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Review Article

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Map of Marine Medical Theory

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ABSTRACT

This PICTURE-FORM MANUSCRIPT is a relatively new look and displays nuances of images and colors, because now it is easier with the help of computers, whereas in the past, using a typewriter was indeed a difficult job. The purpose of this article is to explain the theory related to the competency of a Marine Medicine Specialist, especially those that are still general, because specific material is in the next discussion. An overview of: Marine Medicine Theory, with details: Basic Medicine, Marine Work Environment, Occupational Nutrition, Water Supply and Waste Control, and Marine Emergencies and Offshore Platforms. This is an opening to the horizon of marine medicine that is more complex and interconnected between clinical, environmental, and ship, platform, and port conditions. Presenting an image in the form of an ORGANISATIONAL STRUCTURE to facilitate the condition of the position and its relationship with others.

Keywords: Map, Marine Medical, Theory, Basic, Environment

Introduction

The existence of a published manuscript in the form of images is crucial today, allowing for better visibility of learning outcomes, understanding, and success in the context of competency improvement. In this era, even accurate and complex materials must be packaged with learning and communication methods that simplify, not complicate, learning [1]. This is due to the advancement of computerized learning aids, which can display images attractively while maintaining the intended meaning, accurately, and accurately [2]. For this reason, the purpose of this manuscript is to attempt to obtain a general overview of competency material, so that the big picture and interrelationships can be grasped. This allows for easy exploration and systematic compilation of detailed descriptions, thus aligning with systematic thinking patterns [3].

The material presented is the Marine Medicine Specialist's course material, covering theory, knowledge, and clinical practice, systematically and clearly divided. This includes the competency level of the learning process for the exam. These three elements are not shown in this image, as this would complicate the image and lose its purpose of simplification and clarity. In addition to the image at the beginning of the discussion, the following will be explained:

- 1. Marine Medicine Theory, to avoid dry images and to provide a clearer understanding.
- A map of Marine Medicine Theory, with an organizational structure for easier recognition. The material is structured in tables, making explanations easy to find, navigate, and adapt.
- 3. Clinical Implications concludes, providing clarity regarding the relationship to competencies [4].

This explanation will easily stimulate systematic thinking and foster the habit of systematic thinking.

The next step is to connect the 4 things above as a unity that works as Systematic Thinking, then it will form an easy and enjoyable way of thinking, with brilliant results. Of course, you can't achieve this in one go, but it will give you habits that will make it easier for the next material.

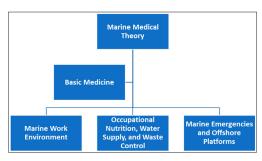
Citation: Boy Subirosa Sabarguna, Harmin Sarana, Djatiwidodo Edi Pratiknya. Map of Marine Medical Theory. Open Access J Clin Images. 2025. 2(3): 1-4. DOI: doi.org/10.61440/OAJCI.2025.v2.19

We often forget and ignore it, because we think it is normal, but **Explanation** we can improve the following things, namely:

- 1. how to read,
- 2. learning patterns,
- 3. think,
- 4. save in memory,
- and withdraw it if necessary. 5.

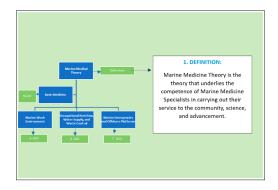
The above requires habits and smart ways to do it. It is recommended to use thinking skills as soft skills.

Marine Medicine Theory [5]



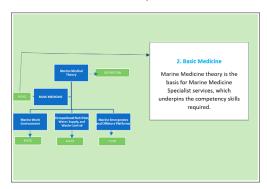
Explanation

NO	Definition			
1.	Marine Medicine Theory is the theory that underlies the competence of Marine Medicine Specialists in carrying out their service to the community, science, and the advancement of services.			
2.	Basic Medicine: The theory of marine medicine that serves as the basis for specialist marine medicine services, underpinning the competency skills required.			
3.	Marine Work Environment: The environment associated with the practice of competency, which will help implement environmentally friendly preventive, therapeutic, and rehabilitation efforts.			
4.	Marine Nutrition, Water Supply, and Waste Management: These are vital needs for crew members working on land and navigating the oceans, often far from land and quickly obtaining supplies. They must be well-managed.			
5.	Marine Emergencies and Offshore Platforms: This is a specific area for Marine Medicine, Emergencies that must be prevented and handled properly, including preparation and handling that will occur on Offshore Platforms.			



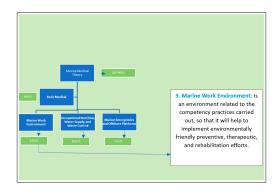
NO	Understanding
1.	GIO = General Instructional Objectives, is a general direction, instruction, or material that must be carried out and mastered as a competency.
2.	The number in front of GIO is the number of GIOs that must be studied and mastered as a competency.
\rightarrow	Explanation Direction, which is a continuation of the next competency in more detail.

Map of Marine Medicine Theory and Materials



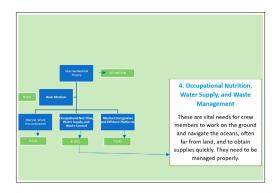
Explanation

NO	GIO = General Instructional Objectives 2. Basic Medicine [6]		
1.	Developments in marine health		
2.	Developments in ship engine technology and implications for the health of crew members in the work environment		
3.	The increase in ship tonnage has led to an increase in cargo and cargo diversity, as well as the potential hazards they pose.		
4.	The impact of ship equipment automation has implications for on-board employment		
5.	The role of ship's doctors in modern/global shipping		
6.	Medical facilities and medicines for shipping		
7.	Maritime and port quarantine regulations		
8.	Sea psychology		
9.	Implementation of maritime labor medical tests under ILO Convention No. 73		



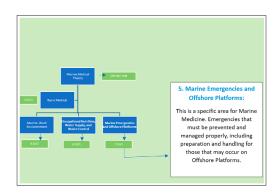
Explanation

NO	GIO = General Instructional Objectives 3. Marine Work Environment [7]	
1.	Seafarers' workload	
2.	Ship work locations with potential hazards	
3.	Controlling potential hazards in the ship's work environment	
4.	Macroclimate on the body	
5.	The effect of the ship's microclimate on the body	
6.	Ship design and its impact on crew members	



Explanation

NO	GIO = General Instructional Objectives 4. Occupational Nutrition, Water Supply and Waste Control [8]	
1.	Nutritional needs of maritime workers	
2.	Food management on board ships	
3.	Cook qualifications	
4.	Ship and port waste control	
5.	Clean water supply	
6.	Marine Pollution (Marpol) 1973: aspects of marine waste control	



Explanation

NO	GIO = General Instructional Objectives 5. Marine Emergencies and Offshore Platforms [9]		
1.	Emergencies for sinking, grounding, or leaking vessels		
2.	Medical emergencies		
3.	Lifesaving equipment management		
4.	Offshore drilling emergencies		

5.	Emergency procedures for blowouts in offshore drilling
6.	Emergency procedures for helicopter crashes on platforms
7.	Emergency procedures for underwater accidents on platforms

Clinical Aspects

Clinical aspects are central to learning and practicing competencies, and therefore crucial to master. Thus, learning must be measurable to achieve these clinical aspects as competencies. The following is a brief overview of the key elements.

NO	THEORY AND MATERIAL	CLINICALASPECT
1.	This includes Medical Emergencies	It's clear.
2.	Basic Medicine	Regarding general health, the condition of the ship, and its relationship to accidents, medical matters will be involved. This includes medical facilities, medications, and psychology.
3.	Marine Work Environment	Regarding the workload of the Crew, the macro and micro climate, and hazardous conditions on board.
4.	Occupational Nutrition, Water Supply, and Waste Management	Regarding food, cooking, the importance of clean water availability, as well as the handling and control of waste from the ship.
5.	Marine Emergencies and Offshore Platforms	There are medical emergencies, safety equipment, and, of course, those related to drilling, blowouts, helicopter accidents, and underwater explosions

Conclusion

THE MAP OF Marine Medicine Theory achieves the purpose of this manuscript, which is to obtain a general overview of competency material so that the big picture and interrelationships can be seen. It provides an overview of:

- Marine Medicine Theory, which contains an overview of the theory used to develop the competencies required of Marine Medicine Specialist graduates.
- Marine Medicine Material, which provides detailed material that aligns with the General Instructional Objectives (GIO) to be studied and mastered as competencies.
- Clinical Implications, which provides a link between theory and material, provides an overview of the implications of each theory as a unified whole.

This map will provide an overview of what students need to master to achieve competency. It certainly requires detailed material and descriptions in the form of knowledge and field practice.

Conflict of Interest

In this manuscript, there is no conflict of interest.

Reference

- 1. Sajidi Hadipoetro. Head of the Marine Medicine Specialist Proposal Preparation Team, not published. 2015.
- Susilawati Thabrany, Nabila Fajrina, Rachmadita Dwi Pramesti. The Role of Visual Elements as a Marketing Communication Strategy in Product Packaging. Journal of Computer Science and Visual Communication Design. 2023. 8: 322-332.
- Boy Subirosa Sabarguna. Soft Skills for Success in Study and Work. UHT University Press. 2024.
- Sheila Siame, Bygvraa DA, Hulse LM, Mouchtouri V, Hadjichristodoulou C, et al. Factors influencing the occurrence of infectious diseases among crew members on board cruise ships: a systematic review, in International Maritime Health, GDYNIA IMH, 2025. Republic of Poland. 2025.
- Farshad Heydari, Nobakht M, Vahedian-Azimi A, Mirzamani SS, Moradian ST, et al. Developing the marine medicine syllabus for medical sciences students: a multiphase design study. BMC Medical Education. 2023. 23: 470.
- Mehdi Zamani, Melnychuk T, Eisenhauer A, Gäbler R, Schultz C. Investigating Past, Present, and Future Trends on the Interface Between Marine and Medical Research and Development: A Bibliometric Review. Marine Drugs. 2025. 23: 34.

- Praetorius G, Österman C, Hult C. Strategies and Measures to Improve the Work Environment of Service Crew on Board Swedish Passenger Vessels, the International Journal on Marine Navigation and Safety of Sea Transportation. 2018. 12: 3.
- Sri Irianti, Prasetyoputra P, Dharmayanti I, Azhar K, Hidayangsih PS. The role of drinking water source, sanitation, and solid waste management in reducing childhood stunting in Indonesia. IOP Conference Series: Earth and Environmental Science, The 5th International Conference on Water Resource and Environment (WRE 2019).
- 9. Nathanael, Khairilmizal S, MF H. Challenges in managing emergency offshore: A comparison of offshore and onshore perspectives. Journal of Loss Prevention in the Process Industries. 2024. 88.

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