Development of a Multidisciplinary Educational Program for Early CKD and High Risk Patients, a Controlled Randomized Study

Chiu-Ching Huang, Cheng-Chieh Lin, Fung-Chang Sung, Tsai-Chung Li, Chiu-Shong Liu, Wen-Yuan Lin, Li-Chi Huang, Ya-Fei Yang, Chia-Ing Li

Introduction
Chronic kidney disease (CKD) has become the 10th leading cause of death in Taiwan since 2010. The prevalence of CKD in Taiwan was about 11.9%, which was similar to that in the United States. However, Taiwan used to have the highest incidence of dialysis patients in the world. It is mandatory to control this high incidence. The previous multidisciplinary educational program for CKD 3b-5 patients has been shown to be effective in slowing progression to the end stage of renal disease and reducing mortality of CKD patients in Taiwan. However, it is not clear if similar intervention will have the same effect for early CKD patients (stage 1-3a).

Purpose
The aims was 1) to develop a multidisciplinary educational model for early CKD patients and 2) to evaluate the change of health related behaviors and outcomes of two different multidisciplinary educational programs.

Methods
This study was a randomized controlled trial (RCT) that evaluated the efficacy of 2 different multidisciplinary educational programs based on a trans-theoretical model with one year of intervention toward early CKD and high risk patients. All participants were randomly assigned to two different experimental groups (self-management and peer-assisted management) and a control group (ordinary clinic management). Participants in the self-management group received 10 classes of CKD education and administered the self-managed interventions by using education materials provided by the multidisciplinary team. The peer-assisted management group received a similar educational program for 3 months, followed by several additional peer oriented group activities.

Results
A total of 411 patients were recruited and randomly assigned to the ordinary management group (n=135), self-management group (n=138) and peer-assisted management group (n=138). Information on medical history, physical examination, biochemical tests, hospitalization and medical costs etc., as well as behavior changes, including smoking, chewing betel nut, medication compliance, exercise and diet were collected and evaluated.

Serial blood biochemistry and urine protein measurements have been scheduled to take place at baseline, the 3rd, 6th and the 12th month of the intervention period and again 18 months after baseline. This project is still ongoing. The preliminary data revealed that the experimental groups had a better understanding of chronic kidney disease, a better control of blood pressure and blood lipids compared to the control group in this 6-month follow-up evaluation. No significant changes in proteinuria, serum creatinine and eGFR were observed. No significant difference was observed between the self-management group and the peer-assisted management group. Subsequent data for the final analyses in the 18-month follow-up survey will be collected.

Conclusions
Self-management may empower patients with early CKD to manage their health related behaviors effectively. When completed, this RCT will provide the information about the degree of intervention needed to slow the progression of CKD and provide evidence of the effectiveness of a multidisciplinary educational program on the change of health related behaviors and outcomes in early CKD patients.

Contact: Ya-Fei Yang
Division of Nephrology, China Medical University Hospital, No 2, Yu-Der Rd, 404 Taichung, Taiwan
D6088@mail.cmuh.org
Creating a salutogenic culture with quality standards
Laura Molloy, Nazih Eldin, Laura McHugh

Introduction
In Ireland the Health Information and Quality Authority (HIQA) set and monitor compliance with standards for the quality and safety of healthcare (National Standards for Safer, Better Healthcare). The Irish Network of Health Promoting Health Services (IHPHS) identified the need to standardise how “Health and Wellbeing” is understood in the standards and how this translates into health promotion activities. To meet these needs, IHPHS have developed a guidance document for healthcare organisations (called) ‘Standards to Practice’ which has an overall aim of helping to develop a more salutogenic culture within health services.

Purpose
The purpose of the guidance document is to:
- Support hospitals to gather information and evidence to verify their assessments against the Irish “National Standards for Safer Better Healthcare”.
- Support hospitals to gather information and evidence to verify their assessments against the WHO Standards for Health Promotion in Hospitals.
- Support Health Promotion Coordinators in hospitals and/or standards assessment teams in carrying out the assessments.
- Demonstrate the interlinking of the WHO HPH and the HIQA standards.
- Illustrate comprehensive examples of evidence of health promotion activities in acute hospitals.
- Reorient the health services to develop a more salutogenic culture.

Results
The guidance document was developed in consultation with specialist health promotion staff in various topics and settings and specialist quality and safety staff and was informed by HPH standards, national policies and practitioners. It expands on standards relevant to “Health and Wellbeing” by illustrating levels of quality with examples of evidence under specific headings.

Conclusion
This guide will help Health Promotion Coordinators and/or Assessment-teams to assess progress in relation to the Irish National Standards for Safer Better Health Care as well as the HPH standards, thus helping to reorient the Irish Health Services to develop a more salutogenic culture.

Comments
This guidance document has been very well received by the acute sector of the Irish Health Services and plans are underway to develop similar documents for primary care services.

Contact: Laura Molloy
Irishhphs network, Academic centre, Connolly Hospital, 15 Blanchardstown, Dublin 15, Ireland
laura.molloy@hse.ie

First do no harm: pain relief for the peripheral venous cannulation of adults, a systematic review
Mary Bond, Chris Cooper, Helen Coelho, Marcela Haasova, Quentin Milner, Vicki Shawyer, Christopher Hyde, Roy Powell, Louise Crathorne

Introduction
It can be argued that causing unnecessary pain during medical procedures is harmful. One example is the routine insertion of peripheral venous cannula (PVC). This procedure is a common experience for thousands of patients every day and reported by adults to be painful.

Purpose
Our objective was to discover the relative effectiveness of local anaesthetics for routine peripheral venous cannulation in adults and whether the ease of cannulation is affected by the use of local anaesthetics.

Methods
This systematic review was carried out following the principles published by the NHS Centre for Reviews and Dissemination and is registered at PROSPERO no. CRD42012002093. Data sources included: Medline, Medline in Process, Embase, PsycINFO, Cinahl, British Nursing Index and the Cochrane library. Eligibility criteria were: studies of adults who experienced routine PVC; intervention, any local anaesthetic, comparator, routine PVC without local anaesthetic. Design; controlled trials, observational studies with control groups and economic evaluations. The primary outcome was self-reported pain.

Results
16,368 titles and abstracts produced 34 includable studies. All local anaesthetics were effective and lidocaine was found to be most effective, with a weighted mean difference (95% CI) 11.2 (18.20 to 4.21). The pain of peripheral venous cannulation was more than twice as great as a lidocaine injection (lidocaine admin: mean...
10.0 (95% CI 3.5, 19.0)) control: mean 23.5 (95% CI 12.0, 47.8), VAS 1-100. The mean (SD) score unattenuated cannulation pain was 3.62 (2.86), VAS 1-10. Local anaesthetic did not make cannulation more difficult.

Conclusions
Adults find peripheral venous cannulation painful. This pain can be successfully treated without making the procedure more difficult. Routine adult peripheral venous cannulation should include local anaesthesia as in common paediatric practice.

Contact: Mary Bond
University of Exeter, Veysey Building, Salmon Pool Lane EX2 4SG Exeter, Great Britain
m.bond@exeter.ac.uk

Developing a more salutogenic workplace for nurses: compatible practices
Robert Bilterys, Nicole Dedobbeleer

Introduction
Healthcare staffs, particularly nurses, are one of the most challenged groups of employees. In Canada, like many other Western countries, nurses’ workplace is an important issue. To improve their working conditions and the quality of care, one of the largest University Hospitals in Canada decided to implement the WHO Health Promoting Hospitals project (HPH), and particularly its dimension related to workplace health promotion. This hospital is a member of the Quebec Network of Health Promoting Institutions.

Purpose
Our objective is to present some of the results of a case study designed to better understand the implementation context of a health promoting workplace for nurses.

Methods
Semi structured interviews were conducted with directors and nurse managers to assess their perceptions about the implementation. A questionnaire was also administered to several strategic stakeholders of the University Hospital, in order to measure the compatibility of existing organizational practices with the criteria of a ‘health promoting workplace’ for nurses.

Results
Results show a discrepancy between perceived and measured compatibility. Indeed, participants perceived few organizational practices compatible with the criteria of a health promoting workplace. However, our data show that many existing organizational practices are compatible with several criteria i.e. learning and performing organization, health and safety, health promoting lifestyles, and social and physical environment changes. Yet, compatibility is weaker for the criteria on a health promotion policy and very weak for nurses’ participation to decision making.

Conclusions
Our study contributes to a better understanding of the context needed to implement a health promoting workplace. Our results suggest hospitals should examine compatibility prior to implementing. Indeed, it allows getting an accurate picture of existing strengths and weaknesses, and helps collecting data about organizational readiness to implement such an innovation. Finally, our results suggest reinforcing knowledge, communication and training about HPH among both strategic and tactical managers, in order to reduce discrepancies and to achieve successful implementation.

Contact: Robert Bilterys
Université du Québec en Outaouais, 5, rue Saint-Joseph, Saint-Jérôme (Québec) Canada, J7Z 0B7
robert.bilterys@uqo.ca

Implementing a health promotion program to improve the quality of life in prostate cancer patients
Carles Serdà Bernat, Rafael Marcos Gragera, Dolors Canal Juvinyà

Introduction
As prostate cancer (PC) is diagnosed at early stages and with more favourable survival outcomes, the basis on which patients select primary therapy has shifted toward considerations of quality of life (QoL) (1;2). Urinary incontinence (UI) remains a significant predictor of lower QoL across all domains of physical, mental and social health in PC patients. The improvement of UI is significantly associated with reduced distress and improves the QoL over time (3).

Purpose
The purpose is to describe a Health Promotion Program (HPP), based on Pelvic Floor Muscle Treatment (PFMT) adapted to the UI symptom and QoL.

Methods
This study is a randomized clinical trial. The sample was formed by 66 participants with PC. The groups were randomized into an experimental group (EG) and a control
group (CG). The variables are related to the UI, muscular strength, and QoL. A statistical analysis was conducted using the Student-Fisher t-test, the Mann-Whitney-Wilcoxon test, and the chi-square test.

**Results**

After 24 weeks an improvement was identified in the EG compared with the CG, in waist perimeter (p ≤ .001), variables related to the UI symptom, intensity, frequency, difficulty and limitation of activity (p ≤ .0001). A correlation between UI and QoL was observed (p = .039).

**Conclusions**

The improvement in QoL is mediated by the improvement in the UI symptom. The HPP is an effective way of causing the symptom of UI to regress in men treated for PC. PFMT improves the muscular condition of the pelvic floor muscle (a decisive aspect for improving urine retention) and, the general strength and muscular resistance of the body. The adherence rate achieved was 91.66%. Furthermore, starting PFMT in a pre-operative context could contribute to the improvement of the achieved results.

**References:**


**Contact:** Juvinyà Dolors

University of Girona
C/ Pic de Peguera, 17003 Girona, Spain

catedrapromociosalut@udg.edu

---

**Developing Migrant-friendly organisations: From assessment to implementation**

Antonio Chiarenza

**Introduction**

Rather than creating an inclusive and responsive environment, the health care system risks perpetuating the level of stress the migrants may feel in their everyday life, if it fails to address a number of barriers in the access of services and quality of care for this vulnerable group. As shown in the MFH project, integrating interpreting services, patient information, education strategies and staff training in the policy and management system of the organisation is a key to successful responsiveness to migrants’ needs (1). These measures are well known to all of us, and there is general consensus that they are indeed needed in order to adapt health care organisations to diversity. However, many obstacles remain, preventing the transformation of this knowledge into action (2).

**Purpose**

To face these challenges and to favour the effective implementation of policy measures in health care organisations, the Task Force on MFH proposes the use of a set of standards for assessing equity in five main areas of the health care organisation: Policy and planning; Access and utilization; Quality of care; Users participation and Equity promotion outside the organization.

The objective of the equity standards is to improve the current ways of tackling inequalities in healthcare organisations by focussing on all kinds of differences, favouring a case-by-case assessment of the needs of patients, regardless of which kind of characteristics they bring with them (3). The final aim of this project is to provide health care organisations with a tool that allows them to assess the level of accessibility to health care for migrants and other vulnerable groups and to guide them in the implementation of improvement measures.

**Methods**

These standards were piloted from April to October 2012 in 45 health care organizations - 5 in Australia, 10 in Canada, and 30 in Europe. The aim of the pilot—test was to evaluate clarity, relevance and applicability of the standards in pilot-organisations.

**Results**

The overall evaluation process was positive and provided important indications for the revision of the standards from pilot institutions. Comments on the applicability of the standards provided important indications for effective implementation of the tool in health care organisations, with regards to national legislation, health systems organisation and socio-political contexts.

**Conclusions**

The findings of the pilot-test suggested important next steps to facilitate the implementation and dissemination of the standards to a wider global audience. The next phase of the project will include activities to develop a self-assessment tool that health care organisations can use to benchmark structures, processes and results related to health equity. To this purpose the TF MFH has
undertaken a second pilot-test to evaluate how institutions can utilize the standards and self-assessment process, as well as to explore challenges and opportunities for effective uptake in connection with existing policies and practices.

**Comments**
Developing explicit, actionable and measurable equity standards can both be a crucial mechanism for operationalizing strategic commitments to equity in health care delivery and can enhance quality improvement and performance measurement initiatives as drivers of change.

**References:**


**Contact:** Antonio Chiarenza
Task Force Migrant-Friendly and Cultural Competent Health Care
HPH Regional Network of Emilia-Romagna
Vis Fornaciari 5, 42100 Reggio Emilia, Italy
Antonio.chiarenza@ausl.re.it

---

**Purpose**
To assess the level of health literacy in the Israeli population and to study the association between health literacy, social determinants, and association with measures of healthcare service use, health behaviour, and reported health.

**Methods**
The Health Literacy Survey of Israel (HLS-ISR) was based on the Health Literacy Survey of Europe (HLS-EU) and was conducted in 2012-2013 among a representative sample of 600 adults in home interviews, following qualitative formative research. The study was conducted in Hebrew, Arabic and Russian.

**Results**
Low health literacy in Israel is associated with significantly higher rates of chronic disease, more frequent visits to family physicians/medical specialists, to emergency services, and higher initial and repeated hospitalisation (p<0.0001). At risk for low health literacy are people with lower socio-economic status, shorter formal education, and poorer self-evaluated health. Health literacy was positively and significantly correlated with physical activity, while no association was found with other risk behaviours (smoking, etc.).

**Conclusions**
The results reflect: 1. The responsibility of the health system for providing more health literacy resources and cultural appropriate services; as demonstrated in this study, people with low literacy use health services at all levels, significantly more than those with higher health literacy. 2. The opportunities for Health Promoting Hospitals based on the settings approach to health promotion, to plan, implement and evaluate interventions for improving health literacy as measured both in Israel and Europe.

**Contact:** Diane Levin-Zamir
Clalit Health Services
University of Haifa School of Public Health
101 Arlozorov St. Tel Aviv, Israel
dianele@clalit.org.il

---

**Health Literacy, Chronic Illness, and Use of Primary, Secondary and Tertiary Healthcare - Making the Case for Health Literate Organizations**

**Diane Levin-Zamir, Orna Baron-Epel, Asher Elhayany,**

**Introduction**
The evidence base for health literacy shows that lower health literacy is significantly associated with poorer health status, challenges in adherence to, medical recommendations, less use of preventive services, and early mortality. Most of the research has focused on functional health literacy, and has been conducted among special populations. National data based on measuring health literacy according to the broad sense of the concept is essential for health promotion planning, particularly when developing health literate organizations.
Effectiveness of an intervention program to increase health professional’s motivation towards their HBV immunity protection. A randomized control trial

Ismini Skourti, Areth Lagiou, Christina Dimitrakaki, Ioanna Petroulia, Yannis Tountas

Purpose
The aim is to investigate the associated factors that can positively increase health professionals’ motivation toward their immunization level against HBV and to assess an intervention program’s effectiveness.

Methods
In 2010, a total of 117 health professionals, working in a Greek public hospital, were stratified to take part in a randomized control trial. The intervention group received a complete intervention program aiming to motivate the subjects to check their immunization status. The control group received only general information about HBV infection. A self-completed questionnaire, based on the Health Belief Model, was used to evaluate both group’s responses, their intention to act and their actual outcome (action).

Results
Significant increase was noted in the intervention group’s motivation to check their immunity status (p = 0.040), HBV infection’s perceived susceptibility (p = 0.040), HBV infection’s perceived seriousness with regard to the consequences it can have for the quality of life (p = 0.040) and financial status (p = 0.020), and also in subjects’ self-efficacy to use a reminder method, after the intervention. No significant results were noted in the control group.

Conclusions
The implementation of intervention programs can contribute towards the motivation of health professionals to undertake the relevant immunity check in order to protect them against HBV.

VIP (Very Important Patient) project: Health Promotion for Alcohol and Drug Abusers

Karen Hovhannisyan, Eva Skagert, Kerstin Thornqvist, My Maria Wikström, Hanne Tønnesen

Introduction
Drug and alcohol addiction are often accompanied by other risk factors such as heavy smoking, poor nutrition and physical inactivity. In addition, co-morbidity may also be increased compared to the background population. A comprehensive cross-section Health Promotion programme could have a major potential for better outcomes for these patients.

Purpose
The aim is to identify the presence of comorbidity and lifestyle risk factors, and to evaluate the effect of adding the VIP program to the usual alcohol and drug treatment.

Methods
VIP project consists of VIP Screening and VIP RCT. VIP Screening: 400 adult men and women with alcohol and drug dependency are screened. Lifestyle factors, comorbidity, socioeconomic factors are recorded and analysed. VIP RCT: 2 x 120 patients are included after screening, if they have at least one health determinant (HD) and at least one co-morbidity. Primary outcomes are compliance to addiction treatment and alcohol or drug-free days. Secondary outcomes are health status, health-related quality of life, harm reduction, use of health services, time to return to work (or similar activity). Patients are randomized to control group with conventional treatment or intervention group with 6 weeks VIP program. Both groups will be followed up for two years.

Results
VIP screening: 322 patients were screened; age 51 years (range 23-79), 67% men and 33% women. 71% were alcohol dependent, 53% drug dependent and 25% both. The 93% had at least one HD, 54% had two and 22% had three HD. 75% were smokers (17% also snuff), 59% had overweight and 35% were physically inactive. 70% of the screened patients had at least one co-morbidity and 25% had two or more. 41% had heart disease, 25% respiratory disease, 26% liver disease and 7% had diabetes. VIP RCT: 213 patients (66%) were subsequently included in the RCT, which is ongoing. Data is not yet analysed.

Conclusions
The preliminary conclusion is that there seems to be a major need for additional health promotion activities among substance abusers.
Effectiveness of a lifestyle counseling intervention on the abdominal obesity and cardiovascular disease risk factors: 3-month results of a randomized clinical trial

Jiyeon Park, Hyekyeong Kim, Sungdae Kim, Han-Ik Cho

Introduction
Abdominal obesity is a major risk factor for cardiovascular diseases and type 2 diabetes. It is therefore important to recognize and reduce abdominal obesity. Abdominal obesity is caused by the complex set of factors within personal control (e.g. overeating, lack of exercise, etc.). But there is little trial-based evidence regarding how to tackle this problem. Thus, MEDI-CHECK health promotion centers at Korea Association of Health Promotion (KAHP) have provided an intervention program for changing the lifestyle of the individual.

Purpose
The purpose of the study was to evaluate the short term effects of a 12-month trial of lifestyle intervention on the improvement of abdominal obesity and cardiovascular risk factors among Korean adults.

Methods
The participants in this study were 447 abdominally obese adults with cardiovascular risk factors. They were randomly assigned to either an intervention group or a control group. The participants in the intervention group (n=215) received a 12-month lifestyle modification intervention composed of individual counseling sessions, prescriptions for nutrition and physical activity, a health booklet, and a health diary. Individual counseling with clinical nutritionists was the main strategy for motivating and enabling healthy behavior changes of the participants. The participants in a comparison group (n=232) were in contrast provided minimal health information at baseline. Health examination and self-administered survey were conducted at baseline and 3 months from the baseline to determine the short term effects of the intervention program.

Results
After the first 3 months of the intervention, significant improvements in waist circumference (p < 0.001), percent of body fat (p < 0.001), BMI (p < 0.001), blood pressure (p < 0.01 for SBP and DBP), total cholesterol (p < 0.01), LDL cholesterol (p < 0.001), fasting blood glucose (p < 0.05), and HbA1c (p < 0.001) were seen in the intervention group. Significant improvements were also seen among the participants of the control group in waist circumference (p < 0.01), percent of body fat (p < 0.001), BMI (p < 0.001), blood pressure (p < 0.001 for SBP, p < 0.05 for DBP), LDL cholesterol (p < 0.001) and HbA1c (p < 0.05). However, compared to those in the comparison group, the participants in the intervention group reduced their percent of body fat (p < 0.05), BMI (p < 0.01), and fasting blood sugar (p < 0.01) significantly more. Significant reduction in the prevalence of abdominal obesity was also observed in the intervention group compared with the control group (25.12% vs.17.67%, p = 0.055).

Conclusions
Both intensive and minimal lifestyle modification programs were found to be effective in improving central obesity and cardiovascular risk factors of Korean adults in the short term. Further trials should be conducted over a longer period in order to identify the factors which contribute to health improvement, and, more importantly, to the maintenance of improved health status.

Contact: Hyekyeong Kim
Korea Association of Health Promotion
1111-1 Hwagok 6-dong, Gangseo-gu
157-705, Seoul, Korea
hkkim9394@gmail.com