



Abstracts selected for publication

At the 25th International HPH Conference in Vienna, 10 abstracts were awarded for their scientific level. The abstracts were chosen amongst all the abstracts presented in the Conference Abstract Book.

Effects of Using Situation Simulation Program in Nutrition Education on Healthy Eating Behaviors in Elementary School Children

CHANG Pei-Tzu, YANG Yu-Ru, YEUNG Chun-Yan

Introduction

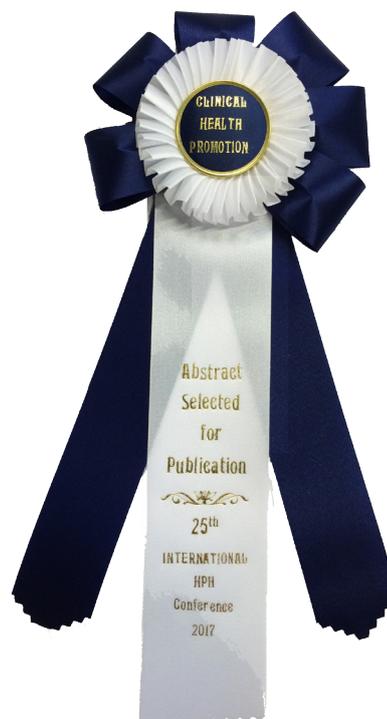
According to the Nutrition and Health Survey in Taiwan (NAHSIT 2001-2002) one in three boys and one in four girls in elementary school were overweight or obese. The purpose of this study was to use Situation Simulation Program and shopping practice to boost the elementary school children's nutrition knowledge, eating principles and behaviors.

Purpose/Methods

13 elementary school children voluntarily participated in this program. We measured their height and body weight before nutrition education intervention. The children were asked to fill out a questionnaire measuring their nutrition knowledge and practice before and after the intervention in order to evaluate its effectiveness. The teaching sessions of three days nutrition education intervention included learning healthy body control, healthy eating principles, healthy eating behaviors (my plate), nutrition facts labels and Traffic Lights foods. After completing the sessions, the children were assigned a task with a convenience store shopping practice. The children experienced various typical grocery products like milk, juice, cookies, etc and what they chose were recorded.

Results

Among the 13 children (eight boys and five girls), mean age 9.2 ± 1 years, mean height 140.7 ± 9.2 cm, mean weight 46.9 ± 8.4 kg were recorded, six children were overweight based on their age. The overall mean scores of nutrition knowledge were improved after education intervention. Furthermore, the attitudes toward checking nutrition facts label before making a decision and having a daily balanced diet were also improved after intervention. On the Traffic Lights foods selection, 85% of the children chose green light foods, 15% yellow and none red.



Conclusions

The Situation Simulation program had immediate effect and helped children to improve nutrition knowledge and correct eating behavior. We thus highly recommend this program to children in elementary school. This health-promotion program could boost children's learning and enhance their confidence.

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Asylum seekers and healthcare seekers: healthy migrant effect and empowerment

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Introduction

Asylum seekers who land on the Italian coast are hosted on Italian territory by an extensive network of reception organizations. Local cooperatives with hosting facilities aim to meet people's basic needs. Since 2014, the local Health Authority of Reggio Emilia has been working in close collaboration with cooperatives in order to recognize the refugees' entitlement to healthcare and access to services.

Purpose/Methods

The local government authority provides information on the new arrivals to the cooperatives; they pass on the data to the other various levels (Administration and Outpatient Service). The Administration prepares the health cards for immigrants to have access to healthcare. People arriving on the territory are given a medical examination within a few days of their arrival, with the main purpose to detect contagious diseases. Active TB screening with chest X ray is performed. The Outpatient Service that provides health care and prevention activities is specialized for 20 years in the management of the immigrants.

Results

In the last two years 7500 examinations and 6424 vaccinations were carried out. Up to 31 August 2016, they were diagnosed 35 cases of scabies, 6 of pulmonary tuberculosis and 35 of latent tuberculosis infection; all patients have completed the prescribed treatment correctly. All women have an interview and an examination with a midwife. Cultural mediators were constantly present with the health care professionals and the patients.

Conclusions

These last two years of collaboration between Hosting Cooperatives and the Health Authority have seen a gradual improvement in the design of social-healthcare pathways to provide health assistance and of educational projects for the hosted immigrants; as part of the collaborativ relationship for the empowerment of asylum seekers, various professional training meetings of healthcare workers and educators have already been held.

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Health-related quality of life among subjects with long-term mental symptoms

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Introduction

There is a need for measuring health-related quality of life (HRQL) to supplement public health's measures of morbidity and mortality. An individual's subjective perception of physical, mental and social functioning and well-being is important in measuring HRQL. It is also necessary to assess HRQL in vulnerable populations and to produce knowledge promoting HRQL.

Purpose/Methods

The purpose of this study was to examine HRQL and its correlates among subjects with long-term mental symptoms (n=158) in a population-based sample in Finland. HRQL was measured using the RAND-36 including the physical (PCS) and mental (MCS) scores. Sociodemographic, somatic, and psychiatric factors were investigated with a self-rated health questionnaire, structured interviews, and standard clinical measurements. Pearson's chi-squared test, an independent samples t-test and logistic regression analyses were used.

Results

Subjects with long-term mental symptoms had a poor HRQL in the physical, mental and social domains. The main correlates were life dissatisfaction and somatic diseases; in men alexithymic features, in women a low level of education, a frequent use of alcohol and depressive symptoms. A reduced working capacity and in women being a current smoker were associated with a poor HRQL. Long-term life dissatisfaction was a risk factor for poor HRQL. Sociodemographic and somatic factors were only weakly associated with HRQL.

Conclusions

When promoting HRQL it is important for nurses and other healthcare professionals to recognize mental health symptoms and co-operate in the early phase in a multiprofessional team. Among subjects with long-term mental symptoms it is necessary to note also their physical and social well-being and functioning. It is important to pay attention to alexithymic features in men and a frequent use of alcohol in women. Society can promote HRQL by supporting education, ability to work and financial situation particularly among vulnerable people.



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An overview of systematic reviews of interventions to change diet-related behaviours in overweight or obese people

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Introduction

This overview of existing systematic reviews (SRs) was conducted to evaluate the effectiveness of interventions in changing diet behaviour among overweight/obese adults in healthcare and community settings.

Purpose/Methods

SRs of randomised controlled trials (RCTs) testing dietary behaviour change interventions were identified through searches in Cochrane Library, PubMed, Embase and PsycINFO(1/2006 to 11/2015). The methodological quality of SRs were appraised using AMSTAR. 17 SRs were identified, 13 were not relevant and excluded.

Results

4 SRs, 3 high quality (Lara 2014; Mastellos 2014; Domrowski 2010) and 1 medium quality (Taylor 2013), were eligible for inclusion in this overview. Two SRs evaluated RCTs within specific population groups: people of retirement age and males. Dietary behaviour change was the primary outcome for two SRs, while two evaluated interventions with other lifestyle components. Increasing fruit and vegetables intake is the most consistent and significant behaviour change across the SRs, especially among older groups. Reducing dietary fat is the next most effective outcome, however reducing total energy intake is less consistent between studies. Effective interventions were both short (2-12 months) and long (12-58 months) and were delivered by dietitians/nutritionists or trained counselors/research staff. Multiple face-to-face contacts combined with remote communications is the most effective modality. The site of delivery may be important for specific population groups, for example effective interventions with males were delivered in workplace and community settings.

Conclusions

This overview demonstrates that dietary interventions are particularly effective in increasing fruit and vegetable and reducing fat intakes in obese/overweight populations.

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Effects of yoga on stress, stress adaptation and heart rate variability among career women in Taiwan - A randomized controlled trial

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Introduction

Work-related stress directly affects the physical and mental health of career women, and indirectly the organization and even the family members they care for. This study was done to examine the effects of yoga exercise on work-related stress and stress adaptation among career women.

Purpose/Methods

This is a parallel-arm randomized controlled trial comparing the outcome of participants who were randomly assigned to the experimental group (yoga, with 30 participants) with the outcome of those assigned to a control group for 12 weeks. The participants attended a regular 90-minute yoga class once a week. We measured work-related stress relief, stress adaptation and autonomic nerve activity improvements after classes.

Results

The results showed that those participating in yoga classes experienced a significant reduction in work-related stress ($t = -6.25$, $p < 0.001$) and a significant increase in autonomic nerve activity ($t = -2.79$, $p = 0.006$). In addition, compared to the control group, the participants in the yoga group significantly decreased their work-related stress ($t = -3.26$, $p = 0.004$) and significantly increased autonomic nerve activity when controlling the pre-test scores of work-related stress.

Conclusions

After participating in 12 weeks of yoga classes, career women experienced a reduction in work-related stress and an increase in autonomic nerve activity. They were able to relax and feel calm from the structured questionnaire of measured responses. These results can be used to help other related career women to reduce their work-related stress and balance of sympathetic and parasympathetic nerve activity.

Comments

Yoga is an effective activity for career women to help decrease stress and improve their health status. Medical institutions may consider offering regular yoga classes for career women as a means to assist them in learn-



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ing skills of physical, mental, spiritual relaxation, and this can promote quality of care to their workplace and family members.

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Smoking and clinical aggression in a large health service: can we do better?

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Introduction

Clinical aggression in a health service may escalate requiring a security response known as a 'code grey'. Addressing the clinical drivers of code grey episodes is a high priority for health services in order to improve patient outcomes and minimise occupational risks.

Purpose/Methods

To understand the relationship between nicotine dependency and clinical aggression as part of an organisational review characterising the epidemiology, management and resource utilisation associated with code grey episodes. A retrospective audit was conducted of all code grey episodes occurring between 1 January and 31 December 2015, in a large metropolitan health service. Patients were identified from security records and clinical incident reports. Variables collected included socio-demographic and clinical risk factors, including drug and alcohol abuse, nicotine dependency, co-morbidities and resource utilization, including special nursing, security personnel and pharmacological/mechanical restraints.

Results

To date 713 code grey episodes in 341 patients have been reviewed. Characteristics include: 69% male (n=235), mean age 39 years (range 16-98 years), psychiatric diagnosis in 35%, dementia or cognitive impairment in 14%, and acquired brain injury in 10%. Of the code grey episodes reviewed, 70% (n=499) involved a patient who smokes (51% patient smoking rate), however a nicotine dependency assessment was performed in only 70% (n=349) of these episodes. Of the 53 episodes involving patients with high nicotine dependency (smoking heaviness index of 5 or 6), nicotine replacement therapy was not administered in 70%, despite recommendations for initiation in 87% and features of nicotine withdrawal in 75% of episodes.

Conclusions

People who smoke are overrepresented among patients with significant episodes of clinical aggression. Improved assessment and management of nicotine dependency in the hospital setting is a modifiable factor with potential to improve patient outcomes and staff safety.

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Impact of a theory-based multi-component lifestyle intervention to control abdominal obesity and cardiovascular risk factors: 12-month results of a randomized clinical trial

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Introduction

The prevalence of obesity and metabolic syndrome is rapidly increasing worldwide. A comprehensive program of lifestyle modification is considered the first option for losing weight and decreasing cardiovascular risks.

Purpose/Methods

The objective of this study was to evaluate the effectiveness of a theory-based lifestyle intervention in decreasing risks for abdominal obesity and cardiovascular diseases. The participants were 370 adults (aged ≥ 30) identified with abdominal obesity (182 intervention group and 188 comparison group) and additional cardiovascular risk factors. The intervention was developed as multiple behavioral intervention which combined individual health counseling with education and monitoring. Social cognitive theory and TTM were applied to develop intervention strategies. The comparison group was provided with minimal information. Health examination were measured at baseline, 3-month, 6-month, and 12-month at health promotion centers at Korea Association of Health Promotion in Korea both in 2013 and 2014.

Results

The prevalence of abdominal obesity was reduced by 27.8% (from 99.0% to 71.2%) in the intervention group and 20.3% (from 98.7% to 78.4%) in the comparison group after the 6-month intervention. In terms of cardiovascular risk reduction, significant improvements were found in BMI ($P < .0001$), waist size ($P < .0001$), systolic and diastolic blood pressure ($P = .0012$, $P < .0001$) and HDL cholesterol ($P < .0001$) among the participants



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of the intervention group after the intervention. In contrast, only BMI and diastolic blood pressure were improved significantly ($P<.0001$, $P=.0033$) among the participants of the comparison group.

Conclusions

Lifestyle intervention program was found to be effective for the reduction of abdominal obesity and cardiovascular risks of Korean adults. However, additional studies are needed to identify factors that could contribute to the improvement of obesity and related health risks.

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Effectiveness of eHealth tools and other intervention components for fruit and vegetable intake

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Introduction

Studies evaluating the effectiveness of a variety of eHealth tools for health behavior change have been published in the literature. However, there is a gap in terms of which eHealth strategies are most successful, and the characteristics that might be responsible for their effectiveness.

Purpose/Methods

This study tried to evaluate the effectiveness of the use of eHealth tools and other intervention components for the improvement of fruit and vegetables (FV) consumption. A meta-analysis of RCTs for FV eHealth interventions was conducted. Peer-reviewed studies were located through online databases. Studies had to be RCTs or quasi-experimental trials, using an eHealth tool as main intervention arm. A random-effects model was used and pooled Hedge's g was calculated for effect sizes (ES). Higgins I-squared test was used to assess for heterogeneity, subgroup analysis was conducted to evaluate for other intervention characteristics.

Results

The analysis included 16 studies and 5774 participants. The most commonly used eHealth tools were Internet-based ($n=9$), and computer-based interventions ($n=6$). The overall ES was small, but statistically significant ($ES=0.261$, $SE=0.055$, $95\% CI=0.153-0.368$, $p<.001$), favoring eHealth interventions. The between-studies heterogeneity was large ($I^2=68.08\%$, $p<.001$). Tailored interventions ($n=13$) showed an overall significant positive ES of 0.28 ($SE=0.061$, 95%

$CI=0.157-0.396$, $p<.001$), while non-tailored interventions ($n=3$) showed a non-significant small positive ES of 0.19 ($SE=0.140$, $95\% CI=-0.089$ to 0.459 , $p=0.186$). When analyzing the ES by eHealth tool, SMS intervention showed the largest ES (0.970 , $p<.05$).

Conclusions

The use of eHealth tools for the improvement of FV intake appears to be more effective than interventions not using these technologies. More research is needed in this area to determine the specific combination of eHealth tools and intervention components that could be more effective.

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Extent of adoption of the WHO Best buys intervention for non-communicable diseases prevention policy formulation in Nigeria

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Introduction

Non-communicable diseases (NCDs) mainly cardiovascular diseases, cancers, chronic respiratory diseases and diabetes are threats to human health and development and prevention remains a key approach for reducing its occurrence. The World Health Organisation emphasizes the "Best Buys" intervention as evidence-based options for addressing NCDs and countries are expected to integrate them into policies. Nigeria has developed some NCD policies; however there is a dearth of information on the extent of integration of the "Best Buy Interventions". This study addresses the information gap.

Purpose/Methods

The study adopted a descriptive case study design guided by the policy analysis framework of Walt and Gilson. A mixed methods approach comprising desk review of 43 NCDs related documents on best buy interventions for the four major NCDs modifiable risk factors – tobacco use, harmful alcohol use, unhealthy diets and insufficient physical activity - and key Informant interviews with 44 policy makers adopted for the study. Data was integrated and analysed using NVIVO version 10.

Results

Tobacco use is the only modifiable risk factor with the most comprehensive set of best buy interventions. Harmful use of alcohol has no comprehensive policy



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and only one of the best buy interventions - restricted access to alcohol, exist in the policies. Policies to promote healthy diet incorporate all the best buy interventions but there are no acts to regulate the activities of the food industry in respect of salt and trans-fat content of manufactured foods. In addition, the “best buy” intervention for physical activity is not integrated in policy documents.

Conclusions

These findings have grave implication on the country’s effort to effectively tackle the growing burden of NCDs. It underscores the urgent need to review the NCDs prevention and control policies to ensure the integration of the globally recommended “best-buy” interventions coupled with sustained political commitment and resource allocation for implementation.

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United States vs Sweden: Health counselling service in primary care

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Introduction

An ongoing Swedish-American study compares (1) primary care professionals’ engagement in lifestyle counselling, (2) patients’ need for support from primary care to change lifestyle and (3) the patients’ experiences of primary care interventions to meet those needs.

Purpose/Methods

The presentation is based on two cross sectional studies, one including four key questions on counseling for tobacco use, alcohol consumption, physical activity, and eating habits, that compares perspectives, attitudes, and practice among 180 Swedish and 86 US primary care providers (physicians, physicians assistants, midwives, and nurses), and the other 288 Swedish and 341 U.S. randomly selected patients, based on telephone interviews.

Results

U.S. providers rated counseling “very important” significantly more frequently than Swedish providers for tobacco, physical activity, and eating habits, and reported giving “very much” counseling more frequently than the Swedish providers did. Swedish providers rated their level of expertise in providing counseling

significantly lower. A higher percentage of U.S. providers expressed a desire to increase levels of counseling “very much”. For 3 of the 4 lifestyle habits (except alcohol) the proportion of subjects needing life style changes was higher in the U.S. The proportion that needed and would like to get lifestyle support from primary care was generally above 80% in both countries. The proportion patients reporting primary care initiated discussions on lifestyle was below 50% in Sweden and above 50% (with the exception of alcohol for men) in the U.S.

Conclusions

The studies indicate the needs of improvement for primary care in both United States and Sweden regarding how to better address nutrition, physical activity and tobacco habits. The study demonstrates high and quite similar patient expectations concerning lifestyle counselling in both countries.

Comments

The presentation is based on a research collaboration between Umeå University, Sweden and Bassett Research Network, Cooperstown, NY, USA.

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