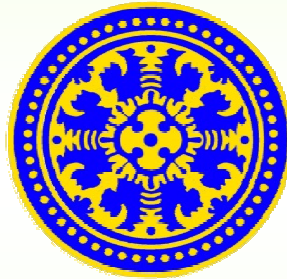


Proceedings
International Seminar
Studies on Bali Dog:
Genetics, Culture, Diseases,
Zoonoses and Community Health



Postgraduate Master Program of Public Health
Faculty of Medicine

&

Udayana One Health Collaboration Center

Udayana University

Denpasar, 31st March - 1st April 2017

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PROCEEDINGS

International Seminar

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Medicine & Udayana One Health Collaboration Center
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BACKGROUND

The indigenous Bali Dog (*Anjing Bali*) has coexisted with the Balinese for thousands of years, probably arriving on the island with some of the earliest waves of migrants from mainland Asia. The Bali Dog has long played an important cultural and ecological role, guarding household compounds and temples from human and spiritual intruders; helping keep pests including rats, snakes and marauding monkeys away from crops and households; and helping to manage waste on the island by eating the refuse thrown away by Bali's inhabitants. Dogs feature prominently in several Hindu stories, and are held up as an example for humans of faithfulness and steadfastness. Culturally, there is an elaborate traditional categorization of Bali Dogs based on temperament, color, measurements, and tail shape. Smart, loyal, hardy and sociable, they have been an integral element of Balinese communities for thousands of years.

Genetic research has determined that the Bali Dog is one of the world's oldest dogs, sharing DNA with several other Austral-asian dog breeds, including the Australian Dingo, Japanese Akita and Chow-chow. Until the recent introduction of pure-bred and mixed breed dog imported from Java and elsewhere, the Bali Dog, both the highland Kintamani and the lowland short-haired, had unadulterated genetic lineages estimated to be between 10 and 15 thousand years old. This rich genetic heritage is a priceless resource for biologists, animal geneticists and animal behavior experts who continue to do research to understand how dogs evolved, and how humans and dogs developed their unique relationship.

The Bali Dog is underappreciated both in terms of its singular genetic identity, and because it is considered of no value and low status compared to pure- and mixed-breed dogs that command high market prices. Its long-term existence is also currently under threat because of several factors, including the dog meat trade, the endemic rabies epidemic, and the preference for breed dogs among Balinese.

PREFACE

Postgraduate Master Program of Public Health Faculty of Medicine and One Health Collaboration Centre Udayana University, Supported by International Fund for Animal Welfare united States and Bali Animal Welfare Association held an International Seminar about Studies on Bali Dog in 31th March – 1st April 2017 to disseminate results of national and international research on the Bali Dog, to publish its uniqueness as well as to discuss what can be done to address the threats to the continued existence of this neglected element of Bali's heritage

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TABLE OF CONTENT

Unlocking secrets of dog origins and spread: a genetic perspective on the dogs of bali (and Southeast Asia): Ancient Asian dogs and the genetics of the bali dog: why is the bali dog unique?	
Benjamin Sack	1-7
Participatory learning and action: a pilot program using behavior change principles to improve dog ownership in Bali	
Kate Natrass Atema	8-9
Threats to the bali dog	
Janice Girardi, Ni Wayan Arya Utami, Kadek Karang Agustina	10-17
Program dharma: community empowerment management of bali dog for public health	
Ida Bagus Ngurah Swacita, Ni Wayan Arya Utami, I Made Subrata, Sang Gede Purnama, Kadek Karang Agustina, Putu Pande Januraga, Dewa Nyoman Wirawan	18-21
Bali dog community: sekehe asu bali	
Gusti Ngurah Surya Anaya	22-26
Implementation animal welfare in dogs in Sanur Villages, Denpasar-Bali	
Kadek Karang Agustina	27-32
Dog status in Kelurahan Sanur Denpasar-Bali	
I Made Subrata	33-38
Seroprevalence of canine parvovirus infection in kintamani dogs at Sukawana village	
I Gusti Ayu Agung Suartini, I Nyoman Suarsana, Ni LuhEka Setiasih, Indrawati Sendow	39

A pathological case study on bali local dog infected with canine distemper virus	
I Made Kardena, Gede Putra Sanjaya.....	40-49
Survey of dogs in Mendoyo Jembrana	
Kadek Karang Agustina	50-55
Dog ecology and demography in Sanur Bali	
Ida Bagus Ngurah Swacita	56-61
Distribution and manifestation of vacuolization in the brain of rabies-infected dogs in Bali	
I Ketut Berata	62-67
Case of canine distemper in Denpasar (Period 2014-2016)	
Gusti Ayu Yuniati Kencana, Ida Bagus Oka Winaya	68-74
Pathological observation on bali local dogs infected by parvovirus	
I Made Kardena, Anak Aagung Ayu Mirah Adi, I Ketut Berata, Ida Bagus Oka Winaya, Ida Bagus Windia Adnyana	75-81
Description of radiology and histopathology of dog femur post implantation of porcine cortical bone xenograft (PCBX)	
I Wayan Wirata, Anak Aagung Gde Oka Dharmayudha, I Wayan Nico Fajar Gunawan, Luh Made Sudimartini.....	82-89
Larva migrans: a potential zoonotic parasite infection of dog in Bali	
Nyoman Adi Suratma, Hapsari Mahatmi.....	90-96
Parasitic protozoan disease in dogs: be aware of zoonotic	
Ida Ayu pasti Apsari.....	97-105

Ivermectin as anti ectoparasite and endoparasite of dog	
Siswanto	106-112
Babesiosis a tick-borne zoonotic disease	
I Putu Gede Yudhi Arjentinia, Putu Ayu Sisyawati	
Putriningsih.....	113-118
Dermatophytosis (ringworm) in dogs: the zoonotic potential	
Putu Ayu Sisyawati Putriningsih, I Putu Gede Yudhi	
Arjentinia	119-124
Empowering society as once strategy to combat rabies in Bali	
I Nyoman Suartha, I Gusti Made Krisna Erawan, Srikayati	
Widastuti, Made Suma Anthara, I Wayan Wirata,	
I Gusti Ngurah Kade Mahardika	125-130
Clusterization of dog maintenance system that has risk of rabies in villages reported negative rabies in Jembrana regency	
Tjokorda Sari Nindhia, I Wayan Batan, I Putu Sampurna,	
Ekklesia Prastya	131-138
Surveying roaming dogs density in Sanur area	
Ni Wayan Arya Utami.....	139-149
Comparison of attitude survey in two areas of Sanur Kaja and Sanur Village in community-based efforts to control rabies	
Sang Gede Purnama.....	150-155
Post rabies vaccination response of Bali dog	
Ida Bagus Kade Suardana.....	156-161

Prevalence of zoonotic intestinal helminths and ectoparasite in dogs in Bali	
Nyoman Sadra Dharmawan, I Made Sukada, Ida Bagus Made Oka, I Putu Panji Nara Dharma, Julian Satria, Kadek Jaya Utama, Kadek Karang Agustina, I Made Damriyasa	162-169
Ashitaba (<i>Angelica keiskei</i>) herbs improve an antibody titer of rabies in young kintamani dogs	
I Wayan Sudira, I Made Merdana	170
Histological structure of the vagina, uterus, and ovary of the kintamani dogs on the sexual maturity	
Ni Luh Eka Setiasih, Putu Suastika	171
Balinese Hindu cultural studies approach in upkeep dogs as one of the effort of freeing Bali from rabies threat	
Ketut Tono PG, Putu Suastika.....	172
Leptospirosis in dogs: Important zoonosis	
I Ketut Suada, Mas Djoko Rudyanto	173
Haematological profile and blood biochemical of kintamani dog in Sukawana Village	
I Gusti Ayu Agung Suartini, Ni Nyoman Werdi Susari ...	174
Mapping and analysis of rabies cases in Buleleng regency period 2010-2016	
I Wayan Suardana, Syinthia Arya Novianti, I Wayan Batan.....	175
Prevalence and identification of dogs scabies in Denpasar	
Ida Bagus Made Oka, I Made Dwinata.....	176
What is bali dogs	
Gusti Ngurah Bagus	177

EMPOWERING SOCIETY AS A STRATEGY TO COMBAT RABIES IN BALI

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ABSTRACT

Rabies has been exist in Bali, since the first outbreak in last 2008 until 2015, cases of rabies still reported. In response mass vaccination, socialization, and control populations with selective elimination and sterilization have been carried out. This study was conducted to propose of empowering society as once strategy to combat rabies in Bali. Data was collected in 2010 as a baseline data (two year case rabies in Bali) and data in 2016 (eight year case rabies in Bali). The results showed an effort of Balinese society in combat rabies was low, especially in upkeep their dog. The conclusion of this study is empowering and involved society must be upgraded.

Keywords: empowering; society, rabies, bali

INTRODUCTION

The efforts to eradicate rabies in Bali have been done for more than eight years. In response mass vaccination, socialization, and control populations with selective elimination and sterilization have been carried out (Putra *et al.*, 2013). However, the rabies cases are still spreading. Thus, rabies virus continues to infect humans and more than 161 people was death. Factors associated with rabid dog were the status of rabies vaccination, contact

with other dog, condition of dog, number of raised dog, and veterinary care (Dibia *et al.*, 2015).

Mass vaccination has been done in all regency of Bali every years and an estimated coverage more than 70% (Suartha *et al.*, 2012; Putra *et al.*, 2013; Widyastuti *et al.* 2015), which is the accepted coverage target to reduce virus circulation (Sugiyama dan Ito, 2007), but the spreads of rabies continues to occur in Bali. It may be correlated with attitudes society in keep a dog. Massive campaigns can increases of knowledge of Bali society about rabies (Suartha *et al.*, 2012, Widyastuti *et al.*, 2015), and what they done after dogs biting.

Increasing of knowledge is not equal to the rate of awareness society in upkeep dogs. More dogs wandering in garbage area, markets, and on the street. Attitude and socio-cultural society was less (Suartha *et al.*, 2014), most dogs keep free-roaming and have a food only once a day and have risk to fighting with another dogs (Suartha *et al.*, 2015). Dogs have closes relationship of emotional with Balinese society and dogs as uses as in ceremony (Widyastuti *et al.*, 2015). This study was conducted to propose of empowering society as once strategy to combat rabies in Bali.

MATERIALS AND METHOD

The data were collection by interviews with questionnaires to the heads of families in each villages and who have dogs. The research was conducted in 2010 and 2016, in Badung regency, Bali. Both questionnaire data were compared and analyzed descriptively using software SPSS 13 for Windows. The query in questionnaire about dogs ownerships, method to keep, feeding frequency, family members to interact, and to healthy and care dogs.

RESULT AND DISCUSSION

Attention of the society against rabies control has been measured from dog ownership, feeding frequency, kept dog, the healthy and care dog,

family members frequently interact, and vaccination status. The level awareness society in combat rabies is less in 2010 and 2016 (Table 1).

Table 1. The attention of dog's owner against rabies control

Parameter	Tahun 2010	Tahun 2016
Dog ownership (number of dog)		
4	28.6%	13.15%
3	4.0%	11.03%
2	9.8%	30.75%
1	57.6%	45.07%
Feeding Frequency		
2 time	86.4%	88.7%
1 time	5.6%	6.4%
Rare	7.8%	4.9%
Keep dog		
Cage	3.8%	24.2%
Least	19.2%	17.2%
Combination	11.6%	-
Become to wild	65.4%	57.6%
The healthy and care dog		
Go to Veterinarian	48.2%	58.2%
No	51.8%	41.8%
Family members frequently interact		
Father	27.6%	25.6%
Mother	21.2%	19.3%
Child	12.4%	14.2%
Combination	37.8%	42.9%
Vaccination Status		
Yes	80,5%	89.9%
No	19.5%	10.1%

The number of dog ownership from one to four. Dog ownership in 2016 was lower than in 2010, this condition can be caused by intensive control population which government has been done. Public attention to the health and care of dog, viewed from feeding frequency, and go to the vet is increasing in 2016, but not significant. Most of owner has been give food a twice and one per day, and dog owner which rare giving food significantly decreased in 2016. This is as evidence that a dog raised of a notice society. Family members frequently interact (provide feed, grooming) with a dog is combination of family members, and between in family members, the father is higher than the others. The majority of respondent have male dogs. The choice of sex of dog is correlated with liking and function to keep dogs as a guard (Widyastuti *et al.*, 2015). The male dogs has more risk to spreads rabies than female dogs, because they will moving to find female dogs, especially in breeding season (Gunata, 2011).

The system cared for keep dogs with to become wild has still higher (more than 50%), in period 2010 until 2016. Although the knowledge of Bali society about rabies diseases is good (Suartha *et al.*, 2012), but behavior and attitude society to keep dogs in cage is less. Society will be respond when have case rabies in their village (Widyastuti *et al.*, 2015). In some regency in Bali, campaign about rabies is less and there are no regulations of dog transportation (Batan dan Suatha, 2016).

Empowering of society is very important to combat rabies in Bali. This program can be done with giving stimulus to keep dogs, like a give least, shampoo for dog, vitamin and cage. This program is combined with socialization. People who can held and bring their dogs to vaccinated are giving incentive. Empowering of society with mixed up all component society as such as student all grade, young generation (karang taruna), women group, and traditional leaders. Funds from Non Government Organization through to society to manage and responsibility.

Proactive program mass dog vaccination is still done. Control through proactive vaccination followed by 2 years of continuous monitoring and vaccination should be sufficient to guarantee elimination from an isolated area (Townsend *et al.*, 2013). Mass vaccination have been conducted and an estimated coverage more than 70% (Putra *et al.*, 2013;), which is the accepted coverage target to reduce virus circulation, but The cases bites with a positive laboratory confirmation have been reported in many rural areas. There are correlated with the socio-cultural attitudes and society in keep a dog (Suartha *et al.* 2015)

CONCLUSION

Empowering of society can be raised contribution society to combat rabies in Bali.

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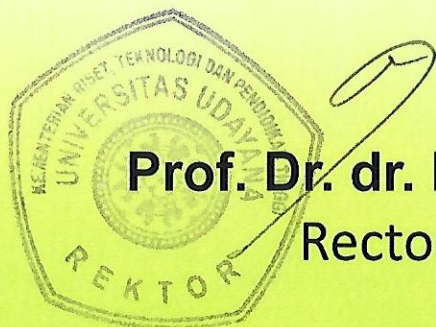
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Has participated as a

ORAL PRESENTER

International seminar and workshop: studies on Bali dogs: genetics, culture, diseases, zoonoses and community health

Denpasar, March 31th - April 1st, 2017



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