# How do different working hour systems impact the safety and health of maritime workers?

Understanding non- standard work schedules, sleep patterns and negative health outcomes in seafarers



Israel P. Nyarubeli israel.nyarubeli@uib.no

Department of Psychosocial Science

## **Background and Motivation**

I am an Environmental and Occupational health specialist and researcher with focus to advancing occupational health and safety, environmental health and public/global health. I earned my PhD from Faculty of Medicine, University of Bergen. Since 2024, I have led and participated in projects on occupational exposures and health outcomes in mining, manufacturing and transportation sectors. Driven by passion for maritime sustainability, I focus on improving safety and health standards and promoting well-being of seafarers.

### **Project description**

Non-standard work schedules and long shifts are prevalent in the maritime sector, adversely affecting the health and safety of workers. While accidents and personal injuries are reported, there are limited empirical studies. Research is needed to broaden our understanding on how different non-standard work hours such as shift work, sleep patterns impact seafarers' health outcomes in terms of accidents and personal injuries.

Marine sustainability

The project will generate essential knowledge to the maritime organizations and stakeholders to prevent accidents and personal injuries on board, promote worker's well-being and enhance the safety and health of seafarers. This initiative will contribute towards SDG 3 (health for all), SDG 8 (Decent work for all and economic growth) as well as facilitate planning for effective interventions.

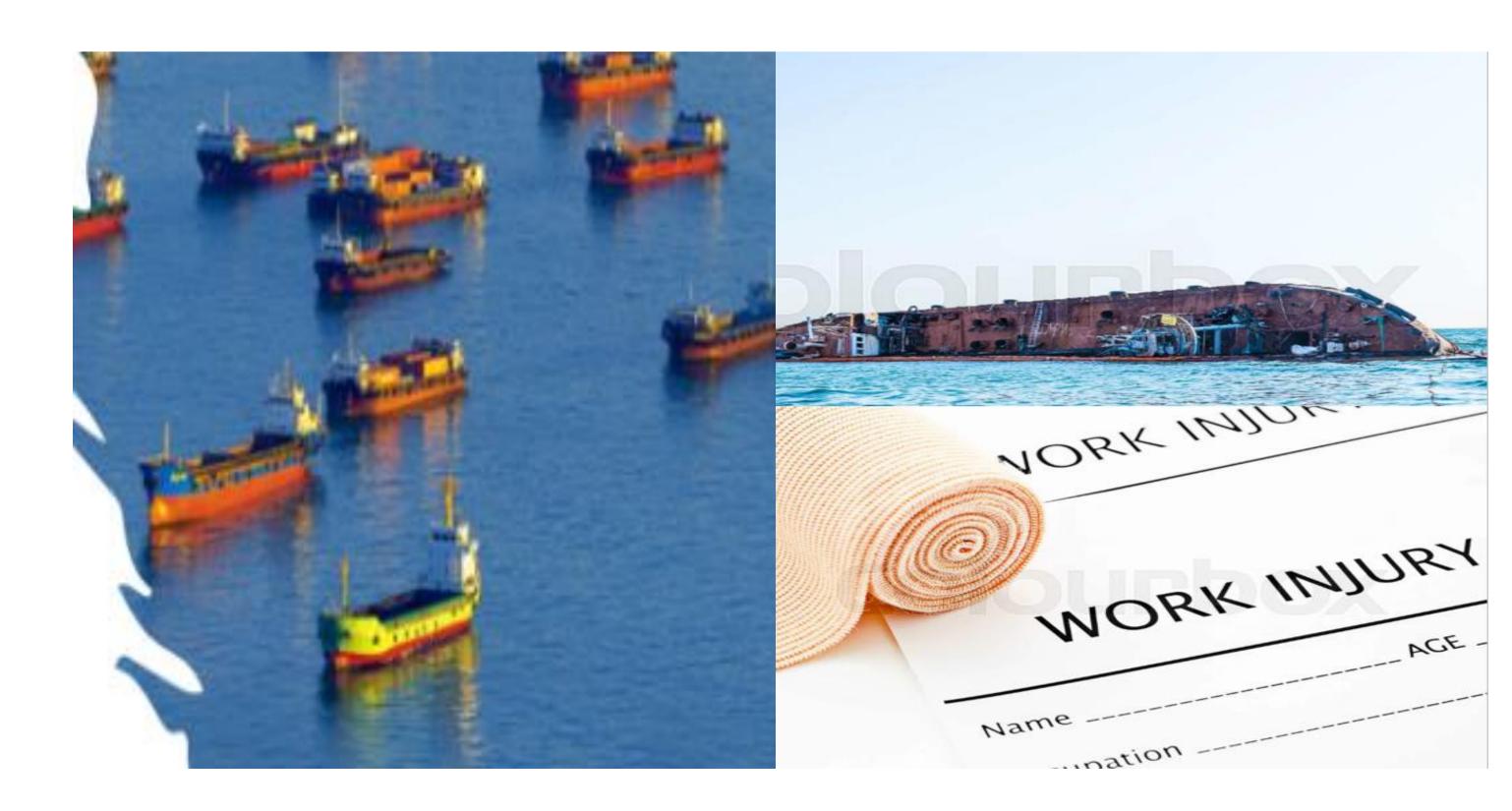
Main questions

What are the work schedules at sea for seafarers on different types of vessels?

What is the incidence of accidents and personal injuries among the crew on different types of ships?

How is the shift work schedules on board related to sleep and cognitive functioning among seafarers?

Maritime work is one of the oldest continuous operations, demanding 24/7-hours activity. With over 50 000 merchant ships trading internationally, the global fleet is manned with nearly 2 million seafarers. Seafaring has been documented as the most dangerous profession in the world by the International Maritime organization (IMO).



#### Aims

- a. Systematic review on association between non-standard work hours and accidents and injuries among seafarers.
- b. Registry and survey of accidents and personal injuries in the Norwegian maritime sector.
- c. Field survey on work schedules for different maritime vessels in Norwegian and International port (Dar es salaam).
- d. Epidemiological study on shift work, sleep and cognitive functioning among seafarers

#### **Supervisory team and Partners**

- **Professor Ståle Pallesen**, Professor Anette Harris, Erlend Sunde- University of Bergen. affiliated with the Bergen Sleep and Chronobiology Network (BeSCN).
- Professor Bente E. Moen, Prof. Magne Bråtveit- University of Bergen. Environmental and Occupational Medicine Research group.
- Project collaborators/ Partners: The Norwegian Maritime Authority, NMA; Tanzania Shipping Agencies Cooperation, TASAC.



















