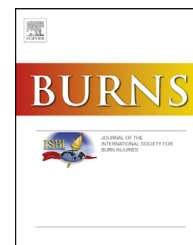


Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/burns

Burn Care on Cruise Ships—Epidemiology, international regulations, risk situation, disaster management and qualification of the ship's doctor

C. Ottomann^{a,b,*}, B. Hartmann^{a,1}, V. Antonic^c

^aUnfallkrankenhaus Berlin, Zentrum für Schwerbrandverletzte mit Plastischer Chirurgie, Warenerstr. 7, 12683, Berlin, Germany

^bMedical-Shipmanagement, Hartengrube 52, 23552, Lübeck, Germany

^cDivision of Translational Radiation Sciences, Department of Radiation Oncology, University of Maryland School of Medicine, 685 W. Baltimore Street, MSTF 7-00A, Baltimore, MD 21201, USA

ARTICLE INFO

Article history:

Accepted 27 January 2016

Keywords:

Burn care
Cruise ship, Epidemiology
International regulations
Risk situation
Disaster management
Qualification of the ship's doctor

ABSTRACT

With the increasing numbers of passengers and crew on board vessels that are becoming larger and larger, the demand for ship's doctors who can adequately treat burns on board has also increased. In the cruise ship industry it is usually those doctor's with internal and general medical training who are recruited from an epidemiological point of view. Training content or recommendations for the treatment of thermal lesions with the limited options available in ship's hospitals and where doctors with no surgical training operate do not yet exist. The guidelines recommended by the Cruise Lines International Association (CLIA) regarding medical staff have only included physicians with minor surgical skills until now. With the introduction of the ATLS[®] course developed by the American College of Surgeons, the requirements for the qualification of the ship's doctor on board cruise ships shall change from January 2017. The article discusses the question of whether having completed the ATLS[®] course, the ship's doctor is trained to adequately treat thermal lesions or severe burns persons on-board, and presents the current discussion on the training content for ship's doctors within the International Maritime Health Association (IMHA). It also provides an overview of existing international regulatory frameworks, the risks presented by a fire on board, the problem of treating burns victims out of reach of coastal rescue services, and alternative training concepts for ship's doctors regarding the therapy of thermal lesions on-board.

© 2016 Elsevier Ltd and ISBI. All rights reserved.

1. The booming cruise-ship industry

Today, the largest cruise ships, namely the Oasis of the Sea and her sister ship Allure of the Sea of the Royal Caribbean

International Cruise Line have a capacity of 6000 passengers and are served by a crew of 2500. Because of the growing market for cruise tourism, cruise ships accommodating more than 10,000 people on board are also planned [1]. According to estimates of the umbrella organisation for the cruise industry,

* Corresponding author at: CEO Medical-Shipmanagement, Hartengrube 52, 23552 Lübeck, Germany. Tel.: +49 30 56813501.

E-mail addresses: christian.ottomann@ukb.de, info@medical-shipmanagement.com (C. Ottomann), bernd.hartmann@ukb.de (B. Hartmann), vladoantonc@gmail.com (V. Antonic).

¹ Tel.: +49 30 56813500.

<http://dx.doi.org/10.1016/j.burns.2016.01.032>

0305-4179/© 2016 Elsevier Ltd and ISBI. All rights reserved.

namely Cruise Line International Association (CLIA), 23 million tourists worldwide will be taking their vacation at sea in 2015, four percent more than was the case in 2014. On the international travel market, the CLIA members offer a total of 430,000 sleeping berths on more than 400 cruise ships [2]. In 2015, another 22 ships catering for 20,000 passengers shall be added. Growth markets such as China, so far untouched by cruise tourism, are also being developed [3]. Three quarters of all cruise passengers still come from the USA, and the most frequented destination during the last season was the Caribbean. The Europeans, however, are catching up, with one in four Europeans aspiring to take a cruise within the next five years [4]. The number of cruise ship passengers in Europe rose last year by 9.2% to 1.69 million where they spent a mean of 9.3 days at sea, and an average of 1696 euros [5]. The most popular sailing area for European cruise passengers is the Western Mediterranean, although more and more ship-owners are looking for new market niches, so that more and more remote areas are being opened up where coastal water- or air-based evacuations then become impossible ([6,7], Fig. 1).

2. Restricted availability of epidemiological data

Only a few epidemiological studies have been published on the incidence and prevalence of certain diseases and traumas

amongst multinational crew members and passenger patient collectives, the makeup of which depends on which cruise line they are travelling under, and which market segments are being catered for [8]. Scientific epidemiological studies on ships deal almost exclusively with the clientele of industry workers on cargo ships and fishing vessels. They often originate from occupational or preventive medical institutions, and are commissioned by national trade associations [9]. The fact that there are only a few descriptive epidemiological papers relating to cruise vessels may be because the cruise lines have little interest in making their data available so as not to compromise the image of the “Sunshine industry” [10]. In 1999, Peake et al. published the results of a study carried out over a calendar year and on four ships where first patient contacts were evaluated [11]. About 200,000 passengers had embarked on these vessels during this period. From this collective about 7147 contacts were made with physicians on board (3.6%). The authors assigned 69.3% of the problems as internal medicine issues, 18.2% as traumas, while 12.5% were registered as “other”. The percentage who referred themselves for thermal lesions amongst the trauma group cannot be determined. In another epidemiological study, Prina et al. evaluated 104 air-borne evacuations from cruise ships to their clinic in Fort Lauderdale, Florida. In 80.8% of cases there were internal medicine syndromes, while 19.2% were surgical problems [12]. Here as well, the surgical diagnoses were not further sub-classified. In a three-year survey Dahl et al.

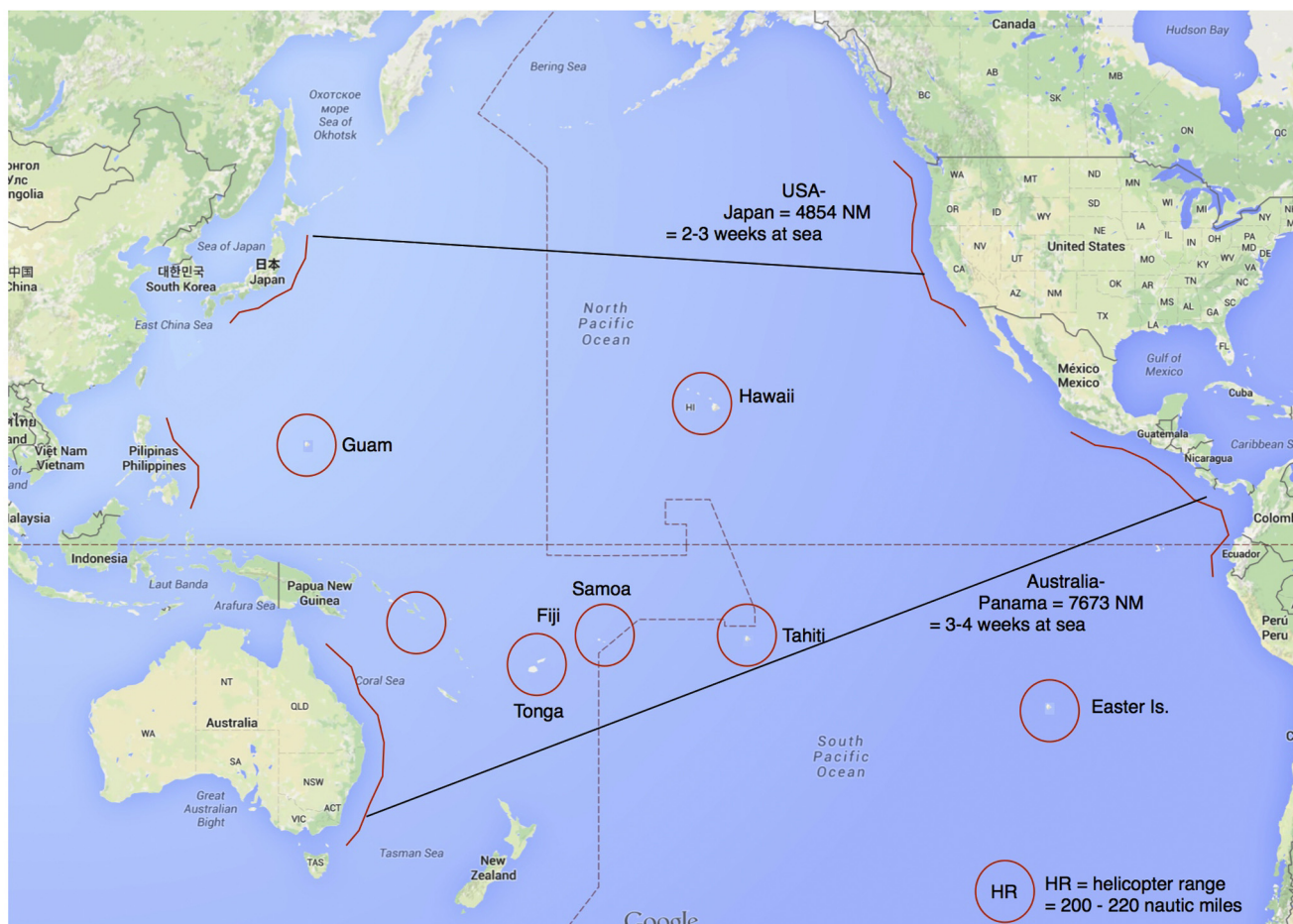


Fig. 1 – Cruise areas outside the range of air-borne evacuation.

Download English Version:

<https://daneshyari.com/en/article/5636334>

Download Persian Version:

<https://daneshyari.com/article/5636334>

[Daneshyari.com](https://daneshyari.com)