



# Maritime Medicine – a specialty

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# Maritime medicine as a specialty

- 1999-2014 → transportation medicine:  
occupational medicine,  
marine medicine,  
tropical medicine,  
travel and tourism medicine,  
aviation medicine,  
hyperbaric medicine,  
railway medicine,  
road transport medicine,  
epidemiology

2014:

Reform of the specialization system in Poland:

- Maritime medicine becomes a separate specialty
- a system of modular specializations was introduced
- 23 specialisations with one basic module of internal medicine:

For ex.:

Maritime medicine

Occupational medicine

Endocrinology

# Maritime medicine as a specialty

- Maritime and tropical medicine is a separate specialisation in Poland since 2014
- We have about 120 actively practising doctors with the specialty maritime and tropical medicine
- There are two centers where doctors are trained in maritime and tropical medicine – Gdynia (since 2014) and Poznań (since 2016)





**Clinical Department of Tropical and  
Parasitic Diseases, University Clinical  
Hospital in Poznań;**

**4 specialisation places**

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# Institute Of Maritime And Tropical Medicine in Gdynia/University Center for Maritime and Tropical Medicine



## 6 specialisation places

Division of Occupational, Metabolic and Internal Diseases -  
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# Institute Of Maritime And Tropical Medicine in Gdynia

Established on 5 June 1937 as a Branch of the Central State Institute of Hygiene (Warsaw)

Gdynia was at that time the only large sea port in the country as well as rapidly growing town and port.

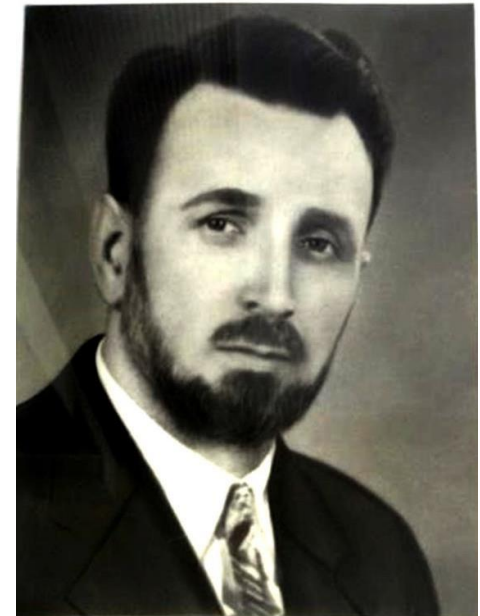
Hundreds of workers, builders and vagrants were coming to town with their families

Health issues increased also due to growing number of seafarers and contact with the tropics.

Dr n. med. Józef Jakóbkiewicz – 1st head

→specialist of tropical medicine

→he brought about 1,000 Polish orphans from Siberia, saving them from death from hunger or disease



# Institute Of Maritime And Tropical Medicine in Gdynia – present day

- National Centre for Maritime Medicine,
- National Centre of Hyperbaric Medicine
- National Centre for Tropical Medicine
- 4 Clinics → Part of Medical University of Gdańsk
- 13 outpatient clinics
- Hyperbaric chamber
- Polish TMAS Centre
- Part of Medical University of Gdańsk since 2006

# Maritime medicine as a specialty

**DOCTORS WITHOUT SPECIALISATION**

(AFTER 1 YEAR OF POSTGRADUATE INTERNSHIP)



**BASIC MODULE – MAINLY INTERNAL MEDICINE – 3 YEARS**



**SPECIALIST MODULE - 2 YEARS**



# Maritime medicine as a specialty

**DOCTORS WITH SPECIALISATION:  
INTERNAL MEDICINE/OCCUPATIONAL MEDICINE  
ANY OTHER SPECIALISATION WITH THE SAME BASIC MODULE**



**SPECIALIST MODULE - 2 YEARS**

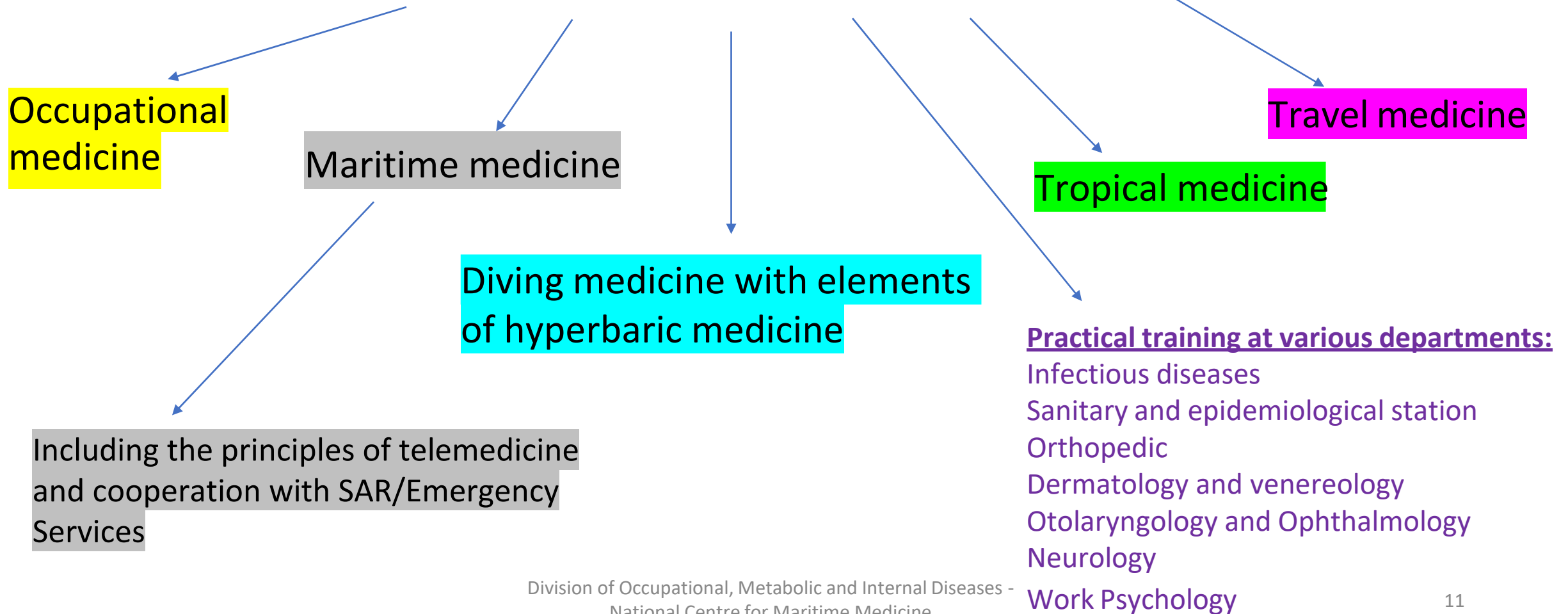
# Maritime medicine as a specialty

## BASIC MODULE – 3 YEARS:

- Emergency situations in internal diseases
  - Cardiovascular and respiratory system diseases
  - Digestive system diseases
  - Endocrinology
  - Nephrology
  - Hematology
  - Rheumatic diseases
  - Nervous system and psychiatric diseases
  - Toxicology
  - Transfusionology
- and others.....

# Maritime medicine as a specialty

## SPECIALIST MODULE (2 YEARS)



# Occupational medicine

- legal basis and organization of occupational medicine,
- professional exposure,
- occupational pathology,
- work psychology,
- conducting tests to determine work ability;



# Marine medicine - course and practical training

- **international maritime conventions** on health protection, crew living conditions and sanitary conditions on ships, drilling platforms and in ports;
- **transport** of patients at sea, **evacuation** of patients from ships;
- **epidemiology** of morbidity among sailors and fishermen;
- hygiene and physiology as well as ergonomics and psychology of work and life on a ship,
- dealing with **accidents at sea**
- occupational **exposure to harmful factors**, including psycho-emotional ones, occurring on ships
- issues related to the supply of water and food to the ship and the disposal of sewage and waste;
- pathophysiology of drowning in sea and fresh water;
- principles of **sanitary supervision** in sea ports,
- regulations regarding **preventive examinations** of sailors, fishermen, divers and oil platform workers.
- principles of radio counseling, **telemedicine**, providing first aid and medical assistance on a ship, medical documentation, stock of medical supplies and devices on a ship;
- organization of the Maritime Search and Rescue Service (**SAR Service**);

# Diving and hyperbaric medicine - course and practical training

- international and **national regulations** for professional, service, sport and recreational diving;
- diver's occupational health and safety;
- hygiene and physiology, ergonomics and psychology of work and life in a hyperbaric facility, the issue of mental health;
- regulations regarding preventive examinations of divers;
- etiology of diving diseases;
- decompression sickness;
- pulmonary barotrauma
- the effect of hyperbaric oxygen and its use in medicine;
- organization of **medical support** for various types of diving;
- **first aid** in diving accidents; treatment of diving accidents;
- health consequences of diving diseases and working in conditions of increased ambient pressure
- participation in **10 hyperbaric sessions**
- participation in procedures for assessing **suitability for work as a diver**

# Tropical medicine – course and practical training

- tropical and parasitic diseases
- physiology and psychology of work in tropical countries;
- dangerous plants and animals in the tropics;
- vectors, transmission diseases and zoonoses in the tropics;
- principles and criteria for health qualification of persons traveling to other countries
- refugees, mass migrations and armed conflicts in tropical countries
- assessment of health status and determination of suitability for work in tropical countries
- knowledge of the etiology, clinical picture, diagnosis and principles of treatment of tropical and parasitic diseases;

# Travel medicine- course and practical training

- **epidemiological situation in the world** in the light of current threats
- **preparation for travel** (medical advice, vaccinations)
- chemoprophylaxis, **antimalarial and antidiarrheal**
- health prevention while traveling, protection against road inflammation
- respiratory, insect bites, food and nutrition hygiene, precautions before and after animal bites, other preventive actions);
- health problems in air, land and sea transport
- acclimatization, heat injuries, high mountain conditions, dangerous land and sea fauna;
- extreme travel;
- **fevers of unknown origin** among travelers;
- health problems after returning from a trip in terms of management, diagnostic and therapeutic.



# The exam

Consist of two parts:

1. Test
2. Oral part



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**Thank you for your attention !**



# Bibliography

- 1. Felczak-Korzybska I, Nahorski WL. Institute of Maritime and Tropical Medicine in Gdynia on the 70(th) anniversary of foundation (1939-2009) - history, staff, achievements. Int Marit Health. 2009;60(1-2):71-4. PMID: 20205132.
- <http://gdyniawktorejzyje.blogspot.com/2012/06/instytut-medycyny-morskiej-i.html>
- <https://www.cmkp.edu.pl/wp-content/uploads/2023/03/0794-program-1-.pdf>