



Physical Therapy for internal medicine (PT311)

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Dear student select one of the following research topics and please consider the following instructions :-

- 1- It is not accepted to just enumerate what was discussed in the lecture. You should enrich this background with updated knowledge and physical therapy techniques**
- 2- Each group of students should not exceed 5**
- 3- Formatting: Times New Roman , size 14, titles size 16 , line spacing 2**
- 4- research pages should not exceed 10 pages**
- 5- Summary and highlights should be included at the end of research**
- 6- Illustrative diagrams should be included**
- 7- recent updated references should be included (5-10)**
- 8- You should write in your own words after you read literature concerning your research topic**
- 9- In case of great similarities between represented researches , these researches will be rejected**
- 10- For each research topic , all subtitles should be covered. You can also discuss additional subtitles that is not mentioned**

11- At the end of your research , add a suggestion for future research related to your topic.

Research topics

- Choose one of the following research topics:-

1- COVID 19 and cardiovascular diseases

A- Correlation between cardiovascular diseases and COVID 19

B- Could some drugs for patients with cardiovascular diseases interfere with the pathophysiology of COVID 19

C- Organization of immune system

D- Response of immune system to exercise

E- Adaptations of immune system to exercise

2- Burden of osteoporosis on Egyptian patients with COPD

A- Basic definitions for COPD, osteoporosis

B- Golden standards for diagnosis of COPD and osteoporosis

C- Pathophysiology of COPD associated with osteoporosis

D- General risk factors for osteoporosis in COPD

E- Secrets behind the benefits of applying whole body vibration for these clinical cases

F- Using electrotherapy modalities in physical therapy management for these clinical cases

3- Lower extremity peripheral arterial disease in diabetic patients with coronary artery disease

A- Basic definitions for intermittent claudication , coronary artery disease

B- Principal mechanisms involved in pathogenesis of lower limb arterial disease in diabetics

C- Physical therapy assessment for these clinical cases with determination of them as primary and secondary outcomes gained

D- Incorporating an exercise rehabilitation program for patients with intermittent claudication into a established cardiac rehabilitation program

4- Incidence of phlebolymphe'dema in patients with chronic heart failure

A- Basic definitions for phlebolymphe'dema and chronic heart failure

B- Pathophysiology of phlebolymphe'dema in patients with chronic heart failure

C- Clinical examination to differentiate this type of edema from other causes of lower limb edema

D- Definition and application of complete decongestive therapy (CDT) for these clinical cases

5- Aging and its accompanied changes

A- Definition of aging

B- Age-related changes

C- One of the aging theories

D- Genetics and environmental effects on aging (giving examples is recommended)

E- Difference between age-related changes and pathological changes

6- Assessment of Competency of an Elder to Live Alone

A- Definition of comprehensive geriatric assessment

B- Purpose of comprehensive geriatric assessment

C- Aim and aspects of assessment of an elder competency to live safe alone

D- Red flags

E-Environmental assessment for risk of fall(giving examples is recommended)

7- Painful diabetic peripheral neuropathy as a common complication of diabetes mellitus

A- Neuropathic pain generation pathogenesis

B- Balance interventions to minimize balance dysfunction for thses clinical cases

C- Different types of LASER therapy as electrotherapy modality for improving neurovascular function

D- Other electrotherapy modalities to decrease pain

8- Hypertension in elderly

A- Baroreceptor control of blood pressure

B- Mechanisms underlying brain differences between normotensive and hypertensive individuals

C- Correlation between hypertension and cognition function

D- Blood pressure adaptations and cardiorespiratory fitness response to different exercise training intensities

E- Application of TENS for managing resistant hypertension

F- Different acupuncture points related to hypertension

9- Nonalcoholic steatohepatitis disease (NASH) as an important public health problem

A- Definition and risk factors

B- Pathogenesis

C- Exercise training protocols and the underlying mechanism for improvement

D- Nutritional advices

GOOD LUCK