

# Should Research Misconduct Be Criminalized?

## **Description**

Cardiologist Don Poldermans, a previously unknown figure, has come under scrutiny from experts for his role in potential deaths linked to his research misconduct. Poldermans, a prominent researcher at Erasmus Medical Center in the Netherlands, conducted studies on cardiac surgery practices, with one key study recommending the use of beta blockers before certain heart surgeries. However, it was later discovered that much of Poldermans's data was fabricated. This revelation led to a reevaluation of beta blocker use, with a subsequent meta-analysis showing that using beta blockers increased the likelihood of death after heart surgery. Estimates suggest that following Poldermans's flawed guidelines may have resulted in hundreds of thousands of unnecessary deaths.

The issue of whether research fraud should be a criminal offense is a contentious topic. While some argue that clear cases of intentional data falsification should be prosecuted, others believe that such actions could hinder scientific progress. Instances of misconduct, such as Poldermans's case, highlight the need for accountability in the scientific community. Efforts to address fraud have been limited, with proposals to criminalize misconduct being considered. However, the effectiveness of legal consequences in preventing research fraud remains uncertain. Ultimately, more robust measures to address and prevent scientific misconduct may be necessary to safeguard the integrity of research and protect public welfare.

# **Vocabulary List:**

- 1. **Scrutiny** /'skru:.tɪ.ni/ (noun): Critical observation or examination.
- 2. **Research** /rɪˈsɜːrtʃ/ (noun): The systematic investigation into and study of materials and sources to establish facts and reach new conclusions.
- 3. **Misconduct** / mis'kon.dakt/ (noun): Unacceptable or improper behavior especially by a professional.
- 4. Fabricated /'fæb.rɪ.keɪ.tɪd/ (verb): Invented or concocted typically with deceitful intent.
- 5. **Accountability** /əˌkaʊntəˈbɪləti/ (noun): The obligation of an individual or organization to account for its activities accept responsibility and disclose results in a transparent manner.
- 6. Integrity /In'tegrIti/ (noun): The quality of being honest and having strong moral principles.

# **Comprehension Questions**



#### **Multiple Choice**

1. Who is Don Poldermans?

Option: A cardiologist at Erasmus Medical Center

Option: A physicist conducting research on black holes Option: A politician advocating for healthcare reform Option: A musician specializing in heart-themed songs

2. What was one of Don Poldermans's key studies focused on?

Option: Cancer treatment methods Option: Cardiac surgery practices

Option: Space exploration technologies
Option: Climate change impact on health

3. What was the impact of using beta blockers according to the subsequent meta-analysis?

Option: Reduced the likelihood of death after heart surgery

Option: No effect on the outcome of heart surgeries

Option: Increased the likelihood of death after heart surgery

Option: Improved recovery time after heart surgery

4. Estimates suggest that following Poldermans's guidelines may have resulted in how many unnecessary deaths?

Option: Thousands

Option: Tens of thousands

Option: Hundreds of thousands

Option: Millions

5. What is a contentious topic related to research fraud?

Option: Impact of technology on healthcare Option: Role of ethics in scientific experiments Option: Effectiveness of alternative medicine

Option: Should research fraud be a criminal offense

6. What do some argue about the prosecution of intentional data falsification cases?

Option: It could hinder scientific progress

Option: It has no impact on research integrity
Option: It is necessary for scientific advancement

Option: It will deter future misconduct



## Answer

Multiple Choice: 1. A cardiologist at Erasmus Medical Center 2. Cardiac surgery practices 3. Increased the likelihood of death after heart surgery 4. Hundreds of thousands 5. Should research fraud be a criminal offense 6. It could hinder scientific progress

# Vocabulary quizzes

#### Multiple Choice ( Select the Correct answer for each question. )

1. What is used to describe the rapidly increasing number of COVID-19 cases?

Option: Easing Option: Fluctuating Option: Soaring

 Which adverb emphasizes the need for immediate action?
 Option: Casually ESL-NE

Option: Reluctantly Option: Urgently Option: Diligently

3. What term refers to the critical nature or seriousness of situation?

Option: Trivial Option: Severity Option: Mildness Option: Insignificant

4. What word is used when medication is officially recommended by a doctor?

Option: Optional Option: Customized Option: Prescribed Option: Suggested

5. What term relates to the growth and development of the brain and nervous system?

Option: Muscular

Option: Neurodevelopmental

Option: Respiratory Option: Digestive



6. What is the term for the careful examination or inspection?

Option: Neglect Option: Scrutiny	
Option: Approval	
Option: Superficiality	
7. Which process involves providing guidance or	support to someone in need?
Option: Judging	
Option: Compromising	
Option: Counselling	
Option: Accusing	
8. What term describes inappropriate behavior o	r wrongdoing?
Option: Pristine	
Option: Misconduct	
Option: Ethical	
Option: Compliant	
9. What is the term for a thorough examination a	and repair or renovation?
Option: Neglect	
Option: Overhaul	
Option: Patchwork	
9. What is the term for a thorough examination a Option: Neglect Option: Overhaul Option: Patchwork Option: Minimal	
10. What term refers to the frequency of occurre	
Option: Relevance	
Option: Frequency	
Option: Incidence	
Option: Negligence	
Gap-Fill (Fill in the blanks with the correct	word from the vocabulary list.)
11. The company was struggling due to a huge _	of orders that needed to be
processed.	
12. The new medicine aims to	pain and reduce inflammation.
13. The community was	_ by the natural disaster with homes destroyed and lives
lost.	



14. The stadium has a seating	of 50,000 spectators.	
15. Lack of funding has been a major	to the project's pro	gress.
16. The new software system improved the com	npany's overall	and productivity.
17. Family planning includes methods of birth c	ontrol and	_ to prevent unwanted
pregnancies.		
18. The errors were not intentional but were du	e to several	in the quality contro
process.		
19. Scientists are studying the relationship betw	veen smoking and lung cancer to d	etermine if there is a
direct		
20. Leaders must take	for their actions and decisions.	

Matching Sentences ( Match each definition to the correct word from the vocabulary list. )



- 21. The play depicted a story of love and loss that moved the audience to tears.
- 22. The campaign aimed to raise about the importance of environmental conservation.
- 23. The project's failure was attributed to several in the planning phase.
- 24. The university is known for its groundbreaking in the field of robotics.
- 25. The evidence presented in court was proven to be leading to a mistrial.
- 26. The company prides itself on its commitment to honesty and in all its dealings.
- 27. The theater has a seating of 500 making it suitable for large productions.
- 28. The patient needs to be seen by a doctor due to the severity of the symptoms.
- 29. Effective time management includes tasks based on their importance and deadlines.
- 30. The of flu cases usually rises during the winter months.

### **Answer**

Multiple Choice: 1. Soaring 2. Urgently 3. Severity 4. Prescribed 5. Neurodevelopmental 6. Scrutiny

7. Counselling 8. Misconduct 9. Overhaul 10. Incidence

Gap-Fill: 11. Backlog 12. Alleviate 13. Devastated 14. Capacity 15. Impediment 16. Efficiency 17.

Contraception 18. Oversights 19. Causality 20. Accountability

Matching sentence: 1. Tragic 2. Awareness 3. Oversights 4. Research 5. Fabricated 6. Integrity 7. Capacity

8. Urgently 9. Prioritization 10. Incidence

#### **CATEGORY**

1. Health - LEVEL4

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