

**PREVENTION AND CONTROL OF  
DOG-MEDIATED HUMAN RABIES AMONG  
COMMUNITY, BASIC HEALTH STAFF AND  
RELEATED STAKEHOLDERS IN  
MAGWAY TOWNSHIP**

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## ABSTRACT

The impact of high case fatality rate of neglected rabies is one of the major public health problems in spite of being 100% vaccine preventable disease. This study aims to describe the knowledge, attitude and practice of dog-mediated human rabies among community, to assess the knowledge and practice of that disease among basic health staff (BHS) and to explore the challenges on prevention and control of that disease among related stakeholders. A cross-sectional study using both quantitative and qualitative methods was conducted in Magway Township from September to December 2018. In quantitative assessment, total 174 respondents of community were face to face interviewed while total 75 respondents of BHS were assessed by using semi-structured and self-administered questionnaires. Total 7 in-depth interviews and total 2 key informant interviews were conducted for qualitative assessment.

Over half of respondents among community (52.9%) have good knowledge and more than half (52.3%) had positive attitude. There was significant association between education level and knowledge level about dog mediated human rabies ( $p=0.035$ ) and there was also statistically significant association between knowledge and attitude level of the community ( $p<0.001$ ). Regarding on practice of dog bite, the respondents who had experienced in their family within 1 year was 15% for dog bite events. Among dog bite victims, person who went to clinic or hospital was majority (80%).

On knowledge of BHS, majority (88%) of respondents were aware of post exposure prophylaxis (PEP). Two third of BHS had knowledge of guideline for rabies instructed by ministry of health while one third had received on rabies control and prevention training and also correctly answered WHO category for dog bite management. Nonetheless, 72% provided PEP on dog bite management.

In qualitative findings, there was sometimes shortage of immunoglobulin supply due to nearly expired date as case that needs of immunoglobulin administration was rare. They have concern about keeping large amount of immunoglobulin while rabies vaccine supply was supported in 200 bedded hospitals. Likewise in dog rabies control, the condition of no specific budget allocated on dog rabies vaccine is the most prominent status for the Veterinary Department in Magway. Similarly, limited human resources (such as staff, veterinarians, dog catchers and

handlers), inadequate vaccine, drugs and equipment supply were also occurred in vaccination and dog population control among related stakeholders. Depending on response of community, nearly one third said that stray dogs were estimated in 4 to 6 numbers on the street and their environment and about 10% of respondents suggested stray dogs should be sent to animal shelter as way to control them. Similarly, the limited land area of shelters for stray dogs was constraint for Pet lovers' association on stray dog control.

The study highlighted association among education, knowledge and attitude of community for human rabies, and BHS need more training on rabies prevention and control. Moreover, access and coverage of rabies vaccine should be reached at least Station hospital level with enough supply. Meanwhile, mass dog vaccination should be initiated for dog rabies control because it is cost-effective and reduces dog-mediated human rabies deaths.