

First Aid Training on Near Drowning and Emergency System Activation to Employees of Hotel Quest San Denpasar

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Abstract

It is possible to use the global decline in the Covid-19 epidemic as a trigger for the revival of Bali's tourism sector. Bali tourism includes a significant portion of water sports like surfing, diving, rafting, and swimming on beaches, lakes, and rivers. Swimming pools and other activities are available at amusement parks. One of the most common events in water tourism is almost drowning. There were 9 fatalities and 300 drowning instances in the Kuta beach area alone, according to the 2018 data. Because it is essential for tourist actors, especially those associated with water leisure, to acquire Basic Life Support (BLS) training, especially in saving drowning victims, the success of the rescue of drowning victims greatly depends on the speed and precision of administering BLS. The administration of the Quest San Denpasar Hotel, where Partners work, wishes to offer first aid training for accidents, particularly for drowning victims, as none of the hotel staff have ever had first aid training. Ten hotel staff members attended the training on October 29, 2022, at the Quest San Denpasar Hotel. The training provided is in the form of theory and practice of identifying drowning victims, activating the emergency system, evacuating victims from the waters to land, providing BLS, and sending victims to the nearest health facility. Before the training, a pre-test was carried out and afterwards, a post-test was carried out, from the results of these tests it could be concluded that there was an increase in the participants' knowledge of 32%, and from BLS practice all participants were able to assist properly.

Keywords: Basic Life Support; near drowning; emergency systems; hotel employees

Abstrak

Penurunan epidemi Covid-19 secara global bisa dijadikan sebagai pemicu kebangkitan sektor pariwisata Bali. Pariwisata Bali banyak berhubungan dengan aktifitas di perairan dari wisata alam seperti selancar, menyelam, arung jeram, dan berenang baik di pantai, danau dan sungai; ada pula aktifitas di dalam wahana hiburan seperti kolam renang. Salah satu kecelakaan serius dalam wisata perairan adalah tenggelam (near drowning), dari laporan tahun 2018 saja tercatat hampir 300 kasus tenggelam hanya di daerah pantai Kuta, di mana dari kasus tersebut tercatat 9 orang meninggal dunia. Keberhasilan dalam menyelamatkan korban tenggelam sangat tergantung kecepatan dan ketepatan dalam memberikan bantuan hidup dasar (BHD), karena itu mutlak bagi pelaku pariwisata terutama yang berhubungan dengan rekreasi perairan untuk mendapat pelatihan BHD terutama pertolongan pada korban tenggelam. Mitra adalah karyawan Hotel Quest

San Denpasar, di mana tidak satupun karyawan hotel pernah mendapat pelatihan pertolongan pertama, sehingga pihak manajemen menginginkan diberikannya pelatihan pertolongan pertama pada kecelakaan terutama pada korban tenggelam. Pelatihan dilakukan di Hotel Quest San Denpasar pada tanggal 29 Oktober 2022, dengan 10 orang peserta karyawan hotel tersebut. Pelatihan yang diberikan berupa teori dan praktek mengidentifikasi korban tenggelam, aktifasi sistem emergensi, melakukan evakuasi korban dari kolam ke daratan, memberikan BHD, mengirim korban ke fasilitas kesehatan terdekat. Sebelum pelatihan dilakukan pre-test dan selanjutnya dilakukan post-test, dari hasil tes tersebut dapat disimpulkan adanya peningkatan pengetahuan peserta sebesar 32%, dan dari praktek BLS seluruh peserta mampu membantu dengan baik.

Kata kunci: BHD; near drowning; sistem emergensi; karyawan hotel

INTRODUCTION

The Covid-19 pandemic which has lasted more than two years has hit various sectors from health, economy, and education to tourism around the world. Indonesia's tourism sector is one of the most affected by the pandemic outbreak. It was recorded from the report of the Ministry of Tourism and Creative Economy that since February 2020 the number of foreign tourists entering Indonesia has decreased drastically, and the peak occurred in April 2020 with only 158 thousand tourists. Data throughout 2020 the number of foreign tourists entering Indonesia is only around 4.052 million people, of course, this figure is very alarming because only about 25% of the number of tourists entered Indonesia in 2019.(Romdiati and Noveria, 2022)

The impact of the COVID-19 pandemic on the Balinese economy, which is largely supported by the tourism industry, is more alarming. According to a report from the Bali Provincial Statistics Agency, the Balinese economy contracted in the first quarter of 2020 by 1.14 per cent compared to the same period in the previous year. The tourism industry is a significant contributor to Bali's economy, accounting for 78% of the country's overall output in 2019, compared to the agriculture industry's contribution of only 14.5%.(A.A.A Ribeka Martha Purwahita *et al.*, 2021)

Indonesia is currently facing the third wave of Covid-19 with the Omicron variant which is highly contagious but causes relatively mild symptoms. Initially, experts predicted that Indonesia would experience a peak phase in early to mid-March 2022, with the number of new infections reaching more than one hundred thousand people per day. But from the recorded data, it seems that the peak number of COVID-19 infections was at 60 thousand cases in mid-February 2022 and has gradually decreased until now. The government even plans to abolish the quarantine policy for foreign tourists coming to Bali as of April 1, 2022, even recorded around 1,600 foreign tourists have come to Bali since early February 2022. This can be used as a momentum for the revival of Bali and Indonesia tourism, especially since in March a major Moto-GP event is also planned at the Mandalika circuit in Lombok, West Nusa Tenggara.(A.A.A Ribeka Martha Purwahita *et al.*, 2021)

Tourists coming to Bali generally do water recreation, from nature tourism such as surfing, diving, rafting, and swimming at beaches, lakes, and rivers; there are also activities in amusement rides such as swimming pools, both public pools and in hotel/villa facilities. One of the most serious accidents in water tourism is near drowning. Globally, in 2019 an estimated 236,000 people died

from drowning and in Indonesia, an estimated 2.2 per 100,000 population died from drowning.(Sumadewi, 2022) In recreational objects such as beaches and swimming pools for the public, it is common to have lifeguards, who are not only physically trained but also properly certified, as they are required to attend regular certification training programs.(Ermawan Susanto, 2017; Windari, Saputra and S, 2021)

In cases of drowning, it will usually be fatal if it does not receive immediate help, whereas death from drowning generally occurs if a person drowns for 4 to 6 minutes, without receiving resuscitation assistance. Brain tissue ischemia and circulatory failure occur when there is a delay in treatment.(Sumadewi, 2022) Providing first aid to drowning victims challenges not only the ability to perform resuscitation but also the physical ability to evacuate victims from the water as soon as possible, therefore the presence of trained rescue workers around the location is very important.(Ermawan Susanto, 2017; Windari, Saputra and S, 2021; Subrata, Wayan Rusni and Mahardika, 2023)

Respiratory and cardiovascular problems are emergencies associated with drowning. The principle of handling drowning victims is to secure the airway through cardiopulmonary resuscitation and prevent insufficiency. The first step in handling drowning victims is to ensure the victim's consciousness.(Hady *et al.*, 2020) Basic Life Support is an effort made to prevent hypoxia. Basic life support is carried out by paying attention to airway, breathing and circulation.(Prawerdana and Suarjaya, 2013) If cardiac arrest is found in a drowning victim, chest compressions can be performed immediately.(Faradisi *et al.*, 2021)

GENERAL DESCRIPTION OF THE COMMUNITY, PROBLEMS AND TARGET SOLUTIONS

General description

Partners in this service are employees of Quest San Denpasar Hotel, which is located at Jalan Mahendradata No 93, Denpasar. The Quest San Denpasar Hotel consists of 4 floors and is part of the Archipelago International hotel chain management which manages various hotel chains around the world. As almost all tourism actors in Bali including hospitality are experiencing a direct impact due to the Covid-19 pandemic which has been going on for more than two years. Seeing the pandemic conditions in Bali are increasingly conducive and it is hoped that with the relaxation of quarantine rules and restrictions during the pandemic, in the near future tourists will return to visit Bali. This of course must be prepared not only from excellent service but also health protocols including safety.

Problem

The management of the Quest San Denpasar Hotel wants all hotel employees to receive first aid training in accidents both in minor cases such as falling and being injured in severe cases such as loss of consciousness, or cardiac arrest, and fatal accidents such as drowning in the swimming pool. However, given the financial condition of the hotel which has been losing money since the pandemic 2 years ago, the management cannot afford the cost of first aid training in accidents, both in mild to severe cases including drowning cases.

The location of swimming pool at Quest San Denpasar Hotel is located in the centre of the hotel. The position of swimming pool is next to Bhira Restaurant, where the position makes it difficult

to convey emergency information in the event of a drowning accident in the pool, therefore an emergency system is needed that can be accessed easily and quickly, so that information on the occurrence of an accident can be conveyed immediately to the reception who will immediately contact the nearest hospital or clinic.

METHOD

Preparation was carried out by coordinating and socializing with the management of Quest San Denpasar Hotel and explaining the purpose, objectives, benefits, flow of activities and monitoring / evaluation plans for activities to be carried out. Preparation also includes planning the venue and the necessary facilities and infrastructure. The activity was held on October 29, 2022 at the Quest San Denpasar Hotel, which is located at Jalan Mahendradata No 93. The implementation of activities is carried out online, including:

- a. Pretest will be conducted first shortly before the delivery of the material.
- b. Providing material and interactive dialog about the identification of victims of drowning accidents (near drowning), activation of emergency systems, first aid in accidents, and evacuation to health facilities. In addition, after the delivery of the material, there will be an interactive dialog between the participants, namely employees and management of Quest San Denpasar Hotel with the delivery of material in the form of questions and answers. The material is provided by professionals who are relevant and competent to deliver the materials to be provided. The delivery of material is carried out using counselling media in the form of PowerPoint presentations.



Figure 1. Material delivery

- c. Participants will be separated into numerous small groups after the experts conduct a live simulation utilizing mannequins and other relevant tools. In each of these small groups, retraining is done more thoroughly with the help of trained assistants. Identification of drowning accident victims through training that involves identifying the victim's characteristics and then calling for help. The training starts with a vital sign assessment. If no vital signs are discovered, heart-lung resuscitation methods are continued until help from medical personnel arrives. If vital signs are discovered to be normal, go on to the recovery position.



Figure 2. CPR and near drowning simulation

- d. Emergency Information System (EIS) training was conducted offline on October 29 by Mr. Aulia Iefan Datya, S.T., M.T. involving employees and management of Quest San Denpasar Hotel. Emergency Information System or Information System in an Emergency, designed web-based following the emergency handling procedures that exist in the Quest San Denpasar hotel. Taking the concept of a reporting system from hotel guests to hotel management in the event of an emergency, this system involves the guest as a reporter to the hotel FO Staff who serves as the system admin. Following the flow in Figure 3 below, the workings of this system begin with the guest (user) scanning the barcode in the event of an emergency at several hotel locations that are fitted with a QR Code. The system will connect hotel guests to the Whatsapp chat application that is connected to the Hotel Front Office. Then the Front Office Staff as the System Administrator will receive an emergency report/message from the guest (user), and take action according to the hotel emergency procedure.

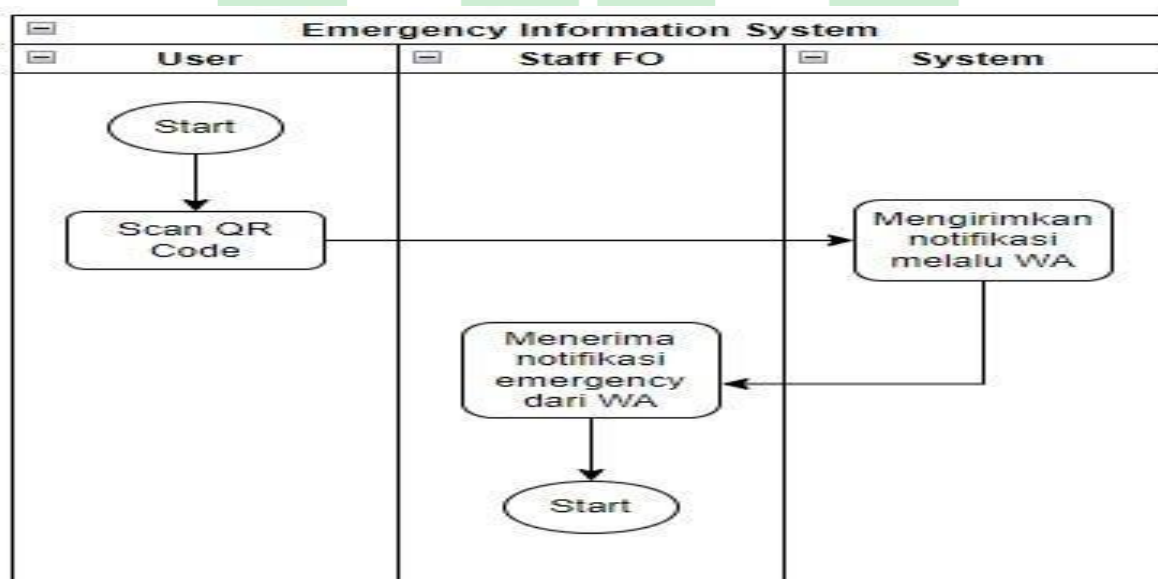


Figure 3. Emergency Information System Flowchart

Figures 4 and 5 below are views of the Quest San Hotel Denpasar emergency information system site, the links used are: <http://eis-quest.fkik-unwar.com/>

RESULTS AND DISCUSSION

The training was conducted in October, 29th 2022 at the Quest San Denpasar Hotel offline by implementing health protocols and limiting participants to only 10 participants. In the training, there was an increase in partner knowledge in drowning accidents, activation of the emergency system, first aid in accidents, evacuation to health facilities. As for the practice of first aid in accidents, all participants were able to perform correctly and were categorized as passed. The results of the training can be seen in Table 1.

Table 1. Participant characteristics and pre-test and post-test scores.

Age	Sex	RJP Practice	Pretest	Posttest
38	M	Pass	50	70
30	M	Pass	70	70
24	M	Pass	65	80
30	M	Pass	55	70
26	M	Pass	50	70
34	M	Pass	55	70
32	M	Pass	55	80
33	M	Pass	70	70
28	M	Pass	30	50
39	M	Pass	45	70
Average			54,5	70

From the table, it can be seen that there is an increase in the pre-post test score by 32%, so it can be concluded that this program has achieved the expected output, namely increasing partner knowledge. The resource persons were dr. Tanjung Subrata, M.Repro, dr. Komang Trisna Sumadewi, M.Biomed, Aulia Iefan Datya, S.T., M.T and assisted by 3 students, namely I Gusti Agung Yoga Mahendra, Luh Putu Swela Caya Purnami and Ida Ayu Ari Dwija Patni. In the observation during the training all participants were able to perform sports accident actions, activation of the emergency system, first aid in accidents, evacuation to health facilities.

CONCLUSION

The conclusion that can be drawn from this service activity is that this training can increase partner knowledge by 32% in recognizing drowning accidents, activating the emergency system, first aid in accidents, and evacuation to health facilities. Hotel employees can also scan the EIS barcode for guests and visitors of the Quest San Denpasar Hotel. The training program also received a positive response from participants consisting of employees of the Quest San Denpasar Hotel.

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The image features a large, semi-transparent watermark of the UNUSA logo in the background. The logo consists of a stylized green shield with a white vertical line down the center, topped with a yellow star. Below the shield, the word 'UNUSA' is written in a large, green, serif font. The watermark is centered on the page and partially overlaps the text of the references.

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