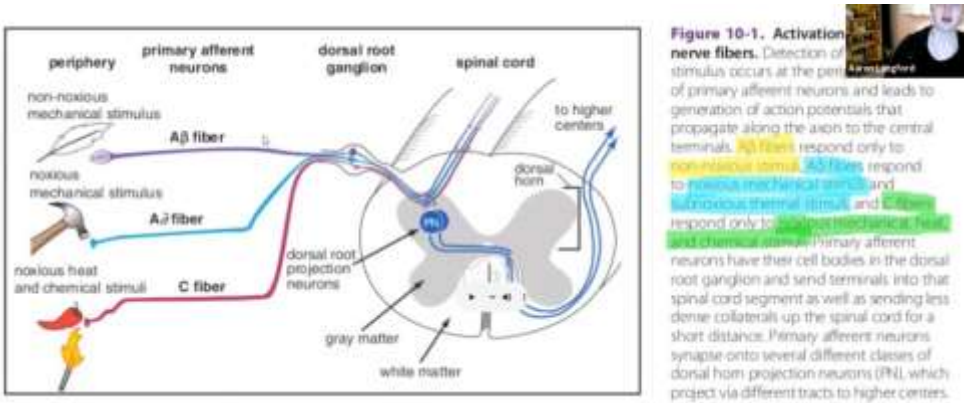
NURS 660 PSYCHOPHARM EXAM 3 LATEST 2023-2024 MARYVILLE UNIVERSITY COMPLETE 200 QUESTIONS AND CORRECT DETAILED ANSWERS WITH RATIONALES|ALREADY GRADED A+

1. Describe different types of insomnia (initial, middle, terminal) and identify which medications are best indicated to treat different types of insomnia.
    - Initial: Trouble falling asleep
        - Treatment:
    - Middle: Trouble staying asleep; Terminal: Waking too early
        - Treatment:
    - Chronic insomnia = excessive/hyper-arousal
    - Primary insomnia = too much arousal at night and day, not tired.
    - Sleep/wake switch = histamine (activating)/GABA(rest)
        - GABAa + benzodiazepines
        - Tuberomammilary nucleus (TMN) - on (wake) switch
            1. Histamine
        - Ventrolateral preoptic nucleus (VLPO) - off (sleep) switch
    - **Caffeine antagonizes adenosine**
    - Lateral hypothalamus - works with SCN, affected by orexin
        - Narcolepsy explained by lack of orexin
    - Suprachiasmatic nucleus = internal clock, pacemaker, regulates circadian rhythm (affected by light dark, melatonin)
        - Melatonin is good for phase delayed sleep (evening melatonin - morning light) and jet lag
            1. MT1 - promote sleep - decreases wakefulness promoting aspect of circadian pacemaker - affects SCN alert signal
            2. MT2 - Phase shifting circadian rhythm location
        - Melatonergic agents work mostly on MT1 receptors, some MT2
            1. Melatonin, ramelteon, tasimelteon, agomelatine
        - Circadian drive - can affect homeostatic drive - adenosine builds up
            1. Can interfere with…
    - Ascending reticular activation system -
        - **radio switch**
        - Alpha 1, M1, and H1 receptors
    - **Z-drugs** = selective GABAa1 -> sleep only, not anxiolytic
2. Distinguish among beta fiber neurons, delta fiber neurons, and C-fiber neurons.

- Primary afferent neurons/nociceptors:
  - **Beta "benign": non noxious stimuli response**
  - **Delta "dual": noxious mechanical (pressure) and subnoxious thermal**

- **C – fiber "critical": noxious mechanical, chemical, and heat stimuli**



3. Explain peripheral neuropathy pain.

Peripheral damage/inflammation stimulating primary afferent neurons (beta, delta, C fibers)

4. Explain the pathophysiology of chronic pain, including the brain circuit it is associated with.

Central sensitization in thalamus and cortex

5. Explain the pathophysiology of anxiety disorders and the associated brain circuits

GABA

Positive Allosteric Modulation (PAM)

BDNF – low production

CSTC loop – Worry (anxious misery, apprehension, expectation, obsession)

Amygdala – Fear (panic, phobia)

Hippocampus – decreased volume

COMP – MET genotype increased anxiety, worry – tendency to obsessions/compulsions

6. Identify and describe signs and symptoms of overdose scenarios and how to medically manage overdose situations.
   - S/Sx: