



# Abstracts selected for publication

At the 26<sup>th</sup> International HPH Conference in Bologna, 10 abstracts were awarded for their scientific level. The abstracts were chosen amongst all the abstracts presented in the Conference Abstract Book.

## *From experience towards large scale implementation – the strategic objectives of the Austrian Network of Health Promoting Hospitals and Health Services*

BRUNNER Gernot, CHRIST Rainer

### Background/Problem/Objective

The Austrian Network of Health Promoting Hospitals and Health Services has a tradition of more than 20 years with a stock of active member organisations. However, we are still far from a preferable level of re-orientation of health systems towards health promotion in Austria.

### Methods/Intervention

The Austrian network undertook a process to reflect how best to boost its impact on the desired transformation process. It started with a retreat of the management board of the network and continued with consultations of the member organisations during the national conference and with a questionnaire. The benefits of network activities have been addressed as well as obstacles and challenges.

### Results (of evaluation)

Five essential objectives have been identified for Austria which frame the strategic directions of the network for the coming years. A high priority is given to addressing the need and potential of health promotion in health services towards stakeholders and the strategic public. A legal basis for health promotion in health services and secured financing of activities is a requirement claimed by the network. In addition, health promotion must become a mandatory part in the curricula of medical and nonmedical health professionals. To reinforce the impact of the network on politics public relations activities will be improved to give the network more visibility and to emphasize the competence of the network. The benefit of being a member of the network also needs continued attention. Health promoting leadership in health care organisations and health promotion for staff will be main topics in capacity building activities.



### Conclusions/Lessons learned

These activities and maintenance of a knowledge base on health promotion in health services should help to spread good practices beyond the network and to gain further network members. The undergone strategic development was a helpful process to focus the activities of the network, which still depends on limited resources.

### Contact: BRUNNER Gernot

Austrian Network of Health Promoting Hospitals and Health Care Institutions, Stubenring 6, 1010 Vienna  
ongkg@ongkg.at



## Research and Best Practice

### *Prescription patterns and consequences of Chinese herbal medicine in pregnant women: A population-based study*

WU Hsien-Chang, WU Dai-Lun, CHANG Wei-Chuan, WEN Shu-Hui

#### **Background/Problem/Objective**

Pregnant women using traditional Chinese medicine (TCM) is gaining popularity worldwide. The use of Chinese herbal medicine (CHM) during the perinatal period is common in Chinese communities. To treat illness during pregnancy with TCM, which is usually promoted as being natural and safe. However, the use of some herbs during pregnancy might still lack in safety and efficacy. Hence, in this cohort study, the prevalence and diagnoses of using CHM during pregnancy in Taiwan have been explored.

#### **Methods/Intervention**

Pregnant women aged 18-50 years were selected from the longitudinal health insurance database (LHID) between 2001 and 2011 using the 2-million random samples of the NHIR Database. Prescription patterns of CHM and obstetrics diagnoses was collected from all TCM outpatient records during pregnancy. CHM prescription records were further categorized on the before or after first prenatal visit during pregnancy. Descriptive statistics such as numbers and percentages were provided for the distribution of primary diagnosis codes and CHM use.

#### **Results (of evaluation)**

A total of 15,162 pregnant women received CHM during pregnancy with CHM utilization rate of 20.6%. Top 3 obstetrics related diagnosis codes were disorders of menstruation and abnormal bleeding from female genital tract, hypertension complicating pregnancy and excessive vomiting in pregnancy. Before the first prenatal visit, the most common used single herb was *Cyperus Rhizoma*, followed by *Cuscuta Semen* and *Leonurus Herba*. The top 3 herbal formulas were *Dang-Guei-Shao-Yao-San*, *Jia-Wei-Siao-Yao-San* and *Wen Jing Tang*. After the first prenatal visit, *Scutellaria Radix* was the most frequent single herb; next was *Atractylodes macrocephala rhizome* and *Cortex Eucommiae*. *Dang-Guei-Shao-Yao-San* remained the most commonly used herbal formula. The following commonly used herbal formulas were *Bao Chan Wu You Fang* and *Xiang Sha Liu Jun Zi Tang*.

#### **Conclusions/Lessons learned**

TCM is popular among pregnant women in Taiwan.

However, the safety of TCM was needed to be monitored during perinatal period requires future investigation.

#### **Comments**

This study focuses on maternal health promotion, especially the safety of traditional Chinese medicine for pregnant women. The use of traditional Chinese medicine which have promoting blood circulation effects in irregular menstruation, women should be aware of the issue of pregnancy.

#### **Contact: WU Hsien-Chang**

Taipei Tzu Chi Hospital  
No.289, Jianguo Rd., Xindian Dist., 23142 New Taipei City,  
xuangu@ms65.hinet.net

### *Effectiveness of Vitamin D Supplementation in the Relief of Dysmenorrhea: Meta-Analysis of Randomized Controlled Trials*

CHEN Yi-Chun, SU Yuh-Wen, PENG Ching-Ching, LIN Yeu-Tyng, CHIEN Wu-Hsiung, HSUEH Shu-Ching, TUNG Tao-Hsin, HSIA Shih-Min

#### **Background/Problem/Objective**

Dysmenorrhea is one of the most common gynecological complaints among young females. Non-steroidal anti-inflammatory (NSAID) drugs are commonly used for symptom relief. Due to the potential risks caused by NSAID, vitamin D is considered as another feasible way for treatment as to its anti-inflammatory effects and evidences in vitamin D receptors gene in the pathogenesis of menstrual dysfunction. The objective of the study is to assess the effects of vitamin D supplementation in relieving dysmenorrhea.

#### **Methods/Intervention**

We searched PubMed and Cochrane Central Register of controlled trials for relevant randomized controlled trials (RCTs) and conducted a systematic review and meta-analysis from inception to 1 January 2018. The search strategy was composed of "vitamin D or 25-hydroxyvitamin D" and "dysmenorrhea or endometriosis or pelvic pain". The primary outcome was the standardized mean difference (SMD) and p value of pain scales in dysmenorrhea treated with vitamin D or placebo.

#### **Results (of evaluation)**

Of 134 records obtained from our search, four RCTs with 185 participants (91 patients in the vitamin D group and 94 patients in the placebo group) met our inclusion criteria. Compared to the placebo, vitamin D



## Research and Best Practice

supplementation did not significantly improve relief in dysmenorrhea (SMD: -0.47; 95% confidence level [CI]: -1.20 to 0.27).

### Conclusions/Lessons learned

Vitamin D treatment did not show a significant effect in reducing dysmenorrhea and/or pelvic pain in our study. Limited by the small number of participants for the current reports, further rigorous and larger studies are still needed to determine the clinical effects of vitamin D supplementation with more objective measures.

#### Contact: CHEN Yi-Chun

Cheng-Hsin General Hospital, Taiwan  
No 45, Cheng-Hsin St. Beitou District, Taipei, Taiwan  
ycchen1204@gmail.com

### *Transforming Practitioners and Practice through work-based Learning*

FINN Frances

#### Background/Problem/Objective

There is a growing imperative that postgraduate nursing education develops both practitioners and practice. This research explores trajectories of change during and following work-based learning and asks 'how' different cultural tools and processes situated within work-based learning frameworks, in addition to social and personal contributions, influences and sustains positive outcomes.

#### Methods

A qualitative case study design was employed to investigate the influences and outcomes of work-based learning over time. Interviews with past students and support practitioners associated with one work-based learning programme were conducted across acute and community healthcare services in Ireland. Individual documentary analysis of student learning logs and portfolios was undertaken using process tracing methods, combined with a thematic analysis of all data sources.

#### Results

Workplace affordances, versus constraints, in addition to the role of cultural tools and other people in scaffolding learning within the programme framework, combined with learner agency and intentionality revealed the duality of personal and social contributions required for successful work-based learning outcomes. Practitioner outcomes of knowledgeability, relational agency and reflexivity, were linked with sustained prac-

tice development outcomes, in the remaking of cultural practices. Examples of practice transformations include service user education and advocacy initiatives in mental health and health education workshops in child and adolescent health.

### Conclusions

Learning at, for and through work is a combined endeavour of individual intentionality, agency and engagement with work-based learning opportunities, tools and processes, in addition to the degree of social support and workplace affordances. The opportunity to promote health through practice development initiatives within primary care and acute health services is a significant potential of work-based learning in post-graduate nurse education.

#### Contact: Dr Frances Finn

Waterford Institute of Technology, Ireland  
ffinn@wit.ie

### *Self-rated health and its relationship to health behavior for the elderly by using the Happiness & Health Feeling Scale (2 HFS)*

Kaori TERAOKA, Kazuyo FURUKAWA, Fumie ONO, Tamiki HIRASAWA, Kyota NEGISHI, Norio SHIMANOUCI, Minako SUZUKI

#### Background/Problem/Objective

To achieve the better health support and self-actualization for the elderly, it is significantly important to measure their perception of happiness/health.

#### Methods/Intervention

A preventive care program (exercise, oral, nutrition, cognitive function) was administered to 17 elderly people over 65-years old, living in Tokyo (once a week for 120 minutes for 8 weeks). We examined if there was any change in the participant's Self-rated health in their daily lives by using 2HFS and the questionnaire on their physical/mental and social aspects at the end of the whole program. CS analysis was used for 2 HFS data analysis.

#### Results (of evaluation)

In the CS analysis of 2 HFS, there was a moderate correlation between the overall evaluation of happiness and "self-esteem". From the questionnaire on Self-rated health, the categories of "pain", "confidence", "anxiety for the future", "Increased communication with family/friend, making telephone calls, and outings" continued to stay low in their scores.



## Research and Best Practice

### Conclusions/Lessons learned

This research (examination) suggested that both 2HFS and the questionnaire on Self-rated health had similar results in the categories related to low self-esteem and poor Self-rated health. This indicated that these measures were able to detect underlying emotions of the elderly which were not surfaced to their daily behaviors/activities. By administering 2HFS to measure the elderly's happiness and health perception, we expect that it would bring improvements in their health behaviors, and Self-rated health.

#### Contact: SAITOH Fumihito

Oizumi Health Cooperative Hospital  
Higashi-Oizumi, 178-0063 Nerima, Tokyo,  
fumisaitoh@gmail.com

### *C.H.A.N.G.E.D.: Developing and testing an innovative health promotion initiative for promoting health behavior change and self-management among people with diabetes in a national health service organization*

LEVIN-ZAMIR Diane, WEINTZIGER Orna, ROTEM Mina,  
TSIPEL Dalit, KEY Calanit, SOLOMON Gavriela, LIEBERMAN  
Nicky

### Background/Problem/Objective

The increasing prevalence of diabetes challenges health systems to develop, test and implement innovative health promotion methods for patient self-management and effective, long-term lifestyle change (DSME). The main study objective: to test an innovative intervention program, promoting lifestyle changes, medication adherence and health outcomes.

### Methods/Intervention

A representative sample of 502 Jewish and Arab adults with uncontrolled Type 2 diabetes was recruited from the primary care registry of Israel's largest health service organization. While continuing normal care, half were randomly assigned to a comparison group, and half participated in a special program: 6 individual face-to-face sessions and up to 14 telephone support sessions, with one of a multi-disciplinary group of 15 health-promoting coaches, recruited and trained in culturally appropriate behavior change methods. Health behavior and quality-of-life indicators were reported before, 6, 12 and 18 months after the program. Glycemic control (HbA1C), BMI, glucose, and lipids were measured prior to 6, 12, 18 months after the program.

### Results (of evaluation)

Findings showed significant improvement in physical activity ( $p < .0001$ ), eating habits ( $p < .001$ ), and quality-of-life indicators ( $p < .03$ ) for program participants. Both groups improved equally for foot examination ( $p < .0001$ ). While neither group reported significant improvement in medication adherence, glycemic control measures showed highly significant improvement ( $p < .0001$ ) 6 months after intervention and less after one year. The opposite true for the comparison group. Results were analyzed for gender, ethnicity, age and other personal measures.

### Conclusions/Lessons learned

Introducing a health-promoting coach into the array of DSME methods augmenting primary care, offers promising possibilities for empowering people with chronic conditions to adopt health promoting behavior. Improvement in comparison group may be attributed to intense follow-up. Ongoing support for long-term maintenance should be considered.

#### Contact: LEVIN-ZAMIR Diane

Clalit Health Services Dept. of Health Education and Promotion +  
University of Ha, 101 Arlozorov St., 69395 Tel Aviv  
diane@clalit.org.il

### *The level of self-rated knowledge among the patients with early rheumatoid arthritis in Estonia: 2-year follow-up*

PÖLLUSTE Kaja, MÜLLER Raili, KALLIKORM Riina, LEMBER  
Margus

### Background/Problem/Objective

Previous study in patients with rheumatoid arthritis (RA) in Estonia demonstrated that the self-reported ratings of knowledge about the disease were rather low, first of all among the patients with shorter disease history. This study aims to explain the trends in level of knowledge among the patients with early RA during the two-year follow-up period.

### Methods/Intervention

The study sample consisted of 79 consecutive patients (aged 19-79 years, mean 54.2; of them 25% male patients) referred to Tartu University Hospital with first ever RA diagnosis in 2012-2014. Data about patients' background, disease characteristics, and disease-related knowledge were collected three times with the one-year interval by a self-administered questionnaire. Descriptive statistics and regression analysis were used to explain the trends of self-rated level of knowledge and association between these ratings and other variables.



## Research and Best Practice

### Results (of evaluation)

During the two-years follow-up, the proportion of well-informed patients increased significantly ( $p < 0.001$ ) in all areas: nature and prognosis of RA from 30% to 64%; treatment options from 15% to 57%; medication from 21% to 51%; and targets of treatment from 33% to 58%. The better ratings of the level of knowledge were independently related to the younger age, female gender, and higher level of education. The strongest positive association was found between the ratings of self-rated knowledge and information received from the rheumatologist in all areas, which remained significant after adjusting for age, gender, and education, too. No significant associations were found between the ratings of the level of knowledge and the variables describing the disease activity and health status.

### Conclusions/Lessons learned

The level of knowledge increased rapidly during the first years of RA; the adequate information from the rheumatologist about the disease, medication, treatment options and targets plays the most important role in good disease-related knowledge among the patients with early RA. The long-term impact of disease-related knowledge on the patients' health outcomes should be studied in the future.

**Contact:** PöLLUSTE Kaja

University of Tartu, Tartu University Hospital, Puusepa 8  
kaja.polluste@kliinikum.ee

### *The perspectives of people who use drugs and health care providers about what leads to illicit drug use during hospital admissions*

STRIKE Carol, ROBINSON Samantha, GUTA Adrian, CHAN CARUSONE Soo, TAN Darrell, O'LEARY Bill, UPSHUR Ross

### Background/Problem/Objective

People who use drugs (PWUD) have higher rates of emergency room visits and hospital admissions, and may encounter stigma, perceive receiving substandard care, and leave hospital before discharge. This is especially concerning for PWUD with complex health needs, including those with or at risk for HIV. Few studies have examined illicit drug use in acute settings despite unman-aged withdrawal being a predictor of leaving hospital early.

### Methods/Intervention

We conducted semi-structured interviews with adults living with HIV and/or HCV who self-identified as

PWUD, and with health care providers (HCP) on in-patient hospital units in two large Canadian cities to understand what leads to on-premise use. PWUD were asked to describe their drug use during hospital stays, staff interactions and experiences leaving before discharge. HCP were asked to describe their attitudes and experiences providing care to PWUD and related hospital policies. Interviews were audio-recorded, transcribed and analyzed inductively.

### Results (of evaluation)

24 PWUD and 26 HCP participated. PWUD used substances in hospital to manage physical and psychological withdrawal and pain. Many HCP described ignoring substance use to avoid confrontation. PWUD described how they conceal use and respond to monitoring following drug use detection. HCP concerns about overdose or breaches in trust led to terminating hospital prescriptions (i.e. opioids) and discharge. Harm reduction approaches were used by some HCP, and no institutional policies existed to guide HCP in managing on-premise use.

### Conclusions/Lessons learned

Optimizing length of stay for all PWUD is crucial for ensuring effective and high-quality care, especially for those with complex health needs. These findings highlight the lack of consistency in approach to on-premise use and indicates institutional policies and further

**Contact:** STRIKE Carol

University of Toronto  
155 College Street, M5T3M7 Toronto  
carol.strike@utoronto.ca

### *Is the hospital an appropriate setting for behavioural change interventions?*

FAGGIANO Fabrizio

### Background/Problem/Objective

Health systems are experiencing a dramatic change, with hospitals limiting their role in acute care, and an increasing role of primary prevention. For this, they are increasingly considered an exceptional setting for prevention activities. The objective of this presentation is to review scientific literature to identify effective prevention interventions to be conducted in the hospital setting.

### Methods/Intervention

A systematic review has been conducted using mainly Medline. The inclusion criteria are the following: RCTs



## Research and Best Practice

or Systematic reviews evaluating the effectiveness of interventions for smoking cessation, overweight treatment, and for health promotion especially in the field of diet and physical activity; targeting hospital patients, parents and hospital staff. The results of the meta-analysis were analysed in order to assess the possibility to transport them in the hospital setting.

### Results (of evaluation)

3309, 1587, 2140 and 761 titles were retrieved for a large search on the main literature databases, evaluating interventions on physical activity, nutrition, obesity and smoking cessation respectively. 10, 7, 17 and 121 were included, respectively, and meta-analysis showed that there are some effective interventions to be transported to the hospital setting.

### Conclusions/Lessons learned

Hospital can be considered an appropriate setting to conduct health promotion interventions aimed at behavioral change. There are effective interventions that can be transported in the hospital setting to target the population of patients, their parents and the hospital staff. The hospital context appears to increase the motivation for a behavioural change. The relationship between effectiveness of intervention and population coverage is a critical issue in considering these interventions.

**Contact: FAGGIANO Fabrizio**  
Università del Piemonte Orientale  
Via Solaroli 17, 28100 Novara,  
fabrizio.faggiano@uniupo.it

### *Strategies to Prevent Type 2 Diabetes for the people with Pre-Diabetes in Health Promoting Hospitals (HPH) in Korea: 12-month Result of Intervention Program*

NAH Eun-Hee, CHU Jieun, CHO Seon, CHAI Jong-Yil

### Background/Problem/Objective

As the focus of health policy changes from disease treatment to prevention, it is necessary for the HPH to develop strategies targeting risk groups to prevent diseases. Particularly, type 2 diabetes mellitus (T2DM) is caused by genetic, behavioral, and environmental risk factors. It is important for pre-diabetes groups to prevent T2DM through elimination of controllable risk factors. Thus this study was designed to see the effects of lifestyle intervention or periodical blood glucose/HbA1c test on the prevention of T2DM for prediabetes groups.

### Methods/Intervention

This study was performed for high-risk individuals (aged 30-70) with prediabetes at the health promotion centers of KAHP in Korea. They were randomly assigned to intervention group 1 (IG1), intervention group 2 (IG2) and control group (CG) and the intervention performed for 12-months. IG1 was provided with lifestyle intervention and glucose/HbA1c tests every 3-months. For IG2, only glucose/HbA1c tests were conducted. Health examinations were conducted for all groups after 12-months. IG1 set intervention goals at baseline and was evaluated for achievement after 12-months.

### Results (of evaluation)

After 12-month intervention, total-cholesterol, LDL-cholesterol and FBS levels have been significantly decreased in IG1 and IG2 (<p.001). However, there was no significant difference between two groups on reducing FBS. Among 5 intervention goals of IG1, reducing intake of lipid and increasing dietary fiber were highly achieved but the achievements in reducing intake of sugar, practicing moderate physical activities and losing weight were low. Incidence of T2DM in IG1 (5.7%) and IG2 (4.3%) were lower than in CG (6.5%) but there were no significant difference.

### Conclusions/Lessons learned

Regular lifestyle intervention and blood glucose/HbA1c test were effective on reducing FBS in high-risk individuals with pre-diabetes. More intensive and continuous intervention for increasing moderate physical activities was thought to be needed in IG1. It is necessary to be followed for three years, to determine effects of intervention on T2DM prevention.

**Contact: CHU Jieun**  
Korea Association of Health Promotion,  
350 Hwagokro, Gangseo-gu, ASI|KR|KSo Seoul,  
je\_wow@naver.com