

**EFFECTIVENESS OF COMMUNITY-BASED
SMOKING CESSATION INTERVENTION
AMONG SMOKERS IN HLEGU TOWNSHIP,
YANGON REGION**

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ABSTRACT

Smoking is one of the most dangerous public threats and the leading causes of preventable death in the world. Tobacco caused diseases killed more than 56,400 people in Myanmar every year. Quitting smoking has immediate and long-term health benefits and it is beneficial at any age.

This study aimed to determine the effectiveness of smoking cessation intervention and to identify the barriers and facilitators during smoking cessation. This study was done in Sarbutaung village, Hlegu Township, Yangon Region and mixed method (both quantitative and qualitative) was applied. For quantitative data collection, community-based randomized controlled study where individualized and interactive smoking cessation intervention was done and for qualitative component, in-depth interview method was done. Behavioral and psychosocial support could achieve greater result in smoking cessation and there were some evidences that regular supervised intensive physical activity was useful as an aid in smoking cessation but effect of less intensive physical activity was not clearly known.

Prevalence of smokers in the study population at a point in time was 41.9% (380/906). At baseline, Fagerström Test for Nicotine Dependence (FTND), Smoking Abstinence Self-Efficacy Questionnaire (SASEQ) score and Carbon Monoxide (CO) level were assessed. There were 334 participants with 166 in intervention group and 168 in comparison group after randomization. Three mass health education sessions were given at 0, 1, 3 months of the study in which behavioural support and psychosocial supports were given to the participants of the intervention group by the researcher. The researcher trained the 11 community leaders. They gave two weekly behavioural and psychosocial support to the participants in intervention group. Follow up assessments were done at 1, 3, 6 months of the study to both groups and measured exhale CO level and SASEQ score. At baseline measurements, mean CO level was higher in intervention group with $p < 0.001$ and more than half of the all participants had very low addiction to nicotine.

The proportion of quit rate of both groups were higher in no regular income group, never married group, who had $\leq 150,000$ kyats per capital per month income group, who had previous quit attempt, no smokers in the family, who had very low FTND score, ate less number of fruits and vegetables intake per day, who did vigorous activity and work related heavy physical activity group. Overall dropout rate was 7.1%. At six month, reduce rate was (28.4% vs 25.9%, $p=0.6$) and quit rate was (48.6% vs 27.2%, $p<0.001$) in intervention and comparison group.

After adjusting the socio demographic and smoking related factors, fruit and vegetables consumption and physical activity, the quit rate of intervention group was 2.57 times higher than odds of comparison group [AOR=2.57; 95% CI=1.5, 4.4]. No smokers in the family [AOR=1.23; 95% CI=0.7, 2.0] and married persons [AOR=1.57; 95% CI= 0.8, 3.2] were found to be more likely to quit.

At the end of six-month intervention, IDIs were done with 10 quitters and 10 still smokers from intervention group. Purposive sampling method was used and participants were recruited after checked out for CO level. Seven main themes were extracted. Will power, social and family support, peers pressure were important factors in smoking cessation. Main reasons for smoking cessation were to improve their health and prevent them from developing diseases. Barriers were addiction, environmental influences, stress, their smoking friends and easy accessibility to cigarettes. Health care providers, friends and family members were effective motivators and financial issue and their health especially their children health were motivating factors to quit smoking. Most of them knew the effectiveness of smoking cessation intervention.

Smoking cessation process is a behavioural change process and it needs time. Maintenance of behavioural change process of the participants could not be seen in six month of the intervention period, but effectiveness of intervention was seen in this study. To implement smoking cessation in community, this study would be a platform for researchers to take up suitable models and proper effective community-based design could be achieved better result.