

Cruise ship doctor: demands and challenges versus qualifications and training

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The practice of cruise medicine will be very different on a small vessel than on a mega-liner with more than 8000 people on board, but many of the doctors' duties will be the same. The primary focus is individual patient treatment, but over the years, ship's doctors have also become increasingly involved in a variety of preventive ship-board measures, such as:

- epidemiology and disease prevention;
- hygiene measures;
- systematic isolation of potentially contagious cases;
- vaccination programs (influenza, yellow fever, hepatitis, tetanus, etc);
- drug and alcohol testing;
- insurance claim and law suit prevention;
- assault investigations;
- anti-terror activity and disaster planning.

Furthermore, cruise companies expect their ship's doctors to provide top service with a warm and caring attitude to both passengers and crew.

There are few internationally accepted rules regarding ship's doctors. According to the International Labour Organization (ILO Convention 164, article 8) [1], all ships carrying 100 or more seafarers and ordinarily engaged on international voyages of more than three days' duration shall carry a medical doctor as a member of the crew. The term 'medical doctor' is not defined, and no qualifications are specified.

To amend the lack of rules, the American College of Emergency Physicians (ACEP) published 'Guidelines of Care for Cruise Ship Medical Facilities' in 1996 [2]. According to this policy, ACEP "believes that appropriate emergency care and health maintenance for passengers and crew members aboard ships sailing in international waters are desi-

nable. The cruise ship industry and its medical departments should retain medical personnel who can:

- provide quality maritime medical care for passengers and crew members aboard cruise ships;
- initiate appropriate stabilization, diagnostic, and therapeutic manoeuvres for critically ill or medically unstable patients;
- support, comfort, and care for patients on board ship; and
- assist, in conjunction with the cruise line, in the medical evacuation of patients in a timely fashion when appropriate".

As an adjunct to this policy statement, ACEP's Section on Cruise Ship and Maritime Medicine prepared ACEP's 'Health Care Guidelines for Cruise Ship Medical Facilities'. Regularly updated, the December 2007 version [3] recommends that the cruise ships should have physicians who have undergone a credentialing process to verify the following qualifications:

- current physician licensure;
- three years of post-graduate/post-registration clinical practice in general and emergency medicine **or** board certification in: Emergency Medicine or Family Practice or Internal Medicine;
- competent skill level in advanced life support and cardiac care;
- minor surgical skills (i.e. suturing, incision and drainage of abscesses, etc);
- fluency in the official language of the cruise line, the ship, and that of most of the passengers.

Having passed an advanced cardiac life support (ACLS) course at home will be accepted as 'a competent skill level' by most cruise lines, but a native certificate may not have sufficiently prepared the ship's physician to run pro-

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perly an emergency code in a language that is foreign to both leader and team. Today the various medical staff members often have different mother tongues and cultural backgrounds. To guarantee fluency and optimal understanding, the official language should always be used in the medical centre, and – as emphasized in the guidelines – the code team is to be trained and updated regularly.

Emergency medical equipment, medications, and procedures required on board are also dealt with in the ACEP guidelines, but it should be noted that they are not evidence based; they are just the result of negotiated compromises, a minimum standard consensus that is acceptable to ACEP. Still, they have been well received by the cruise industry and are now not only supported, but also actively promoted by the Cruise Lines' International Association (CLIA), a non-profit trade association that represents over 97 percent of the cruise capacity marketed from North America [4]. Although they have not gained any official national or international recognition, the ACEP guidelines are now considered a commonly accepted US standard. Therefore, all ships that carry Americans or visit US ports are well advised to follow them closely, not least for medico-legal reasons.

The ACEP guidelines have already done a lot to improve various aspects of international cruise medicine and should be viewed as an important step toward an internationally accepted standard for health care on cruise vessels.

However, created by emergency physicians, they especially reflect on conditions requiring urgent action. This is certainly important because every medical emergency that occurs ashore will eventually also happen at sea, and the ship's doctors must be prepared to handle all types of emergencies in passengers and crew, but the guidelines do not address the special challenges of handling emergencies at sea over longer periods of time.

Moreover, they do not deal with problems that arise from the unique situation of being the primary physician for a multinational crew living and working together at sea for many months at a time. Furthermore, they do not prepare the doctors for their increasing involvement with disease prevention measures aboard, nor for their expected compliance with demands from shore-side public health authorities.

Since there are no internationally accepted requirements for cruise doctors, it is hardly surprising that there are no public training programs for them.

Some years ago, week-long medical seminars on cruise medicine were privately arranged aboard passenger vessels, but they stopped when the organizer turned to another medical challenge.

National maritime medicine associations, like the German Society for Maritime Medicine [5], conduct weekend workshops on cruise medicine, while ACEP's Section for Cruise Ship and Maritime Medicine arrange one member

meeting a year and publish newsletters where maritime issues and cases of interest are reported.

There is only one textbook on cruise medicine. Although the second edition was published in 1999 and is due for an update, it contains a lot of practical and useful information and is still a must for every cruise ship infirmary [6]. A textbook on maritime medicine, which will soon be available from the Norwegian Centre for Maritime Medicine on the internet, will have a chapter on cruise medicine. It will, however, focus mainly on the various roles and duties of the medical staff on board and their work place: the ship's infirmary.

Some special interest books have chapters dealing with medical challenges from a passenger ship point of view, like *Travelers' Diarrhea* [7].

For medical personnel working on ships visiting US ports it is imperative to be thoroughly familiar with the Vessel Sanitation Program of the Centres for Disease Prevention and Control [8].

Research that might reveal unflattering conditions on board is not encouraged by shipping companies. Cruise medicine research is therefore sparse and mostly limited to official outbreak reports from government agencies [9]. Some epidemiological studies are published in international journals on emergency, travel, and maritime medicine.

Presently, it is up to the individual cruise lines to ensure that their physicians have the necessary qualifications, knowledge, and experience to work on their ships, and that they are familiar with indications, contraindications, and handling of every medical item on board. Larger cruise companies have more sophisticated equipment and a bigger variety of medications than the ACEP guidelines specify, and some have started their own cruise medicine courses for further education of their medical personnel. The trendsetter has incorporated years of participant feedback into a week-long course comprising medical lectures from a maritime perspective, skill stations, an ACLS refresher course, and an excursion to a coast guard air station. Hopefully, these educational courses will also be available for other cruise lines and for physicians not currently employed at sea.

Although the cruise industry is immensely competitive, medicine, like safety, is not an area where rivalry among companies makes sense. Medical mishaps at sea attract attention that will invariably hurt the whole industry. A worldwide standard of qualifications and training for medical staff on cruise ships calls for international cooperation and coordination within the global community of maritime medicine.

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