

## Tourist Knowledge And Behaviours Towards Rabies Prevention–UBUD Bali Indonesia

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### ABSTRACT

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Rabies is one of the causes of death in the world. Therefore rabies is a global health problem. In Ubud District, cases of Rabies Transmitting Animal Bites (GHPR) doubled compared to the previous year with the second highest average number of cases in Gianyar Regency. The GHPR case in Ubud does not only affect the local community but also some tourists who stay and vacation in Ubud. If this problem is not addressed it will have a direct impact on the decline of the tourism industry in Ubud. This research aims to obtain an overview of the level of knowledge and prevention behavior of tourists regarding rabies in Ubud as a tourist destination in Bali. This research is a descriptive study with a cross-sectional design. The sample for this research was 96 tourists who stayed and vacationed in Ubud, both domestic and international tourists. Data was collected through interviews with questionnaires and measurements then analyzed by univariate. The results of this research show that the majority of tourists already have high knowledge of rabies, namely 65% for international and 63% for domestic. As with knowledge, the majority of tourist prevention behavior is classified as good, namely 79% for international and 73% for domestic. It is recommended that the government and related agencies carry out policy improvements to increase public knowledge regarding changes in health behavior in terms of the use of information media to socialize the dangers of rabies to the public, especially the use of electronic media.

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### 1. INTRODUCTION

Rabies is a fatal disease, occurring mainly only in developing countries. Nevertheless, globalization and tourism market his a global health problem. WHO estimates the death rate due to rabies in the world. as many as 35,000 –50,000 people each year, where more than 95% of human deaths occur on the Asian and African continents (WHO, 2021). Indonesia is the 5th highest country with a death rate due to rabies in Asia (Usman, 2021).

Of the total rabies cases that occurred in Indonesia, more than 95% of cases occurred in Bali Province (Dirjen PP & PL, 2020). According to rabies control data from the Bali Provincial Health Service from 2020 to 25 October 2022, Gianyar Regency is one of the districts with a relatively high rate of rabies cases in humans, namely 2.13 cases per 100,000 population (Bali Provincial Health Office, 2022). Based on data on cases of animal bites that transmit rabies (GHPR) from the Gianyar District Health Service from 2021 to September 2022, there were around 14,509 cases of bites (Gianyar District Health Office, 2022). From the data on recorded GHPR cases, tourist areas in Gianyar Regency, such as Ubud District, have the second highest case rate in Gianyar Regency, namely 38.4 per 1000 residents. The UPT Public Health Ubud I Rabies Center noted that of the many GHPR cases that occurred in Ubud, there were 6 tourists who on holiday in Ubud experienced cases of GHPR (UPT Public Health Ubud I, 2022).

In Ubud Bali, rabies cases increased two-fold between 2021 and 2022. This does not only impact the local people but also tourists. Exposure to rabies does not come only from dogs but also from cats, bats and monkeys. Transmission from monkeys in particular, could be problematic as there is major tourist attraction in Ubud which is the “Monkey Forest Ubud”. If this problem is not appropriately addressed, it may affect the tourism industry. In Monkey forest Ubud, approximately 605 *Macaca*

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*fascicularis* “crab-eating macaque” live here. (these monkeys are believed to be guardians of the gods of the Dalem Agung Temple, the hindu temple which exists in the middle of forest). This study aimed to examine tourist knowledge about the disease and prevention behaviours relating to rabies in Ubud Bali.

## 2. METHOD

A descriptive cross-sectional study was conducted among tourists holidaying in Ubud. Inclusion criteria is both domestik and international tourists age > 20 years old who signed a consent form and exclusion criteria is tourists who have holidayed in Ubud more than 1 time. We used one proportions test formula for cross-sectional study to calculate the sample size and total final sample is 96 respondents. A convenience sampling approach was used where respondents visiting the Ubud Tourist Information (UTI) were approached and invited to participate. The responden were interviewed using a structural questionnaire which had a major question about knowledge and rabies prevention behaviour including the cause of rabies, rabies exposure and how to manage the wound after an animal bite. The data collected was processed and analyzed by univariate test.

## 3. RESULTS AND DISCUSSION

Based on the origins of tourists, 80% of respondents has international and 19% has domestic.

**Table 1.** Percentage of the respondenst by their origins

Origins	percentage (%)
International tourists	77 (80%)
Domestic tourists	19 (20%)
TOTAL	96 (100%)

From the table above it can be seen that responden mostly international tourists as Ubud is the one destination tourism in the world. Regarding the proportion of the level of knowledge and prevention behavior among international and domestik tourists can be seen on the table below. From international tourists, 65% had high level knowledge and 79% good prevention behaviours as same as for domestik tourists, 63% had high level knowledge and 73% good prevention behaviours

**Table 2.** Proportion of the level of knowledge and prevention behaviour among international and domestik tourist.

Tourists' knowledge and prevention behaviors	International tourists (n= 77)	Domestic tourists (n=19)
Level of knowledge		
High	50 (65%)	12 (63%)
Low	27 (35%)	7 (37%)
Prevention behavior		
Good	61 (79%)	14 (73%)
Bad	16 (21%)	5 (27%)

From the table above, it is known that mostly tourists had a high knowledge and good prevention behaviors. Tourist already get information about the rabies disease before travelling by their government and some of them got medical kit from their country. Regarding the proportion of the knowledge about rabies exposures among international and domestik tourists (tourists can answered more than 1 exposures). From international tourists mostly they answered dog (95%), monkey (45%), cat (60%) and bat (49%). From domestik tourists mostly the answered dog (85%), monkey (75%), cat (71%) and bat (45%).

**Table 3.** Proportion of the knowledge about rabies exposures among international and domestik tourists

Rabies exposure	International tourists (n = 77)	Domestic tourists (n = 19)
Dog	73 (95%)	16 (85%)
Monkey	35 (45%)	14 (75%)
Cat	46 (60%)	13 (71%)
Bat	38 (49%)	9 (45%)

Table 3 above shows that the rabies exposures knew by the tourists such as dog, monkey, cat and bat among international and domestic tourists. This is good news that the tourist will be aware if they meet this animal. But the problem is tourists only mostly know dog for rabies exposures compared to other animals such as a monkey. In Ubud also there is monkey, dog, cat and bat so they should be aware about them. In general, there is no difference in the level of knowledge and prevention behaviours between international and domestic tourists. Approximately 60-70% for the level of knowledge and approximately 70-80% for prevention behaviours. There is a significant difference in the level of knowledge about rabies exposures.

#### 4. CONCLUSION

Most tourists in Ubud have a high level of knowledge and appropriate prevention behaviours. As few international tourists know monkeys are a source of rabies exposures, these data further support the current strategy for health tourism in monkey forest Ubud, current information for tour guides to more vigorously socialize rabies disease in other tourism areas.

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