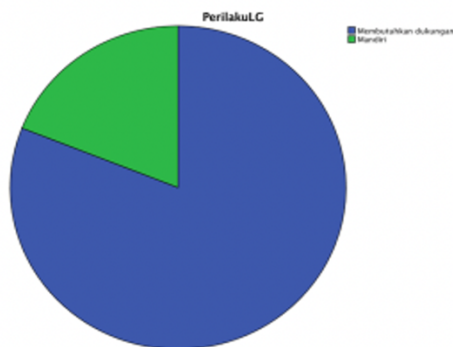


Figure 1. Behaviour of mothers in Purworejo Village, Wates – Blitar East Java.

Predisposing Factor

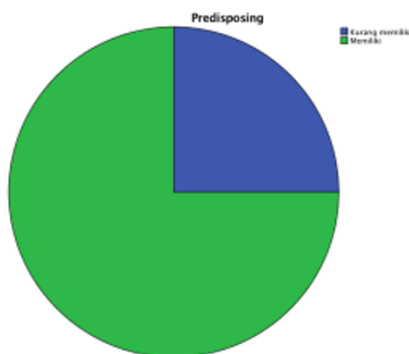


Figure 2. Predisposing factors (beliefs, attitudes and actions, knowledge) in Purworejo Village, Wates – Blitar East Java.

Enabling Factor

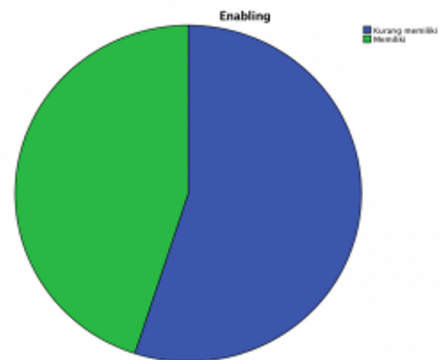


Figure 3. Enabling factor in Purworejo Village, Wates – Blitar East Java.

According to the findings of the Enabling Factor, 45 percent already have an enabling factor and 55 percent do not (Figure 3). This indicates that the lack of support from the family environment, home facilities related to dental and oral health of children and health accessibilities in terms of distance and cost. The results for Reinforcing Factor indicated that 49 percent already have reinforcing factor and 51 percent do not. This reveals that mothers' behavior in maintaining their children's dental and oral health is linked to a lack of assistance from health care providers and community leaders (Figure 4).

Reinforcing Factor

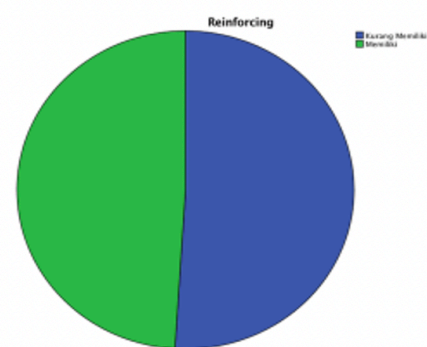


Figure 4. Reinforcing Factor in Purworejo Village, Wates – Blitar East Java.

This demonstrates that mothers' behavior to maintain their children's dental and oral health was influenced by a lack of assistance from health care professionals and community leaders. The reinforcing factor is a result of the activity that influences whether the person receives positive or negative feedback and is socially

supported after receiving the input. Social support, peer influence, and guidance and feedback from healthcare experts are therefore reinforcing factors.

Discussion

Knowledge is a set of facts and ideas that enable a person to understand a symptom and solve a problem. Other people's experiences, books, friends, parents, radio, television, posters, magazines, and newspapers may all be used to gain knowledge.⁷ This study demonstrates a lack of support from the family environment, home amenities relating to children's dental and oral health, and health accessibility in terms of distance and cost. Lack of home dental and oral health facilities, such as the inability to get particular toothpaste and toothbrushes for children, as well as a lack of access to health facilities for children's dental care owing to financial constraints.^{8,9} Enabling Factors may either be an impediment or a facilitator of behavioral and environmental changes.

Enabling Factors include the availability of facilities and infrastructure that facilitate the implementation of a habit, as well as accessibility and improved health care in terms of distance, cost, and social impact. The reinforcing factor is a result of the activity that influences whether the person receives positive or negative feedback and is socially supported after receiving the input. Social support, peer influence, and guidance and feedback from healthcare experts are therefore reinforcing factors.¹⁰ According to the research findings, there is a good association between mother's knowledge and conduct when it comes to oral and dental health. Mothers' attitudes and efforts toward children's oral and dental health in Blitar have been 75 percent positive.

Attitude is a person's closed reaction to a certain stimulus or item, which already includes opinion and emotion aspects of the person in question, such as agree-disagree, happy-unhappy, good-not-good, and so on. Attitude is a ready or inclination to behave rather than the expression of a specific motivation. Attitude is a willingness to react to items in specific circumstances as an expression of respect for the object. Two fundamental principles of attitude must be understood in health education. Attitude is a persistent sensation oriented toward an object (whether it is people, acts, or objects), and

assessment, good-bad aspects are inherent in the structure of attitude.^{12,13}

Supportive characteristics and mother's conduct have a favorable association. Supporting elements that influence the mother because contextual variables, such as the mother's spouse and children, do not adequately support her. Furthermore, features, such as the availability of teeth cleaning instruments, are not provided (toothbrush and toothpaste). Financial considerations include the availability of funding to provide oral hygiene equipment.¹² Positive association between, for example, the presence of community health center or an auxiliary health facility in the community, the availability of dental health specialists, and the socialization of dental and oral health services.^{14,15}

Conclusion

Dental disorders in children are a serious problem, and mother play an important role in their children's oral hygiene habits. According to the findings of this exploratory study, mothers believe that professional dentist appointments are too expensive, that dental issues are unavoidable, and that they lack the time to fit dental practices in. Other mothers believed that there is an element of luck in dental caries and that a child's oral health is connected to their overall health. These views have an influence on children's oral hygiene routines. As a result, the goal is to include mothers' perspectives into intervention programs in the hopes that changing these attitudes can enhance children's dental habits. These findings also indicated the necessity for more investigation into this topic. This study has given researchers insight into mothers' impressions of their children's dental health, which might be utilized to create a survey to collect data from a wider sample. Because of this study only interviewed mother, more epidemiological research including both parents are required.

Declaration of Interest

The authors declare that there is no conflict of interest in this study

References

1. Wall R, Rainchuso L, Vineyard J, Libby L. Oral Health-Related Quality of Life of Children: An Assessment of the Relationship between Child and Caregiver Reporting. *J Dent Hyg.* 2020 Apr;94(2):18-26. PMID: 32354848.
2. Shrestha PD. Health Seeking Behavior among Mothers of Sick Children. *J Nepal Health Res Counc.* 2015 May-Aug;13(30):112-5. PMID: 26744194.
3. Abduljalil HS, Abuaffan AH. Knowledge and Practice Of Mothers IN Relation to Dental Health Of Preschool Children, *Advancements in Genetic Engineering (Adv Genet Ang)*, 2016; 5: 1-7.
4. Stacey B, Virginia SD, Karen A, Mark G. An Exploration of Mothers' Perceptions About Dental Health, *Journal of Theory and Practice of Dental Public Health*, 2013;1: 9-14.
5. Oktarina, Tumaji, Betty R. Korelasi Faktor Ibu dengan Status Kesehatan Gigi dan Mulut Anak taman kanak-Kanak di Kelurahan Kemayoran Kecamatan Krembangan, Kota Surabaya, *Correlation of Mother Factors and Their Kindergarten's Oral Health Status in Kelurahan Kemayoran, Krembangan Subdistrict, Surabaya City, Buletin Penelitian Sistem Kesehatan* . 2016; 19:227-235.
6. Green LW. Public health asks of systems science: to advance our evidence-based practice, can you help us get more practice-based evidence? *Am J Public Health.* 2006 Mar;96(3):406-9. doi: 10.2105/AJPH.2005.066035. Epub 2006 Jan 31. PMID: 16449580; PMCID: PMC1470512.
7. Kermel-Schiffman I, Werner P. Knowledge regarding advance care planning: A systematic review. *Arch Gerontol Geriatr.* 2017 Nov;73:133-142. doi: 10.1016/j.archger.2017.07.012. Epub 2017 Jul 27. PMID: 28802216.
8. Varenne B, Fournet F, Cadot E, Msellati P, Ouedraogo HZ, Meyer PE, Cornu JF, Salem G, Petersen PE. Environnement familial et disparités de santé dentaire des enfants en milieu urbain au Burkina Faso [Family environment and dental health disparities among urban children in Burkina Faso]. *Rev Epidemiol Sante Publique.* 2011 Dec;59(6):385-92. French. doi: 10.1016/j.respe.2011.07.002. Epub 2011 Oct 14. PMID: 22000043.
9. Duijster D, O'Malley L, Elison S, Van Loveren C, Marcenes W, Adair PM, Pine CM. Family relationships as an explanatory variable in childhood dental caries: a systematic review of measures. *Caries Res.* 2013;47 Suppl 1:22-39. doi: 10.1159/000351832. Epub 2013 Oct 7. PMID: 24107605.
10. Gregory EF, Upadhyia KK, Cheng TL, Psoter KJ, Mistry KB. Enabling Factors Associated with Receipt of Interconception Health Care. *Matern Child Health J.* 2020 Mar;24(3):275-282. doi: 10.1007/s10995-019-02850-0. PMID: 31838666; PMCID: PMC7117827.
11. Rocklage MD, Fazio RH. Attitude Accessibility as a Function of Emotionality. *Pers Soc Psychol Bull.* 2018 Apr;44(4):508-520. doi: 10.1177/0146167217743762. Epub 2017 Dec 1. PMID: 29191112.
12. Xiao J, Alkhers N, Kopycka-Kedzierawski DT, Billings RJ, Wu TT, Castillo DA, Rasubala L, Malmstrom H, Ren Y, Eliav E. Prenatal Oral Health Care and Early Childhood Caries Prevention: A Systematic Review and Meta-Analysis. *Caries Res.* 2019;53(4):411-421. doi: 10.1159/000495187. Epub 2019 Jan 10. PMID: 30630167; PMCID: PMC6554051.
13. Bramantoro T, Suryo Y, Tedjosasongko U, Ismail D. Mother's Belief Regarding Their Children's Dental Health as a Potential Predictor of Mother's Dental Health Attitude for Early Childhood. *Journal of International Dental and Medical Research* 2018; 11 (3):955-959
14. Chaffee BW, Rodrigues PH, Kramer PF, Vítolo MR, Feldens CA. Oral health-related quality-of-life scores differ by socioeconomic status and caries experience. *Community Dent Oral Epidemiol.* 2017 Jun;45(3):216-224. doi: 10.1111/cdoe.12279. Epub 2017 Jan 12. PMID: 28083880; PMCID: PMC5506781.
15. Dwiputri E, Indiarti IS, Suharsini M. The Relation of a Mother's Dental Health Behavior and the Severity of Dental Black Stain in Children 4–8 Years Old. *Journal of International Dental and Medical Research* 2018; 11 (1):197-201