

### Summarizing Factors Contributing to Partial or Non-utilization of Individual Household Latrine (IHHL) in Charutar Region of Gujarat, India

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**Background:** Sanitation campaign in India found renewed interest after Prime Minister Narendra Modi mentioned about it in his 2014 Independence Day speech followed by launch of “Swachh Bharat Abhiyan” (SBA). Construction of Individual Household Latrines (IHHL) is one of the key components under the mission to achieve ‘Open Defecation Free’ (ODF) status. While IHHLs have been constructed in majority of villages in Gujarat, government is now campaigning for its increased utilization. The study assessed factors contributing non-utilization of IHHLs so that promotional campaign can be contextualized to address underlying issues.

**Methods:** Four villages were randomly selected in Charutar region of Gujarat and 313 eligible respondents were surveyed after obtaining written informed consent. Trained surveyors collected socio-demographics and observational data using a structured questionnaire. In case of non-utilization, an open-ended question probed reasons for the same. The responses were summarized to report key findings.

**Findings:** Out of 313 respondents, 85 (27.16%) reported that not all the family members in their household are using IHHL. Review of responses revealed that elderly members were reluctant to use latrines constructed just outside the household. One elderly female responded that as long as she can walk, she will prefer going to the field for open defecation. Higher number of family members was also reported as a barrier because one latrine was not sufficient for all the members.

Commode was not installed in 11 latrines which were mainly used as dry-store. Overhead tank and tap were not fitted in 121 (39%) & 163 (52%) latrines respectively, these together with limited water storage capacity, limited 5’ depth of cesspool and inadequate drainage facility were also reported as reasons for non-utilization.

**Interpretation:** Following fast-tracked construction of IHHL, now the challenge is to promote sustained utilization. Broadly, the barriers can be categorized as household- and structure-related. Participatory research involving IHHL beneficiaries and relevant stakeholders can help further investigate key barriers to non-utilization and list out locally adaptable, potential solutions. The findings can then be utilized to strengthen program planning & implementation, and design context-specific health promotion intervention to achieve ODF status. Opportunities for resource sharing between IHHL beneficiaries and local self-government to fix-up structural barriers can also be investigated.

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### Self-reported Oral Hygiene Care and Natural Teeth Retention among Older Singaporeans

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**Background:** In recent years, the elderly population in Singapore has significantly increased. However, few studies have conducted on oral health among older Singaporeans. Oral health is an important part of general health. Studies have shown that poor oral health is related to pain, functional impairment, and quality of life. The aim of this study is to examine the association between self-reported oral hygiene care and tooth retention from clinical examinations among older adults by linking the survey to patients’ dental records.

**Methods:** A total of 240 participants completed a survey questionnaire. The participants were recruited from those who visited National Dental Centre of Singapore in summer 2016. In the study, older adults’ oral health-related quality of life was measured by the geriatric oral health assessment index (GOHAI). The survey also included self-reported oral hygiene care and nutritional behaviors. Participants’ dental records were obtained which included the information on number of natural teeth remaining, dental caries, periodontitis, and dry mouth.

**Findings:** Amongst the 240 participants, the mean number of natural teeth remaining was 18.56 (95% CI 17.54–19.59). There was a significant gender difference in frequency of tooth-brushing, with female had a higher frequency of brushing twice a day than their male counterparts ( $p=0.03$ ). A linear regression model showed that the number of natural teeth remaining was significantly associated with the frequency of teeth flossing ( $p=0.001$ ) but it was not correlated with brushing frequencies. Logistic regression models were used to evaluate the relationship between oral health-related quality of life and natural teeth remaining and found that patients with trouble biting, swallowing and food limiting were associated with less natural teeth remaining ( $p=0.001$ ).

**Interpretation:** This study suggests that among the elderly Singaporeans, teeth flossing is important to natural teeth retention and should be promoted from a policy perspective.

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### Prehypertension and Hypertension in Bangladesh – Modifiable Lifestyle Factors

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**Background:** It is documented that pre-hypertensive patients are at greater risk of developing hypertension and thereby more likely to experience cardiovascular diseases in their lifetime. However, little attention has been given to the lifestyle modifiable factors that enhance developing prehypertension in order to prevent the transfer from pre-hypertension to the hypertension.

**Methods:** We measured blood pressure from a total of 11861 (5743 men and 6118 women) participants aged over 35 years.