

1- Vaccine. 2011 Aug 12. [Epub ahead of print]**Prevention of tick-borne encephalitis by FSME-IMMUN(®) vaccines: Review of a clinical development programme.****Loew-Baselli A, Poellabauer EM, Pavlova BG, Fritsch S, Firth C, Petermann R, Barrett NP, Ehrlich HJ.****Abstract**

The need for highly effective tick-borne encephalitis (TBE) vaccines has increased globally due to a variety of factors including climate, social, economic and demographic changes, which are thought to have promoted the expansion of the endemic region of TBE viruses. The first TBE vaccine, FSME-IMMUN(®) Inject, was introduced in the 1970s and has been continually improved since then to enhance both its safety and immunogenicity. The current formulation was established in 2001 and is marketed as FSME-IMMUN(®). This review summarizes findings of the **clinical** development programme since 2001 regarding determination of the optimal dose, conventional and rapid vaccination schedules, vaccination in adults, the elderly and special patient populations, safety, immunogenicity, and immunopersistence in adults and children, comparison of FSME-IMMUN(®) with another commercially available TBE vaccine as well as post-marketing vaccination outcome. This successful research programme demonstrated the strong immunogenicity and continued safety of the FSME-IMMUN(®) vaccine, which is further confirmed by the performance reported under field conditions.

2- Int J Nurs Stud. 2011 Jul 30. [Epub ahead of print]**Universal to standard precautions in disease prevention: Preliminary development of compliance scale for clinical nursing.****Lam SC.****Abstract**

The Center for Disease Control and Prevention revised the infection control practice from Universal Precautions to Standard Precautions in 1996. Although the practice of Standard Precautions has been implemented for almost 15 years in clinical settings, recent local research still adopts the Universal Precautions Scale to measure the compliance with the current infection control practice of general frontline nursing staff and students. Despite the scale's sound psychometric properties, that its items may not be sensitive and comprehensive enough to reflect the current compliance of frontline staff to Standard Precautions is questionable. The present study aims to develop a Compliance with Standard Precautions Scale (CSPS) for use by the general frontline nurses and nursing students in clinical settings. **METHODS:** The current study employed a recognized instrumentation design. In addition, a preliminary assessment of reliability and validity was described. The CSPS was developed through the modification of the Universal Precautions Scale through five steps: reviewing the infection control guidelines, modifying the items of the Universal Precautions Scale, examining the relevance and adequacy of new items by an expert panel, verifying the linguistic and grammatical issues, and examining the understandability of the items and acceptability of the entire instrument by stakeholders. Internal consistency was examined using Cronbach's alpha statistic. **RESULTS:** The original 15-item Universal Precautions Scale was revised to the 20-item CSPS, in which 13 items were revised in wording and concept, 2 items were deleted, and 7 items were added. The 20-item new scale obtained the overall content validity index of 0.90, and 100% understandability and acceptability in face validity, and Cronbach's alpha of 0.73. **CONCLUSION:** With the explicit justification on each generated item and the satisfactory results of the psychometric testing, the CSPS is a preliminary reliable and valid instrument in measuring the compliance with Standard Precautions of frontline nurses and nursing students in clinical settings.

3- Support Care Cancer. 2011 Aug;19(8):1079-95. Epub 2011 Jun 1.

Clinical practice guidelines for the prevention and treatment of EGFR inhibitor-associated dermatologic toxicities.

Lacouture ME, Anadkat MJ, Bensadoun RJ, Bryce J, Chan A, Epstein JB, Eaby-Sandy B, Murphy BA; MASCC Skin Toxicity Study Group.

BACKGROUND: Epidermal growth factor receptor inhibitors (EGFRI) produce various dermatologic side effects in the majority of patients, and guidelines are crucial for the prevention and treatment of these untoward events. The purpose of this panel was to develop evidence-based recommendations for EGFRI-associated dermatologic toxicities. **METHODS:** A multinational, interdisciplinary panel of experts in supportive care in cancer reviewed pertinent studies using established criteria in order to develop first-generation recommendations for EGFRI-associated dermatologic toxicities. **RESULTS:** Prophylactic and reactive recommendations for papulopustular (acneiform) rash, hair changes, radiation dermatitis, pruritus, mucositis, xerosis/fissures, and paronychia are presented, as well as general dermatologic recommendations when possible. **CONCLUSION:** Prevention and management of EGFRI-related dermatologic toxicities is critical to maintain patients' health-related quality of life and dose intensity of antineoplastic regimens. More rigorous investigation of these toxicities is warranted to improve preventive and treatment strategies.

4- Arthritis Care Res (Hoboken). 2011 Aug;63(8):1142-9. doi: 10.1002/acr.20481.

RAPID3 (Routine Assessment of Patient Index Data 3) severity categories and response criteria: Similar results to DAS28 (Disease Activity Score) and CDAI (Clinical Disease Activity Index) in the RAPID 1 (Rheumatoid Arthritis Prevention of Structural Damage) clinical trial of certolizumab pegol. Pincus T, Furer V, Keystone E, Yazici Y, Bergman MJ, Luijckens K.

Abstract

OBJECTIVE: To compare categories for activity/severity according to the Disease Activity Score 28-joint count (DAS28), the Clinical Disease Activity Index (CDAI), and the Routine Assessment of Patient Index Data 3 (RAPID3), an index without formal joint counts calculated in 5 versus >100 seconds, as well as the European League Against Rheumatism (EULAR)- DAS28 and the RAPID3 response criteria, in the Rheumatoid Arthritis Prevention of Structural Damage (RAPID 1) clinical trial of certolizumab pegol (CZP). **METHODS:** Post hoc analyses were performed using correlations, cross-tabulations, and kappa statistics. Patients (treated with CZP plus methotrexate [MTX] or placebo plus MTX) were classified at baseline and at 52 weeks as high, moderate, low activity/severity or remission, according to the DAS28 (>5.1, >3.2 to ≤5.1, 2.6 to ≤3.2, <2.6 [total range 0-10]), the CDAI (>22, >10 to ≤22, >2.8 to ≤10, ≤2.8 [total range 0-76]), and RAPID3 (>12, >6 to ≤12, >3 to ≤6, ≤3 [total range 0-30]), as well as for good, moderate, and poor EULAR-DAS28 and proposed RAPID3 response criteria. **RESULTS:** All measures were correlated significantly: RAPID3 with DAS28 and CDAI ($\rho > 0.7$), higher than erythrocyte sedimentation rate with C-reactive protein level ($\rho = 0.47$). At 52 weeks, DAS28, CDAI, and RAPID3 low activity/remission was seen in 30%, 44%, and 42% of CZP-treated patients versus 3%, 7%, and 10% of control patients. Good, moderate, and poor EULAR-DAS28 responses were seen in 30%, 51%, and 19% of CZP-treated patients versus 3%, 28%, and 70% of control patients, and for RAPID3 in 39%, 30%, and 32% of CZP-treated patients versus 8%, 16%, and 76% of control patients. Kappa and weighted kappa values ranged from 0.36-0.53, indicating fair to moderate agreement.

CONCLUSION: RAPID3, DAS28, and CDAI give similar results to distinguish CZP patients from controls in the RAPID 1 clinical trial. DAS28 is specific for clinical trials; RAPID3 appears pragmatically useful for usual care.

5- Int J Dent Hyg. 2011 Aug;9(3):216-22

Clinical evaluation of an implant maintenance protocol for the prevention of peri-implant diseases in patients treated with immediately loaded full-arch rehabilitations.

Corbella S, Del Fabbro M, Taschieri S, De Siena F, Francetti L.

Abstract

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Corbella S, Del Fabbro M, Taschieri S, De Siena F, Francetti L. **Clinical** evaluation of an implant

maintenance protocol for the **prevention** of peri-implant diseases in patients treated with The aim of Objective: immediately loaded full-arch rehabilitations. Abstract: this prospective study was to assess the outcomes of an implant maintenance protocol for implants supporting a full-arch rehabilitation. Materials and Sixty-one patients (28 women and 33 men) treated with immediately methods: loaded full-arch rehabilitation, both mandibular and maxillary, supported by a combination of two tilted and two axial implants, were included in the study. years, then months for +2 Patients were scheduled for follow-up visits every 6 years. Each patient received professional oral hygiene treatment yearly up to 4 and detailed oral hygiene instructions. During each visit, modified plaque index, bleeding index and probing depth were assessed. The presence of Mean observation peri-implant tissue inflammation was also evaluated. Results: months ranging from time, considering both mandible and maxilla, was 18.3 years. Both plaque and bleeding indexes frequency decreased over months to 5 6 years). Only three implants mm at 4 $0.5 \pm$ time. Probing depth was stable (2.46 months), whereas the incidence of were lost due to peri-implantitis (1.4% at 12 peri-implant mucositis was less than 10% in each considered period. The adoption of a systematic hygienic protocol is effective in Conclusions: keeping low the incidence of peri-implant mucositis as well as in controlling plaque accumulation and **clinical** attachment loss.

6- J Eval Clin Pract. 2011 Aug;17(4):801-810.

The validation of a clinical algorithm for the prevention and management of pulmonary dysfunction in intubated adults - a synthesis of evidence and expert opinion.

Hanekom S, Berney S, Morrow B, Ntoumenopoulos G, Paratz J, Patman S, Louw Q.

Abstract

Pulmonary dysfunction (PDF) in intubated patients remains a Background serious and costly complication of intensive care unit care. Optimal cardiopulmonary therapy strategies to prevent and manage PDF need clarification to reduce practice variability. The purpose of this paper is to report on the content validation of an evidence-based **clinical** management algorithm (EBCMA) aimed at the **prevention**, identification and management of PDF in Forty-four draft algorithm statements critically ill patients. Methods extracted from the extant literature by the primary research team were verified 7) in an electronic three-round Delphi = and rated by research clinicians (n process. Statements which reached a priori defined consensus [semi-interquartile range (SIQR) < One hundred per 0.5] were collated into the EBCMA. Results cent response rate. Forty-four statements were added after round one. Consensus was reached on rating of 83% (73/88) statements. Differences in interpretation of the existing evidence base, and variations in accepted **clinical** practice were identified. Four themes were identified where panel failed to The internationally agreed hierarchical framework reach consensus. Conclusion of current available evidence and **clinical** expertise developed through this Delphi process provides clinicians with a tool to inform **clinical** practice. This tool has the potential to reduce practice variability thereby maximizing safety and treatment outcome. The **clinical** utility of the EBCMA requires further evaluation

7- Int J Cardiol. 2011 Jul 13. [Epub ahead of print]

Circulating biomarkers with preventive, diagnostic and prognostic implications in cardiovascular diseases.

Battistoni A, Rubattu S, Volpe M.

The search for molecules that may contribute to better identify patients at risk for cardiovascular diseases (CVD) represents today an active field in clinical research. Few biomarkers have already been identified as reliable and useful tools in medical decision making, such as cardiac troponin (cTn) and NT-proBNP. At the same time, evidence regarding the possible role of other molecules is piling up. Every new putative biomarker has demonstrated effectiveness in at least one clinical application: cardiovascular risk assessment, diagnosis or outcome prediction. On the other hand, combination of preventive, diagnostic and prognostic implications for the same molecule is expected to improve enormously the usefulness of a biomarker in medicine. We performed a search of the literature looking for circulating molecules found to exert discriminating abilities in all three mentioned clinical applications. The purpose of the present review is to bring to the attention of medical and research communities those biomarkers for which a relevant amount of evidence has been accumulated

regarding their potential application in all clinical steps of the cardiovascular continuum. Furthermore, since simultaneous testing of different plasmatic molecules has been proposed as a suitable tool to improve medical decision making, we also discuss feasible associations of biomarkers that promise to be the most effective for cardiovascular risk assessment in the general population and for outcome prediction in patients affected by acute coronary syndrome (ACS) and by heart failure (HF).

8- Fam Med. 2011 Jul-Aug;43(7):480-6.

Incorporating population medicine into primary care residency training.

Dysinger WS, King V, Foster TC, Geffken D.

BACKGROUND AND OBJECTIVES: Expanded competencies in population health and systems-based medicine have been identified as a need for primary care physicians. Incorporating formal training in preventive medicine is one method of accomplishing this objective. **METHODS:** We identified three family medicine residencies that have developed formal integrated pathways for residents to also complete preventive medicine residency requirements during their training period. Although there are differences, each pathway incorporates a structured approach to dual residency training and includes formal curriculum that expands resident competencies in population health and systems-based medicine. **RESULTS:** A total of 26 graduates have completed the formally combined family and preventive medicine residencies. All are board certified in family medicine, and 22 are board certified in preventive medicine. Graduates work in a variety of academic, quality improvement, community, and international settings utilizing their clinical skills as well as their population medicine competencies. Dual training has been beneficial in job acquisition and satisfaction. **CONCLUSIONS:** Incorporation of formal preventive medicine training into family medicine education is a viable way to use a structured format to expand competencies in population medicine for primary care physicians. This type of training, or modifications of it, should be part of the debate in primary care residency redesign

9- Int J Emerg Med. 2011 Jul 22;4(1):44. [Epub ahead of print]

The efficacy and value of emergency medicine: a supportive literature review.

Holliman CJ, Mulligan TM, Suter RE, Cameron P, Wallis L, Anderson PD, Clem K.

ABSTRACT: Study objectives The goal of this study was to identify publications in the medical literature that support the efficacy or value of Emergency Medicine (EM) as a medical specialty and of clinical care delivered by trained emergency physicians. In this study we use the term "value" to refer both to the "efficacy of clinical care" in terms of achieving desired patient outcomes, as well as "efficiency" in terms of effective and/or cost-effective utilization of healthcare resources in delivering emergency care. A comprehensive listing of publications describing the efficacy or value of EM has not been previously published. It is anticipated that the accumulated reference list generated by this study will serve to help promote awareness of the value of EM as a medical specialty, and acceptance and development of the specialty of EM in countries where EM is new or not yet fully established. **METHODS:** The January 1995 to October 2010 issues of selected journals, including the EM journals with the highest article impact factors, were reviewed to identify articles of studies or commentaries that evaluated efficacy, effectiveness, and/or value related to EM as a specialty or to clinical care delivered by EM practitioners. Articles were included if they found a positive or beneficial effect of EM or of EM physician-provided medical care. Additional articles that had been published prior to 1995 or in other non-EM journals already known to the authors were also included. **RESULTS:** A total of 282 articles were identified, and each was categorized into one of the following topics: efficacy of EM for critical care and procedures (31 articles), efficacy of EM for efficiency or cost of care (30 articles), efficacy of EM for public health or preventive medicine (34 articles), efficacy of EM for radiology (11 articles), efficacy of EM for trauma or airway management (27 articles), efficacy of EM for using ultrasound (56 articles), efficacy of EM faculty (34 articles), efficacy of EM residencies (24 articles), and overviews and editorials of EM efficacy and value (35 articles). **CONCLUSION:** There is extensive medical literature that supports the efficacy and value for both EM as a medical specialty and for emergency patient care delivered by trained EM physicians.

10- J Cutan Med Surg. 2011 Jul-Aug;15(4):185-91.

A refresher on herpes zoster, current status on vaccination, and the role of the dermatologist.

Guenther LC, Lynde CW.

Abstract: Background: Herpes zoster (HZ) and postherpetic neuralgia (PHN) have a significant impact on quality of life. PHN is often chronic and difficult to treat. Dermatologists have always been involved in making the diagnosis of these conditions and, most recently, teaching the need for early antiviral therapy. Objective: With the introduction of a new vaccine, HZ and its difficult-to-treat complication PHN can be prevented or minimized. Preventive medicine is important and has been supported by dermatologists with sun safety programs. Patients receiving biologics are at increased risk of developing zoster. Conclusion: Dermatologists should embrace zoster vaccination and recommend routine vaccination of immunocompetent individuals > age 60 years, as well as patients of any age who are starting immunosuppressants, including biologics. Given that individuals over age 50 years are at risk for PHN and studies have shown that the vaccine's immunogenicity and safety are maintained in individuals age 50 to 59 years, vaccination in this age group may be considered. Some dermatologists may consider vaccinating their own patients, but most will likely recommend that vaccination be performed by their patients' primary care physicians.

11- J Hist Med Allied Sci. 2011 Jul 19. [Epub ahead of print]

The Decrease in Socioeconomic Differences in Mortality from 1920 to 2000 in the United States and England.

Rothstein WG.

Abstract: This study found that the effect of socioeconomic status (SES) on mortality decreased steadily during the twentieth century. It examined trends in age-specific adult mortality rates for employed men and infants in a number of social classes based on occupation in England and Wales and for black, white, and immigrant nationality groups of men, women, and infants in the United States. Both countries experienced continuing decreases in mortality rates and narrowing of SES differences in mortality rates from 1920 to the end of the century. Most of the decrease and narrowing in England and Wales occurred before the establishment of the National Health Service and the unprecedented improvements in clinical and preventive medicine after midcentury. Current cancer mortality rates in both countries show no consistent relationship with SES. The very low mortality rates of some low SES immigrant nationality groups in the United States throughout the century demonstrate that other social factors can have a greater effect on health than SES.

12- Prev Sci. 2011 Jul 15. [Epub ahead of print]

Family-Centered Preventive Intervention for Military Families: Implications for Implementation Science.

Beardslee W, Lester P, Klosinski L, Saltzman W, Woodward K, Nash W, Mogil C, Koffman R, Leskin G.

In this paper, we report on the development and dissemination of a preventive intervention, Families OverComing Under Stress (FOCUS), an eight-session family-centered intervention for families facing the impact of wartime deployments. Specific attention is given to the challenges of rapidly deploying a prevention program across diverse sites, as well as to key elements of implementation success. FOCUS, developed by a UCLA-Harvard team, was disseminated through a large-scale demonstration project funded by the United States Bureau of Navy Medicine and Surgery (BUMED) beginning in 2008 at 7 installations and expanding to 14 installations by 2010. Data are presented to describe the range of services offered, as well as initial intervention outcomes. It proved possible to develop the intervention rapidly and to deploy it consistently and effectively.

13- Mt Sinai J Med. 2011 Jul;78(4):498-508.

Screening and preventive services for older adults.

Nicholas JA, Hall WJ.

Federal, professional, and academic efforts are converging to address the preventive care needs of older Americans. Medicare is placing an increased emphasis on preventive care services for older adults. With the passage of the Patient Protection and Affordable Care Act, access to preventive

services has been enhanced by reducing out-of-pocket costs for older adults and increasing reimbursement to healthcare providers. In 2010-11, newly revised guidelines for screening and preventive services have been issued by the US Preventive Services Task Force and the Centers for Disease Control and Prevention. In addition to these guidelines and the landmark changes in Medicare coverage, there are significant new attempts to modify national screening recommendations based on age and expected risk/benefit for older adults. These population-specific guidelines with new emphasis on functional status and multiple risk factor reduction are of increasing importance to an aging population, where more conventional disease-focused guidelines are less suitable for maintaining physical function and quality of life. Evidence-based measures of physical performance appropriate for primary-care office use are being developed and piloted. As a result of these policies, guidelines, and tools, we have the ability to offer older adults more comprehensive, cost-effective screening and preventive measures than in any other previous time.

14- *Genome Med.* 2011 Jul 6;3(7):43. [Epub ahead of print]

Systems medicine and integrated care to combat chronic noncommunicable diseases.

Bousquet J, Anto JM, Sterk PJ, Adcock IM, Chung KF, Roca J, Agusti A, Brightling C, Cambon-Thomsen A, Cesario A, Abdelhak S, Antonarakis SE, Avignon A, Ballabio A, Baraldi E, Baranov A, Bieber T, Bockaert J, Brahmachari S, Brambilla C, Bringer J, Dauzat M, Ernberg I, Fabbri L, Froguel P, Galas D, Gojobori T, Hunter P, Jorgensen C, Kauffmann F, Kourilsky P, Kowalski ML, Lancet D, Pen CL, Mallet J, Mayosi B, Mercier J, Metspalu A, Nadeau JH, Ninot G, Noble D, Oztürk M, Palkonen S, Préfaut C, Rabe K, Renard E, Roberts RG, Samolinski B, Schünemann HJ, Simon HU, Soares MB, Superti-Furga G, Tegner J, Verjovski-Almeida S, Wellstead P, Wolkenhauer O, Wouters E, Balling R, Brookes AJ, Charron D, Pison C, Chen Z, Hood L, Auffray C.

ABSTRACT: We propose an innovative, integrated, cost-effective health system to combat major non-communicable diseases (NCDs), including cardiovascular, chronic respiratory, metabolic, rheumatologic and neurologic disorders and cancers, which together are the predominant health problem of the 21st century. This proposed holistic strategy involves comprehensive patient-centered integrated care and multi-scale, multi-modal and multi-level systems approaches to tackle NCDs as a common group of diseases. Rather than studying each disease individually, it will take into account their intertwined gene-environment, socio-economic interactions and co-morbidities that lead to individual-specific complex phenotypes. It will implement a road map for predictive, preventive, personalized and participatory (P4) medicine based on a robust and extensive knowledge management infrastructure that contains individual patient information. It will be supported by strategic partnerships involving all stakeholders, including general practitioners associated with patient-centered care. This systems medicine strategy, which will take a holistic approach to disease, is designed to allow the results to be used globally, taking into account the needs and specificities of local economies and health systems.

15- *Wien Klin Wochenschr.* 2011 Jul 7. [Epub ahead of print]

Evaluation of the sustainability of the Public Health Program "Slim without diet (Schlank ohne Diät)"

Boehm G, Bracharz N, Schoberberger R.

BACKGROUND: The prevalence of obesity and associated illnesses is continuously rising in industrialized countries. As a preventive measure, the Lower Austria Health Insurance Fund, together with the Institute of Social Medicine of the Medical University Vienna has launched the weight reduction program "Slim without Diet (SWD)". The Program's aim is to change the participants' eating and exercise habits. The methodical approach is to enhance the individual's self-control so that participants are able to identify, break, and modify false behavior patterns. During this project, the data from 4,053 individuals were descriptively evaluated by using the statistical program SPSS (Version 15). **RESULTS:** The scientifically recommended target group regarding Body Mass Index and age was reached and the weight reduction success rate is comparable to similar programs. Follow-up checks of the project carried out 6 and 12 months after the end of the intervention phase showed that participants were able to maintain an average weight loss of 4.26 kg compared to their weight at program-start. The participants who follow the therapy recommendations achieved significantly higher weight loss and

weight reduction also correlates with the number of attended group sessions ($p < 0.001$). The attendance frequency at the follow-up checks, however, shows a decreasing tendency of up to 75 percent. **CONCLUSION:** The results show that there is need to develop new methods to increase motivation and compliance of the participants to achieve long-term success. A first trial in this direction was to implement an additional module - participants had the chance of ongoing contacts after the group sessions have finished. The results until now show that a possible participation in the follow-ups is not significantly affected by ongoing contacts.

16- Wien Klin Wochenschr. 2011 Jul 7. [Epub ahead of print]

Consumer participation and organizational development in health care: a systematic review.

Tempfer CB, Nowak P.

OBJECTIVE: To provide an overview of published data on user participation in Health Care. **BACKGROUND:** Active and passive involvement of consumers into agendas associated with Health Care is still an exception. Data on the success of user participation projects in various areas of Health Care are lacking. **DESIGN:** Systematic literature review using public databases. **RESULTS:** We identified 467 studies including five systematic reviews describing various participation projects, among them workshops, citizens' panels, focus groups, citizens' juries, and consultation meetings. A general trend favoring a specific method was not observed. The categorization of evaluable studies according to Health Care area ($n = 331$) yielded the following results: general medicine/preventive medicine ($n = 5$), internal medicine/oncology ($n = 132$), obstetrics and gynecology ($n = 2$), surgery ($n = 1$), neurology/psychiatry ($n = 2$), social medicine ($n = 16$), health worker training ($n = 38$), and research agenda setting ($n = 135$). Predefined qualitative parameters were extracted from 69/467 (15%) studies. Sixty one of 69 studies (88%) were retrospective analyses without control groups and without outcome assessment. Six studies had outcome assessment, three judged the outcome as successful, two as negative, and one multi-project study reported 'very successful' project assessments in 24% of the projects. In 18 studies, the level of consumer participation was described as 'informed' in 2/18, 'advisory' in 14/18, and 'decision-making' in 2/18. The following factors associated with project success were identified: adequate financing, partnerships with well institutionalized consumer organizations, advanced project logistics, small-scale projects, and adequate internal and external communication. **CONCLUSIONS:** Most consumer participation projects were performed in research agenda setting, internal medicine/oncology, and health worker training. Various methods have been used in the projects, the level of consumer participation was low, and the success rate of the investigated projects was moderate. Potential factors associated with project success and future areas of research are discussed.

17- Curr Pharm Des. 2011 Jul 7. [Epub ahead of print]

Recent Progress Toward Hydrogen Medicine: Potential of Molecular Hydrogen for Preventive and Therapeutic Applications.

Ohta S.

Persistent oxidative stress is one of the major causes of most lifestyle-related diseases, cancer and the aging process. Acute oxidative stress directly causes serious damage to tissues. Despite the clinical importance of oxidative damage, antioxidants have been of limited therapeutic success. We have proposed that molecular hydrogen (H_2) has potential as a "novel" antioxidant in preventive and therapeutic applications [Ohsawa et al., Nat Med. 2007; 13; 688-94]. H_2 has a number of advantages as a potential antioxidant: H_2 rapidly diffuses into tissues and cells, and it is mild enough neither to disturb metabolic redox reactions nor to affect reactive oxygen species (ROS) that function in cell signaling, thereby, there should be little adverse effects of consuming H_2 . There are several methods to ingest or consume H_2 , including inhaling hydrogen gas, drinking H_2 -dissolved water (hydrogen water), taking a hydrogen bath, injecting H_2 -dissolved saline (hydrogen saline), dropping hydrogen saline onto the eye, and increasing the production of intestinal H_2 by bacteria. Since the publication of the first H_2 paper in Nature Medicine in 2007, the biological effects of H_2 have been confirmed by the publication on more than 38 diseases, physiological states and clinical tests in leading biological/medical journals, and several groups have started clinical examinations. Moreover, H_2 shows not only effects against oxidative stress, but also various anti-inflammatory and anti-allergic

effects. H(2) regulates various gene expressions and protein-phosphorylations, though the molecular mechanisms underlying the marked effects of very small amounts of H(2) remain elusive.

18- Dig Dis. 2011;29(2):255-63. Epub 2011 Jul 5.

Diseases of the digestive tract: is prevention possible and feasible?

Malagelada JR.

Prevention is and will remain a major goal of medicine and gastroenterology. Economics will have a major influence. Preventive approaches will need to prove a favorable cost-benefit ratio before they are authorized for broad implementation. Personalized medicine is just starting, but undoubtedly it will accelerate, gain relevance and become an integral part of our clinical practice. Physicians in general and gastroenterologists specifically will need to seriously contemplate retraining/refocusing to gain competence in genetic/proteomic evaluation of individuals, or risk a significant degree of obsolescence.

19- OMICS. 2011 Jul 6. [Epub ahead of print]

Vaccinomics and a New Paradigm for the Development of Preventive Vaccines Against Viral Infections.

Poland GA, Ovsyannikova IG, Kennedy RB, Haralambieva IH, Jacobson RM.

Abstract In this article we define vaccinomics as the integration of immunogenetics and immunogenomics with systems biology and immune profiling. Vaccinomics is based on the use of cutting edge, high-dimensional (so called "omics") assays and novel bioinformatics approaches to the development of next-generation vaccines and the expansion of our capabilities in individualized medicine. Vaccinomics will allow us to move beyond the empiric "isolate, inactivate, and inject" approach characterizing past vaccine development efforts, and toward a more detailed molecular and systemic understanding of the carefully choreographed series of biological processes involved in developing viral vaccine-induced "immunity." This enhanced understanding will then be applied to overcome the obstacles to the creation of effective vaccines to protect against pathogens, particularly hypervariable viruses, with the greatest current impact on public health. Here we provide an overview of how vaccinomics will inform vaccine science, the development of new vaccines and/or clinically relevant biomarkers or surrogates of protection, vaccine response heterogeneity, and our understanding of immunosenescence.

20- BMC Public Health. 2011 Jul 5;11:531.

Status and risk factors of unintentional injuries among Chinese undergraduates: a cross-sectional study.

Shi H, Yang X, Huang C, Zhou Z, Zhou Q, Chu M.

BACKGROUND: Injuries affect all age groups but have a particular impact on young people. To evaluate the incidence of non-fatal, unintentional, injuries among undergraduates in Wenzhou, China, assess the burden caused by these injuries, and explore the associated risk factors for unintentional injuries among these undergraduates, we conducted a college-based cross-sectional study. **METHODS:** Participants were selected by a multi-stage random sampling method, and 2,287 students were asked whether they had had an injury in the last 12 months; the location, cause, and consequences of the event. The questionnaire included demographic and socioeconomic characteristics, lifestyle habits, and the scale of type A behaviour pattern (TABP). Multivariate logistic regression models were used; crude odds ratios (ORs), adjusted ORs and their 95% confidence intervals (CIs) were estimated, with students having no injuries as the reference group. **RESULTS:** The incidence of injuries among undergraduates in Wenzhou was 18.71 injuries per 100 person-years (95%CI: 17.12~20.31 injuries per 100 person-years). Falls were the leading cause of injury, followed by traffic injuries, and animal/insect bites. Male students were more likely to be injured than female students. Risk factors associated with unintentional injuries among undergraduates were: students majoring in non-medicine (adjusted OR: 1.53; 95% CI: 1.19-1.96); type A behaviour pattern (adjusted OR: 2.99; 95% CI: 1.45-6.14); liking sports (adjusted OR: 1.86; 95% CI: 1.41-2.45). **CONCLUSIONS:** Injuries have become a public health problem among undergraduates. Falls were the major cause of non-fatal injury. Therefore, individuals, families, schools and governments should promptly adopt preventive measures aimed at preventing and controlling

morbidity due to non-fatal injury, especially among students identified to be at high-risk; such as male students with type A behaviour pattern who like sports.

21- Curr Treat Options Neurol. 2011 Jul 5. [Epub ahead of print]

Treatment of Memory Loss with Herbal Remedies.

Serby MJ, Burns SJ, Roane DM.

OPINION STATEMENT: Increased rates of dementia throughout the world are creating an emergent need for successful preventive and treatment strategies. Despite a lack of any significant scientific basis, herbal remedies and other types of "complementary and alternative medicine" (CAM) are being aggressively marketed for both prophylactic and therapeutic effects in regard to memory disorders. In the past few years, a small number of controlled studies have explored the effectiveness of some of the more popular herbal and CAM remedies, including ginkgo biloba, phosphatidylcholine, phosphatidylserine, and omega-3 fatty acids. To date, the bulk of evidence suggests that such approaches are not successful in preventing or delaying cognitive decline or dementia, and there is little reason to prescribe these remedies for the treatment of established cognitive impairment. Some very preliminary evidence suggests that Ginkgo biloba may be useful in treating behavioral problems in demented people. It is likely that the absence of regulatory controls on the sale of herbal and CAM preparations will foster continued use of these agents and perhaps even accelerated use as the dementia epidemic increases, assuming no imminent breakthroughs in pharmacotherapy.

22- J Vasc Surg. 2011 Jun 29. [Epub ahead of print]

The epidemiology of subclavian artery calcification.

Prasad A, Wassel CL, Jensky NE, Allison MA.

OBJECTIVES: The purpose of the present study was to determine the prevalence and risk factor associations for subclavian artery calcification. **BACKGROUND:** Arterial calcification is a marker of atherosclerosis, and its presence portends an adverse prognostic risk. The prevalence and associated risk factors for aortic arch, carotid, renal, and coronary calcification have been well described. Fewer data are available for subclavian artery calcification. **METHODS:** Electron-beam computed tomography was used to evaluate the extent of vascular calcification in multiple arterial beds in 1387 consecutive individuals who presented for preventive medicine services at a university-affiliated disease prevention center. Laboratory values for blood pressure, lipids, anthropomorphic data, and self-reported medical history were obtained. **RESULTS:** Subclavian artery calcification was present in 439 of 1387 individuals (31.7%). Those with subclavian artery calcification were significantly older, had a smaller body mass index, and were more likely to also have calcification of nonsubclavian vascular beds. When adjusted for cardiovascular disease risk factors, the presence of subclavian artery calcification was significantly associated with age (prevalence ratio [PR], 1.04; $P < .001$), hypertension (PR, 1.20; $P = .01$), history of smoking (PR, 1.21; $P = .01$), and calcification in nonsubclavian vascular beds (PR, 1.58; $P = .01$). Subclavian artery calcification was also associated with an increased pulse pressure (β -coefficient = 2.2, $P = .008$). **CONCLUSIONS:** Subclavian artery calcification is relatively common and is significantly associated with age, smoking, hypertension, and nonsubclavian vascular calcification. There may be a relationship between vascular stiffness, as manifested by a widened pulse pressure, and the presence of subclavian artery calcification.

23- Crit Care. 2011 Jun 24;15(3):R155. [Epub ahead of print]

Prevention of ventilator-associated pneumonia, mortality and all intensive care unit acquired infections by topically applied antimicrobial or antiseptic agents: a meta-analysis of randomized controlled trials in intensive care units.

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INTRODUCTION: Given the high morbidity and mortality attributable to ventilator-associated pneumonia (VAP) in intensive care unit (ICU) patients, prevention plays a key role in the management of patients undergoing mechanical ventilation. One of the candidate preventive interventions is the selective decontamination of the digestive or respiratory tract (SDRD) by topical antiseptic or antimicrobial agents. We performed a meta-analysis to investigate the effect of topical digestive or respiratory tract decontamination with antiseptics or antibiotics in the prevention of VAP, of mortality

and of all ICU-acquired infections in mechanically ventilated ICU patients. **METHODS:** A meta-analysis of randomised controlled trials was performed. The U.S. National Library of Medicine MEDLINE database, Embase, and Cochrane Library computerized bibliographic databases, and references lists of selected studies were used. Selection criteria for inclusion were: randomised controlled trials (RCTs); primary studies; examining the reduction of VAP and/or mortality and/or all ICU-acquired infections in ICU patients by prophylactic use of one or more of following topical treatments: 1) oropharyngeal decontamination using antiseptics or antibiotics, 2) gastrointestinal tract decontamination using antibiotics, 3) oropharyngeal plus gastrointestinal tract decontamination using antibiotics 4) respiratory tract decontamination using antibiotics; reported enough data to estimate the odds ratio (OR) or risk ratio (RR) and their variance; English language; published through June 2010. **RESULTS:** 28 articles met all inclusion criteria and were included in the meta-analysis. The overall estimate of efficacy of topical SDRD in the prevention of VAP was 27% (95%CI of efficacy = 16% to 37%) for antiseptics and 36% (95%CI of efficacy = 18% to 50%) for antibiotics whereas in none of the meta-analyses conducted on mortality a significant effect was found. Effect of topical SDRD in the prevention of all ICU-acquired infections was statistically significant (efficacy = 29%; 95%CI of efficacy = 14% to 41%) for antibiotics whereas the use of antiseptics did not show a significant beneficial effect. **CONCLUSIONS:** Topical SDRD using antiseptics or antimicrobial agents is effective in reducing the frequency of VAP in ICU. Unlike antiseptics, the use of topical antibiotics seems to be effective also in preventing all ICU-acquired infections, while the effectiveness on mortality of these two approaches needs to be investigated in further research.

24- *Mil Med.* 2011 Jun;176(6):679-84.

An evaluation of the delivery of clinical preventive services in the Joint Task Force National Capital Region Medical.

Freeman RJ, Cersovsky SB, Barbour G.

The Walter Reed Army Institute of Research General Preventive Medicine Residency conducted a performance improvement study to evaluate clinical preventive services (CPSs) in the National Capital Region. This study focused on enhancing medical care through quality management of both the process and measurement of service delivery, thereby improving the overall quality of a service by examining its constituent parts. Screening mammography and pneumococcal immunization were the CPSs selected for evaluation, and 9 of 40 military treatment facilities (MTFs) were visited. Mammography completion ranged from 64% to 81%. The process of providing mammography to eligible enrollees varied greatly among MTFs, and the majority did not utilize all identified steps deemed critical for mammography completion. Pneumococcal immunization ranged from 0% to 21%. There was a positive correlation between CPS completion, the number of eligible enrollees, and the use of critical steps. Recommendations include using critical steps to evaluate and improve MTFs' CPS processes.

25- *Versicherungsmedizin.* 2011 Jun 1;63(2):86-90.

[Relation of external biometric parameters to health risk and mortality--analysis and evaluation of different measurement methods and study results].

Flaig B, Zedler B, Ramsthaler F, Bratzke H, Parzeller M.

In clinical practice diagnoses can be found which are partially based on body measurements. By measuring body height and body weight the patient is categorised, for example by Body-Mass Index (BMI), in different adipose grades. Different diseases are associated with specific biometric parameters. Abdominal adiposity measured by waist circumference correlates with the risk of colon carcinoma and is one diagnostic criteria of the metabolic syndrome. An unhealthy waist-hip ratio (WHR) can cause a higher risk of a cardiovascular disease and dementia. By combining body measurement with cause of death found during the medicolegal autopsy, clinical relevant correlations can be uncovered. Research in medical databases (e.g. PubMed) was carried out to find studies showing possible associations between body measurements, their indices and morbidity or causes of death. This article is a selective survey of these published studies, current guidelines and the German Institute for Standardisation - Norm (DIN-Norm). We give a wide thematic overview and select relevant parameters, which should be taken during medico-legal autopsies in future. The ascertainment of those parameters and their adjustment with the findings of the medico-legal autopsies can be a key to finding predictors of history of disease and relevant morbidity risks in the institutes of forensic medicine. Such findings are very

important in the assessment of risk for living patients and necessary preventive actions. Beside the measurement of waist and hip circumference mentioned in specific clinical guidelines in Germany, we suggest, after analysing the parameters, to measure the thickness of the subcutaneous fat on the anterior chest and the thigh circumference as well.

26- Yale J Biol Med. 2011 Jun;84(2):155-9.

Tobacco-related disease burden and preventive initiatives in china: global health and the chronic diseases: perspective, policy and practice.

Niu B.

The burden of chronic diseases in global health is a surging area of research. The Global Health Initiative at the National Heart, Lung, and Blood Institute brings together investigators from developing countries with those from the developed world to study these diseases. In China, approximately 83 percent of all deaths in 2000 were attributed to chronic illnesses, which are the research focuses of the Chinese center of the Global Health Initiative. Tobacco use as well as passive smoking are modifiable risk factors in a large number of such chronic conditions. The prevalence of smoking in China is extensive and has inseparable ties to the economy, with tobacco taxes making up a large portion of government revenue in poorer provinces. Methods of smoking prevention have been piloted in some Chinese schools, which have mitigated the increase in smoking rate but have not resulted in a primary preventive effect. Efforts by the Yale Global Health Initiative and the Yale-China Association are bringing researchers together to address chronic disease in China as Yale School of Medicine enters its 200th year

27- Eur J Health Econ. 2011 Jun 22. [Epub ahead of print]

Patients whose GP knows complementary medicine tend to have lower costs and live longer.

Kooreman P, Baars EW.

BACKGROUND:

Health economists have largely ignored complementary and alternative medicine (CAM) as an area of research, although both clinical experiences and several empirical studies suggest cost-effectiveness of CAM.

OBJECTIVE: To explore the cost-effectiveness of CAM compared with conventional medicine. **METHODS:** A dataset from a Dutch health insurer was used containing quarterly information on healthcare costs (care by general practitioner (GP), hospital care, pharmaceutical care, and paramedic care), dates of birth and death, gender and 6-digit postcode of all approximately 150,000 insurees, for the years 2006-2009. Data from 1913 conventional GPs were compared with data from 79 GPs with additional CAM training in acupuncture (25), homeopathy (28), and anthroposophic medicine (26). **RESULTS:** Patients whose GP has additional CAM training have 0-30% lower healthcare costs and mortality rates, depending on age groups and type of CAM. The lower costs result from fewer hospital stays and fewer prescription drugs. **DISCUSSION:** Since the differences are obtained while controlling for confounders including neighborhood specific fixed effects at a highly detailed level, the lower costs and longer lives are unlikely to be related to differences in socioeconomic status. Possible explanations include selection (e.g. people with a low taste for medical interventions might be more likely to choose CAM) and better practices (e.g. less overtreatment, more focus on preventive and curative health promotion) by GPs with knowledge of complementary medicine. More controlled studies (replication studies, research based on more comprehensive data, cost-effectiveness studies on CAM for specific diagnostic categories) are indicated.

28- PLoS Negl Trop Dis. 2011 Jun;5(6):e1138. Epub 2011 Jun 7.

Potential drug development candidates for human soil-transmitted helminthiasis.

Olliaro P, Seiler J, Kuesel A, Horton J, Clark JN, Don R, Keiser J.

BACKGROUND: Few drugs are available for soil-transmitted helminthiasis (STH); the benzimidazoles albendazole and mebendazole are the only drugs being used for preventive chemotherapy as they can be given in one single dose with no weight adjustment. While generally safe and effective in reducing intensity of infection, they are contra-indicated in first-trimester pregnancy and have suboptimal efficacy against *Trichuris trichiura*. In addition, drug resistance is a threat. It is

therefore important to find alternatives. **METHODOLOGY:** We searched the literature and the animal health marketed products and pipeline for potential drug development candidates. Recently registered veterinary products offer advantages in that they have undergone extensive and rigorous animal testing, thus reducing the risk, cost and time to approval for human trials. For selected compounds, we retrieved and summarised publicly available information (through US Freedom of Information (FoI) statements, European Public Assessment Reports (EPAR) and published literature). Concomitantly, we developed a target product profile (TPP) against which the products were compared. **PRINCIPAL FINDINGS:** The paper summarizes the general findings including various classes of compounds, and more specific information on two veterinary anthelmintics (monepantel, emodepside) and nitazoxanide, an antiprotozoal drug, compiled from the EMA EPAR and FDA registration files. **CONCLUSIONS/SIGNIFICANCE:** Few of the compounds already approved for use in human or animal medicine qualify for development track decision. Fast-tracking to approval for human studies may be possible for veterinary compounds like emodepside and monepantel, but additional information remains to be acquired before an informed decision can be made.

29- Sleep Breath. 2011 Jun 19. [Epub ahead of print]

Association between osteoporosis and sleep duration in healthy middle-aged and elderly adults: a large-scale, cross-sectional study in Japan.

Kobayashi D, Takahashi O, Deshpande GA, Shimbo T, Fukui T.

STUDY OBJECTIVES: This study aims to explore the association between osteoporosis and nightly sleep duration among adult outpatients. **DESIGN:** This is a large-scale, retrospective cross-sectional study. **SETTING:** The setting was in a preventive medicine health center at a general community hospital in Tokyo, Japan. **PARTICIPANTS:** There were 19,321 healthy individuals (≥ 50 years old) who underwent annual general health checkup between January and December 2008. **MEASUREMENTS:** The participants were divided into four groups according to their self-reported average nightly sleep duration (< 6 , 6-6.9, 7-7.9, and > 8 h). Radial bone mineral density was measured using dual-energy X-ray absorptiometry, and T-score was compared to young adult mean to diagnose osteoporosis. Multivariate logistic regression was used to explore the association between sleep duration and osteoporosis. **RESULTS:** The mean age of the participants was 60.9 years (standard deviation [SD], 7.9) and 48.0% were female. The prevalence of osteoporosis was 8.0% (95% confidence interval [CI] = 7.6-8.4%). Those with sleep duration of > 8 h were more likely to have osteoporosis (odds ratio [OR] = 1.35; 95% CI = 1.06-1.73) than those with short sleep duration (< 6 h). **CONCLUSION:** Those individuals with self-reported sleep duration of more than 8 h (long sleepers) appear to have higher odds of osteoporosis compared to the progressively shorter sleepers.

30- Behav Brain Res. 2011 Jun 13. [Epub ahead of print]

Green odor and depressive-like state in rats: Toward an evidence-based alternative medicine?

Watanabe T, Fujihara M, Murakami E, Miyoshi M, Tanaka Y, Koba S, Tachibana H.

It is widely accepted that mental stress is an important factor in the development of psychological disorders such as depression. On pre-existing evidence, the so-called green odor may have a relieving and sedative effect on animals exposed to stressful situations. Using two behavioral models of depression, the forced-swim test and learned helplessness paradigm, we investigated whether inhalation of green odor (a 50:50 mixture of trans-2-hexenal and cis-3-hexenol) might alleviate and/or prevent experimentally induced depressive-like states in rats. A 3-min swim every day for 7 days resulted in significant prolongation of immobility time (vs. day 1). Inhaling green odor, but not vehicle, thereafter for 10 days (without swimming) led to the prolonged immobility time being significantly reduced and the hippocampal level of brain-derived neurotrophic factor (BDNF) being significantly increased. In the learned helplessness paradigm, the failure number and time spent in the shock compartment seen in the active avoidance test were both significantly attenuated in those rats that inhaled green odor for 11 days after the postshock screening test (vs. vehicle-exposed rats). Finally, for 10 consecutive days rats continuously exposed to green odor or vehicle swam for 3min/day. Immobility time was significantly shorter in the green-odor group than in the vehicle-exposed group on days 6-10. These results suggest that green odor has not only a therapeutic, but also a preventive effect on depressive-like states in rats.

These effects may be at least in part due to a green odor-induced upregulation of BDNF in the hippocampus.

31- Infect Disord Drug Targets. 2011 Jun 16. [Epub ahead of print]

Microaspiration in Intubated Critically Ill Patients: Diagnosis and Prevention.

Nseir S, Zerimech F, Jaillette E, Artru F, Balduyck M.

Microaspiration of contaminated oropharyngeal secretions and gastric contents frequently occurs in intubated critically ill patients, and plays a major role in the pathogenesis of ventilator-associated pneumonia. Risk factors for microaspiration include impossible closure of vocal cords, longitudinal folds in high-volume low-pressure polyvinyl chloride cuffs, and underinflation of tracheal cuff. Zero positive end expiratory pressure, low peak inspiratory pressure, tracheal suctioning, nasogastric tube and enteral nutrition increase the risk for microaspiration. Other patient related factors include supine position, coma, sedation, and hyperglycemia. Technetium 99 labelled enteral feeding is probably the most accurate marker of microaspiration in critically ill patients. However, use of this radioactive marker is restricted to nuclear medicine departments. Blue methylene is a reliable qualitative marker of microaspiration. However, fiberoptic bronchoscopy is required to diagnose microaspiration of blue dye in ICU patients. Quantitative pepsin measurement in tracheal aspirates is accurate in diagnosing microaspiration of gastric contents in critically ill patients. In addition, this marker is easy to use in routine practice. However, pepsin should be detected rapidly after aspiration. In vitro, and clinical studies suggested that semirecumbent position, polyurethane cuffs, positive end expiratory pressure, low-volume low-pressure cuff, and continuous control of cuff pressure were efficient in reducing microaspiration in ICU patients. Other preventive measures such as subglottic aspiration, tapered shape cuff, guayule latex cuff, lateral horizontal patient position, gastrostomy tube, and postpyloric feeding require further investigation.

32- Hypertens Res. 2011 Jun 16. doi: 10.1038/hr.2011.76. [Epub ahead of print]

Significance of measuring oxidative stress in lifestyle-related diseases from the viewpoint of correlation between d-ROMs and BAP in Japanese subjects.

Fukui T, Yamauchi K, Maruyama M, Yasuda T, Kohno M, Abe Y.

In recent years, oxidative stress has been postulated to be an important factor in the pathogenesis and development of lifestyle-related diseases. In this study, we investigated the association between the derivatives of reactive oxygen metabolites (d-ROMs), as an index of products of reactive oxygen species (ROS), and biological antioxidant potential (BAP), as an index of antioxidant potential. We also investigated the associations between d-ROMs or BAP and the risk factors for lifestyle-related diseases or metabolic syndrome-associated factors to evaluate their usefulness in preventive medicine. There were 442 subjects who underwent health checkup examination in our facilities. In addition to standard medical checkup items, we analyzed d-ROMs, BAP, brachial-ankle pulse wave velocity, high-sensitivity C-reactive protein level and visceral fat area (VFA) visualized on a computed tomography scan. The mean d-ROM value in females was significantly higher than that in males. There was a positive correlation between the d-ROM and VFA levels. On correlation analysis, there was a negative correlation between the d-ROM and creatinine levels. As factors that influence d-ROMs, the level of VFA was selected, suggesting the significance of oxidative stress measurement with d-ROMs. In addition, there was a positive correlation between d-ROMs and BAP values. Further research is required to resolve whether increased production of ROS or the antioxidant potential that can compensate for such an increase of ROS is more important in vivo. Hypertension Research advance online publication, 16 June 2011; doi:10.1038/hr.2011.76.

33- J Diabetes. 2011 Jun 7. doi: 10.1111/j.1753-0407.2011.00139.x. [Epub ahead of print]

Nutrition Transition in India: Secular Trends in Dietary Intake and their Relationship to Diet-related Non-communicable Diseases.

Misra A, Singhal N, Sivakumar B, Bhagat N, Jaiswal A, Khurana L.

India is facing an 'epidemic' of diet-related non-communicable diseases (DR-NCDs), along with widely prevalent undernutrition resulting in substantial socio-economic burden. The aim of this paper is to review secular trends in food groups and nutrient intake and implications for DR-NCDs in India so

as to understand optimal choices for healthy diets for prevention of DR-NCDs. The literature search was carried out in PubMed (National Library of Medicine, Bethesda, MD) and Google Scholar search engines upto July, 2010. Manual search for all other references, national and medical databases was also carried out. Nutrition transition over the past 30 years (1973-2004), has resulted in 7% decrease in energy derived from carbohydrate and 6% increase in energy derived from fats. Decreasing intake of coarse cereals, pulses, fruits and vegetables, increasing intake of meat products and salt, coupled with declining levels of physical activity due to rapid urbanization have resulted in escalating levels of obesity, atherogenic dyslipidemia, subclinical inflammation, the metabolic syndrome, type 2 diabetes and coronary heart disease in Indians. Studies also suggest that adverse perinatal events due to maternal nutritional deprivation may cause low birth weight, which coupled with early childhood 'catch-up growth' leads to obesity in early childhood, thus predisposing to NCDs later in life. In view of rapidly increasing imbalanced diets, multi-sectoral preventive approach is needed to provide balanced diets to pregnant women, children and adults, and to maintain normal body weight from childhood onwards, to prevent escalation of DR-NCDs in India.

34- J Adv Nurs. 2011 Jun 7. doi: 10.1111/j.1365-2648.2011.05685.x. [Epub ahead of print]

Associations between self-rated health and psychosocial conditions, lifestyle factors and health resources among hospital nurses in Lithuania.

Malinauskiene V, Leisyte P, Malinauskas R, Kirtiklyte K.

Associations between self-rated health and psychosocial conditions, (2011) lifestyle factors and health resources among hospital nurses in Lithuania. The aim of our study Journal of Advanced Nursing00(0), 000-000. **ABSTRACT:** Aim. was to investigate the association between self-rated health and psychosocial factors at work and everyday life (job demands, job control, social support, workplace bullying, life-threatening events); health behaviours (smoking, alcohol, being overweight, obesity, low physical activity); mental distress; job satisfaction; and sense of coherence in a representative sample of Lithuanian hospitals' internal medicine Recent department nurses. **Background.** trends to extend the retirement age in many countries of the European Union challenge future public health. Nurses are exposed to a broad variety of adverse psychosocial factors at work and in every day life that affect their health years for perception. As the retirement age in Lithuania is to be extended to 65 women, research on the associations of poor self-rated health with related A cross-sectional study was carried out in the factors is important. **Method.** period 2005-2006 using the representative sample of Lithuanian hospitals' internal medicine department nurses. Data were collected from 748 nurses About 60.4% of nurses rated using questionnaire (response rate 53.9%). **Results.** their health negatively. In the fully adjusted model age, high job demands, low job control, low social support at work, life-threatening events, low physical activity, being overweight, obesity, mental distress, job dissatisfaction and weak sense of coherence were associated with negative self-rated health. **Conclusions.** Preventive strategies against adverse psychosocial working conditions of nurses should be implemented in the Lithuanian hospitals.

35- Curr Opin Cardiol. 2011 Jul;26(4):308-13.

What should be the blood pressure target for diabetic patients?

Elliott WJ.

PURPOSE OF REVIEW: To summarize the pros and cons of a lower-than-usual blood pressure goal (e.g., <130/80 mmHg) for diabetic patients.**RECENT FINDINGS:** Aside from general socioeconomic and preventive medicine principles that either support or reject potential benefits associated with a lower blood pressure goal, clinical trial data from the last millennium have been challenged by the results of the prospective, randomized, National Institutes of Health-sponsored Action to Control Cardiovascular Risk in Diabetes trial, which found no significant benefit for a systolic goal of less than 120 mmHg, compared with less than 140 mmHg. Updated meta-analyses of five clinical trials are presented that show a significant ($P < 0.05$) reduction in the risk of stroke or major cardiovascular events. **SUMMARY:** Although a major clinical trial has shown that it is possible to lower blood pressure to a very low goal in a large number of diabetic patients, it remains to be seen whether those who are preparing the Eighth Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure will agree with the American Diabetes Association and continue to recommend the less than 130/80 mmHg target for all diabetic patients.

36- Am J Prev Med. 2011 Jun;40(6):608-15.

Effectiveness of a web-based colorectal cancer screening patient decision aid a randomized controlled trial in a mixed-literacy population.

Miller DP Jr, Spangler JG, Case LD, Goff DC Jr, Singh S, Pignone MP.

BACKGROUND: Colorectal cancer (CRC) screening reduces mortality yet remains underutilized. Low health literacy may contribute to this underutilization by interfering with patients' ability to understand and receive preventive health services. **PURPOSE:** To determine if a web-based multimedia CRC screening patient decision aid, developed for a mixed-literacy audience, could increase CRC screening. **DESIGN:** RCT. Patients aged 50-74 years and overdue for CRC screening were randomized to the web-based decision aid or a control program seen immediately before a scheduled primary care appointment. **SETTING/PARTICIPANTS:** A large community-based, university-affiliated internal medicine practice serving a socioeconomically disadvantaged population. **MAIN OUTCOME MEASURES:** Patients completed surveys to determine their ability to state a screening test preference and their readiness to receive screening. Charts were abstracted by masked observers to determine if screening tests were ordered and completed. **RESULTS:** Between November 2007 and September 2008, a total of 264 patients enrolled in the study. Data collection was completed in 2009, and data analysis was completed in 2010. A majority of participants (mean age=57.8 years) were female (67%), African-American (74%), had annual household incomes of <\$20,000 (76%), and had limited health literacy (56%). When compared to control participants, more decision-aid participants had a CRC screening preference (84% vs 55%, $p<0.0001$) and an increase in readiness to receive screening (52% vs 20%, $p=0.0001$). More decision-aid participants had CRC screening tests ordered (30% vs 21%) and completed (19% vs 14%), but no statistically significant differences were seen (AOR=1.6, 95% CI=0.97, 2.8, and AOR=1.7, 95% CI=0.88, 3.2, respectively). Similar results were found across literacy levels. **CONCLUSIONS:** The web-based decision aid increased patients' ability to form a test preference and their intent to receive screening, regardless of literacy level. Further study should examine ways the decision aid can be combined with additional system changes to increase CRC screening.

Eur J Cardiovasc Prev Rehabil. 2011 Aug 30. [Epub ahead of print]

Prevention of diabetes and reduction in major cardiovascular events in studies of subjects with prediabetes: meta-analysis of randomised controlled clinical trials.

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Source

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Abstract

Background: Impaired glucose tolerance (IGT) and impaired fasting glucose (IFG) are pre-diabetic states, treatment of which may prevent or delay the onset of overt diabetes and thus potentially reduce major cardiovascular (CV) events. We therefore sought to determine whether interventions (including diet, exercise and pharmacological therapy), altered all-cause and cardiovascular related mortality in such subjects. **Methods:** We performed a meta-analysis of prospective, randomised controlled trials (RCTs) that were identified in the medical literature and databases. Trials were eligible for inclusion if they reported all-cause mortality rates (at a minimum), recruited approximately 100 patients and had a minimum follow-up of one year. Interventions were divided into pharmacological and non-pharmacological. **Results:** Ten RCTs that enrolled 23,152 patients met the above entry criteria. Trials ran for an average of 3.75 years. Diabetes was delayed or prevented by these interventions vs control (risk ratio 0.83, 95%CI 0.80-0.86). Non-drug approaches ($n = 3495$) were superior to drug-based approaches ($n = 20,872$) in diabetes prevention (0.52, 0.46-0.58 vs 0.70, 0.58-0.85, $P < 0.05$). There was no difference in risk of all-cause mortality in the intervention versus control group (0.96, 0.84-1.10) and no difference in CV death (1.04, 0.61-1.78). There was a non-significant trend towards reduction in fatal and non-fatal myocardial infarction (0.59, 0.23-1.50). Fatal and non-fatal stroke was borderline reduced (0.76, 0.58-0.99) with intervention versus control. **Conclusions:** Despite interventions being mostly successful in retarding progression to overt diabetes, this did not result in reductions in all-cause or cardiovascular mortality, or myocardial infarction, with the possible exception of stroke.