Visualizing Chiropractic Motion Palpation Techniques
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Abstract
My research and artistry project involved the creation of two educational posters showing different manipulations that are involved with motion palpation, a chiropractic technique used to diagnose and treat patients. The posters I created are designed to be displayed in a chiropractor’s office to be used as an educational tool and visually inform patients about this technique.

To conduct my research, I analyzed literature, consulted with a chiropractor, and took my own references of each adjustment. After gathering information and references, I drew my illustrations and designed my posters. As a result, I have created two visual aids to help educate patients and promote conversation between chiropractors and their patients.

Aim
Purpose of Project:
• Provide a visual avenue for learning about motion palpation and adjustment techniques
• Provide a tool to spark dialogue between patients and their physicians
• Spread awareness about the connection between research and artistry
• Illustrate the significance of visual communication

Methods
• Read and analyzed literature related to motion palpation, the discipline of chiropractic, anatomy, and physiology
• Used graphite to illustrate drawings
• Utilized Photoshop to design layout of each poster, organize layers, add color, and finish drawings
• Photographed references for each manipulation
• Referred to an anatomically correct skeleton, various different images, and 3D visual aids

Results
• The discipline of chiropractic focuses on examining the structure and function of the spine and limbs and how this affects our health.
• Some chiropractors use motion palpation, which is a diagnostic technique used to examine the motion of the spine and extremities by touching and feeling the motion to locate joint dysfunction.
• The goal of using this technique is to locate joint dysfunction and then alleviate pain or pressure, improve range of motion, and reduce joint restriction by applying an adjustment.
• This technique involves placing a patient’s spine into certain positions and stressing the zygapophysial joints, or Z joints, in a particular plane of motion and adjusting in the same position.
• Z Joint – The junction found between the superior and inferior articular facets on one side of two adjacent vertebrae is known as a zygapophysial joint or Z joint. A left and right Z joint are between each pair of vertebrae.
• Chiropractors study the range of movement in the vertebrae of their patients and then apply an adjustment, or High Velocity Low Amplitude (HVLA) thrust, to restricted joints to reduce joint restriction, increase the range of motion, and improve overall function.
• They seek to decrease pain and muscle spasms due to the nerves supplied to the Z joints. Damage to the Z joints can result in inflammation, which can stimulate nerve endings and cause back pain.
• Spine adjustments introduce movement to the Z joints, which can relieve pressure and pain.
• The normal curves of the spine help absorb the weight and forces applied to the spine; the thoracic and pelvic curves concave posteriorly (kyphosis) while the cervical and lumbar curves concave posteriorly (lordosis). If these curves are accentuated beyond the accepted range of normal, it is possible for a person to experience pain or pressure due to added stress on the Z-joints.
• It is common for postural changes to alter the normal curves of the spine, which can cause back pain.

Conclusions
Why it matters:
• Through this project, I have been able to create two educational posters that will help clarify what motion palpation is and make it easier to learn about and understand this subject.
• Images express ideas, clarify and communicate information, and most importantly, encourage discussions. Visual communication is an important part of our learning process, and without visual aids we would not have a full understanding of most things in our world.
• Contrary to popular belief, research and artistry are not mutually exclusive. Although we do not realize it, we see the connection between them everywhere from textbooks to journals to advertisements we see everyday, and our society has greatly benefited from this relationship.

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