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Exercise versus drug interventions on mortality outcomes in patients with stroke: An infographic

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Abstract: **Stroke survival rates have improved a lot over the last few years. There is a serious gap between stroke patients being discharged and transitioning to physical recovery programs. In an effort to improve recovery and quality of life, the American Heart Association has urged the healthcare community to prioritize exercise as an essential part of post-stroke care. With the right recovery programs that prioritize exercise for rehabilitation, stroke survivors can "relearn" crucial motors skills to regain a high quality of life. The purpose of this study is to create an infographic about the effectiveness of exercise and drug interventions on mortality outcomes in patients with stroke.**

Keywords: **Exercise, Drug interventions, Stroke, Infographic.**

1. INTRODUCTION

Despite encouraging advances in the early treatment of stroke, at least one third of the 10 million people worldwide with new stroke each year2 remain functionally dependent and as a result experience impairment in activities of daily living. The number of stroke survivors with impairments in activities of daily living is increasing, leading to more people with stroke who are dependent on rehabilitation interventions. To date, no drug treatments are available to enhance rehabilitation. Treadmill based physical fitness training constitutes a non-drug approach in stroke rehabilitation that might not only prevent deconditioning but also show associated benefits on activities of daily living, such as walking and climbing stairs. In the past decade, post-stroke aerobic exercise has gained more attention and recognition from both clinicians and researchers. Aerobic exercise training plays a vital role in promoting aerobic fitness, cardiovascular fitness, cognitive, walking speed and endurance, balance, mobility, quality of life, and other health outcomes among post-stroke patients. The American Heart Association (AHA) also recommends regular aerobic exercise as part of stroke prevention and treatment. Aerobic exercise, the main part of cardiac rehabilitation, is an integral part of stroke rehabilitation and cannot be considered a substitute for conventional drugs or surgery treatments. Recent research reports that the influence of aerobic exercise for poststroke patients and the need to implement post-stroke exercise programs is crucial. [1-10]

Infographics are information graphics that visually convey information and data accumulations. Infographics, which are referred to as methods of making information by visualizing the information, reveal the causal relationship in the informing process. While preparing information design material, the overall aim is to transfer intensive and complex information to the target group easily by reflecting the contents of the subject. The objective is that viewers will easily and quickly understand, learn, and grasp the design created by two different elements, such as information and graphs. [11]

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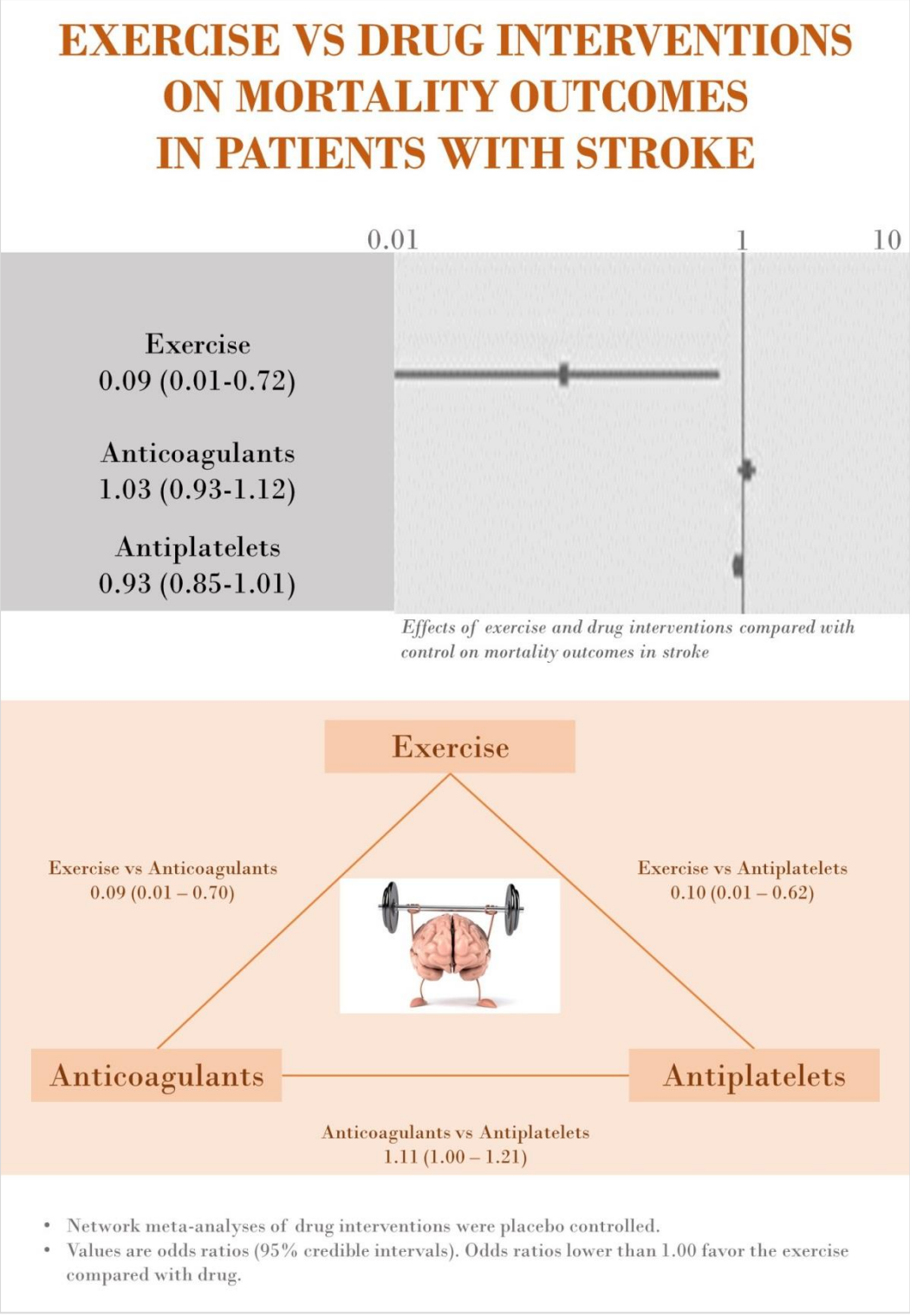
2. RESULTS



Unlike any of the drug interventions, exercise was significantly more effective than control in reducing the odds of mortality among patients with stroke. When compared head to head in network meta-analyses, exercise interventions were more effective than anticoagulants and antiplatelets, albeit with considerable uncertainty owing to the small number of events in exercise trials. Anticoagulants were also marginally worse than antiplatelets. The following infographic summarizes the effectiveness of exercise and drug interventions on mortality outcomes in patients with stroke.

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