Background
Cardiovascular disease is the most common cause of disqualification from competitive sports. The pre-participation screening is fundamental in order to detect these diseases and is based on clinical history and physical examination in addition to a 12-lead electrocardiogram. Additional tests are required only for those with any abnormality in the initial evaluation [1-2]. According to previous studies, the most common cardiovascular diseases that disqualify young athletes are different from those associated to veteran athletes: congenital arrhythmias vs. subclinical coronary disease, respectively [3-5].

Objective
To analyse and compare, amongst young and veteran athletes, the cardiovascular causes of disqualification from competitive sports, consecutively screened at a sports medicine unit in a decade (2007-2017).

Methods
Descriptive-comparative retrospective study. The study population consisted of all case files from athletes disqualified from competitive sports due to cardiovascular disease during the 2007-2017 period. A sample of 58 case files was divided into group A (young athletes, < 35 years, n A= 36) and group B (veteran athletes, ≥ 35 years, n B=22). It was evaluated the clinical history, sport disciplines, symptoms and cardiovascular diseases. Descriptive statistics and statistical inference (Chi-squared distribution) were applied for the characterization and comparison of the study variables.

Results
Both sample groups consisted mainly in male athletes (group A 94.4%, group B 100%). The most referred symptom in group A was palpitations (16.7%), whereas in group B was chest pain (36.4%). There was a significant association between relevant cardiovascular history and veteran athletes. The most frequent cardiovascular diseases in group A were hypertrophic cardiomyopathy (19.4%), arterial hypertension (11.1%), left ventricle noncompaction (8.3%) and great vessel transposition (8.3%). Arterial hypertension (50%) and coronary disease (45.4%) were the most frequent diseases that disqualified the practice of competition sports in veteran athletes. It's important to emphasize that some veteran athletes presented simultaneously more than one cardiovascular cause of disqualification.

Conclusions
The most frequent cardiovascular diseases in groups A and B matched those found in literature [3-5]. The prevalence of hypertrophic cardiomyopathy and coronary disease in the respective groups may be associated with a higher awareness towards the dangers of these particular diseases in the practice of competition sports. The data in this study confirms the key role of pre-participation screening for the identification of cardiovascular diseases that can cause sudden cardiac death during sport.

References

Keywords
Cardiovascular diseases, Competitive sports, Pre-participation screening.

Bioethics, health promotion and sustainability: interfaces in higher education
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BMC Health Services Research 2018, 18(Suppl 2):O128

Background
Universities are essential institutions for health promotion (HP) [1]. As they have their own ethos and distinct cultures, they may act as potential enhancers of the conceptual frameworks of HP and interdisciplinary values such as equity, social justice and sustainable growth [2]. Bioethics, as a transversal discipline, seeks to ethically analyse and systematize such values, strengthening the synergy between health and sustainability [3]. Bioethics is a reflexive, mutually shared and interdisciplinary tool whose goal is to promote health and sustainability in an integrated and coherent way, adapting life actions in their equitable and inclusive characters.

Objective
1) Identify how bioethics takes place in daily life and how it is possible to establish links between scientific and ethical knowledge, in order to avoid negative impacts on people's lives; 2) Describe the appropriate bioethical tools (principles) for intervention in the context of higher education (HE), HP and sustainability.

Methods
Exploratory-descriptive methodology using a quasi-qualitative approach [4]. Sample: University teachers from Rio Grande do Sul/Brazil, random
sample, probabilistic sampling by convenience, CI = 95%, n = 1400 persons. The research was approved by the Research Ethics Committee of the Hospital de Clínicas de Porto Alegre (HCPA)/Brazil, Ethics Committee of the Universidade Federal do Rio Grande do Sul (UFRGS)/Porto Alegre, receiving the approval number CAAE 55066616.8.0000.5327/Plataforma Brasil/Brazil. The interviews were carried out after receiving the informed consent from the participants, taking into account the assumptions of the National Health Council Brazil (CNS) 466-2012.

Results

Beyond the principalistic formulation - charity, non-maleficence, justice and respect for autonomy [5], certain subjacent referentials, such as, solidarity, shared commitment, and health environment/sustainability were evoked, causing a positive impact on HP, individual and collective well-being, quality of life, inclusion and social justice in the University environment.

Conclusions

HE upholds a fundamental role in HP for their faculty teachers. Universities act as places for investigation and learning in a way that it involves HP activities [6]. Bioethics, as a transdisciplinary activity, seeks to help building qualified actions in health, which uphold and promote well-being, cohesion, inclusion, sustainability and social justice, with the respective conceptual clarity that resides therein [2, 7].

References


Keywords

Bioethics, Health Promotion, Higher Education, Sustainability.

O129

Pilot program to develop clinical skills in counseling-based motivational interview (CBMI) to prevent obesity in Chile

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BMC Health Services Research 2018, 18(Suppl 2):O129

Background

To influence mediator variables of behavioural change in health and the adherence to treatment in an individual context, health professionals and users must develop a help-based relation mediated by effective communication. At the same time, health professionals must trigger processes in the users that allow them to recognize and develop intrinsic motivation towards change. In this sense, a pilot program is proposed for training CBMI for primary health care (PHC) nutritionists that develops knowledge and tools to foster behavioural change in users. The pilot project was developed as part of the Chilean health program “Vida Sana”.

Objective

Describe a training pilot program to develop clinical skills in CBMI, for PHC nutritionists, to prevent obesity in Chile.

Methods

A training program was built comprised by 34 face-to-face hours and 8 hours of accompaniment at the workplace for 13 Nutritionists. The program was based on a constructivist approach centred on the development of skills in the following sequence: critical analysis for regular practice, adherence comprehension and behavioural change, communication skills, motivational interviewing skills, skill integration in a simulated and real situation. The program employed psychometric scales for motivation, beliefs and self-efficacy for CBMI, video analysis, observations performed at the Centre for Clinical Skills at the Facultad de Medicina de la Universidad de Chile and accompaniment at PHC centres.

Results

Participant knowledge increased on average 5.25 to 20.85 (p = 0.008). The average of total points did not vary at the beginning or at the end (74 pts). Effective beliefs increased from 61.3 to 68.7 (p < 0.05) and self-efficacy from 1617 to 1851 (p < 0.05). Observation and video analysis showed that Nutritionists went from delivering information to open and strategic inquiring during the course. Accompaniment showed that skills were deepened and the level of satisfaction improved with practice.

Conclusions

This is an innovative program that incorporates CBMI and defines a methodology centred on reflection, practice and accompaniment in real and simulated situations. It is necessary to evaluate the effects in indicators that measure user behaviour and the effect and impact on adult obesity. This training program represents a tool to promote behavioural change and adherence in PHC to prevent obesity.

Acknowledgements

The project was financed by CONICYT: FONIS SA160122.

Keywords

Behavior Change, Motivational Interview, Professional Education, Obesity, Nutritionists Skills.

O130

Childhood body fat and motor competence in elementary school (5 to 9 years old)

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BMC Health Services Research 2018, 18(Suppl 2):O130

Background

Obesity rates have increased globally in the last decades, justifying the denomination “public health epidemic”. According some studies [1], in Portugal, childhood overweight and obesity affects about 31.5% of elementary school children, with higher values for girls, except between 7.5 and 9.0 years old. Overweight and obesity are strictly related with childhood motor competence [2]. To access overweight and obesity, among others, is recommended the body fat percentage (BFP), classified by age and gender by McCarthy centiles of BFP [3].

Objective

The main objectives of this investigation are: 1) to characterize childhood elementary school overweight/obesity and compare it by gender and age; 2) to correlate childhood elementary school overweight/obesity with motor competence.

Methods

Data was collected from 604 children’s between 5 to 9 years old (7.40 ± 1.16 years old; 295 female) of the 10 elementary schools from