73 - KNOWLEDGE OF STUDENTS OF 1 TO 4 TIMES ON THE ANATOMY AND SYSTEMIC LOCOMOTOR IN FEDERAL INSTITUTE FLUMINENSE, CABO FRIO, RJ.

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Students arriving at Federal Institutes bring their experiences and they can contribute positively to their learning or not. The experiences during the first year in the universities are very important for the persistence in higher education and academic success of students (Pascarella & Terenzini, 2005; Reason, Terenzini & Domingo, 2006). What is surprising is the difficulty some students understand the lessons and anatomical structures at the beginning of each semester when the course is presented to them. And what is more surprising, and this fact is that some students remain with this difficulty after going through the discipline of anatomy systemic and locomotor. Concerned about this Fornaziero, (2003), pointed technological innovations to be used to make learning more interesting Anatomy and contribute to the quality of the teaching of anatomy. Therefore, a doubt arose that sought to remedy this research: that knowledge in anatomy students arrive at Federal Institutes? This is the main focus that prompted the implementation of such research in order to identify the knowledge of students in the 1st period of the Instituto Federal Fluminense Campus Cabo Frio RJ Course of Natural Sciences, in relation to systemic and locomotor anatomical structures.

The teacher who works with the discipline of human anatomy, realize in their daily practice that does not have as much progress in his teaching because despite the advanced technology, bones, muscles and tendons are still bones, muscles and tendons. It is perceived that the teaching of human anatomy, despite the evolution of technology and teaching methods, no major changes. Stacciarini and Esperidião (1999) state that the content was and continues to be made mostly of expository for, which creates a restriction on the use of other mechanisms for the implementation of teaching, which does not make the critical student. Even with the use of technological resources, such as multimedia projectors, not reached the practical reality of the students.

Costa (2007 and Horne et al. 1990) reported that the structure of classes in human anatomy presents two distinct periods: the theoretical part, which introduces concepts and definitions of the systems and organs of the human body and practical part, which utilizes is usually natural anatomical specimens in the laboratory, making the study of the general characteristics and their inter - relationships.

As reported by Guimarães and Silva (2004), the faculty is responsible for providing academic moments of appreciation, knowledge and awareness of body structures, formed by biological, stimulating them to a relationship with contents of anatomy and his own being biological.

But the application model of discipline may interfere with student learning. Piazza (2012) conducted a survey which investigated the possible causes of truancy and exclusion in the discipline of Human Anatomy courses in Physical Education (Degree and Bachelor's), the Methodist University of IPA. The research raised issues and implications with respect to the method of teaching the subject teacher and compared the traditional method of teaching human anatomy with the most current and innovative methods. You can find that a different method of teaching Human Anatomy prevents students feel excluded or abandon the discipline.

Perreira et al (2007) found the teaching of Human Anatomy course in Biology at the University Pompeu Fabra in Barcelona and found that students demonstrated an increase in the satisfaction of learning when the teacher used new teaching strategies, such as using the internet, slides in high definition and other multimedia materials, without leaving aside the blackboard, books and classes in cadavers. Thus there was an increase in the adoption of the students in the discipline. McLachlan and Patten (2006) tell us that the human anatomy is widely appreciated, being among the most important components of medical education. The study using cadavers dissected is seen as the best alternative medicine courses, for example.

Through teaching and learning in human anatomy, Damasceno (2003) sought to examine aspects of the organization of teaching discipline Human Anatomy Physiotherapy courses, such as assessment, workload and teaching methodology, specifically the one used in practical classes. Sixteen teachers from two universities completed a questionnaire with open questions about the topics mentioned. The results showed that teachers have a traditional approach to learning as memorizing and fixing the content, although they believe that knowledge of human anatomy is essential to professional performance that exceeds the conventional and routine procedures.

Wood (2008) considers that the human anatomy is the discipline foundation of all clinical disciplines, so a discipline essential for health.

The goals of teaching human anatomy are needed to know the anatomy and the relationships between them; recognize anatomical structures through imaging techniques and understand the anatomical basis of disease. CORREDERA and SANTANA (2003).

The study of anatomy characterized by a regional subdivision of the human body and topography, followed by the description: (PIATTO; BATIGÁLIA, 2000).

The anatomy (Anatome = cut into pieces, separating cut) so defined because it refers to the study of the structure and the relationships between these structures. Anatomy is a science that studies the physical structure of living beings. The internal and external organs, their interactions, operation, location and layout are the main aspects studied by anatomy. Already Anatomy focuses on the study of the human body and is considered one of the basic sciences of medicine. (Dangelo and Fatinni, 2007).

The Macroscopic anatomy studies the human body and as the focus receives several names: OR DESCRIPTIVE SYSTEMATIC ANATOMY: study analytically (separation of a whole into its elements or component parts) and separately the various structures of the systems that constitute the body, skeleton, the muscles, circulatory etc.; Surveying or Regional Anatomy: studies in a synthetic way (method, process or operation of bringing together different elements and merge them into a whole), the relationship between the structures of the regions bounded body; Anatomy of Surface or Alive: studying the projection of organs and structures deep in the body surface, is of great importance for the understanding of clinical semiology (study and interpretation of the set of signs and symptoms observed in the examination of a patient); Functional Anatomy: studying functional segments of the body, establishing reciprocal relationships and functions of various structures of different systems;

Applied Anatomy - stresses the importance of anatomical knowledge to medical activities, medical or surgical, and even for artistic; Radiological Anatomy: studying the body using the properties of X-rays and constitutes, with the Surface Anatomy of the morphological basis of clinical examination techniques; Comparative Anatomy: studying the anatomy of different animal species with particular focus on the ontogenetic development (development of an individual from conception to adulthood) and phylogenetic (evolutionary history of a species or any other taxonomic group) of different organs.

For the anatomical study of the human body, the material used is the corpse or corpse parts. Currently, knowledge must be transposed directly to the practical use and clinical student, making it feasible to use synthetic anatomical models, specific software, imaging and surface anatomy, approaching the basic content of the specific. The word corpse is an old Latin acrostic, Caro date vermibus which means flesh given to worms. To be handled in the classroom, the play deserves respect and care, such as the legacy transmitted by Karl von Rokitansky (1804-1878), physician and scholar of pathological anatomy. Dissector obsessive, he left us one of the maxims of anatomy: the unknown corpse meditation (Leandro, 2010).

The following structures were separated for this search: heart, spleen, thyroid, kidney, carpal bones, fibula, radio, clavicle, femur, rotator cuff, biceps, supinator, quadriceps, pectineus, tarsal bones, cremaster muscle, tibia and deltoid.

The heart is located in the thoracic cavity, between the 2nd and 5th ribs, between the lungs, with 2/3 to the left, the apex downwards and base upwards and left and right in a region called the middle mediastinum. Its apex is slightly anterior while the base slightly posterior position. The spleen is located in the upper left abdomen under the diaphragm and behind the lower ribs and costal cartilages (JACOB STANLEY W et/al.1990).

The human thyroid is composed of two lobes that are disposed on either side of the trachea and in the middle line are connected by a thin neck, which extends on the anterior surface of the trachea. (DANGELO and FATTINI, 2007).

The kidneys are located in the dorsal part of the tummy, abdominal peritoneum after just below the diaphragm, one on each side of the spine at this position is protected by the lower ribs and also a layer of fat. The poles are above the level of the upper edge of the 12th thoracic vertebra, and the poles below the level of the 3rd lumbar vertebra. The right kidney is usually lower than the left, possibly because of its close relationship with the liver. (JACOB STANLEY W et/al.1990)

The carpal bones are located in the hand. Eight bones distributed in two rows: proximal and distal. Proximal row: Scaphoid, Lunate, Pyramidal and pisiform and distal row: Trapezium, Trapezoid, Capitate, Hamato. (MIRANDA, 2000).

The thin fibula is located in the leg, posterior- laterally to the tibia and serves mainly for fastening muscles. It has no weight bearing function. Articulates with the tibia (proximally and distally) and the talus distally.

The radius is the lateral bone of the forearm. It is the shorter of the two bones of the forearm. Articulates proximally with the humerus and ulna and distally with the ulna and the carpal bones. It has two epiphyses and a shaft.

The clavicle forms the ventral portion of the shoulder girdle. It is a long bone curved like an "S" italic, located almost horizontally just above the first rib. Articulates medially with the manubrium of the sternum and laterally with the acromion of the scapula. Has two ends, two sides and two edges.

The femur is the longest bone in the body and heavy. The consists of a femur diaphysis and epiphysis two. Articulates proximally with the hip bone and distally to the patella and tibia. Except for the femur, the tibia is the largest bone in the body that supports weight. Is located on the anteromedial leg. It has two epiphyses and a shaft. Articulates with the femur proximally and distally to the fibula and talus and fibula.

The rotator cuff is comprised of four muscles located in the shoulder joint. The main function of this group is to keep the humeral head against the glenoid cavity, strengthen the joint capsule and actively resist and unwanted displacements of the humeral head anteriorly, posterior and superior.

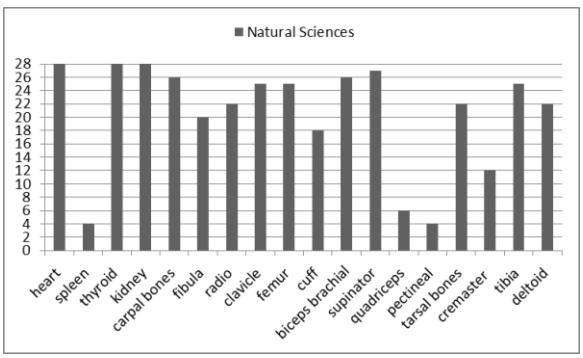
Are the following muscles: supraspinatus, with medial insertion in the supraspinatus fossa on the scapula, lateral insertion on the superior facet of the greater tubercle of the humerus innervation: Supra scapular nerve (C5 and C6) and Action: Abduction of the arm; Infra Spinal - with medial insertion in the infraspinatus fossa of the scapula, lateral insertion on the middle facet of the greater tubercle of the humerus innervation: Supra scapular nerve (C5 and C6) and action: lateral rotation of the arm; Smaller Round with medial insertion: 2/3 of the upper lateral border of the scapula, lateral insertion: inferior facet of the greater tubercle of the humerus innervation: Axillary nerve (C5 and C6) and action: lateral rotation and adduction of the arm and subscapular, medial insertion with the subscapular fossa, lateral insertion on the lesser tubercle, innervation: Upper and Lower subscapular nerve - Volume posterior (C5 and C6) and action: medial rotation and adduction of the arm. (JACOB STANLEY W et/al.1990; MIRANDA, 2000; DANGELO and FATTINI, 2007).

The deltoid muscle has its origin on the spine of the scapula, acromion and the lateral third of the clavicle and inserting in deltoidea or "V" deltoid. Innervation is Axillary nerve (C5 and C6), with the following actions: abduction of the arm assists in flexion, extension, lateral and medial rotation, flexion and extension of the horizontal arm. Stabilization of the shoulder joint. (JACOB STANLEY W et/al.1990; MIRANDA, 2000; DANGELO and FATTINI, 2007).

The method used was through a questionnaire where students had access to 18 questions on the gross anatomy of the human body and scored on a figure that was with some squares and the same would have to mark the box in an "X " corresponding to the correct question. The questions are related to the following structures: heart, spleen, thyroid, kidney, carpal bones, fibula, radio, clavicle, femur, rotator cuff, biceps, supinator, quadriceps, pectineus, tarsal bones, cremaster muscle, tibia and deltoid. The research took place at the Institute Federal Fluminense - Campus Cabo Frio RJ. Participated 28 students of Natural Sciences, of the morning.

In relation to the class of the course of Nature, we obtained the following result for the number of correct answers for each question:

For the 28 students of Natural Sciences, investigated gave the following result:



It is concluded that in relation to the knowledge of students of the 1st course of Natural Sciences of the Federal Fluminense - Campus Cabo Frio, RJ, in relation to anatomical structures have the following percentage of hits: heart (100%), spleen (14%), thyroid (100%), kidney (100%); carpal bones (93%), fibula (71%), radio (79%); clavicle (89%); femur (89%); cuff (64%); biceps brachial (71%); supinator (96%); quadriceps (21%); pectineal (14%); tarsal bones (79%); cremaster muscle (43%), tibia (89%); deltoid (79%).

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KNOWLEDGE OF STUDENTS OF 1 TO 4 TIMES ON THE ANATOMY AND SYSTEMIC LOCOMOTOR IN FEDERAL INSTITUTE FLUMINENSE, CABO FRIO, RJ.

ABSTRACT

Students arriving at Federal Institutes bring their experiences and they can contribute positively to their learning or not. The teacher who works with the discipline of human anatomy, realize in their daily practice that does not have as much progress in his teaching because despite the advanced technology, bones, muscles and tendons are still bones, muscles and tendons. Therefore, a doubt arose that sought to remedy this research: that knowledge in anatomy students arrive at Federal Institutes? Seeking to identify the knowledge of students in the 1st period of the Federal Fluminense Campus Cabo Frio RJ Course Natural Sciences, in relation to anatomical structures systemic and locomotor, using the method of questionnaire, where students have access to 18 questions about the gross anatomy of the human body and scored on a figure that was with some squares and the same would have to mark the box in an "X " corresponding to the correct question. The questions are related to the following structures: heart, spleen, thyroid, kidney, carpal bones, fibula, radio, clavicle, femur, rotator cuff, biceps, supinator, quadriceps, pectineus, tarsal bones, cremaster muscle, tibia and deltoid. For the 28 students of Natural Sciences, investigated gave the following result, concluded that in relation to the knowledge of students of the 1st course of Natural Sciences of the Federal Fluminense - Campus Cabo Frio, RJ, compared anatomical structures have the following percentage of correct answers: heart (100%), spleen (14%), thyroid (100%), kidney (100%); carpal bones (93%), the fibula (71%); radio (79%); clavicle (89%); femur (89%); rotator cuff (64%); biceps brachial (71%); supinator (96%); quadriceps (21%); pectineal (14%); tarsal bones (79%); cremaster muscle (43%), tibia (89%), deltoid (79%).

KEYWORDS: Anatomy, higher education, human body.

CONNAISSANCES DES ÉLÈVES DE 1 LA 4 REPRISES SUR L'ANATOMIE ET LA SYSTEMIQUE LOCOMOTRICE FLUMINENSE EN INSTITUT FÉDÉRAL, CABO FRIO, RJ.

RÉSUMÉ

Les étudiants qui arrivent à polytechniques fédérales apportent leur expérience et qu'ils peuvent contribuer positivement à leur apprentissage ou non. L'enseignant qui travaille avec la discipline de l'anatomie humaine, se rendent compte dans leur pratique quotidienne qui ne possède pas autant de progrès dans son enseignement parce que, malgré la technologie de pointe, les os, les muscles et les tendons sont toujours les os, les muscles et les tendons. Par conséquent, un doute a surgi qui

a cherché à remédier à cette recherche: que la connaissance des étudiants d'anatomie arriver à polytechniques fédérales? Cherchant à identifier les connaissances des élèves en 1re période de la Federal Fluminense Campus Cabo Frio RJ cours en sciences naturelles, en relation avec les structures anatomiques systémiques et locomoteur, en utilisant la méthode du questionnaire, où les étudiants ont accès à 18 questions sur l' anatomie du corps humain et a marqué sur un chiffre qui était avec quelques places et les mêmes devront cocher la case dans un «X» correspondant à la bonne question. Les questions portent sur les structures suivantes: le coeur, la rate, la thyroïde, les reins, les os du carpe, du péroné, de la radio, de la clavicule, du fémur, coiffe des rotateurs, biceps, supinateur, les quadriceps, pectiné, les os du tarse, cremaster musculaires, le tibia et le deltoïde. Pour les 28 étudiants de sciences naturelles, l'enquête a donné le résultat suivant, conclu qu'en ce qui concerne les connaissances des élèves de la 1re cours de sciences naturelles de la Federal Fluminense - Campus de Cabo Frio, RJ, comparé structures anatomiques ont le pourcentage suivant de bonnes réponses: coeur (100%), de la rate (14%), de la thyroïde (100%), le rein (100%); os du carpe (93%), la fibula (71%); Radio (79%); clavicule (89%); fémur (89%); la coiffe des rotateurs (64%); biceps brachial (71%); supinateur (96%); quadriceps (21%); pectinés (14%); os du tarse (79%); cremaster musculaires (43%), le tibia (89%) , la région deltoïde (79%).

MOTS-CLÉS: anatomie, l'enseignement supérieur, le corps humain.

CONOCIMIENTO DE LOS ALUMNOS DE 1 A 4 VECES EN LA ANATOMÍA Y SISTÉMICO LOCOMOTOR FLUMINENSE INSTITUTO FEDERAL, CABO FRIO, RJ.

RESUMEN

Los estudiantes que llegan al Instituto Federal aportar su experiencia y pueden contribuir de manera positiva a su aprendizaje o no. El profesor que trabaja con la disciplina de la anatomía humana, se da cuenta en su práctica diaria que no tiene tantos progresos en su enseñanza, porque a pesar de la tecnología avanzada, los huesos, los músculos y los tendones son todavía los huesos, músculos y tendones. Por lo tanto, surgió una duda que buscó remediar esta investigación: que el conocimiento de los estudiantes de anatomía llegar al Instituto Federal? Tratar de identificar el conocimiento de los estudiantes en la primera época del Fluminense Campus Cabo Frio RJ Curso Ciencias Naturales Federal, en relación con las estructuras anatómicas sistémicos y locomotor, utilizando el método del cuestionario, donde los estudiantes tienen acceso a 18 preguntas sobre el anatomía del cuerpo humano y anotó una cifra que fue con algunas plazas y los mismos tendrán que marcar la casilla con una "X " correspondiente a la pregunta correcta. Las preguntas están relacionadas con las siguientes estructuras: corazón, bazo, tiroides, riñón, huesos del carpo, peroné, radio, clavícula, fémur, manguito rotador, bíceps, supinador, cuádriceps, pectíneo, los huesos del tarso, el músculo cremáster, la tibia y el músculo deltoides. A los 28 estudiantes de Ciencias Naturales, investigados dieron el siguiente resultado, la conclusión de que en relación con el conocimiento de los alumnos del 1 º curso de Ciencias Naturales de la Federal Fluminense - Campus Cabo Frio, RJ, en comparación estructuras anatómicas tienen el siguiente porcentaje de respuestas correctas: corazón (100%), bazo (14%), la tiroides (100%), riñón (100%); huesos del carpo (93%), el peroné (71%); Radio (79%); clavícula (89%); fémur (89%); manguito de los rotadores (64 %) ; bíceps braquial (71 %) ; supinador (96 %) ; cuádriceps (21%); pectíneos (14%); huesos del tarso (79%); cremáster musculares (43%), la tibia (89%), deltoides (79%).

PALABRAS CLAVE: anatomía, la educación superior, el cuerpo humano.

O CONHECIMENTO DE ALUNOS DO 1º AO 4º PERÍODOS EM RELAÇÃO À ANATOMIA SISTÊMICA E LOCOMOTORA NO INSTITUTO FEDERAL FLUMINENSE, CABO FRIO, RJ.

RESUMO

Os alunos que chegam aos Institutos Federais trazem suas experiências e estas podem contribuir positivamente para o seu aprendizado ou não. O professor que atua com a disciplina de anatomia humana, percebe em sua prática diária que não tem muito como evoluir em seu ensinamento porque apesar da tecnologia avançada, ossos, músculos e tendões continuam sendo ossos, músculos e tendões. Por isso, surgiu uma dúvida que se procurou sanar nesta pesquisa: com que conhecimento em anatomia os alunos chegam aos Institutos Federais? Buscando identificar o conhecimento de alunos do 1º período do Instituto Federal Fluminense do Campus Cabo Frio RJ do curso de Ciências da Natureza, em relação às estruturas anatômicas sistêmicas e locomotoras, utilizando o método de questionário, onde os alunos tiveram acesso a 18 perguntas sobre a anatomia macroscópica do corpo humano e marcaram em uma figura que se encontrava com algumas quadrículas e o mesmo teria que marcar na quadrícula um “X” correspondente à pergunta correta. As perguntas são relacionadas às seguintes estruturas: coração, baço, tireoide, rim, ossos do carpo, fíbula, rádio, clavícula, fêmur, manguito rotador, bíceps braquial, supinador, quadríceps, pectíneo, ossos do tarso, músculo cremáster, tíbia e deltoide. Para os 28 alunos do curso de Ciências da Natureza, investigados obteve-se o seguinte resultado, concluindo-se que em relação ao conhecimento de alunos do 1º do curso de Ciências da Natureza do Instituto Federal Fluminense – Campus Cabo Frio, RJ, em relação às estruturas anatômicas têm-se o seguinte percentual de acertos: coração (100%); baço (14%); tireóide (100%); rim (100%); ossos do carpo (93%); fíbula (71%); rádio (79%); clavícula (89%); fêmur (89%); manguito rotador (64%); bíceps braquial (71%); supinador (96%); quadríceps (21%); pectíneo (14%); ossos do tarso (79%); músculo cremáster (43%); tíbia (89%); deltóide (79%).

PALAVRAS-CHAVES: Anatomia, ensino superior, corpo humano.