Bulletin de veille

« Focus sur 12 pathologies graves »

Octobre 2009

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Le service documentation de l'EHESP édite **mensuellement** un bulletin de veille. Celui-ci signale les **articles récents**, parus dans des revues scientifiques de renommée internationale, autour de **12 pathologies graves,** ainsi que sur la **pandémie grippale**. Ce bulletin signale également des **rapports officiels et institutionnels** disponibles en texte intégral.

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Bulletin de veille – Octobre 2009
« Focus sur 12 pathologies graves »

Ce bulletin de veille est une **publication mensuelle** qui recueille les publications scientifiques autour des **pathologies** suivantes :

- Bronchite chronique obstructive
- Cancer du poumon
- Dengue
- Dépression
- Diabète
- Grippe A
- Maladie d'Alzheimer
- Maladies cardio-vasculaires
- Maladies liées à l'alcool
- Paludisme
- Pathologies liées à l'obésité
- SIDA
- Tuberculose

La recherche documentaire est effectuée dans la **base de données Medline** et porte sur les **12 titres de revues** suivants :

- American journal of epidemiology
- American journal of public health
- BMC public health
- BMJ (Clinical research ed.) - British medical journal
- International journal of epidemiology
- JAMA : the journal of the American Medical Association
- Lancet
- Nature
- Risk analysis : an official publication of the Society for Risk Analysis
- Science
- Social science & medicine
- The New England journal of medicine

Des **rapports officiels et institutionnels** en ligne sont également signalés en fin de bulletin.

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Articles scientifiques issus de l'interrogation de la base Medline (interrogée le 07/10/2009)

Rapports et dossiers en ligne

Articles scientifiques

Bronchite chronique obstructive

sommaire

(1) SCHWARZMANN SW. **Acute exacerbation of chronic bronchitis. Guidelines for antibiotic selection**. Postgrad Med. 2000 Dec., vol. 108, n° 7 Suppl Contemporaty, pp.25-29

An acute exacerbation of chronic bronchitis (AECB) is frequently caused by viral infection. Because of the impairment of mucociliary clearance, secondary bacterial infection is likely to ensue. Haemophilus influenzae, Streptococcus pneumoniae, and Moraxella catarrhalis account for about 50% of all episodes of AECB. The best approach to antibiotic selection for bacterial exacerbations is stratification by exacerbation type, patient type, or antibiotic type

(2) PELL DM. **Novel agents for the treatment of outpatient respiratory tract infections. Introduction**. Postgrad Med. 2002 Sept., vol. 112, n° 3 Suppl, pp.5-6

(3) HEM KG, EIDE AH. **[Living conditions for people with COPD]**. Tidsskr Nor Laegeforen. 2009 Aug. 13, vol. 129, n° 15, pp.1465-1468
http://dx.doi.org/10.4045/tidsskr.09.28233

BACKGROUND: More than 200,000 people in Norway have chronic obstructive pulmonary disease (COPD), but knowledge about their living conditions is insufficient. MATERIAL AND METHODS: The Living Conditions Survey of 2002 (Statistics Norway) included specific questions about COPD. We have compared living conditions of people with self-reported chronic bronchitis, pulmonary emphysema or COPD with that of other groups with or without chronic disease. RESULTS: People with chronic bronchitis, pulmonary emphysema or COPD have considerably worse living conditions than comparable groups. This is especially true in areas such as health, education, employment and income. Similar patterns are also seen in their social relationships. In a global index, where 1 indicates good living conditions and 0 bad living conditions, the COPD group scored 0.46, while people with other chronic diseases scored 0.60. Smokers with difficulty breathing have equally bad living conditions as those with self-reported COPD. The number of people stating they have COPD is considerably lower than shown in other recent studies of prevalence. INTERPRETATION: Patients with COPD have larger problems within several areas of life than other groups with chronic diseases. In addition, the results indicate that many people have this disease without knowing it

(4) ARTAMONOVA VG, BASOVA ON, LASHINA EL. **[Efficiency of rehabilitation for workers having occupational respiratory diseases and engaged into non-mining materials industry]**. Med Tr Prom Ekol. 2009, n° 6, pp.18-23
http://www.ncbi.nlm.nih.gov/pubmed/19670488

The analysis covered contemporary approaches to rehabilitation of patients having occupational respiratory diseases (pneumoconiosis, chronic dust bronchitis and their combination). The authors evaluate efficiency of therapeutic and rehabilitation measures

(5) STIEFELHAGEN P. **[Recurrent bronchitis: the esophagus was not considered]**. MMW Fortschr Med. 2009 Apr. 16, vol. 151, n° 16, p.17
http://www.ncbi.nlm.nih.gov/pubmed/19658289

(6) SVARTENGREN M, ENGSTROM G, ANDERSON M, HALLBERG J, *et al.* **Twins studies as a model for studies on the interaction between smoking and genetic factors in the development of chronic bronchitis**. Biochem Soc Trans. 2009 Aug., vol. 37, n° Pt 4, pp.814-818

Smoking is the main risk factor for COPD (chronic obstructive pulmonary disease) but genetic factors are of importance, since only a subset of smokers develops the disease. Sex differences have been suggested both in disease prevalence and response to environmental exposures. Furthermore, it has been shown that acquisition of 'addiction' to smoking is partly genetically mediated. Disease cases and smoking habits were identified in 44919 twins aged >40 years from the Swedish Twin Registry. Disease was defined as self-reported chronic bronchitis or emphysema, or recurrent cough with phlegm. The results showed that chronic bronchitis seems to be more prevalent among females, and that the heritability estimate for chronic bronchitis was a moderate 40% and only 14% of the genetic influences were shared by smoking. In addition, 392 twins have been invited to a clinical investigation to evaluate: (i) to what extent genetic factors contribute to individual differences (variation) in FEV(1) (forced expiratory volume in 1 s), vital capacity and DL(CO) (diffusion capacity), taking sex into consideration, and (ii) whether smoking behaviour and respiratory symptoms influence these estimates

(7) LEIGH MW, PITTMAN JE, CARSON JL, FERKOL TW, *et al.* **Clinical and genetic aspects of primary ciliary dyskinesia/Kartagener syndrome**. Genet Med. 2009 July, vol. 11, n° 7, pp.473-487
http://www.ncbi.nlm.nih.gov/pubmed/19606528

Primary ciliary dyskinesia is a genetically heterogeneous disorder of motile cilia. Most of the disease-causing mutations identified to date involve the heavy (dynein axonemal heavy chain 5) or intermediate(dynein axonemal intermediate chain 1) chain dynein genes in ciliary outer dynein arms, although a few mutations have been noted in other genes. Clinical molecular genetic testing for primary ciliary dyskinesia is available for the most common mutations. The respiratory manifestations of primary ciliary dyskinesia (chronic bronchitis leading to bronchiectasis, chronic rhino-sinusitis, and chronic otitis media)reflect impaired mucociliary clearance owing to defective axonemal structure. Ciliary ultrastructural analysis in most patients (>80%) reveals defective dynein arms, although defects in other axonemal components have also been observed. Approximately 50% of patients with primary ciliary dyskinesia have laterality defects (including situs inversus totalis and, less commonly, heterotaxy, and congenital heart disease),reflecting dysfunction of embryological nodal cilia. Male infertility is common and reflects defects in sperm tail axonemes. Most patients with primary ciliary dyskinesia have a history of neonatal respiratory distress, suggesting that motile cilia play a role in fluid clearance during the transition from a fetal to neonatal lung. Ciliopathies involving sensory cilia, including autosomal dominant or recessive polycystic kidney disease, Bardet-Biedl syndrome, and Alstrom syndrome, may have chronic respiratory symptoms and even bronchiectasis suggesting clinical overlap with primary ciliary dyskinesia

Cancer du poumon

sommaire

(8) VOYKOV B, GUENOVA E. **Images in clinical medicine. Diagnostic finding in the iris**. N Engl J Med. 2009 Sept. 24, vol. 361, n° 13, p.e22
http://dx.doi.org/36110.1056/NEJMicm0805492 **(Accès réservé EHESP)**

(9) DEUTSCH ME. **Less-toxic cigarette use may backfire**. Science. 2009 Aug. 21, vol. 325, n° 5943, p.944
http://dx.doi.org/325/59410.1126/science.325_944a **(Accès réservé EHESP)**

(10) ROSELL R, MORAN T, QUERALT C, PORTA R, *et al.* **Screening for epidermal growth factor receptor mutations in lung cancer**. N Engl J Med. 2009 Sept. 3, vol. 361, n° 10, pp.958-967
http://dx.doi.org/10.1056/NEJMoa0904554 **(Accès réservé EHESP)**

BACKGROUND: Activating mutations in the epidermal growth factor receptor gene (EGFR) confer hypersensitivity to the tyrosine kinase inhibitors gefitinib and erlotinib in patients with advanced non-small-cell lung cancer. We evaluated the feasibility of large-scale screening for EGFR

mutations in such patients and analyzed the association between the mutations and the outcome of erlotinib treatment. METHODS: From April 2005 through November 2008, lung cancers from 2105 patients in 129 institutions in Spain were screened for EGFR mutations. The analysis was performed in a central laboratory. Patients with tumors carrying EGFR mutations were eligible for erlotinib treatment. RESULTS: EGFR mutations were found in 350 of 2105 patients (16.6%). Mutations were more frequent in women (69.7%), in patients who had never smoked (66.6%), and in those with adenocarcinomas (80.9%) (P<0.001 for all comparisons). The mutations were deletions in exon 19 (62.2%) and L858R (37.8%). Median progression-free survival and overall survival for 217 patients who received erlotinib were 14 months and 27 months, respectively. The adjusted hazard ratios for the duration of progression-free survival were 2.94 for men (P<0.001); 1.92 for the presence of the L858R mutation, as compared with a deletion in exon 19 (P=0.02); and 1.68 for the presence of the L858R mutation in paired serum DNA, as compared with the absence of the mutation (P=0.02). The most common adverse events were mild rashes and diarrhea; grade 3 cutaneous toxic effects were recorded in 16 patients (7.4%) and grade 3 diarrhea in 8 patients (3.7%). CONCLUSIONS: Large-scale screening of patients with lung cancer for EGFR mutations is feasible and can have a role in decisions about treatment

(11) GAZDAR AF. **Personalized medicine and inhibition of EGFR signaling in lung cancer**. N Engl J Med. 2009 Sept. 3, vol. 361, n° 10, pp.1018-1020
http://dx.doi.org/NEJMe10.1056/NEJMe0905763 **(Accès réservé EHESP)**

(12) MOK TS, WU YL, THONGPRASERT S, YANG CH, *et al.* **Gefitinib or carboplatin-paclitaxel in pulmonary adenocarcinoma**. N Engl J Med. 2009 Sept. 3, vol. 361, n° 10, pp.947-957
http://dx.doi.org/10.1056/NEJMoa0810699 **(Accès réservé EHESP)**

BACKGROUND: Previous, uncontrolled studies have suggested that first-line treatment with gefitinib would be efficacious in selected patients with non-small-cell lung cancer. METHODS: In this phase 3, open-label study, we randomly assigned previously untreated patients in East Asia who had advanced pulmonary adenocarcinoma and who were nonsmokers or former light smokers to receive gefitinib (250 mg per day) (609 patients) or carboplatin (at a dose calculated to produce an area under the curve of 5 or 6 mg per milliliter per minute) plus paclitaxel (200 mg per square meter of body-surface area) (608 patients). The primary end point was progression-free survival. RESULTS: The 12-month rates of progression-free survival were 24.9% with gefitinib and 6.7% with carboplatin-paclitaxel. The study met its primary objective of showing the noninferiority of gefitinib and also showed its superiority, as compared with carboplatin-paclitaxel, with respect to progression-free survival in the intention-to-treat population (hazard ratio for progression or death, 0.74; 95% confidence interval [CI], 0.65 to 0.85; P<0.001). In the subgroup of 261 patients who were positive for the epidermal growth factor receptor gene (EGFR) mutation, progression-free survival was significantly longer among those who received gefitinib than among those who received carboplatin-paclitaxel (hazard ratio for progression or death, 0.48; 95% CI, 0.36 to 0.64; P<0.001), whereas in the subgroup of 176 patients who were negative for the mutation, progression-free survival was significantly longer among those who received carboplatin-paclitaxel (hazard ratio for progression or death with gefitinib, 2.85; 95% CI, 2.05 to 3.98; P<0.001). The most common adverse events were rash or acne (in 66.2% of patients) and diarrhea (46.6%) in the gefitinib group and neurotoxic effects (69.9%), neutropenia (67.1%), and alopecia (58.4%) in the carboplatin-paclitaxel group. CONCLUSIONS: Gefitinib is superior to carboplatin-paclitaxel as an initial treatment for pulmonary adenocarcinoma among nonsmokers or former light smokers in East Asia. The presence in the tumor of a mutation of the EGFR gene is a strong predictor of a better outcome with gefitinib. (ClinicalTrials.gov number, NCT00322452.)

(13) SILVESTRI GA, ALBERG AJ, RAVENEL J. **The changing epidemiology of lung cancer with a focus on screening**. BMJ. 2009, vol. 339, p.b3053
http://www.ncbi.nlm.nih.gov/pubmed/19687094 **(Accès réservé EHESP)**

(14) GWINN M, GUESSOUS I, KHOURY MJ. **Invited commentary: genes, environment, and hybrid vigor**. Am J Epidemiol. 2009 Sept. 15, vol. 170, n° 6, pp.703-707
http://dx.doi.org/10.1093/aje/kwp221 **(Accès réservé EHESP)**

In the 1950s, case-control studies of smoking and lung cancer established a paradigm for epidemiologic studies of risk factors for chronic diseases. Since then, thousands of case-control studies have examined possible associations of countless risk factors with numerous diseases, rarely finding associations as strong or consistent as that of smoking with lung cancer. Recently, researchers have applied advances in molecular genetics to conduct candidate gene and genome-wide association studies of lung cancer. Skeptics among both epidemiologists and geneticists have argued that genomic research adds little value when most cases of disease can be attributed to a preventable exposure; however, well-conducted studies of gene-environment interactions that draw on data from more than 50 years of research in toxicology, pathophysiology, and behavioral science offer important models for the development of more comprehensive approaches to understanding the etiology of chronic diseases

(15) CHANG CH, HSIAO CF, CHANG GC, TSAI YH, *et al.* **Interactive effect of cigarette smoking with human 8-oxoguanine DNA N-glycosylase 1 (hOGG1) polymorphisms on the risk of lung cancer: a case-control study in Taiwan**. Am J Epidemiol. 2009 Sept. 15, vol. 170, n° 6, pp.695-702
http://dx.doi.org/10.1093/aje/kwp019 **(Accès réservé EHESP)**

Human 8-oxoguanine DNA N-glycosylase 1 (hOGG1) plays an important role in repairing oxidative DNA damage induced by tobacco carcinogens. In this case-control study, the authors examined the interactive effect of hOGG1 gene polymorphisms and cigarette smoking on the risk of lung cancer in Taiwan. A total of 1,096 cases and 1,007 controls were enrolled from 6 medical centers in Taiwan during 2002-2004. hOGG1 Ser326Cys genetic polymorphisms were determined using the MassARRAY system (SEQUENOM, Inc., San Diego, California). Tobacco smoking history was obtained through personal interview according to a structured questionnaire. Logistic regression analysis was used to estimate multivariate-adjusted odds ratios and 95% confidence intervals. The odds of developing lung cancer for persons with the Cys/Cys genotype versus the Ser/Ser genotype were 1.11 (95% confidence interval (CI): 0.74, 1.65) for never smokers, 1.45 (95% CI: 0.74, 2.83) for moderate smokers, and 3.52 (95% CI: 1.54, 8.06) for heavy smokers. The P value for interaction in the logistic model was 0.01. The increased risk associated with the Cys/Cys genotype among heavy smokers remained statistically significant for various histologic types of lung cancer, including adenocarcinoma, squamous cell carcinoma, and small cell carcinoma. The authors conclude that there was a noticeable modifying effect on the association between hOGG1 genotype and lung cancer risk by cigarette smoking status

(16) ALBAIN KS, SWANN RS, RUSCH VW, TURRISI AT, III, *et al.* **Radiotherapy plus chemotherapy with or without surgical resection for stage III non-small-cell lung cancer: a phase III randomised controlled trial**. Lancet. 2009 Aug. 1, vol. 374, n° 9687, pp.379-386
http://dx.doi.org/10.1016/S0140-6736(09)60737-6 **(Accès réservé EHESP)**

BACKGROUND: Results from phase II studies in patients with stage IIIA non-small-cell lung cancer with ipsilateral mediastinal nodal metastases (N2) have shown the feasibility of resection after concurrent chemotherapy and radiotherapy with promising rates of survival. We therefore did this phase III trial to compare concurrent chemotherapy and radiotherapy followed by resection with standard concurrent chemotherapy and definitive radiotherapy without resection. METHODS: Patients with stage T1-3pN2M0 non-small-cell lung cancer were randomly assigned in a 1:1 ratio to concurrent induction chemotherapy (two cycles of cisplatin [50 mg/m(2) on days 1, 8, 29, and 36] and etoposide [50 mg/m(2) on days 1-5 and 29-33]) plus radiotherapy (45 Gy) in multiple academic and community hospitals. If no progression, patients in group 1 underwent resection and those in group 2 continued radiotherapy uninterrupted up to 61 Gy. Two additional cycles of cisplatin and etoposide were given in both groups. The primary endpoint was overall survival (OS). Analysis was by intention to treat. This study is registered with ClinicalTrials.gov, number NCT00002550. FINDINGS: 202 patients (median age 59 years, range 31-77) were assigned to group 1 and 194 (61 years, 32-78) to group 2. Median OS was 23.6 months (IQR 9.0-not reached) in group 1 versus 22.2 months (9.4-52.7) in group 2 (hazard ratio [HR] 0.87 [0.70-1.10]; p=0.24). Number of patients alive at 5 years was 37 (point estimate 27%) in group 1 and 24 (point estimate

20%) in group 2 (odds ratio 0.63 [0.36-1.10]; p=0.10). With N0 status at thoracotomy, the median OS was 34.4 months (IQR 15.7-not reached; 19 [point estimate 41%] patients alive at 5 years). Progression-free survival (PFS) was better in group 1 than in group 2, median 12.8 months (5.3-42.2) vs 10.5 months (4.8-20.6), HR 0.77 [0.62-0.96]; p=0.017); the number of patients without disease progression at 5 years was 32 (point estimate 22%) versus 13 (point estimate 11%), respectively. Neutropenia and oesophagitis were the main grade 3 or 4 toxicities associated with chemotherapy plus radiotherapy in group 1 (77 [38%] and 20 [10%], respectively) and group 2 (80 [41%] and 44 [23%], respectively). In group 1, 16 (8%) deaths were treatment related versus four (2%) in group 2. In an exploratory analysis, OS was improved for patients who underwent lobectomy, but not pneumonectomy, versus chemotherapy plus radiotherapy. INTERPRETATION: Chemotherapy plus radiotherapy with or without resection (preferably lobectomy) are options for patients with stage IIIA(N2) non-small-cell lung cancer. FUNDING: National Cancer Institute, Canadian Cancer Society, and National Cancer Institute of Canada

(17) EBERHARDT WE, STAMATIS G, STUSCHKE M. **Surgery in stage III non-small-cell lung cancer**. Lancet. 2009 Aug. 1, vol. 374, n° 9687, pp.359-360
http://dx.doi.org/10.1016/S0140-6736(09)61026-6 **(Accès réservé EHESP)**

(18) HILL DA, IVANOVICH J, PRIEST JR, GURNETT CA, *et al.* **DICER1 mutations in familial pleuropulmonary blastoma**. Science. 2009 Aug. 21, vol. 325, n° 5943, p.965
http://dx.doi.org/10.1126/science.1174334 **(Accès réservé EHESP)**

Pleuropulmonary blastoma (PPB) is a rare pediatric lung tumor that is often part of an inherited cancer syndrome. PPBs consist of mesenchymal cells that are susceptible to malignant transformation and cysts lined by epithelial cells. In a subset of patients, overgrowth of the cysts by mesenchymal cells leads to sarcoma formation. Here, we show that 11 multiplex PPB families harbor heterozygous germline mutations in DICER1, a gene encoding an endoribonuclease critical to the generation of small noncoding regulatory RNAs. Expression of DICER1 protein was undetectable in the epithelial component of PPB tumors but was retained in the malignant mesenchyme (sarcoma). We hypothesize that loss of DICER1 in the epithelium of the developing lung alters the regulation of diffusible factors that promote mesenchymal proliferation

Dengue

sommaire

(19) HUY R, WICHMANN O, BEATTY M, NGAN C, *et al.* **Cost of dengue and other febrile illnesses to households in rural Cambodia: a prospective community-based case-control study**. BMC Public Health. 2009, vol. 9, p.155
http://dx.doi.org/1471-24510.1186/1471-2458-9-155 **(Accès libre)**

BACKGROUND: The average annual reported dengue incidence in Cambodia is 3.3/1,000 among children < 15 years of age (2002-2007). To estimate the economic burden of dengue, accurate cost-of-illness data are essential. We conducted a prospective, community-based, matched case-control study to assess the cost and impact of an episode of dengue fever and other febrile illness on households in rural Cambodia. METHODS: In 2006, active fever surveillance was conducted among a cohort of 6,694 children aged < or = 15 years in 16 villages in Kampong Cham province, Cambodia. Subsequently, a case-control study was performed by individually assigning one non-dengue febrile control from the cohort to each laboratory-confirmed dengue case. Parents of cases and controls were interviewed using a standardized questionnaire to determine household-level, illness-related expenditures for medical and non-medical costs, and estimated income loss (see Additional file 1). The household socio-economic status was determined and its possible association with health seeking behaviour and the ability to pay for the costs of a febrile illness. RESULTS: Between September and November 2006, a total of 60 household heads were interviewed: 30 with dengue-positive and 30 with dengue-negative febrile children. Mean total dengue-related costs did not differ from those of other febrile illnesses (31.5 vs. 27.2 US dollars, p = 0.44). Hospitalization almost tripled the costs of dengue (from 14.3 to 40.1 US dollars) and

doubled the costs of other febrile illnesses (from 17.0 to 36.2 US dollars). To finance the cost of a febrile illness, 67% of households incurred an average debt of 23.5 US dollars and higher debt was associated with hospitalization compared to outpatient treatment (23.1 US dollars vs. 4.5 US dollars, p < 0.001). These costs compared to an average one-week expenditure on food of 9.5 US dollars per household (range 2.5-21.3). In multivariate analysis, higher socio-economic status (odds ratio [OR] 4.4; 95% confidence interval [CI] 1.4-13.2), duration of fever (OR 2.1; 95%CI 1.3-3.5), and age (OR 0.8; 95%CI 0.7-0.9) were independently associated with hospitalization. CONCLUSION: In Cambodia, dengue and other febrile illnesses pose a financial burden to households. A possible reason for a lower rate of hospitalization among children from poor households could be the burden of higher illness-related costs and debts

(20) CUDDEHE M. **Mexico fights rise in dengue fever**. Lancet. 2009 Aug. 22, vol. 374, n° 9690, p.602
http://www.ncbi.nlm.nih.gov/pubmed/19708101 **(Accès réservé EHESP)**

Diabète

sommaire

(21) HARATI H, HADAEGH F, SAADAT N, AZIZI F. **Population-based incidence of Type 2 diabetes and its associated risk factors: results from a six-year cohort study in Iran**. BMC Public Health. 2009, vol. 9, p.186
http://dx.doi.org/1471-24510.1186/1471-2458-9-186 **(Accès libre)**

BACKGROUND: The Middle East is estimated to have the largest increase in prevalence of diabetes by 2030; yet there is lack of published data on the incidence of Type 2 diabetes in this region. This study aimed to estimate Type 2 diabetes incidence and its associated risk factors in an Iranian urban population. METHODS: Among 3307 non-diabetics >or= 20 years (mean age 42 +/- 13 years, 42% males), glucose tolerance test was performed at baseline in 1999-2001 and at two consecutive phases in 2001-2005 and 2005-2008. Diabetes and glucose tolerance status were defined according to the ADA 1997 criteria. Logistic regression was used to determine the independent variables associated with incident diabetes and their odds ratios (OR). RESULTS: After median follow-up of 6 years, 237 new cases of diabetes were ascertained corresponding to an age and sex standardized cumulative incidence of 6.4% (95%CI: 5.6-7.2) and incidence rate of 10.6 (9.2-12.1) per 1000 person years. Besides classical diabetes risk factors, female sex and low education level significantly increased risk of diabetes in age adjusted models. In full model, the independent predictors were age [OR, 95%CI: 1.2 (1.1-1.3)], family history of diabetes [1.8 (1.3-2.5)], body mass index >or= 30 kg/m2 [2.3 (1.5-3.6)], abdominal obesity [1.9 (1.4-2.6)], high triglyceride [1.4 (1.1-1.9)], Isolated impaired fasting glucose (IFG) [7.4 (3.6-15.0)], Isolated impaired glucose tolerance (IGT) [5.9 (4.2-8.4)] and combined IFG and IGT [42.2 (23.8-74.9)]. CONCLUSION: More than 1% of the Iranian urban population older than 20 years develops Type 2 diabetes each year. Combination of IFG and IGT was the strongest predictor of incident diabetes among the modifiable risk factors

(22) ESTEGHAMATI A, MEYSAMIE A, KHALILZADEH O, RASHIDI A, *et al.* **Third national Surveillance of Risk Factors of Non-Communicable Diseases (SuRFNCD-2007) in Iran: methods and results on prevalence of diabetes, hypertension, obesity, central obesity, and dyslipidemia**. BMC Public Health. 2009, vol. 9, p.167
http://dx.doi.org/1471-24510.1186/1471-2458-9-167 **(Accès libre)**

BACKGROUND: The burden of non-communicable diseases is rising globally. This trend seems to be faster in developing countries of the Middle East. In this study, we presented the latest prevalence rates of a number of important non-communicable diseases and their risk factors in the Iranian population. METHODS: The results of this study are extracted from the third national Surveillance of Risk Factors of Non-Communicable Diseases (SuRFNCD-2007), conducted in 2007. A total of 5,287 Iranian citizens, aged 15-64 years, were included in this survey. Interviewer-administered questionnaires were applied to collect the data of participants including the

demographics, diet, physical activity, smoking, history of hypertension, and history of diabetes. Anthropometric characteristics were measured and serum biochemistry profiles were determined on venous blood samples. Diabetes (fasting plasma glucose >or= 126 mg/dl), hypertension (systolic blood pressure >or= 140 mmHg, diastolic blood pressure >or= 90 mmHg, or use of anti-hypertensive drugs), dyslipidemia (hypertriglyceridemia: triglycerides >or= 150 mg/dl, hypercholesterolemia: total cholesterol >or= 200 mg/dl), obesity (body mass index >or= 30 kg/m2), and central obesity (waist circumference >or= 80 cm in females and >or= 94 cm in males) were identified and the national prevalence rates were estimated. RESULTS: The prevalence of diabetes, hypertension, obesity, and central obesity was 8.7% (95%CI = 7.4-10.2%), 26.6% (95%CI = 24.4-28.9%), 22.3% (95%CI = 20.2-24.5%), and 53.6% (95%CI = 50.4-56.8%), respectively. The prevalence of hypertriglyceridemia and hypercholesterolemia was 36.4% (95%CI = 34.1-38.9%) and 42.9% (95%CI = 40.4-45.4%), respectively. All of the mentioned prevalence rates were higher among females (except hypertriglyceridemia) and urban residents. CONCLUSION: We documented a strikingly high prevalence of a number of chronic non-communicable diseases and their risk factors among Iranian adults. Urgent preventive interventions should be implemented to combat the growing public health problems in Iran

(23) VADSTRUP ES, FROLICH A, PERRILD H, BORG E, *et al.* **Lifestyle intervention for type 2 diabetes patients: trial protocol of The Copenhagen Type 2 Diabetes Rehabilitation Project**. BMC Public Health. 2009, vol. 9, p.166
http://dx.doi.org/1471-24510.1186/1471-2458-9-166 **(Accès libre)**

BACKGROUND: Current guidelines recommend education, physical activity and changes in diet for type 2 diabetes patients, yet the composition and organization of non-pharmacological care are still controversial. Therefore, it is very important that programmes aiming to improve non-pharmacological treatment of type 2 diabetes are developed and evaluated. The Copenhagen Type 2 Diabetes Rehabilitation Project aims to evaluate the effectiveness of a new group-based lifestyle rehabilitation programme in a Health Care Centre in primary care. METHODS/DESIGN: The group-based diabetes rehabilitation programme consists of empowerment-based education, supervised exercise and dietary intervention. The effectiveness of this multi-disciplinary intervention is compared with conventional individual counselling in a Diabetes Outpatient Clinic and evaluated in a prospective and randomized controlled trial. During the recruitment period of 18 months 180 type 2 diabetes patients will be randomized to the intervention group and the control group. Effects on glycaemic control, quality of life, self-rated diabetes symptoms, body composition, blood pressure, lipids, insulin resistance, beta-cell function and physical fitness will be examined after 6, 12 and 24 months. DISCUSSION: The Copenhagen Type 2 Diabetes Rehabilitation Project evaluates a multi-disciplinary non-pharmacological intervention programme in a primary care setting and provides important information about how to organize non-pharmacological care for type 2 diabetes patients. TRIAL REGISTRATION: (ClinicalTrials.gov) registration number: NCT00284609

(24) ECHOUFFO-TCHEUGUI JB, SIMMONS RK, WILLIAMS KM, BARLING RS, *et al.* **The ADDITION-Cambridge trial protocol: a cluster -- randomised controlled trial of screening for type 2 diabetes and intensive treatment for screen-detected patients**. BMC Public Health. 2009, vol. 9, p.136
http://dx.doi.org/1471-24510.1186/1471-2458-9-136 **(Accès libre)**

BACKGROUND: The increasing prevalence of type 2 diabetes poses a major public health challenge. Population-based screening and early treatment for type 2 diabetes could reduce this growing burden. However, the benefits of such a strategy remain uncertain. METHODS AND DESIGN: The ADDITION-Cambridge study aims to evaluate the effectiveness and cost-effectiveness of (i) a stepwise screening strategy for type 2 diabetes; and (ii) intensive multifactorial treatment for people with screen-detected diabetes in primary care. 63 practices in the East Anglia region participated. Three undertook the pilot study, 33 were allocated to three groups: no screening (control), screening followed by intensive treatment (IT) and screening plus routine care (RC) in an unbalanced (1:3:3) randomisation. The remaining 27 practices were randomly allocated to IT and RC. A risk score incorporating routine practice data was used to

identify people aged 40-69 years at high-risk of undiagnosed diabetes. In the screening practices, high-risk individuals were invited to take part in a stepwise screening programme. In the IT group, diabetes treatment is optimised through guidelines, target-led multifactorial treatment, audit, feedback, and academic detailing for practice teams, alongside provision of educational materials for newly diagnosed participants. Primary endpoints are modelled cardiovascular risk at one year, and cardiovascular mortality and morbidity at five years after diagnosis of diabetes. Secondary endpoints include all-cause mortality, development of renal and visual impairment, peripheral neuropathy, health service costs, self-reported quality of life, functional status and health utility. Impact of the screening programme at the population level is also assessed through measures of mortality, cardiovascular morbidity, health status and health service use among high-risk individuals. DISCUSSION: ADDITION-Cambridge is conducted in a defined high-risk group accessible through primary care. It addresses the feasibility of population-based screening for diabetes, as well as the benefits and costs of screening and intensive multifactorial treatment early in the disease trajectory. The intensive treatment algorithm is based on evidence from studies including individuals with clinically diagnosed diabetes and the education materials are informed by psychological theory. ADDITION-Cambridge will provide timely evidence concerning the benefits of early intensive treatment and will inform policy decisions concerning screening for type 2 diabetes. TRIAL REGISTRATION: Current Controlled trials ISRCTN86769081

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http://dx.doi.org/10.1056/NEJMoa0902430 **(Accès réservé EHESP)**

BACKGROUND: It is uncertain whether treatment of mild gestational diabetes mellitus improves pregnancy outcomes. METHODS: Women who were in the 24th to 31st week of gestation and who met the criteria for mild gestational diabetes mellitus (i.e., an abnormal result on an oral glucose-tolerance test but a fasting glucose level below 95 mg per deciliter [5.3 mmol per liter]) were randomly assigned to usual prenatal care (control group) or dietary intervention, self-

monitoring of blood glucose, and insulin therapy, if necessary (treatment group). The primary outcome was a composite of stillbirth or perinatal death and neonatal complications, including hyperbilirubinemia, hypoglycemia, hyperinsulinemia, and birth trauma. RESULTS: A total of 958 women were randomly assigned to a study group--485 to the treatment group and 473 to the control group. We observed no significant difference between groups in the frequency of the composite outcome (32.4% and 37.0% in the treatment and control groups, respectively; P=0.14). There were no perinatal deaths. However, there were significant reductions with treatment as compared with usual care in several prespecified secondary outcomes, including mean birth weight (3302 vs. 3408 g), neonatal fat mass (427 vs. 464 g), the frequency of large-for-gestational-age infants (7.1% vs. 14.5%), birth weight greater than 4000 g (5.9% vs. 14.3%), shoulder dystocia (1.5% vs. 4.0%), and cesarean delivery (26.9% vs. 33.8%). Treatment of gestational diabetes mellitus, as compared with usual care, was also associated with reduced rates of preeclampsia and gestational hypertension (combined rates for the two conditions, 8.6% vs. 13.6%; P=0.01). CONCLUSIONS: Although treatment of mild gestational diabetes mellitus did not significantly reduce the frequency of a composite outcome that included stillbirth or perinatal death and several neonatal complications, it did reduce the risks of fetal overgrowth, shoulder dystocia, cesarean delivery, and hypertensive disorders. (ClinicalTrials.gov number, NCT00069576.)

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(36) PRADHAN AD, EVERETT BM, COOK NR, RIFAI N, *et al.* **Effects of initiating insulin and metformin on glycemic control and inflammatory biomarkers among patients with type 2 diabetes: the LANCET randomized trial**. JAMA. 2009 Sept. 16, vol. 302, n° 11, pp.1186-1194
http://dx.doi.org/10.1001/jama.2009.1347 **(Accès réservé EHESP)**

CONTEXT: As diabetes is in part an inflammatory condition, the initiation of insulin and/or metformin may beneficially reduce levels of inflammatory biomarkers such as high-sensitivity C-reactive protein (hsCRP). OBJECTIVE: To determine whether insulin alone or combined with metformin lowers levels of hsCRP, IL-6, and soluble tumor necrosis factor receptor 2 (sTNFr2) in patients with recent-onset type 2 diabetes mellitus. DESIGN, SETTING, AND PARTICIPANTS: Randomized 2 x 2 factorial trial of open-label insulin glargine and placebo-controlled metformin in 500 adults with type 2 diabetes (median time from diagnosis, 2.0 years), suboptimal glycemic control, and elevated hsCRP levels. Patients were recruited from US office-based practices between October 2006 and December 2008. INTERVENTION: Random allocation to 1 of 4 treatments (placebo metformin only, placebo metformin and insulin glargine, active metformin only, or active metformin and insulin glargine) with dose titration targeting fasting blood glucose less than 110 mg/dL. MAIN OUTCOME MEASURES: Change in hsCRP level (primary end point) and change in IL-6 and sTNFr2 levels (secondary end points) from baseline to 14 weeks. RESULTS: Levels of glucose and glycated hemoglobin (HbA(1c)) were significantly reduced with active treatment vs placebo (all P values <.001). Levels of hsCRP were reduced in all 4 groups. There was no significant difference in hsCRP reduction among those allocated to insulin (-11.8%; 95% CI, -18.7% to -4.4%) or to no insulin (-17.5%; 95% CI, -23.9% to -10.5%) (P for difference = .25), or among those allocated to active metformin (-18.1%; 95% CI, -24.4% to -11.1%) or placebo metformin (-11.2%; 95% CI, -18.1% to -3.7%) (P for difference = .17). In the individual treatment groups, despite a differential impact on glucose control, reductions in hsCRP in the metformin (-

16.1%; 95% CI, -25.1% to -6.1%) and metformin plus insulin (-20.1%; 95% CI, -28.8% to -10.4%) groups were no different than reductions with placebo alone (-19.0%; 95% CI, -27.8% to -9.1%; P = .67 and .87 vs placebo, respectively). By contrast, hsCRP reduction was attenuated with insulin alone (-2.9%, 95% CI, -13.2% to 8.6%; P = .03 vs placebo). Similar findings were noted for levels of IL-6 and sTNFr2. CONCLUSION: In patients with recent-onset type 2 diabetes, treatment with insulin or metformin compared with placebo did not reduce inflammatory biomarker levels despite improving glucose control. TRIAL REGISTRATION: clinicaltrials.gov Identifier: NCT00366301

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(44) ODENT M. **Gestational diabetes and health promotion**. Lancet. 2009 Aug. 29, vol. 374, n° 9691, p.684
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(45) MAYOSI BM, FLISHER AJ, LALLOO UG, SITAS F, *et al.* **The burden of non-communicable diseases in South Africa**. Lancet. 2009 Sept. 12, vol. 374, n° 9693, pp.934-947
http://dx.doi.org/10.1016/S0140-6736(09)61087-4 **(Accès réservé EHESP)**

15 years after its first democratic election, South Africa is in the midst of a profound health transition that is characterised by a quadruple burden of communicable, non-communicable, perinatal and maternal, and injury-related disorders. Non-communicable diseases are emerging in both rural and urban areas, most prominently in poor people living in urban settings, and are resulting in increasing pressure on acute and chronic health-care services. Major factors include demographic change leading to a rise in the proportion of people older than 60 years, despite the negative effect of HIV/AIDS on life expectancy. The burden of these diseases will probably increase as the roll-out of antiretroviral therapy takes effect and reduces mortality from HIV/AIDS. The scale of the challenge posed by the combined and growing burden of HIV/AIDS and non-communicable diseases demands an extraordinary response that South Africa is well able to provide. Concerted action is needed to strengthen the district-based primary health-care system, to integrate the care of chronic diseases and management of risk factors, to develop a national surveillance system, and to apply interventions of proven cost-effectiveness in the primary and secondary prevention of such diseases within populations and health services. We urge the launching of a national initiative to establish sites of service excellence in urban and rural settings

throughout South Africa to trial, assess, and implement integrated care interventions for chronic infectious and non-communicable diseases

(46) NANDA A, CHEN MH, BRACCIOFORTE MH, MORAN BJ, *et al.* **Hormonal therapy use for prostate cancer and mortality in men with coronary artery disease-induced congestive heart failure or myocardial infarction**. JAMA. 2009 Aug. 26, vol. 302, n° 8, pp.866-873
http://dx.doi.org/10.1001/jama.2009.1137 **(Accès réservé EHESP)**

CONTEXT: Hormonal therapy (HT) when added to radiation therapy (RT) for treating unfavorable-risk prostate cancer leads to an increase in survival except possibly in men with moderate to severe comorbidity. However, it is unknown which comorbid conditions eliminate this survival benefit. OBJECTIVE: To assess whether neoadjuvant HT use affects the risk of all-cause mortality in men with prostate cancer and coronary artery disease (CAD)-induced congestive heart failure (CHF) or myocardial infarction (MI), CAD risk factors, or no comorbidity. DESIGN, SETTING, AND PATIENTS: A total of 5077 men (median age, 69.5 years) with localized or locally advanced prostate cancer were consecutively treated with or without a median of 4 months of neoadjuvant HT followed by RT at a suburban cancer center between 1997 and 2006 and were followed up until July 1, 2008. Cox regression multivariable analyses were performed assessing whether neoadjuvant HT use affected the risk of all-cause mortality, adjusting for age, year and type of RT, treatment propensity score, and known prostate cancer prognostic factors in each comorbidity group. MAIN OUTCOME MEASURE: Risk of all-cause mortality. RESULTS: Neoadjuvant HT use was not associated with an increased risk of all-cause mortality in men with no comorbidity (9.6% vs 6.7%, adjusted hazard ratio [HR], 0.97; 95% confidence interval [CI], 0.72-1.32; P = .86) or a single CAD risk factor (10.7% vs 7.0%, adjusted HR, 1.04; 95% CI, 0.75-1.43; P = .82) after median follow-ups of 5.0 and 4.4 years, respectively. However, for men with CAD-induced CHF or MI, after a median follow-up of 5.1 years, neoadjuvant HT use was significantly associated with an increased risk of all-cause mortality (26.3% vs 11.2%, adjusted HR, 1.96; 95% CI, 1.04-3.71; P = .04). CONCLUSION: Neoadjuvant HT use is significantly associated with an increased risk of all-cause mortality among men with a history of CAD-induced CHF or MI but not among men with no comorbidity or a single CAD risk factor

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(48) SONG F, LI X, ZHANG M, YAO P, *et al.* **Association between heme oxygenase-1 gene promoter polymorphisms and type 2 diabetes in a Chinese population**. Am J Epidemiol. 2009 Sept. 15, vol. 170, n° 6, pp.747-756
http://dx.doi.org/10.1093/aje/kwp196 **(Accès réservé EHESP)**

The authors aimed to determine whether 2 functional polymorphisms in the heme oxygenase-1 (HO-1) gene promoter are associated with type 2 diabetes mellitus (T2DM). A Chinese case-control study involving 1,103 newly diagnosed T2DM patients, 371 patients with impaired glucose regulation (IGR), and 1,615 controls was performed (December 2004-December 2007). A (GT)(n) microsatellite polymorphism and a single nucleotide polymorphism, T(-413)A, were genotyped, and their functional relevance was evaluated by examining the level of HO-1 protein expression. For the (GT)(n) microsatellite polymorphism, genotypes with the L (GT)(n) allele (>or=25 GT repeats) were associated with increased odds of IGR or T2DM compared with the S/S genotype (<25 GT repeats) (S/L genotype: odds ratio (OR) = 1.35, P = 0.048; L/L genotype: OR = 1.65, P = 0.006). Subsequent haplotype analysis showed that haplotype TL contributed to increased odds of IGR or T2DM compared with haplotype TS (OR = 1.56, P = 0.003). In functional analyses, HO-1 expression level was significantly reduced in persons with IGR and T2DM carrying the L/L (GT)(n) genotype compared with persons with the S/S genotype. Further haplotype combination assay confirmed the functional dominance of the (GT)(n) microsatellite polymorphism over the T(-413)A single nucleotide polymorphism. These results support an association between the HO-1 (GT)(n) microsatellite polymorphism, HO-1 expression levels, and the odds of T2DM

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(50) JUURLINK DN, GOMES T, LIPSCOMBE LL, AUSTIN PC, *et al.* **Adverse cardiovascular events during treatment with pioglitazone and rosiglitazone: population based cohort study**. BMJ. 2009, vol. 339, p.b2942
http://www.ncbi.nlm.nih.gov/pubmed/19690342 **(Accès réservé EHESP)**

OBJECTIVE: To compare the risk of acute myocardial infarction, heart failure, and death in patients with type 2 diabetes treated with rosiglitazone and pioglitazone. DESIGN: Retrospective cohort study. SETTING: Ontario, Canada. PARTICIPANTS: Outpatients aged 66 years and older who were started on rosiglitazone or pioglitazone between 1 April 2002 and 31 March 2008. MAIN OUTCOME MEASURE: Composite of death or hospital admission for either acute myocardial infarction or heart failure. In a secondary analysis, each outcome was also examined individually. RESULTS: 39 736 patients who started on either pioglitazone or rosiglitazone were identified. During the six year study period, the composite outcome was reached in 895 (5.3%) of patients taking pioglitazone and 1563 (6.9%) of patients taking rosiglitazone. After extensive adjustment for demographic and clinical factors and drug doses, pioglitazone treated patients had a lower risk of developing the primary outcome than did patients treated with rosiglitazone (adjusted hazard ratio 0.83, 95% confidence interval 0.76 to 0.90). Secondary analyses revealed a lower risk of death (adjusted hazard ratio 0.86, 0.75 to 0.98) and heart failure (0.77, 0.69 to 0.87) with pioglitazone but no significant difference in the risk of acute myocardial infarction (0.95, 0.81 to 1.11). One additional composite outcome would be predicted to occur annually for every 93 patients treated with rosiglitazone rather than pioglitazone. CONCLUSIONS: Among older patients with diabetes, pioglitazone is associated with a significantly lower risk of heart failure and death than is rosiglitazone. Given that rosiglitazone lacks a distinct clinical advantage over pioglitazone, continued use of rosiglitazone may not be justified

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(55) SHEN L, SUN X, YAO L. **Voglibose for prevention of type 2 diabetes mellitus**. Lancet. 2009 Aug. 8, vol. 374, n° 9688, pp.448-449
http://dx.doi.org/10.1016/S0140-6736(09)61446-X **(Accès réservé EHESP)**

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(57) DING EL, SONG Y, MANSON JE, HUNTER DJ, *et al.* **Sex hormone-binding globulin and risk of type 2 diabetes in women and men**. N Engl J Med. 2009 Sept. 17, vol. 361, n° 12, pp.1152-1163
http://dx.doi.org/10.1056/NEJMoa0804381 **(Accès réservé EHESP)**

BACKGROUND: Circulating sex hormone-binding globulin levels are inversely associated with insulin resistance, but whether these levels can predict the risk of developing type 2 diabetes is uncertain. METHODS: We performed a nested case-control study of postmenopausal women in the Women's Health Study who were not using hormone therapy (359 with newly diagnosed type 2 diabetes and 359 controls). Plasma levels of sex hormone-binding globulin were measured; two polymorphisms of the gene encoding sex hormone-binding globulin, SHBG, that were robustly associated with the protein levels were genotyped and applied in mendelian randomization analyses. We then conducted a replication study in an independent cohort of men from the Physicians' Health Study II (170 with newly diagnosed type 2 diabetes and 170 controls). RESULTS: Among women, higher plasma levels of sex hormone-binding globulin were prospectively associated with a lower risk of type 2 diabetes: multivariable odds ratios were 1.00 for the first (lowest) quartile of plasma levels, 0.16 (95% confidence interval [CI], 0.08 to 0.33) for the second quartile, 0.04 (95% CI, 0.01 to 0.12) for the third quartile, and 0.09 (95% CI, 0.03 to 0.21) for the fourth (highest) quartile (P<0.001 for trend). These prospective associations were replicated among men (odds ratio for the highest quartile of plasma levels vs. the lowest quartile, 0.10; 95% CI, 0.03 to 0.36; P<0.001 for trend). As compared with homozygotes of the respective wild-type allele, carriers of a variant allele of the SHBG single-nucleotide polymorphism (SNP) rs6259 had 10% higher sex hormone-binding globulin levels (P=0.005), and carriers of an rs6257 variant had 10% lower plasma levels (P=0.004); variants of both SNPs were also associated with a risk of type 2 diabetes in directions corresponding to their associated sex hormone-binding globulin levels. In mendelian randomization analyses, the predicted odds ratio of type 2 diabetes per standard-deviation increase in the plasma level of sex hormone-binding globulin was 0.28 (95% CI, 0.13 to 0.58) among women and 0.29 (95% CI, 0.15 to 0.58) among men, a finding that suggests that sex hormone-binding globulin may have a causal role in the risk of type 2 diabetes. CONCLUSIONS: Low circulating levels of sex hormone-binding globulin are a strong predictor of the risk of type 2 diabetes in women and men. The clinical usefulness of both SHBG genotypes and plasma levels in stratification and intervention for the risk of type 2 diabetes warrants further examination

(58) FRETTS AM, HOWARD BV, KRISKA AM, SMITH NL, *et al.* **Physical activity and incident diabetes in American Indians: the Strong Heart Study**. Am J Epidemiol. 2009 Sept. 1, vol. 170, n° 5, pp.632-639
http://dx.doi.org/10.1093/aje/kwp181 **(Accès réservé EHESP)**

The authors examined the association between total physical activity (leisure-time plus occupational) and incident diabetes among 1,651 American Indians who participated in the Strong Heart Study, a longitudinal study of cardiovascular disease and its risk factors among 13 American Indian communities in 4 states (North Dakota, South Dakota, Oklahoma, and Arizona). Discrete Cox models were used to examine the association between physical activity level (in tertiles), compared with no physical activity, and incident diabetes, after adjustment for potential confounders. During 10 years of follow-up (f1989-1999), 454 incident cases of diabetes were identified. Compared with participants who reported no physical activity, those who reported any physical activity had a lower risk of diabetes: Odds ratios were 0.67 (95% confidence interval (CI): 0.46, 0.99), 0.67 (95% CI: 0.45, 0.99), and 0.67 (95% CI: 0.45, 0.99) for increasing tertile of physical activity, after adjustment for age, sex, study site, education, smoking, alcohol use, and family history of diabetes. Further adjustment for body mass index and other potential mediators attenuated the risk estimates. These data suggest that physical activity is associated with a lower risk of incident diabetes in American Indians. This study identifies physical activity as an important determinant of diabetes among American Indians and suggests the need for physical activity outreach programs that target inactive American Indians

(59) SALANTI G, SOUTHAM L, ALTSHULER D, ARDLIE K, *et al.* **Underlying genetic models of inheritance in established type 2 diabetes associations**. Am J Epidemiol. 2009 Sept. 1, vol. 170, n° 5, pp.537-545
http://dx.doi.org/10.1093/aje/kwp145 **(Accès réservé EHESP)**

For most associations of common single nucleotide polymorphisms (SNPs) with common diseases, the genetic model of inheritance is unknown. The authors extended and applied a Bayesian meta-analysis approach to data from 19 studies on 17 replicated associations with type 2 diabetes. For 13 SNPs, the data fitted very well to an additive model of inheritance for the diabetes risk allele; for 4 SNPs, the data were consistent with either an additive model or a dominant model; and for 2 SNPs, the data were consistent with an additive or recessive model. Results were robust to the use of different priors and after exclusion of data for which index SNPs had been examined indirectly through proxy markers. The Bayesian meta-analysis model yielded point estimates for the genetic effects that were very similar to those previously reported based on fixed- or random-effects models, but uncertainty about several of the effects was substantially larger. The authors also examined the extent of between-study heterogeneity in the genetic model and found generally small between-study deviation values for the genetic model parameter. Heterosis could not be excluded for 4 SNPs. Information on the genetic model of robustly replicated association signals derived from genome-wide association studies may be useful for predictive modeling and for designing biologic and functional experiments

(60) MOLLOY GJ, STAMATAKIS E, RANDALL G, HAMER M. **Marital status, gender and cardiovascular mortality: behavioural, psychological distress and metabolic explanations**. Soc Sci Med. 2009 July, vol. 69, n° 2, pp.223-228
http://dx.doi.org/10.1016/j.socscimed.2009.05.010 **(Accès réservé EHESP)**

The intermediate processes through which the various unmarried states can increase the risk of subsequent cardiovascular disease mortality are incompletely understood. An understanding of these processes and how they may vary by gender is important for understanding why marital status is strongly and robustly associated with subsequent cardiovascular disease. In a prospective study of 13,889 Scottish men and women (mean age 52.3, Standard Deviation: 11.8 yrs, range 35-95, 56.1% female) without a history of clinically diagnosed cardiovascular disease, we examined the extent to which health behaviours (smoking, alcohol, physical activity), psychological distress (General Health Questionnaire-12 item) and metabolic dysregulation (obesity levels, and the presence of hypertension and diabetes) account for the association between marital status and cardiovascular mortality. There were 258 cardiovascular deaths over an average follow up of 7.1 (Standard Deviation=3.3) years. The risk of cardiovascular mortality was greatest in single, never married men and separated/divorced women compared with those that were married in gender stratified models that were adjusted for age and socio-economic group. In models that were separately adjusted, behavioural factors explained up to 33%, psychological distress explained up to 10% and metabolic dysregulation up to 16% of the relative change in the hazard ratios in the observed significant associations between marital status and cardiovascular mortality. Behavioural factors were particularly important in accounting for the relationship between being separated/divorced and cardiovascular mortality in both men and women (33% and 21% of the relative change in the hazard ratios, respectively). The findings suggest that health behaviour, psychological distress and metabolic dysregulation data have varying explanatory power for understanding the observed relationship between cardiovascular disease mortality and unmarried states

Dépression

sommaire

(61) TAFT AJ, SMALL R, HEGARTY KL, LUMLEY J, *et al.* **MOSAIC (MOthers' Advocates In the Community): protocol and sample description of a cluster randomised trial of mentor mother support to reduce intimate partner violence among pregnant or recent mothers**. BMC Public Health. 2009, vol. 9, p.159
http://dx.doi.org/1471-24510.1186/1471-2458-9-159 **(Accès libre)**

BACKGROUND: Intimate partner violence (IPV) is prevalent globally, experienced by a significant minority of women in the early childbearing years and is harmful to the mental and physical health of women and children. There are very few studies with rigorous designs which have tested the effectiveness of IPV interventions to improve the health and wellbeing of abused women. Evidence for the separate benefit to victims of social support, advocacy and non-professional mentoring suggested that a combined model may reduce the levels of violence, the associated mental health damage and may increase a woman's health, safety and connection with her children. This paper describes the development, design and implementation of a trial of mentor mother support set in primary care, including baseline characteristics of participating women. METHODS/DESIGN: MOSAIC (MOtherS' Advocates In the Community) was a cluster randomised trial embedded in general practice and maternal and child health (MCH) nursing services in disadvantaged suburbs of Melbourne, Australia. Women who were pregnant or with infants, identified as abused or symptomatic of abuse, were referred by IPV-trained GPs and MCH nurses from 24 general practices and eight nurse teams from January 2006 to December 2007. Women in the intervention arm received up to 12 months support from trained and supported non-professional mentor mothers. Vietnamese health professionals also referred Vietnamese women to bilingual mentors in a sub-study. Baseline and follow-up surveys at 12 months measured IPV (CAS), depression (EPDS), general health (SF-36), social support (MOS-SF) and attachment to children (PSI-SF). Significant development and piloting occurred prior to trial commencement. Implementation interviews with MCH nurses, GPs and mentors assisted further refinement of the intervention. In-depth interviews with participants and mentors, and follow-up surveys of MCH nurses and GPs at trial conclusion will shed further light on MOSAIC's impact. DISCUSSION: Despite significant challenges, MOSAIC will make an important contribution to the need for evidence of effective partner violence interventions, the role of non-professional mentors in partner violence support services and the need for more evaluation of effective health professional training and support in caring for abused women and children among their populations. TRIAL REGISTRATION: ACTRN12607000010493

(62) HONG X, LI J, XU F, TSE LA, *et al.* **Physical activity inversely associated with the presence of depression among urban adolescents in regional China**. BMC Public Health. 2009, vol. 9, p.148
http://dx.doi.org/1471-24510.1186/1471-2458-9-148 **(Accès libre)**

BACKGROUND: An inverse relationship between physical activity (PA) and depression among adolescents has been reported in developed communities without consideration of sedentary behaviors (SB, including sitting for course study, viewing TV, and sleeping). We explored the association between recreational PA time (hr/wk) and depression after adjustment with SB and other possible confounders among Chinese adolescents. METHODS: A population-based cross-sectional study was conducted in Nanjing municipality of China in 2004 using a multi-stage cluster sampling approach. A total of 72 classes were randomly selected from 24 urban junior high schools and all students completed the structured questionnaire. Adolescent depression was examined by the Children's Depression Inventory (CDI) of Chinese version with cutoff point value of 20 or above as the presence of depression. Recreational PA time was measured by a question on weekly hours of PA outside of school. Descriptive statistics, multivariate logistic and linear regression models were used in analysis. RESULTS: The overall prevalence of depression was 15.7% (95%CI: 14.3%, 17.1%) among 2,444 eligible participants. It was found that physical activity was negatively associated with depression. After adjustment for sedentary behaviors and other potential confounders, participants who spent 1-7 hr/wk, 8-14 hr/wk and 15+ hr/wk for

recreational PA, respectively, had odds ratios of 0.70 (95% CI = 0.57, 0.86), 0.68 (95% CI = 0.53, 0.88) and 0.66 (95% CI = 0.50, 0.87) for likelihood of being depressive, compared to their counterparts who spent 0-0.9 hr/wk for PA. This inverse relationship between PA time and depression remained statistically significant by gender and grade. CONCLUSION: This study, conducted among Chinese adolescents, strengthened the evidence that physical activity was inversely associated with depression. Our study has important implications for health officers and public health professionals to pay much attention to the relationship between physical activity and depression in Mainland China

(63) MOSSAKOWSKI KN. **The influence of past unemployment duration on symptoms of depression among young women and men in the United States**. Am J Public Health. 2009 Oct., vol. 99, n° 10, pp.1826-1832
http://dx.doi.org/10.2105/AJPH.2008.152561 **(Accès payant)**

OBJECTIVES: I examined whether unemployment while looking for a job and being out of the labor force while not seeking work have distinct effects on symptoms of depression among young women and men in the United States. I also investigated whether past unemployment duration predicts depressive symptoms. METHODS: I used ordinary least squares regression to analyze data from the 1979-1994 National Longitudinal Survey of Youth. RESULTS: Cross-sectional results suggested that current unemployment status and out-of-the-labor-force status were significantly associated with depressive symptoms at ages 29 through 37 years. The association between being out of the labor force and depressive symptoms was stronger for men. Longitudinal results revealed that past unemployment duration across 15 years of the transition to adulthood significantly predicted depressive symptoms, net of demographics, family background, current socioeconomic status, and prior depressive symptoms. However, duration out of the labor force did not predict depressive symptoms. CONCLUSIONS: Longer durations of unemployment predict higher levels of depressive symptoms among young adults. Future research should measure duration longitudinally and distinguish unemployment from being out of the labor force to advance our understanding of socioeconomic mental health disparities

(64) POLLACK CE, LYNCH J. **Health status of people undergoing foreclosure in the Philadelphia region**. Am J Public Health. 2009 Oct., vol. 99, n° 10, pp.1833-1839
http://dx.doi.org/10.2105/AJPH.2009.161380 **(Accès payant)**

OBJECTIVES: We assessed the health status of people undergoing mortgage foreclosure in the Philadelphia region to determine if there was a relationship between foreclosure and health. METHODS: Participants were recruited in partnership with a mortgage counseling agency. Participants' health status and health care use were compared with a community sample from the 2008 Southeastern Pennsylvania Household Health Survey. We used publicly filed foreclosure records to assess response bias. RESULTS: Of the 250 people recruited, 36.7% met screening criteria for major depression. The foreclosure sample was significantly more likely than the community sample to not have insurance coverage (adjusted odds ratio [AOR] = 2.28; 95% confidence interval [CI] = 1.49, 3.48) and to not have filled a prescription because of cost in the preceding year (AOR = 3.44; 95% CI = 2.45, 4.83). Approximately 9% of the participants reported that their own or a family member's medical condition was the primary reason they were undergoing foreclosure. More than a quarter of those in foreclosure (27.7%) stated that they owed money to medical creditors. CONCLUSIONS: Foreclosure affects already-vulnerable populations. Public health practitioners may be able to leverage current efforts to connect homeowners with mortgage counseling agencies to improve health care access

(65) PEDERSEN LH, HENRIKSEN TB, VESTERGAARD M, OLSEN J, *et al.* **Selective serotonin reuptake inhibitors in pregnancy and congenital malformations: population based cohort study**. BMJ. 2009, vol. 339, p.b3569
http://www.ncbi.nlm.nih.gov/pubmed/19776103 **(Accès réservé EHESP)**

OBJECTIVE: To investigate any association between selective serotonin reuptake inhibitors (SSRIs) taken during pregnancy and congenital major malformations. DESIGN: Population based

cohort study. PARTICIPANTS: 493 113 children born in Denmark, 1996-2003. MAIN OUTCOME MEASURE: Major malformations categorised according to Eurocat (European Surveillance of Congenital Anomalies) with additional diagnostic grouping of heart defects. Nationwide registers on medical redemptions (filled prescriptions), delivery, and hospital diagnosis provided information on mothers and newborns. Follow-up data available to December 2005. RESULTS: Redemptions for SSRIs were not associated with major malformations overall but were associated with septal heart defects (odds ratio 1.99, 95% confidence interval 1.13 to 3.53). For individual SSRIs, the odds ratio for septal heart defects was 3.25 (1.21 to 8.75) for sertraline, 2.52 (1.04 to 6.10) for citalopram, and 1.34 (0.33 to 5.41) for fluoxetine. Redemptions for more than one type of SSRI were associated with septal heart defects (4.70, 1.74 to 12.7)). The absolute increase in the prevalence of malformations was low-for example, the prevalence of septal heart defects was 0.5% (2315/493 113) among unexposed children, 0.9% (12/1370) among children whose mothers were prescribed any SSRI, and 2.1% (4/193) among children whose mothers were prescribed more than one type of SSRI. CONCLUSION: There is an increased prevalence of septal heart defects among children whose mothers were prescribed an SSRI in early pregnancy, particularly sertraline and citalopram. The largest association was found for children of women who redeemed prescriptions for more than one type of SSRI

(66) CHAMBERS C. **Selective serotonin reuptake inhibitors and congenital malformations**. BMJ. 2009, vol. 339, p.b3525
http://www.ncbi.nlm.nih.gov/pubmed/19776102 **(Accès réservé EHESP)**

(67) WEST CP, TAN AD, HABERMANN TM, SLOAN JA, *et al.* **Association of resident fatigue and distress with perceived medical errors**. JAMA. 2009 Sept. 23, vol. 302, n° 12, pp.1294-1300
http://dx.doi.org/10.1001/jama.2009.1389 **(Accès réservé EHESP)**

CONTEXT: Fatigue and distress have been separately shown to be associated with medical errors. The contribution of each factor when assessed simultaneously is unknown. OBJECTIVE: To determine the association of fatigue and distress with self-perceived major medical errors among resident physicians using validated metrics. DESIGN, SETTING, AND PARTICIPANTS: Prospective longitudinal cohort study of categorical and preliminary internal medicine residents at Mayo Clinic, Rochester, Minnesota. Data were provided by 380 of 430 eligible residents (88.3%). Participants began training from 2003 to 2008 and completed surveys quarterly through February 2009. Surveys included self-assessment of medical errors, linear analog self-assessment of overall quality of life (QOL) and fatigue, the Maslach Burnout Inventory, the PRIME-MD depression screening instrument, and the Epworth Sleepiness Scale. MAIN OUTCOME MEASURES: Frequency of self-perceived, self-defined major medical errors was recorded. Associations of fatigue, QOL, burnout, and symptoms of depression with a subsequently reported major medical error were determined using generalized estimating equations for repeated measures. RESULTS: The mean response rate to individual surveys was 67.5%. Of the 356 participants providing error data (93.7%), 139 (39%) reported making at least 1 major medical error during the study period. In univariate analyses, there was an association of subsequent self-reported error with the Epworth Sleepiness Scale score (odds ratio [OR], 1.10 per unit increase; 95% confidence interval [CI], 1.03-1.16; P = .002) and fatigue score (OR, 1.14 per unit increase; 95% CI, 1.08-1.21; P < .001). Subsequent error was also associated with burnout (ORs per 1-unit change: depersonalization OR, 1.09; 95% CI, 1.05-1.12; P < .001; emotional exhaustion OR, 1.06; 95% CI, 1.04-1.08; P < .001; lower personal accomplishment OR, 0.94; 95% CI, 0.92-0.97; P < .001), a positive depression screen (OR, 2.56; 95% CI, 1.76-3.72; P < .001), and overall QOL (OR, 0.84 per unit increase; 95% CI, 0.79-0.91; P < .001). Fatigue and distress variables remained statistically significant when modeled together with little change in the point estimates of effect. Sleepiness and distress, when modeled together, showed little change in point estimates of effect, but sleepiness no longer had a statistically significant association with errors when adjusted for burnout or depression. CONCLUSION: Among internal medicine residents, higher levels of fatigue and distress are independently associated with self-perceived medical errors

(68) WEISSMAN MM, TALATI A. **Depression in at-risk adolescents and their parents**. JAMA. 2009 Sept. 16, vol. 302, n° 11, pp.1167-1168
http://dx.doi.org/10.1001/jama.2009.1329 **(Accès réservé EHESP)**

(69) MITKA M. **Report offers clinicians guidance for treating depression during pregnancy**. JAMA. 2009 Sept. 16, vol. 302, n° 11, p.1158
http://dx.doi.org/10.1001/jama.2009.1313 **(Accès réservé EHESP)**

(70) LOGSDAIL S. **Synaesthesia**. BMJ. 2009, vol. 339, p.b3191
http://www.ncbi.nlm.nih.gov/pubmed/19734195 **(Accès réservé EHESP)**

(71) KESSLER D, LEWIS G, KAUR S, WILES N, *et al.* **Therapist-delivered Internet psychotherapy for depression in primary care: a randomised controlled trial**. Lancet. 2009 Aug. 22, vol. 374, n° 9690, pp.628-634
http://dx.doi.org/10.1016/S0140-6736(09)61257-5 **(Accès réservé EHESP)**

BACKGROUND: Despite strong evidence for its effectiveness, cognitive-behavioural therapy (CBT) remains difficult to access. Computerised programs have been developed to improve accessibility, but whether these interventions are responsive to individual needs is unknown. We investigated the effectiveness of CBT delivered online in real time by a therapist for patients with depression in primary care. METHODS: In this multicentre, randomised controlled trial, 297 individuals with a score of 14 or more on the Beck depression inventory (BDI) and a confirmed diagnosis of depression were recruited from 55 general practices in Bristol, London, and Warwickshire, UK. Participants were randomly assigned, by a computer-generated code, to online CBT in addition to usual care (intervention; n=149) or to usual care from their general practitioner while on an 8-month waiting list for online CBT (control; n=148). Participants, researchers involved in recruitment, and therapists were masked in advance to allocation. The primary outcome was recovery from depression (BDI score <10) at 4 months. Analysis was by intention to treat. This trial is registered, number ISRCTN 45444578. FINDINGS: 113 participants in the intervention group and 97 in the control group completed 4-month follow-up. 43 (38%) patients recovered from depression (BDI score <10) in the intervention group versus 23 (24%) in the control group at 4 months (odds ratio 2.39, 95% CI 1.23-4.67; p=0.011), and 46 (42%) versus 26 (26%) at 8 months (2.07, 1.11-3.87; p=0.023). INTERPRETATION: CBT seems to be effective when delivered online in real time by a therapist, with benefits maintained over 8 months. This method of delivery could broaden access to CBT. FUNDING: BUPA Foundation

(72) ARAYA R, ALVARADO R, MINOLETTI A. **Chile: an ongoing mental health revolution**. Lancet. 2009 Aug. 22, vol. 374, n° 9690, pp.597-598
http://dx.doi.org/10.1016/S0140-6736(09)61490-2 **(Accès réservé EHESP)**

(73) SIMON GE, LUDMAN EJ. **It's time for disruptive innovation in psychotherapy**. Lancet. 2009 Aug. 22, vol. 374, n° 9690, pp.594-595
http://dx.doi.org/10.1016/S0140-6736(09)61415-X **(Accès réservé EHESP)**

(74) WEE CC. **A 52-year-old woman with obesity: review of bariatric surgery**. JAMA. 2009 Sept. 9, vol. 302, n° 10, pp.1097-1104
http://dx.doi.org/2010.1001/jama.2009.1197 (**Accès réservé EHESP**)

Ms J is a 52-year-old woman with severe obesity and depression, anxiety, and osteoarthritis who has not been able to sustain weight loss through dieting and is now considering having weight loss surgery. She would like to know the long-term effects of surgery, including its psychological consequences. The article discusses the consequences of the 2 most commonly performed bariatric procedures, Roux-en-Y gastric bypass and laparoscopic adjustable gastric banding, and their effects on weight loss, comorbidities, psychological function, and overall quality of life. Evidence suggests average weight loss at 10 years after surgery of 25% and 13%, respectively. The risk of perioperative mortality varies with patient factors and surgeon experience but is typically less than 1% with experienced surgeons. Roux-en-Y gastric bypass has a higher

complication rate than laparoscopic adjustable gastric banding. Many obesity-related comorbidities such as diabetes and hypertension resolve or improve with weight loss, and quality of life generally improves in parallel with weight loss. However, depression and anxiety, as Ms J experiences, do not necessarily improve as a result of surgery

(75) NICKLETT EJ, BURGARD SA. **Downward social mobility and major depressive episodes among Latino and Asian-American immigrants to the United States**. Am J Epidemiol. 2009 Sept. 15, vol. 170, n° 6, pp.793-801
http://dx.doi.org/10.1093/aje/kwp192 **(Accès réservé EHESP)**

The authors analyzed the association between downward social mobility in subjective social status among 3,056 immigrants to the United States and the odds of a major depressive episode. Using data from the National Latino and Asian American Study (2002-2003), the authors examined downward mobility by comparing immigrants' subjective social status in their country of origin with their subjective social status in the United States. The dependent variable was the occurrence of a past-year episode of major depression defined according to Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, criteria. Logistic regression models were used to control for a variety of sociodemographic and immigration-related characteristics. Analyses suggested that a loss of at least 3 steps in subjective social status is associated with increased risk of a depressive episode (odds ratio = 3.0, 95% confidence interval: 1.3, 6.6). Other factors independently associated with greater odds of depression included Latino ethnicity, female sex, having resided for a longer time in the United States, and being a US citizen. The findings suggest that immigrants who experience downward social mobility are at elevated risk of major depression. Policies or interventions focused only on immigrants of low social status may miss another group at risk: those who experience downward mobility from a higher social status

(76) TYRER P. **Are general practitioners really unable to diagnose depression?** Lancet. 2009 Aug. 22, vol. 374, n° 9690, pp.589-590
http://dx.doi.org/10.1016/S0140-6736(09)61156-9 **(Accès réservé EHESP)**

(77) MITCHELL AJ, VAZE A, RAO S. **Clinical diagnosis of depression in primary care: a meta-analysis**. Lancet. 2009 Aug. 22, vol. 374, n° 9690, pp.609-619
http://dx.doi.org/10.1016/S0140-6736(09)60879-5 **(Accès réservé EHESP)**

BACKGROUND: Depression is a major burden for the health-care system worldwide. Most care for depression is delivered by general practitioners (GPs). We assessed the rate of true positives and negatives, and false positives and negatives in primary care when GPs make routine diagnoses of depression. METHODS: We undertook a meta-analysis of 118 studies that assessed the accuracy of unassisted diagnoses of depression by GPs. 41 of these studies were included because they had a robust outcome standard of a structured or semi-structured interview. FINDINGS: 50 371 patients were pooled across 41 studies and examined. GPs correctly identified depression in 47.3% (95% CI 41.7% to 53.0%) of cases and recorded depression in their notes in 33.6% (22.4% to 45.7%). 19 studies assessed both rule-in and rule-out accuracy; from these studies, the weighted sensitivity was 50.1% (41.3% to 59.0%) and specificity was 81.3% (74.5% to 87.3%). At a rate of 21.9%, the positive predictive value was 42.0% (39.6% to 44.3%) and the negative predictive value was 85.8% (84.8% to 86.7%). This finding suggests that for every 100 unselected cases seen in primary care, there are more false positives (n=15) than either missed (n=10) or identified cases (n=10). Accuracy was improved with prospective examination over an extended period (3-12 months) rather than relying on a one-off assessment or case-note records. INTERPRETATION: GPs can rule out depression in most people who are not depressed; however, the modest prevalence of depression in primary care means that misidentifications outnumber missed cases. Diagnosis could be improved by re-assessment of individuals who might have depression. FUNDING: None

(78) LINDERT J, EHRENSTEIN OS, PRIEBE S, MIELCK A, *et al.* **Depression and anxiety in labor migrants and refugees--a systematic review and meta-analysis**. Soc Sci Med. 2009 July, vol. 69, n° 2, pp.246-257

http://dx.doi.org/10.1016/j.socscimed.2009.04.032 **(Accès réservé EHESP)**

Prevalence rates of depression and anxiety among migrants (i.e. refugees, labor migrants) vary among studies and it's been found that prevalence rates of depression and anxiety may be linked to financial strain in the country of immigration. Our aim is to review studies on prevalence rates of depression and/or anxiety (acknowledging that Post-traumatic Stress Disorder (PTSD) is within that class of disorders), and to evaluate associations between the Gross National Product (GNP) of the immigration country as a moderating factor for depression, anxiety and PTSD among migrants. We carried out a systematic literature review in the databases MEDLINE and EMBASE for population based studies published from 1990 to 2007 reporting prevalence rates of depression and/or anxiety and or PTSD according to DSM- or ICD- criteria in adults, and a calculation of combined estimates for proportions using the DerSimonian-Laird estimation. A total of 348 records were retrieved with 37 publications on 35 populations meeting our inclusion criteria. 35 studies were included in the final evaluation. Our meta-analysis shows that the combined prevalence rates for depression were 20 percent among labor migrants vs. 44 percent among refugees; for anxiety the combined estimates were 21 percent among labor migrants vs. 40 percent among (n=24,051) refugees. Higher GNP in the country of immigration was related to lower symptom prevalence of depression and/or anxiety in labor migrants but not in refugees. We conclude that depression and/or anxiety in labor migrants and refugees require separate consideration, and that better economic conditions in the host country reflected by a higher GNP appear to be related to better mental health in labor migrants but not in refugees

(79) BUTTERWORTH P, RODGERS B, WINDSOR TD. **Financial hardship, socio-economic position and depression: results from the PATH Through Life Survey**. Soc Sci Med. 2009 July, vol. 69, n° 2, pp.229-237
http://dx.doi.org/10.1016/j.socscimed.2009.05.008 **(Accès réservé EHESP)**

There is a strong association between financial hardship and the experience of depression. Previous longitudinal research differs in whether this association is viewed as a contemporaneous relationship between depression and hardship or whether hardship has a role in the maintenance of existing depression. In this study we investigate the association between depression and hardship over time and seek to resolve these contradictory perspectives. We also investigate the consistency of the association across the lifecourse. This study reports analysis of two waves of data from a large community survey conducted in the city of Canberra and the surrounding region in south-east Australia. The PATH Through Life Study used a narrow-cohort design, with 6715 respondents representing three birth cohorts (1975-1979; 1956-1960; and 1937-1941) assessed on the two measurement occasions (4 years apart). Depression was measured using the Goldberg Depression Scale and hardship assessed by items measuring aspects of deprivation due to lack of resources. A range of measures of socio-economic circumstance and demographic characteristics were included in logistic regression models to predict wave 2 depression. The results showed that current financial hardship was strongly and independently associated with depression, above the effects of other measures of socio-economic position and demographic characteristics. In contrast, the effect of prior financial difficulty was explained by baseline depression symptoms. There were no reliable cohort differences in the association between hardship and depression having controlled for socio-demographic characteristics. There was some evidence that current hardship was more strongly associated with depression for those who were not classified as depressed at baseline than for those identified with depression at baseline. The evidence of the contemporaneous association between hardship and depression suggests that addressing deprivation may be an effective strategy to moderate socio-economic inequalities in mental health

(80) TEGHTSOONIAN K. **Depression and mental health in neoliberal times: a critical analysis of policy and discourse**. Soc Sci Med. 2009 July, vol. 69, n° 1, pp.28-35
http://dx.doi.org/10.1016/j.socscimed.2009.03.037 **(Accès réservé EHESP)**

Depression has received increasing attention as a significant public health issue over the past ten years, both in Canada and elsewhere in the industrialized west. During the same period, many of

the social and economic policies adopted by governments in these jurisdictions have reflected neoliberal goals and orientations. The purpose of this article is to explore the points of contact between these two features of contemporary social and political life in the industrialized west, using the Canadian province of British Columbia as an empirical site. My analysis draws on the Foucauldian literature on governmentality in presenting a close reading of provincial government documents concerned with depression and mental health literacy that have been produced since the election of the Liberal Party to office in British Columbia in 2001. This analysis identifies discourses of "responsibilization" circulating in these documents, within which individuals, families, communities and workplaces - rather than publicly-funded services - appear as key resources in responding to experiences of mental distress. It also points to a number of strategies visible in the documents that work to align the interests of individuals and their practitioners in pursuing particular approaches to treatment with a governing interest in reducing public spending on services and supports. The article concludes by identifying a number of resistive discourses and proposing further research in a range of empirical contexts within which they may be evident

(81) RAMCHANDANI P, PSYCHOGIOU L. **Paternal psychiatric disorders and children's psychosocial development**. Lancet. 2009 Aug. 22, vol. 374, n° 9690, pp.646-653
http://dx.doi.org/10.1016/S0140-6736(09)60238-5 **(Accès réservé EHESP)**

Psychiatric disorders of parents are associated with an increased risk of psychological and developmental difficulties in their children. Most research has focused on mothers, neglecting psychiatric disorders affecting fathers. We review findings on paternal psychiatric disorders and their effect on children's psychosocial development. Most psychiatric disorders that affect fathers are associated with an increased risk of behavioural and emotional difficulties in their children, similar in magnitude to that due to maternal psychiatric disorders. Some findings indicate that boys are at greater risk than girls, and that paternal disorders, compared with maternal disorders, might be associated with an increased risk of behavioural rather than emotional problems. Improved paternal mental health is likely to improve children's wellbeing and life course

(82) DAVE D, RASHAD I. **Overweight status, self-perception, and suicidal behaviors among adolescents**. Soc Sci Med. 2009 May, vol. 68, n° 9, pp.1685-1691
http://dx.doi.org/10.1016/j.socscimed.2009.02.015 **(Accès réservé EHESP)**

Suicide is the third leading cause of death among adolescents in the USA. The suicide rate for individuals 15-19 years of age, while having declined since the early 1990s, has recently shown signs of an increasing trend. The prevalence of being overweight has also steadily risen among adolescents, and has tripled since 1960. This study utilizes data from the Youth Risk Behavioral Surveillance System (1999-2007) to explore the relationship between the perception of being overweight and suicidal behaviors. Studies have shown a high degree of correlation between overweight status, depressive disorders, and suicidal behaviors. This study analyzes these indicators in conjunction with individuals' perception of their weight. The empirical methodology is based on simultaneous-equations models and stratified samples to gauge whether the link between overweight indicators and suicide is causal or whether it is driven by other factors. Results indicate that body dissatisfaction, as measured by the perception of being overweight, has a strong impact on all suicidal behaviors for girls. It raises the risk of suicide ideation by 6.1 percentage points, suicide attempt by 3.6 percentage points, and a serious suicide attempt by 0.5 percentage points. Results are generally insignificant for males. Conditional on overweight perception, actual weight does not generally have an independent effect on suicidal behaviors. Policies aimed at reducing the prevalence of overweight among adolescents may further reduce suicidal behaviors by limiting overweight perception, especially among girls. However, the independent role of perception also highlights the importance of educating youths and fostering healthy attitudes regarding body image

Grippe A

sommaire

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http://dx.doi.org/10.1038/461020a **(Accès payant)**

(145) QIU J. **China boosts pandemic surveillance**. Nature. 2009 Aug. 27, vol. 460, n° 7259, p.1066
http://dx.doi.org/410.1038/4601066a **(Accès payant)**

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http://dx.doi.org/10.1038/460785a **(Accès payant)**

(148) ITOH Y, SHINYA K, KISO M, WATANABE T, *et al.* **In vitro and in vivo characterization of new swine-origin H1N1 influenza viruses**. Nature. 2009 Aug. 20, vol. 460, n° 7258, pp.1021-1025
http://dx.doi.org/10.1038/nature08260 **(Accès payant)**

Influenza A viruses cause recurrent outbreaks at local or global scale with potentially severe consequences for human health and the global economy. Recently, a new strain of influenza A virus was detected that causes disease in and transmits among humans, probably owing to little or no pre-existing immunity to the new strain. On 11 June 2009 the World Health Organization declared that the infections caused by the new strain had reached pandemic proportion. Characterized as an influenza A virus of the H1N1 subtype, the genomic segments of the new strain were most closely related to swine viruses. Most human infections with swine-origin H1N1 influenza viruses (S-OIVs) seem to be mild; however, a substantial number of hospitalized individuals do not have underlying health issues, attesting to the pathogenic potential of S-OIVs. To achieve a better assessment of the risk posed by the new virus, we characterized one of the first US S-OIV isolates, A/California/04/09 (H1N1; hereafter referred to as CA04), as well as several other S-OIV isolates, in vitro and in vivo. In mice and ferrets, CA04 and other S-OIV isolates tested replicate more efficiently than a currently circulating human H1N1 virus. In addition, CA04 replicates efficiently in non-human primates, causes more severe pathological lesions in the lungs of infected mice, ferrets and non-human primates than a currently circulating human H1N1 virus, and transmits among ferrets. In specific-pathogen-free miniature pigs, CA04 replicates without clinical symptoms. The assessment of human sera from different age groups suggests that infection with human H1N1 viruses antigenically closely related to viruses circulating in 1918 confers neutralizing antibody activity to CA04. Finally, we show that CA04 is sensitive to approved and experimental antiviral drugs, suggesting that these compounds could function as a first line of defence against the recently declared S-OIV pandemic

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Agent-based computational models can capture irrational behaviour, complex social networks and global scale--all essential in confronting H1N1, says Joshua M. Epstein

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BACKGROUND: A novel influenza A (H1N1) 2009 virus is responsible for the first influenza pandemic in 41 years. A safe and effective vaccine is urgently needed. A randomized, observer-blind, parallel-group trial evaluating two doses of an inactivated, split-virus 2009 H1N1 vaccine in healthy adults between the ages of 18 and 64 years is ongoing at a single site in Australia. METHODS: This preliminary report evaluates the immunogenicity and safety of the vaccine 21 days after the first of two scheduled doses. A total of 240 subjects, equally divided into two age groups (<50 years and >/=50 years), were enrolled and underwent randomization to receive either 15 mug or 30 mug of hemagglutinin antigen by intramuscular injection. We measured antibody titers using hemagglutination-inhibition and microneutralization assays at baseline and 21 days after vaccination. The coprimary immunogenicity end points were the proportion of subjects with antibody titers of 1:40 or more on hemagglutination-inhibition assay, the proportion of subjects with either seroconversion or a significant increase in antibody titer, and the factor increase in the geometric mean titer. RESULTS: By day 21 after vaccination, antibody titers of 1:40 or more were observed in 116 of 120 subjects (96.7%) who received the 15-mug dose and in 112 of 120 subjects (93.3%) who received the 30-mug dose. No deaths, serious adverse events, or adverse events of special interest were reported. Local discomfort (e.g., injection-site tenderness or pain) was reported by 46.3% of subjects, and systemic symptoms (e.g., headache) by 45.0% of subjects. Nearly all events were mild to moderate in intensity. CONCLUSIONS: A single 15-mug dose of 2009 H1N1 vaccine was immunogenic in adults, with mild-to-moderate vaccine-associated reactions. (ClinicalTrials.gov number, NCT00938639.) Copyright 2009 Massachusetts Medical Society

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BACKGROUND: The 2009 pandemic influenza A (H1N1) virus has emerged to cause the first pandemic of the 21st century. Development of effective vaccines is a public health priority. METHODS: We conducted a single-center study, involving 175 adults, 18 to 50 years of age, to test the monovalent influenza A/California/2009 (H1N1) surface-antigen vaccine, in both MF59-adjuvanted and nonadjuvanted forms. Subjects were randomly assigned to receive two intramuscular injections of vaccine containing 7.5 mug of hemagglutinin on day 0 in each arm or one injection on day 0 and the other on day 7, 14, or 21; or two 3.75-mug doses of MF59-adjuvanted vaccine, or 7.5 or 15 mug of nonadjuvanted vaccine, administered 21 days apart. Antibody responses were measured by means of hemagglutination-inhibition assay and a microneutralization assay on days 0, 14, 21, and 42 after injection of the first dose. RESULTS: Results of an interim analysis of the responses to the 7.5-mug dose of MF59-adjuvanted vaccine by days 14 and 21 are presented (data from four of the seven groups studied, for a total of 100 subjects). The most frequent local and systemic reactions were pain at the injection site and muscle aches, noted in 70% and 42% of subjects, respectively. Two subjects reported fever, with a temperature of 38 degrees C or higher, after the first dosing. Antibody titers, expressed as geometric means, were generally higher at day 14 among subjects who had received two 7.5-mug doses of the MF59-adjuvanted vaccine than among those who had received only one by this time point (P=0.04 by the hemagglutination-inhibition assay and P<0.001 by the microneutralization assay). By 21 days after vaccination with the first dose of 7.5 mug of MF59-adjuvanted vaccine, the rates of seroconversion, as measured with the use of a hemagglutination-inhibition assay and a microneutralization assay, were 76% and 92% of subjects, respectively, who had received only one dose to date (with the second dose scheduled for day 21) and 88 to 92% and 92 to 96% of subjects, respectively, who had already received both doses (P=0.11 and P=0.64, respectively). CONCLUSIONS: In preliminary analyses, the monovalent influenza A (H1N1) 2009 MF59-adjuvanted vaccine generates antibody responses likely to be associated with protection within 14

days after a single dose is administered. (ClinicalTrials.gov number, NCT00943358.) Copyright 2009 Massachusetts Medical Society

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BACKGROUND: A new pandemic influenza A (H1N1) virus has emerged, causing illness globally, primarily in younger age groups. To assess the level of preexisting immunity in humans and to evaluate seasonal vaccine strategies, we measured the antibody response to the pandemic virus resulting from previous influenza infection or vaccination in different age groups. METHODS: Using a microneutralization assay, we measured cross-reactive antibodies to pandemic H1N1 virus (2009 H1N1) in stored serum samples from persons who either donated blood or were vaccinated with recent seasonal or 1976 swine influenza vaccines. RESULTS: A total of 4 of 107 persons (4%) who were born after 1980 had preexisting cross-reactive antibody titers of 40 or more against 2009 H1N1, whereas 39 of 115 persons (34%) born before 1950 had titers of 80 or more. Vaccination with seasonal trivalent inactivated influenza vaccines resulted in an increase in the level of cross-reactive antibody to 2009 H1N1 by a factor of four or more in none of 55 children between the ages of 6 months and 9 years, in 12 to 22% of 231 adults between the ages of 18 and 64 years, and in 5% or less of 113 adults 60 years of age or older. Seasonal vaccines that were formulated with adjuvant did not further enhance cross-reactive antibody responses. Vaccination with the A/New Jersey/1976 swine influenza vaccine substantially boosted cross-reactive antibodies to 2009 H1N1 in adults. CONCLUSIONS: Vaccination with recent seasonal nonadjuvanted or adjuvanted influenza vaccines induced little or no cross-reactive antibody response to 2009 H1N1 in any age group. Persons under the age of 30 years had little evidence of cross-reactive antibodies to the pandemic virus. However, a proportion of older adults had preexisting cross-reactive antibodies. Copyright 2009 Massachusetts Medical Society

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Pandemic influenza A (H1N1) 2009 (pandemic H1N1) is spreading throughout the planet. It has become the dominant strain in the southern hemisphere, where the influenza season is under way. Here, based on reported case clusters in the USA, we estimate the household secondary attack rate for pandemic H1N1 to be 27.3% [95% confidence interval (CI) 12.2% to 50.5%]. From a school outbreak, we estimate a schoolchild infects 2.4 (95% CI: 1.8 to 3.2) other children within the school. We estimate that the basic reproductive number, R0, to range from 1.3 to 1.7 and the generation interval to range from 2.6 to 3.2 days. We use a simulation model to evaluate the effectiveness of vaccination strategies in the USA for Fall 2009. If vaccine were available soon enough, vaccination of children, followed by adults, reaching 70% overall coverage, in addition to high-risk and essential workforce groups, could mitigate a severe epidemic

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OBJECTIVE: To evaluate ascertainment of the onset of community transmission of influenza A/H1N1 2009 (swine flu) in England during the earliest phase of the epidemic through comparing data from two surveillance systems. DESIGN: Cross sectional opportunistic survey. STUDY SAMPLES: Results from self samples by consenting patients who had called the NHS Direct telephone health line with cold or flu symptoms, or both, and results from Health Protection Agency (HPA) regional microbiology laboratories on patients tested according to the clinical algorithm for the management of suspected cases of swine flu. SETTING: Six regions of England between 24 May and 30 June 2009. MAIN OUTCOME MEASURE: Proportion of specimens with laboratory evidence of influenza A/H1N1 2009. RESULTS: Influenza A/H1N1 2009 infections were detected in 91 (7%) of the 1385 self sampled specimens tested. In addition, eight instances of influenza A/H3 infection and two cases of influenza B infection were detected. The weekly rate of change in the proportions of infected individuals according to self obtained samples closely matched the rate of increase in the proportions of infected people reported by HPA regional laboratories. Comparing the data from both systems showed that local community transmission was occurring in London and the West Midlands once HPA regional laboratories began detecting 100 or more influenza A/H1N1 2009 infections, or a proportion positive of over 20% of those tested, each week. CONCLUSIONS: Trends in the proportion of patients with influenza A/H1N1 2009 across regions detected through clinical management were mirrored by the proportion of NHS Direct callers with laboratory confirmed infection. The initial concern that information from HPA regional laboratory reports would be too limited because it was based on testing patients

with either travel associated risk or who were contacts of other influenza cases was unfounded. Reports from HPA regional laboratories could be used to recognise the extent to which local community transmission was occurring

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http://www.ncbi.nlm.nih.gov/pubmed/19706937 **(Accès réservé EHESP)**

OBJECTIVE: To assess the acceptability of pre-pandemic influenza vaccination among healthcare workers in public hospitals in Hong Kong and the effect of escalation in the World Health Organization's alert level for an influenza pandemic. DESIGN: Repeated cross sectional studies using self administered, anonymous questionnaires SETTING: Surveys at 31 hospital departments of internal medicine, paediatrics, and emergency medicine under the Hong Kong Hospital Authority from January to March 2009 and in May 2009 PARTICIPANTS: 2255 healthcare workers completed the questionnaires in the two studies. They were doctors, nurses, or allied health professionals working in the public hospital system. MAIN OUTCOME MEASURES: Stated willingness to accept pre-pandemic influenza vaccination (influenza A subtypes H5N1 or H1N1) and its associating factors. RESULTS: The overall willingness to accept pre-pandemic H5N1 vaccine was only 28.4% in the first survey, conducted at WHO influenza pandemic alert phase 3. No significant changes in the level of willingness to accept pre-pandemic H5N1 vaccine were observed despite the escalation to alert phase 5. The willingness to accept pre-pandemic H1N1 vaccine was 47.9% among healthcare workers when the WHO alert level was at phase 5. The most common reasons for an intention to accept were "wish to be protected" and "following health authority's advice." The major barriers identified were fear of side effects and doubts about efficacy. More than half of the respondents thought nurses should be the first priority group to receive the vaccines. The strongest positive associating factors were history of seasonal influenza vaccination and perceived risk of contracting the infection. CONCLUSIONS: The willingness to accept pre-pandemic influenza vaccination was low, and no significant effect was observed with the change in WHO alert level. Further studies are required to elucidate the root cause of the low intention to accept pre-pandemic vaccination

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http://dx.doi.org/10.1093/aje/kwp237 **(Accès réservé EHESP)**

Vaccinating school-aged children against influenza can reduce age-specific and population-level illness attack rates. Using a stochastic simulation model of influenza transmission, the authors assessed strategies for vaccinating children in the United States, varying the vaccine type, coverage level, and reproductive number R (average number of secondary cases produced by a typical primary case). Results indicated that vaccinating children can substantially reduce population-level illness attack rates over a wide range of scenarios. The greatest absolute reduction in influenza illness cases per season occurred at R values ranging from 1.2 to 1.6 for a given vaccine coverage level. The indirect, total, and overall effects of vaccinating children were strong when transmission intensity was low to intermediate. The indirect effects declined rapidly as transmission intensity increased. In a mild influenza season (R = 1.1), approximately 19 million influenza cases could be prevented by vaccinating 70% of children. At most, nearly 100 million cases of influenza illness could be prevented, depending on the proportion of children vaccinated and the transmission intensity. Given the current worldwide threat of novel influenza A (H1N1), with an estimated R of 1.4-1.6, health officials should consider strategies for vaccinating children against novel influenza A (H1N1) as well as seasonal influenza

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http://www.ncbi.nlm.nih.gov/pubmed/19666987 **(Accès réservé EHESP)**

OBJECTIVE: To assess the effects of the neuraminidase inhibitors oseltamivir and zanamivir in treatment of children with seasonal influenza and prevention of transmission to children in households. DESIGN: Systematic review and meta-analysis of data from published and unpublished randomised controlled trials. DATA SOURCES: Medline and Embase to June 2009, trial registries, and manufacturers and authors of relevant studies. Review methods Eligible studies were randomised controlled trials of neuraminidase inhibitors in children aged </=12 in the community (that is, not admitted to hospital) with confirmed or clinically suspected influenza. Primary outcome measures were time to resolution of illness and incidence of influenza in children living in households with index cases of influenza. RESULTS: We identified four randomised trials of treatment of influenza (two with oseltamivir, two with zanamivir) involving 1766 children (1243 with confirmed influenza, of whom 55-69% had influenza A), and three randomised trials for postexposure prophylaxis (one with oseltamivir, two with zanamivir) involving 863 children; none of these trials tested efficacy with the current pandemic strain. Treatment trials showed reductions in median time to resolution of symptoms or return to normal activities, or both, of 0.5-1.5 days, which were significant in only two trials. A 10 day course of postexposure prophylaxis with zanamivir or oseltamivir resulted in an 8% (95% confidence interval 5% to 12%) decrease in the incidence of symptomatic influenza. Based on only one trial, oseltamivir did not reduce asthma exacerbations or improve peak flow in children with asthma. Treatment was not associated with reduction in overall use of antibiotics (risk difference -0.30, -0.13 to 0.01). Zanamivir was well tolerated, but oseltamivir was associated with an increased risk of vomiting (0.05, 0.02 to 0.09, number needed to harm=20). CONCLUSIONS: Neuraminidase inhibitors provide a small benefit by shortening the duration of illness in children with seasonal influenza and reducing household transmission. They have little effect on asthma exacerbations or the use of antibiotics. Their effects on the incidence of serious complications, and on the current A/H1N1 influenza strain remain to be determined

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http://dx.doi.org/10.1016/S0140-6736(09)61304-0 **(Accès réservé EHESP)**

BACKGROUND: Pandemic H1N1 2009 influenza virus has been identified as the cause of a widespread outbreak of febrile respiratory infection in the USA and worldwide. We summarised cases of infection with pandemic H1N1 virus in pregnant women identified in the USA during the first month of the present outbreak, and deaths associated with this virus during the first 2 months of the outbreak. METHODS: After initial reports of infection in pregnant women, the US Centers for Disease Control and Prevention (CDC) began systematically collecting additional information about cases and deaths in pregnant women in the USA with pandemic H1N1 virus infection as part of enhanced surveillance. A confirmed case was defined as an acute respiratory illness with laboratory-confirmed pandemic H1N1 virus infection by real-time reverse-transcriptase PCR or viral culture; a probable case was defined as a person with an acute febrile respiratory illness who was positive for influenza A, but negative for H1 and H3. We used population estimates derived from the 2007 census data to calculate rates of admission to hospital and illness. FINDINGS: From April 15 to May 18, 2009, 34 confirmed or probable cases of pandemic H1N1 in pregnant women were reported to CDC from 13 states. 11 (32%) women were admitted to hospital. The estimated rate of admission for pandemic H1N1 influenza virus infection in pregnant women

during the first month of the outbreak was higher than it was in the general population (0.32 per 100 000 pregnant women, 95% CI 0.13-0.52 vs 0.076 per 100 000 population at risk, 95% CI 0.07-0.09). Between April 15 and June 16, 2009, six deaths in pregnant women were reported to the CDC; all were in women who had developed pneumonia and subsequent acute respiratory distress syndrome requiring mechanical ventilation. INTERPRETATION: Pregnant women might be at increased risk for complications from pandemic H1N1 virus infection. These data lend support to the present recommendation to promptly treat pregnant women with H1N1 influenza virus infection with anti-influenza drugs. FUNDING: US CDC

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http://dx.doi.org/10.1126/science.1177127 **(Accès réservé EHESP)**

The swine-origin A(H1N1) influenza virus that has emerged in humans in early 2009 has raised concerns about pandemic developments. In a ferret pathogenesis and transmission model, the 2009 A(H1N1) influenza virus was found to be more pathogenic than a seasonal A(H1N1) virus, with more extensive virus replication occurring in the respiratory tract. Replication of seasonal A(H1N1) virus was confined to the nasal cavity of ferrets, but the 2009 A(H1N1) influenza virus also replicated in the trachea, bronchi, and bronchioles. Virus shedding was more abundant from the upper respiratory tract for 2009 A(H1N1) influenza virus as compared with seasonal virus, and transmission via aerosol or respiratory droplets was equally efficient. These data suggest that the 2009 A(H1N1) influenza virus has the ability to persist in the human population, potentially with more severe clinical consequences

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http://dx.doi.org/10.1126/science.1177238 **(Accès réservé EHESP)**

Recent reports of mild to severe influenza-like illness in humans caused by a novel swine-origin 2009 A(H1N1) influenza virus underscore the need to better understand the pathogenesis and transmission of these viruses in mammals. In this study, selected 2009 A(H1N1) influenza isolates were assessed for their ability to cause disease in mice and ferrets and compared with a contemporary seasonal H1N1 virus for their ability to transmit to naive ferrets through respiratory droplets. In contrast to seasonal influenza H1N1 virus, 2009 A(H1N1) influenza viruses caused increased morbidity, replicated to higher titers in lung tissue, and were recovered from the intestinal tract of intranasally inoculated ferrets. The 2009 A(H1N1) influenza viruses exhibited less efficient respiratory droplet transmission in ferrets in comparison with the highly transmissible phenotype of a seasonal H1N1 virus. Transmission of the 2009 A(H1N1) influenza viruses was further corroborated by characterizing the binding specificity of the viral hemagglutinin to the sialylated glycan receptors (in the human host) by use of dose-dependent direct receptor-binding and human lung tissue-binding assays

Maladie d'Alzheimer

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Maladies cardio-vasculaires

sommaire

(86) HONJO K, ISO H, IKEDA A, INOUE M, *et al.* **Education level and physical functional limitations among Japanese community residents-gender difference in prognosis from stroke**. BMC Public Health. 2009, vol. 9, p.131
http://dx.doi.org/1471-24510.1186/1471-2458-9-131 **(Accès libre)**

BACKGROUND: Little research has been conducted to examine the relationship between education level and functional limitations among Japanese community residents. We sought to examine the association between education level and physical functional limitations among Japanese men and women, and whether that association was modified by gender and history of stroke. METHODS: We examined prevalence of physical functional limitation by educational level using the data from a total of 29,134 Japanese men and women aged 50-69 years living in communities in 2000. The information of educational level (junior high school graduates, senior high school graduates, college and/or higher education) and physical functional limitations (no need for assistance, need for assistance when going outdoors, and need for assistance to carry out indoor activities) were obtained by self-administrated questionnaire. RESULTS: The proportions of the subjects reported their highest level of schooling were 48% for junior high school, 39% for high school, and 13% for college. Three hundred and twenty eight subjects (1% of total subjects) reported having some physical functional limitations. Multinomial logistic regression analyses showed that the odds ratio of needing assistance to carry out indoor activities were 4.84(95%CI:3.61,6.50) for lowest education level group and 2.21(95%CI:1.00,4.86) for middle education level group compared to highest education level group. The corresponding odds ratios of needing assistance when going outdoors were 2.36(95%CI: 2.03,2.72) and 1.08(95%CI:0.73,1.60), respectively. Further, the significant excess prevalence of having functional limitations associated with the low education level was identified for men regardless of history of stroke and for women without history of stroke. CONCLUSION: Low education level was associated with the higher prevalence of physical functional limitations for both genders. That association among persons with history of stroke was observed for men but not for women probably due to gender differences in stroke subtypes and social support

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http://dx.doi.org/10.1056/NEJMoa0900854 **(Accès réservé EHESP)**

BACKGROUND: Whether hypothermic therapy improves neurodevelopmental outcomes in newborn infants with asphyxial encephalopathy is uncertain. METHODS: We performed a randomized trial of infants who were less than 6 hours of age and had a gestational age of at least 36 weeks and perinatal asphyxial encephalopathy. We compared intensive care plus cooling of the body to 33.5 degrees C for 72 hours and intensive care alone. The primary outcome was

death or severe disability at 18 months of age. Prespecified secondary outcomes included 12 neurologic outcomes and 14 other adverse outcomes. RESULTS: Of 325 infants enrolled, 163 underwent intensive care with cooling, and 162 underwent intensive care alone. In the cooled group, 42 infants died and 32 survived but had severe neurodevelopmental disability, whereas in the noncooled group, 44 infants died and 42 had severe disability (relative risk for either outcome, 0.86; 95% confidence interval [CI], 0.68 to 1.07; P=0.17). Infants in the cooled group had an increased rate of survival without neurologic abnormality (relative risk, 1.57; 95% CI, 1.16 to 2.12; P=0.003). Among survivors, cooling resulted in reduced risks of cerebral palsy (relative risk, 0.67; 95% CI, 0.47 to 0.96; P=0.03) and improved scores on the Mental Developmental Index and Psychomotor Developmental Index of the Bayley Scales of Infant Development II (P=0.03 for each) and the Gross Motor Function Classification System (P=0.01). Improvements in other neurologic outcomes in the cooled group were not significant. Adverse events were mostly minor and not associated with cooling. CONCLUSIONS: Induction of moderate hypothermia for 72 hours in infants who had perinatal asphyxia did not significantly reduce the combined rate of death or severe disability but resulted in improved neurologic outcomes in survivors. (Current Controlled Trials number, ISRCTN89547571.)

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OBJECTIVE: To examine associations between thigh circumference and incident cardiovascular

disease and coronary heart disease and total mortality. DESIGN: Prospective observational cohort study with Cox proportional hazards model and restricted cubic splines. SETTING: Random subset of adults in Denmark. PARTICIPANTS: 1436 men and 1380 women participating in the Danish MONICA project, examined in 1987-8 for height, weight, and thigh, hip, and waist circumference, and body composition by impedance. MAIN OUTCOME MEASURES: 10 year incidence of cardiovascular and coronary heart disease and 12.5 years of follow-up for total death. RESULTS: A small thigh circumference was associated with an increased risk of cardiovascular and coronary heart diseases and total mortality in both men and women. A threshold effect for thigh circumference was evident, with greatly increased risk of premature death below around 60 cm. Above the threshold there seemed to be no additional benefit of having larger thighs in either sex. These findings were independent of abdominal and general obesity, lifestyle, and cardiovascular risk factors such as blood pressure and lipid concentration. CONCLUSION: A low thigh circumference seems to be associated with an increased risk of developing heart disease or premature death. The adverse effects of small thighs might be related to too little muscle mass in the region. The measure of thigh circumference might be a relevant anthropometric measure to help general practitioners in early identification of individuals at an increased risk of premature morbidity and mortality

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(104) WALLENTIN L, BECKER RC, BUDAJ A, CANNON CP, *et al.* **Ticagrelor versus clopidogrel in patients with acute coronary syndromes**. N Engl J Med. 2009 Sept. 10, vol. 361, n° 11, pp.1045-1057 http://dx.doi.org/10.1056/NEJMoa0904327 **(Accès réservé EHESP)**

BACKGROUND: Ticagrelor is an oral, reversible, direct-acting inhibitor of the adenosine diphosphate receptor P2Y12 that has a more rapid onset and more pronounced platelet inhibition than clopidogrel. METHODS: In this multicenter, double-blind, randomized trial, we compared ticagrelor (180-mg loading dose, 90 mg twice daily thereafter) and clopidogrel (300-to-600-mg loading dose, 75 mg daily thereafter) for the prevention of cardiovascular events in 18,624 patients admitted to the hospital with an acute coronary syndrome, with or without ST-segment elevation. RESULTS: At 12 months, the primary end point--a composite of death from vascular causes, myocardial infarction, or stroke--had occurred in 9.8% of patients receiving ticagrelor as compared with 11.7% of those receiving clopidogrel (hazard ratio, 0.84; 95% confidence interval [CI], 0.77 to 0.92; P<0.001). Predefined hierarchical testing of secondary end points showed significant differences in the rates of other composite end points, as well as myocardial infarction alone (5.8% in the ticagrelor group vs. 6.9% in the clopidogrel group, P=0.005) and death from vascular causes (4.0% vs. 5.1%, P=0.001) but not stroke alone (1.5% vs. 1.3%, P=0.22). The rate of death from any cause was also reduced with ticagrelor (4.5%, vs. 5.9% with clopidogrel; P<0.001). No significant difference in the rates of major bleeding was found between the ticagrelor and clopidogrel groups (11.6% and 11.2%, respectively; P=0.43), but ticagrelor was associated with a higher rate of major bleeding not related to coronary-artery bypass grafting (4.5% vs. 3.8%, P=0.03), including more instances of fatal intracranial bleeding and fewer of fatal bleeding of other types. CONCLUSIONS: In patients who have an acute coronary syndrome with or without ST-segment elevation, treatment with ticagrelor as compared with clopidogrel significantly reduced the rate of death from vascular causes, myocardial infarction, or stroke without an increase in the rate of overall major bleeding but with an increase in the rate of non-procedure-related bleeding. (ClinicalTrials.gov number, NCT00391872.)

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http://dx.doi.org/10.1056/NEJMoa0905561 **(Accès réservé EHESP)**

BACKGROUND: Warfarin reduces the risk of stroke in patients with atrial fibrillation but increases the risk of hemorrhage and is difficult to use. Dabigatran is a new oral direct thrombin inhibitor. METHODS: In this noninferiority trial, we randomly assigned 18,113 patients who had atrial fibrillation and a risk of stroke to receive, in a blinded fashion, fixed doses of dabigatran--110 mg or 150 mg twice daily--or, in an unblinded fashion, adjusted-dose warfarin. The median duration of the follow-up period was 2.0 years. The primary outcome was stroke or systemic embolism. RESULTS: Rates of the primary outcome were 1.69% per year in the warfarin group, as compared with 1.53% per year in the group that received 110 mg of dabigatran (relative risk with dabigatran, 0.91; 95% confidence interval [CI], 0.74 to 1.11; P<0.001 for noninferiority) and 1.11% per year in the group that received 150 mg of dabigatran (relative risk, 0.66; 95% CI, 0.53 to 0.82; P<0.001 for superiority). The rate of major bleeding was 3.36% per year in the warfarin group, as compared with 2.71% per year in the group receiving 110 mg of dabigatran (P=0.003) and 3.11% per year in the group receiving 150 mg of dabigatran (P=0.31). The rate of hemorrhagic stroke was 0.38% per year in the warfarin group, as compared with 0.12% per year with 110 mg of dabigatran (P<0.001) and 0.10% per year with 150 mg of dabigatran (P<0.001). The mortality rate was 4.13% per year in the warfarin group, as compared with 3.75% per year with 110 mg of dabigatran (P=0.13) and 3.64% per year with 150 mg of dabigatran (P=0.051). CONCLUSIONS: In patients with atrial fibrillation, dabigatran given at a dose of 110 mg was associated with rates of stroke and systemic embolism that were similar to those associated with warfarin, as well as lower rates of major hemorrhage. Dabigatran administered at a dose of 150 mg, as compared with warfarin, was associated with lower rates of stroke and systemic embolism but similar rates of major hemorrhage. (ClinicalTrials.gov number, NCT00262600.)

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http://dx.doi.org/NEJMe10.1056/NEJMe0906886 **(Accès réservé EHESP)**

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http://dx.doi.org/10.1093/aje/kwp206 **(Accès réservé EHESP)**

In a 2002-2004 prospective cohort study of deliveries of infants at <28 weeks at 14 US centers, the authors sought the antecedents of white matter damage evident in newborn cranial ultrasound scans (ventriculomegaly and an echolucent lesion) and of cerebral palsy diagnoses at age 2 years. Of the 1,455 infants enrolled, those whose mothers received an antenatal steroid tended to have lower risks of ventriculomegaly and an echolucent lesion than their peers (10% vs. 23%, P < 0.001 and 7% vs. 11%, P = 0.06, respectively). Risk of ventriculomegaly was increased for infants delivered because of preterm labor (adjusted odds ratio (OR) = 2.3, 95% confidence interval (CI): 1.1, 4.9), preterm premature rupture of fetal membranes (OR = 3.6, 95% CI: 1.5, 8.7), and cervical insufficiency (OR = 2.8, 95% CI: 1.4, 5.5) when compared with infants delivered because of preeclampsia. Risk of an echolucent lesion was increased for infants delivered because of preterm labor (OR = 2.7, 95% CI: 1.2, 5.7) and intrauterine growth retardation (OR = 3.3, 95% CI: 1.2, 9.4). The doubling of diparesis risk associated with preterm labor and with preterm premature rupture of fetal membranes did not achieve statistical significance, nor did the doubling of quadriparesis risk and the tripling of diparesis risk associated with cervical insufficiency

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http://dx.doi.org/10.1001/jama.2009.1249 **(Accès réservé EHESP)**

(111) NANDA A, CHEN MH, BRACCIOFORTE MH, MORAN BJ, *et al.* **Hormonal therapy use for prostate cancer and mortality in men with coronary artery disease-induced congestive heart failure or myocardial infarction**. JAMA. 2009 Aug. 26, vol. 302, n° 8, pp.866-873
http://dx.doi.org/10.1001/jama.2009.1137 **(Accès réservé EHESP)**

CONTEXT: Hormonal therapy (HT) when added to radiation therapy (RT) for treating unfavorable-risk prostate cancer leads to an increase in survival except possibly in men with moderate to severe comorbidity. However, it is unknown which comorbid conditions eliminate this survival benefit. OBJECTIVE: To assess whether neoadjuvant HT use affects the risk of all-cause mortality in men with prostate cancer and coronary artery disease (CAD)-induced congestive heart failure (CHF) or myocardial infarction (MI), CAD risk factors, or no comorbidity. DESIGN, SETTING, AND PATIENTS: A total of 5077 men (median age, 69.5 years) with localized or locally advanced prostate cancer were consecutively treated with or without a median of 4 months of neoadjuvant HT followed by RT at a suburban cancer center between 1997 and 2006 and were followed up until July 1, 2008. Cox regression multivariable analyses were performed assessing whether neoadjuvant HT use affected the risk of all-cause mortality, adjusting for age, year and type of RT, treatment propensity score, and known prostate cancer prognostic factors in each comorbidity group. MAIN OUTCOME MEASURE: Risk of all-cause mortality. RESULTS: Neoadjuvant HT use was not associated with an increased risk of all-cause mortality in men with no comorbidity (9.6% vs 6.7%, adjusted hazard ratio [HR], 0.97; 95% confidence interval [CI], 0.72-1.32; P = .86) or a single CAD risk factor (10.7% vs 7.0%, adjusted HR, 1.04; 95% CI, 0.75-1.43; P = .82) after median follow-ups of 5.0 and 4.4 years, respectively. However, for men with CAD-induced CHF or MI, after a median follow-up of 5.1 years, neoadjuvant HT use was significantly associated with an increased risk of all-cause mortality (26.3% vs 11.2%, adjusted HR, 1.96; 95% CI, 1.04-3.71; P = .04). CONCLUSION: Neoadjuvant HT use is significantly associated with an increased risk of all-cause mortality among men with a history of CAD-induced CHF or MI but not among men with no comorbidity or a single CAD risk factor

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http://dx.doi.org/10.1001/jama.2009.1232 **(Accès réservé EHESP)**

CONTEXT: Clopidogrel therapy improves cardiovascular outcomes in patients with acute coronary syndromes and following percutaneous coronary intervention by inhibiting adenosine diphosphate (ADP)-dependent platelet activation. However, nonresponsiveness is widely recognized and is related to recurrent ischemic events. OBJECTIVE: To identify gene variants that influence clopidogrel response. DESIGN, SETTING, AND PARTICIPANTS: In the Pharmacogenomics of Antiplatelet Intervention (PAPI) Study (2006-2008), we administered clopidogrel for 7 days to 429 healthy Amish persons and measured response by ex vivo platelet aggregometry. A genome-wide association study was performed followed by genotyping the loss-of-function cytochrome P450 (CYP) 2C19*2 variant (rs4244285). Findings in the PAPI Study were extended by examining the relation of CYP2C19*2 genotype to platelet function and cardiovascular outcomes in an independent sample of 227 patients undergoing percutaneous coronary intervention. MAIN OUTCOME MEASURE: ADP-stimulated platelet aggregation in response to clopidogrel treatment and cardiovascular events. RESULTS: Platelet response to clopidogrel was highly heritable (h(2) = 0.73; P < .001). Thirteen single-nucleotide polymorphisms on chromosome 10q24 within the CYP2C18-CYP2C19-CYP2C9-CYP2C8 cluster were associated with diminished clopidogrel response, with a high degree of statistical significance (P = 1.5 x 10(-13) for rs12777823, additive model). The rs12777823 polymorphism was in strong linkage disequilibrium with the CYP2C19*2 variant, and was associated with diminished clopidogrel response, accounting for 12% of the variation in platelet aggregation to ADP (P = 4.3 x 10(-11)). The relation between CYP2C19*2 genotype and platelet aggregation was replicated in

clopidogrel-treated patients undergoing coronary intervention (P = .02). Furthermore, patients with the CYP2C19*2 variant were more likely (20.9% vs 10.0%) to have a cardiovascular ischemic event or death during 1 year of follow-up (hazard ratio, 2.42; 95% confidence interval, 1.18-4.99; P = .02). CONCLUSION: CYP2C19*2 genotype was associated with diminished platelet response to clopidogrel treatment and poorer cardiovascular outcomes

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http://www.ncbi.nlm.nih.gov/pubmed/19690343 **(Accès réservé EHESP)**

OBJECTIVE: To assess whether people who use smokeless tobacco products are at increased risk of myocardial infarction and stroke. DESIGN: Meta-analysis of observational studies from Sweden and the United States. DATA SOURCES: Electronic databases and reference lists. DATA EXTRACTION: Quantitative estimates of the association between use of smokeless tobacco products and risk of myocardial infarction and stroke among never smokers. REVIEW METHODS: Both authors independently abstracted risk estimates and study characteristics. Summary relative risks were estimated on the basis of random effects models. RESULTS: 11 studies, mainly in men, were included. Eight risk estimates were available for fatal myocardial infarction: the relative risk for ever use of smokeless tobacco products was 1.13 (95% confidence 1.06 to 1.21) and the excess risk was restricted to current users. The relative risk of fatal stroke, on the basis of five risk estimates, was 1.40 (1.28 to 1.54). The studies from both the United States and Sweden showed an increased risk of death from myocardial infarction and stroke. The inclusion of non-fatal myocardial infarction and non-fatal stroke lowered the summary risk estimates. Data on dose-response were limited but did not suggest a strong relation between risk of dying from either disease and frequency or duration of use of smokeless tobacco products. CONCLUSION: An association was detected between use of smokeless tobacco products and risk of fatal myocardial infarction and stroke, which does not seem to be explained by chance

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http://dx.doi.org/10.1001/jama.2009.1189 **(Accès réservé EHESP)**

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http://dx.doi.org/302/10.1001/jama.2009.1188 **(Accès réservé EHESP)**

(120) HOLMES DR, REDDY VY, TURI ZG, DOSHI SK, *et al.* **Percutaneous closure of the left atrial appendage versus warfarin therapy for prevention of stroke in patients with atrial fibrillation: a randomised non-inferiority trial**. Lancet. 2009 Aug. 15, vol. 374, n° 9689, pp.534-542
http://dx.doi.org/10.1016/S0140-6736(09)61343-X **(Accès réservé EHESP)**

BACKGROUND: In patients with non-valvular atrial fibrillation, embolic stroke is thought to be associated with left atrial appendage (LAA) thrombi. We assessed the efficacy and safety of percutaneous closure of the LAA for prevention of stroke compared with warfarin treatment in patients with atrial fibrillation. METHODS: Adult patients with non-valvular atrial fibrillation were eligible for inclusion in this multicentre, randomised non-inferiority trial if they had at least one of the following: previous stroke or transient ischaemic attack, congestive heart failure, diabetes, hypertension, or were 75 years or older. 707 eligible patients were randomly assigned in a 2:1 ratio by computer-generated randomisation sequence to percutaneous closure of the LAA and subsequent discontinuation of warfarin (intervention; n=463) or to warfarin treatment with a target international normalised ratio between 2.0 and 3.0 (control; n=244). Efficacy was assessed by a primary composite endpoint of stroke, cardiovascular death, and systemic embolism. We selected a one-sided probability criterion of non-inferiority for the intervention of at least 97.5%, by use of a two-fold non-inferiority margin. Serious adverse events that constituted the primary endpoint for safety included major bleeding, pericardial effusion, and device embolisation. Analysis was by intention to treat. This study is registered with Clinicaltrials.gov, number NCT00129545. FINDINGS: At 1065 patient-years of follow-up, the primary efficacy event rate was 3.0 per 100 patient-years (95% credible interval [CrI] 1.9-4.5) in the intervention group and 4.9 per 100 patient-years (2.8-7.1) in the control group (rate ratio [RR] 0.62, 95% CrI 0.35-1.25). The probability of non-inferiority of the intervention was more than 99.9%. Primary safety events were more frequent in the intervention group than in the control group (7.4 per 100 patient-years, 95% CrI 5.5-9.7, vs 4.4 per 100 patient-years, 95% CrI 2.5-6.7; RR 1.69, 1.01-3.19). INTERPRETATION: The efficacy of percutaneous closure of the LAA with this device was non-inferior to that of warfarin therapy. Although there was a higher rate of adverse safety events in the intervention group than in the control group, events in the intervention group were mainly a result of periprocedural complications. Closure of the LAA might provide an alternative strategy to chronic warfarin therapy for stroke prophylaxis in patients with non-valvular atrial fibrillation. FUNDING: Atritech

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http://dx.doi.org/10.1016/S0140-6736(09)61478-1 **(Accès réservé EHESP)**

(122) VERHEUGT FW. **Who is ineligible for warfarin in atrial fibrillation?** Lancet. 2009 Aug. 15, vol. 374, n° 9689, pp.510-511
http://dx.doi.org/10.1016/S0140-6736(09)61471-9 **(Accès réservé EHESP)**

(123) TAURO S, HUTCHEON S. **Chest pain and small red cells: size does matter**. Lancet. 2009 Aug. 1, vol. 374, n° 9687, p.426
http://dx.doi.org/10.1016/S0140-6736(09)60936-3 **(Accès réservé EHESP)**

(124) BHATT DL. **Prasugrel in clinical practice**. N Engl J Med. 2009 Sept. 3, vol. 361, n° 10, pp.940-942
http://dx.doi.org/NEJMp10.1056/NEJMp0806848 **(Accès réservé EHESP)**

Maladies liées à l'alcool

sommaire

(125) BERTHOLET N, HORTON NJ, SAITZ R. **Improvements in readiness to change and drinking in primary care patients with unhealthy alcohol use: a prospective study**. BMC Public Health. 2009, vol. 9, p.101
http://dx.doi.org/1471-24510.1186/1471-2458-9-101 **(Accès libre)**

BACKGROUND: The course of alcohol consumption and cognitive dimensions of behavior change (readiness to change, importance of changing and confidence in ability to change) in primary care patients are not well described. The objective of the study was to determine changes

in readiness, importance and confidence after a primary care visit, and 6-month improvements in both drinking and cognitive dimensions of behavior change, in patients with unhealthy alcohol use. METHODS: Prospective cohort study of patients with unhealthy alcohol use visiting primary care physicians, with repeated assessments of readiness, importance, and confidence (visual analogue scale (VAS), score range 1-10 points). Improvements 6 months later were defined as no unhealthy alcohol use or any increase in readiness, importance, or confidence. Regression models accounted for clustering by physician and adjusted for demographics, alcohol consumption and related problems, and discussion with the physician about alcohol. RESULTS: From before to immediately after the primary care physician visit, patients (n = 173) had increases in readiness (mean +1.0 point), importance (+0.2), and confidence (+0.5) (all p < 0.002). In adjusted models, discussion with the physician about alcohol was associated with increased readiness (+0.8, p = 0.04). At 6 months, many participants had improvements in drinking or readiness (62%), drinking or importance (58%), or drinking or confidence (56%). CONCLUSION: Readiness, importance and confidence improve in many patients with unhealthy alcohol use immediately after a primary care visit. Six months after a visit, most patients have improvements in either drinking or these cognitive dimensions of behavior change

(126) HILL TD, SCHROEDER RD, BRADLEY C, KAPLAN LM, *et al.* **The long-term health consequences of relationship violence in adulthood: an examination of low-income women from Boston, Chicago, and San Antonio**. Am J Public Health. 2009 Sept., vol. 99, n° 9, pp.1645-1650
http://dx.doi.org/10.2105/AJPH.2008.151498 **(Accès payant)**

OBJECTIVES: We examined the long-term health consequences of relationship violence in adulthood. METHODS: Using data from the Welfare, Children, and Families project (1999 and 2001), a probability sample of 2402 low-income women with children living in disadvantaged neighborhoods in Boston, Massachusetts; Chicago, Illinois; and San Antonio, Texas, we predicted changes in the frequency of intoxication, psychological distress, and self-rated health over 2 years with baseline measures of relationship violence and a host of relevant background variables. RESULTS: Our analyses showed that psychological aggression predicted increases in psychological distress, whereas minor physical assault and sexual coercion predicted increases in the frequency of intoxication. There was no evidence to suggest that relationship violence in adulthood predicted changes in self-rated health. CONCLUSIONS: Experiences with relationship violence beyond the formative and developmental years of childhood and adolescence can have far-reaching effects on the health status of disadvantaged urban women

(127) KIRBY T. **Australia considers string of preventive health measures**. Lancet. 2009 Sept. 19, vol. 374, n° 9694, p.963
http://www.ncbi.nlm.nih.gov/pubmed/19774704 **(Accès réservé EHESP)**

(128) CHRETIEN KC, GREYSEN SR, CHRETIEN JP, KIND T. **Online posting of unprofessional content by medical students**. JAMA. 2009 Sept. 23, vol. 302, n° 12, pp.1309-1315
http://dx.doi.org/10.1001/jama.2009.1387 **(Accès réservé EHESP)**

CONTEXT: Web 2.0 applications, such as social networking sites, are creating new challenges for medical professionalism. The scope of this problem in undergraduate medical education is not well-defined. OBJECTIVE: To assess the experience of US medical schools with online posting of unprofessional content by students and existing medical school policies to address online posting. DESIGN, SETTING, AND PARTICIPANTS: An anonymous electronic survey was sent to deans of student affairs, their representatives, or counterparts from each institution in the Association of American Medical Colleges. Data were collected in March and April 2009. MAIN OUTCOME MEASURES: Percentage of schools reporting incidents of students posting unprofessional content online, type of professionalism infraction, disciplinary actions taken, existence of institution policies, and plans for policy development. RESULTS: Sixty percent of US medical schools responded (78/130). Of these schools, 60% (47/78) reported incidents of students posting unprofessional online content. Violations of patient confidentiality were reported by 13% (6/46). Student use of profanity (52%; 22/42), frankly discriminatory language (48%; 19/40), depiction of

intoxication (39%; 17/44), and sexually suggestive material (38%; 16/42) were commonly reported. Of 45 schools that reported an incident and responded to the question about disciplinary actions, 30 gave informal warning (67%) and 3 reported student dismissal (7%). Policies that cover student-posted online content were reported by 38% (28/73) of deans. Of schools without such policies, 11% (5/46) were actively developing new policies to cover online content. Deans reporting incidents were significantly more likely to report having such a policy (51% vs 18%; P = .006), believing these issues could be effectively addressed (91% vs 63%; P = .003), and having higher levels of concern (P = .02). CONCLUSION: Many responding schools had incidents of unprofessional student online postings, but they may not have adequate policy in place

(129) LACHENMEIER DW. **Reducing harm from alcohol: what about unrecorded products?** Lancet. 2009 Sept. 19, vol. 374, n° 9694, p.977
http://dx.doi.org/10.1016/S0140-6736(09)61661-5 **(Accès réservé EHESP)**

(130) MOLE D, GARDEN OJ, IREDALE J. **Alcohol and global health: focus on acute pancreatitis needed**. Lancet. 2009 Sept. 19, vol. 374, n° 9694, pp.976-977
http://dx.doi.org/10.1016/S0140-6736(09)61659-7 **(Accès réservé EHESP)**

(131) DALTON HR, BENDALL RP, KEANE FE, TEDDER RS, *et al.* **Persistent carriage of hepatitis E virus in patients with HIV infection**. N Engl J Med. 2009 Sept. 3, vol. 361, n° 10, pp.1025-1027
http://dx.doi.org/10.1056/NEJMc0903778 **(Accès réservé EHESP)**

(132) MITKA M. **College binge drinking still on the rise**. JAMA. 2009 Aug. 26, vol. 302, n° 8, pp.836-837
http://dx.doi.org/10.1001/jama.2009.1154 **(Accès réservé EHESP)**

(133) BRADY JE, BAKER SP, DIMAGGIO C, MCCARTHY ML, *et al.* **Effectiveness of mandatory alcohol testing programs in reducing alcohol involvement in fatal motor carrier crashes**. Am J Epidemiol. 2009 Sept. 15, vol. 170, n° 6, pp.775-782
http://dx.doi.org/10.1093/aje/kwp202 **(Accès réservé EHESP)**

Mandatory alcohol testing programs for motor carrier drivers were implemented in the United States in 1995 and have not been adequately evaluated. Using data from the Fatality Analysis Reporting System during 1982-2006, the authors assessed the effectiveness of mandatory alcohol testing programs in reducing alcohol involvement in fatal motor carrier crashes. The study sample consisted of 69,295 motor carrier drivers and 83,436 non-motor-carrier drivers who were involved in 66,138 fatal multivehicle crashes. Overall, 2.7% of the motor carrier drivers and 19.4% of the non-motor-carrier drivers had positive blood alcohol concentrations. During the study period, the prevalence of alcohol involvement in fatal crashes decreased by 80% among motor carrier drivers and 41% among non-motor-carrier drivers. With adjustment for driver age, sex, history of driving while intoxicated, and survival status, implementation of the mandatory alcohol testing programs was found to be associated with a 23% reduced risk of alcohol involvement in fatal crashes by motor carrier drivers (odds ratio = 0.77, 95% confidence interval: 0.62, 0.94). Results from this study indicate that mandatory alcohol testing programs may have contributed to a significant reduction in alcohol involvement in fatal motor carrier crashes

(134) O'DOWD A. **Recession could increase alcohol and drug addiction and mental health problems, watchdog warns**. BMJ. 2009, vol. 339, p.b3361
http://www.ncbi.nlm.nih.gov/pubmed/19687095 **(Accès réservé EHESP)**

(135) CHRISTIE B. **Specialist alcohol treatment services fail to meet need in Scotland**. BMJ. 2009, vol. 339, p.b3259
http://www.ncbi.nlm.nih.gov/pubmed/19666965 **(Accès réservé EHESP)**

(136) MAKI N, MARTIKAINEN P. **The role of socioeconomic indicators on non-alcohol and alcohol-associated suicide mortality among women in Finland. A register-based follow-up study of 12 million person-years**. Soc Sci Med. 2009 June, vol. 68, n° 12, pp.2161-2169

http://dx.doi.org/10.1016/j.socscimed.2009.04.006 **(Accès réservé EHESP)**

This study was to analyse the effects and interrelationships of three socioeconomic indicators--education, occupation-based social class and income--on non-alcohol and alcohol-associated suicide mortality among women in Finland. The register data used comprised the 1990 census records linked to the death register for the years 1991-2001 for women who were 25-64 years old in 1990. Adjusted relative mortality rates and the relative index of inequality (RII) were estimated using Poisson regression. The study population experienced 1926 suicides, of which 563 (29%) had alcohol intoxication as a contributory cause. The age-adjusted effects of education on non-alcohol associated suicide were modest, while social class and income related inversely and strongly. The effect of social class was partly mediated by income, and social class explained income differences to some extent. The associations between these socioeconomic indicators and alcohol-associated suicide were stronger, and following adjustment for each other large effects were left for education, social class and income. Further adjustment for living arrangements had little effect on socioeconomic differences in both types of suicide, but practically all of the effects of income and some of education and social class were mediated by employment status. In conclusion, current material factors are hardly the main underlying drivers of socioeconomic differences in suicide among Finnish women. Low social class proved to be an important determinant of suicide risk, but the strong independent effect of education on alcohol-associated suicide indicates that the roots of these differences are probably established in early adulthood when educational qualifications are obtained and health-behavioural patterns set

Paludisme

sommaire

(137) BUTLER D. **Malaria drug-makers ignore WHO ban**. Nature. 2009 July 16, vol. 460, n° 7253, pp.310-311
http://dx.doi.org/10.1038/460310b **(Accès payant)**

(138) TUNG J, PRIMUS A, BOULEY AJ, SEVERSON TF, *et al.* **Evolution of a malaria resistance gene in wild primates**. Nature. 2009 July 16, vol. 460, n° 7253, pp.388-391
http://dx.doi.org/10.1038/nature08149 **(Accès payant)**

The ecology, behaviour and genetics of our closest living relatives, the nonhuman primates, should help us to understand the evolution of our own lineage. Although a large amount of data has been amassed on primate ecology and behaviour, much less is known about the functional and evolutionary genetic aspects of primate biology, especially in wild primates. As a result, even in well-studied populations in which nongenetic factors that influence adaptively important characteristics have been identified, we have almost no understanding of the underlying genetic basis for such traits. Here, we report on the functional consequences of genetic variation at the malaria-related FY (DARC) gene in a well-studied population of yellow baboons (Papio cynocephalus) living in Amboseli National Park in Kenya. FY codes for a chemokine receptor normally expressed on the erythrocyte surface that is the known entry point for the malarial parasite Plasmodium vivax. We identified variation in the cis-regulatory region of the baboon FY gene that was associated with phenotypic variation in susceptibility to Hepatocystis, a malaria-like pathogen that is common in baboons. Genetic variation in this region also influenced gene expression in vivo in wild individuals, a result we confirmed using in vitro reporter gene assays. The patterns of genetic variation in and around this locus were also suggestive of non-neutral evolution, raising the possibility that the evolution of the FY cis-regulatory region in baboons has exhibited both mechanistic and selective parallels with the homologous region in humans. Together, our results represent the first reported association and functional characterization linking genetic variation and a complex trait in a natural population of nonhuman primates

(139) WOLITZ R, EMANUEL E, SHAH S. **Rethinking the responsiveness requirement for international research**. Lancet. 2009 Sept. 5, vol. 374, n° 9692, pp.847-849
http://dx.doi.org/10.1016/S0140-6736(09)60320-2 **(Accès réservé EHESP)**

(140) KIRBY MJ, AMEH D, BOTTOMLEY C, GREEN C, *et al.* **Effect of two different house screening interventions on exposure to malaria vectors and on anaemia in children in The Gambia: a randomised controlled trial**. Lancet. 2009 Sept. 19, vol. 374, n° 9694, pp.998-1009
http://dx.doi.org/10.1016/S0140-6736(09)60871-0 **(Accès réservé EHESP)**

BACKGROUND: House screening should protect people against malaria. We assessed whether two types of house screening--full screening of windows, doors, and closing eaves, or installation of screened ceilings--could reduce house entry of malaria vectors and frequency of anaemia in children in an area of seasonal malaria transmission. METHODS: During 2006 and 2007, 500 occupied houses in and near Farafenni town in The Gambia, an area with low use of insecticide-treated bednets, were randomly assigned to receive full screening, screened ceilings, or no screening (control). Randomisation was done by computer-generated list, in permuted blocks of five houses in the ratio 2:2:1. Screening was not treated with insecticide. Exposure to mosquitoes indoors was assessed by fortnightly light trap collections during the transmission season. Primary endpoints included the number of female Anopheles gambiae sensu lato mosquitoes collected per trap per night. Secondary endpoints included frequency of anaemia (haemoglobin concentration <80 g/L) and parasitaemia at the end of the transmission season in children (aged 6 months to 10 years) who were living in the study houses. Analysis was by modified intention to treat (ITT), including all randomised houses for which there were some outcome data and all children from those houses who were sampled for haemoglobin and parasitaemia. This study is registered as an International Standard Randomised Controlled Trial, number ISRCTN51184253. FINDINGS: 462 houses were included in the modified ITT analysis (full screening, n=188; screened ceilings, n=178; control, n=96). The mean number of A gambiae caught in houses without screening was 37.5 per trap per night (95% CI 31.6-43.3), compared with 15.2 (12.9-17.4) in houses with full screening (ratio of means 0.41, 95% CI 0.31-0.54; p<0.0001) and 19.1 (16.1-22.1) in houses with screened ceilings (ratio 0.53, 0.40-0.70; p<0.0001). 755 children completed the study, of whom 731 had complete clinical and covariate data and were used in the analysis of clinical outcomes. 30 (19%) of 158 children from control houses had anaemia, compared with 38 (12%) of 309 from houses with full screening (adjusted odds ratio [OR] 0.53, 95% CI 0.29-0.97; p=0.04), and 31 (12%) of 264 from houses with screened ceilings (OR 0.51, 0.27-0.96; p=0.04). Frequency of parasitaemia did not differ between intervention and control groups. INTERPRETATION: House screening substantially reduced the number of mosquitoes inside houses and could contribute to prevention of anaemia in children. FUNDING: Medical Research Council

(141) GIMNIG JE, SLUTSKER L. **House screening for malaria control**. Lancet. 2009 Sept. 19, vol. 374, n° 9694, pp.954-955
http://dx.doi.org/10.1016/S0140-6736(09)61078-3 **(Accès réservé EHESP)**

(142) HOGLUND P. **Quinine for malaria in children. Increasing adherence to quinine**. BMJ. 2009, vol. 339, p.b3349
http://www.ncbi.nlm.nih.gov/pubmed/19690009 **(Accès réservé EHESP)**

(143) NDAO CT, DUMONT A, FIEVET N, DOUCOURE S, *et al.* **Placental malarial infection as a risk factor for hypertensive disorders during pregnancy in Africa: a case-control study in an urban area of Senegal, West Africa**. Am J Epidemiol. 2009 Oct. 1, vol. 170, n° 7, pp.847-853
http://dx.doi.org/10.1093/aje/kwp207 **(Accès réservé EHESP)**

In tropical countries, malaria and hypertension are common diseases of pregnancy. They have physiopathologic similarities such as placental ischemia, endothelial dysfunction, and production of proinflammatory cytokines. Recent findings suggested their possible link. The authors conducted a case-control study to explore the relation between malaria and hypertension at Guediawaye, a hypoendemic malarial setting in Senegal. Cases were pregnant women admitted to the delivery unit for hypertension. Controls were pregnant women admitted for normal delivery, without any history of hypertension or proteinuria during the present pregnancy. Malarial infection was determined by placental tissue examination. From January to December 2002, 77 cases of gestational hypertension, 113 cases of preeclampsia, 59 cases of eclampsia, and 241 controls were enrolled. Placental malarial infection (PMI) was present in 14 cases (6.3%) and in 15

controls (6.2%). The prevalence of PMI was 4.6% for eclampsia, 4.0% for preeclampsia, and 11.6% for gestational hypertension. In multivariate analysis, PMI appeared to be an independent risk factor for gestational hypertension (adjusted odds ratio = 2.7, 95% confidence interval: 1.0, 7.6). The authors found an association between PMI and nonproteinuric hypertension in women living in a malaria-hypoendemic area. The exact significance of such relation should be clarified in further studies in different settings of malarial endemicity

Pathologies liées à l'obésité

sommaire

(205) SPENCE JC, CUTUMISU N, EDWARDS J, RAINE KD, *et al.* **Relation between local food environments and obesity among adults**. BMC Public Health. 2009, vol. 9, p.192
http://dx.doi.org/1471-24510.1186/1471-2458-9-192 **(Accès libre)**

BACKGROUND: Outside of the United States, evidence for associations between exposure to fast-food establishments and risk for obesity among adults is limited and equivocal. The purposes of this study were to investigate whether the relative availability of different types of food retailers around people's homes was associated with obesity among adults in Edmonton, Canada, and if this association varied as a function of distance between food locations and people's homes. METHODS: Data from a population health survey of 2900 adults (18 years or older) conducted in 2002 was linked with geographic measures of access to food retailers. Based upon a ratio of the number of fast-food restaurants and convenience stores to supermarkets and specialty food stores, a Retail Food Environment Index (RFEI) was calculated for 800 m and 1600 m buffers around people's homes. In a series of logistic regressions, associations between the RFEI and the level of obesity among adults were examined. RESULTS: The median RFEI for adults in Edmonton was 4.00 within an 800 m buffer around their residence and 6.46 within a 1600 m buffer around their residence. Approximately 14% of the respondents were classified as being obese. The odds of a resident being obese were significantly lower (OR = 0.75, 95%CI 0.59 - 0.95) if they lived in an area with the lowest RFEI (below 3.0) in comparison to the highest RFEI (5.0 and above). These associations existed regardless of the covariates included in the model. No significant associations were observed between RFEI within a 1600 m buffer of the home and obesity. CONCLUSION: The lower the ratio of fast-food restaurants and convenience stores to grocery stores and produce vendors near people's homes, the lower the odds of being obese. Thus the proximity of the obesogenic environment to individuals appears to be an important factor in their risk for obesity

(206) ESTEGHAMATI A, MEYSAMIE A, KHALILZADEH O, RASHIDI A, *et al.* **Third national Surveillance of Risk Factors of Non-Communicable Diseases (SuRFNCD-2007) in Iran: methods and results on prevalence of diabetes, hypertension, obesity, central obesity, and dyslipidemia**. BMC Public Health. 2009, vol. 9, p.167
http://dx.doi.org/1471-24510.1186/1471-2458-9-167 **(Accès libre)**

BACKGROUND: The burden of non-communicable diseases is rising globally. This trend seems to be faster in developing countries of the Middle East. In this study, we presented the latest prevalence rates of a number of important non-communicable diseases and their risk factors in the Iranian population. METHODS: The results of this study are extracted from the third national Surveillance of Risk Factors of Non-Communicable Diseases (SuRFNCD-2007), conducted in 2007. A total of 5,287 Iranian citizens, aged 15-64 years, were included in this survey. Interviewer-administered questionnaires were applied to collect the data of participants including the demographics, diet, physical activity, smoking, history of hypertension, and history of diabetes. Anthropometric characteristics were measured and serum biochemistry profiles were determined on venous blood samples. Diabetes (fasting plasma glucose >or= 126 mg/dl), hypertension (systolic blood pressure >or= 140 mmHg, diastolic blood pressure >or= 90 mmHg, or use of anti-hypertensive drugs), dyslipidemia (hypertriglyceridemia: triglycerides >or= 150 mg/dl, hypercholesterolemia: total cholesterol >or= 200 mg/dl), obesity (body mass index >or= 30 kg/m2), and central obesity (waist circumference >or= 80 cm in females and >or= 94 cm in males)

were identified and the national prevalence rates were estimated. RESULTS: The prevalence of diabetes, hypertension, obesity, and central obesity was 8.7% (95%CI = 7.4-10.2%), 26.6% (95%CI = 24.4-28.9%), 22.3% (95%CI = 20.2-24.5%), and 53.6% (95%CI = 50.4-56.8%), respectively. The prevalence of hypertriglyceridemia and hypercholesterolemia was 36.4% (95%CI = 34.1-38.9%) and 42.9% (95%CI = 40.4-45.4%), respectively. All of the mentioned prevalence rates were higher among females (except hypertriglyceridemia) and urban residents. CONCLUSION: We documented a strikingly high prevalence of a number of chronic non-communicable diseases and their risk factors among Iranian adults. Urgent preventive interventions should be implemented to combat the growing public health problems in Iran

(207) KESTILA L, MARTELIN T, RAHKONEN O, HARKANEN T, *et al.* **The contribution of childhood circumstances, current circumstances and health behaviour to educational health differences in early adulthood**. BMC Public Health. 2009, vol. 9, p.164
http://dx.doi.org/1471-24510.1186/1471-2458-9-164 **(Accès libre)**

BACKGROUND: The life course approach emphasises the contribution of circumstances in childhood and youth to adult health inequalities. However, there is still a lot to know of the contribution of living conditions in childhood and youth to adult health inequalities and how later environmental and behavioural factors are connected with the effects of earlier circumstances. This study aims to assess a) how much childhood circumstances, current circumstances and health behaviour contribute to educational health differences and b) to which extent the effect of childhood circumstances on educational health differences is shared with the effects of later living conditions and health behaviour in young adults. METHODS: The data derived from the Health 2000 Survey represent the Finnish young adults aged 18-29 in 2000. The analyses were carried out on 68% (n = 1282) of the sample (N = 1894). The cross-sectional data based on interviews and questionnaires include retrospective information on childhood circumstances. The outcome measure was poor self-rated health. RESULTS: Poor self-rated health was much more common among subjects with primary education only than among those in the highest educational category (OR 4.69, 95% CI 2.63 to 8.62). Childhood circumstances contributed substantially (24%) to the health differences between these educational groups. Nearly two thirds (63%) of this contribution was shared with behavioural factors adopted by early adulthood, and 17% with current circumstances. Health behaviours, smoking especially, were strongly contributed to educational health differences. CONCLUSION: To develop means for avoiding undesirable trajectories along which poor health and health differences develop, it is necessary to understand the pathways to health inequalities and know how to improve the living conditions of families with children

(208) LAZAROU C, PANAGIOTAKOS DB, KOUTA C, MATALAS AL. **Dietary and other lifestyle characteristics of Cypriot school children: results from the nationwide CYKIDS study**. BMC Public Health. 2009, vol. 9, p.147
http://dx.doi.org/1471-24510.1186/1471-2458-9-147 **(Accès libre)**

BACKGROUND: Dietary and lifestyle behaviors at young ages have been associated with the development of various chronic diseases. Schools are regarded as an excellent setting for lifestyle modification; there is a lack, however, of published dietary data in Cypriot school children. Thus, the objective of this work was to describe lifestyle characteristics of a representative segment of Cypriot school children and provide implications for school health education. METHODS: The CYKIDS (Cyprus Kids Study) is a national, cross-sectional study conducted among 1140 school children (10.7 +/- 0.98 years). Sampling was stratified and multistage in 24 primary schools of Cyprus. Dietary assessment was based on a 154-item semi-quantitative food-frequency questionnaire and three supplementary questionnaires, assessing dietary patterns and behaviors. Adherence to the Mediterranean diet was evaluated by the KIDMED index (Mediterranean Diet Quality Index for children and adolescents). Physical activity was assessed by a 32-item, semi-quantitative questionnaire. RESULTS: Analysis revealed that 6.7% of the children were classified as high adherers, whereas 37% as low adherers to the Mediterranean diet. About 20% of boys and 25% of girls reported "not having breakfast on most days of the week", while more than 80% of the children reported having meals with the family at least 5 times/week. Some food-related behaviors, such as intake of breakfast, were associated with socio-demographic factors, mostly

with gender and the geomorphological characteristics of the living milieu. With respect to physical activity, boys reported higher levels compared to girls, however, one fourth of children did not report any kind of physical activity. CONCLUSION: A large percentage of Cypriot school children have a diet of low quality and inadequate physical activity. Public health policy makers should urgently focus their attention to primary school children and design school health education programs that target the areas that need attention in order to reduce the future burden of metabolic disorders and chronic diseases

(209) MADDISON R, FOLEY L, MHURCHU CN, JULL A, *et al.* **Feasibility, design and conduct of a pragmatic randomized controlled trial to reduce overweight and obesity in children: The electronic games to aid motivation to exercise (eGAME) study**. BMC Public Health. 2009, vol. 9, p.146
http://dx.doi.org/1471-24510.1186/1471-2458-9-146 **(Accès libre)**

BACKGROUND: Childhood obesity has reached epidemic proportions in developed countries. Sedentary screen-based activities such as video gaming are thought to displace active behaviors and are independently associated with obesity. Active video games, where players physically interact with images onscreen, may have utility as a novel intervention to increase physical activity and improve body composition in children. The aim of the Electronic Games to Aid Motivation to Exercise (eGAME) study is to determine the effects of an active video game intervention over 6 months on: body mass index (BMI), percent body fat, waist circumference, cardio-respiratory fitness, and physical activity levels in overweight children. METHODS/DESIGN: Three hundred and thirty participants aged 10-14 years will be randomized to receive either an active video game upgrade package or to a control group (no intervention). DISCUSSION: An overview of the eGAME study is presented, providing an example of a large, pragmatic randomized controlled trial in a community setting. Reflection is offered on key issues encountered during the course of the study. In particular, investigation into the feasibility of the proposed intervention, as well as robust testing of proposed study procedures is a critical step prior to implementation of a large-scale trial

(210) GARCIA-MENDIZABAL MJ, CARRASCO JM, PEREZ-GOMEZ B, ARAGONES N, *et al.* **Role of educational level in the relationship between Body Mass Index (BMI) and health-related quality of life (HRQL) among rural Spanish women**. BMC Public Health. 2009, vol. 9, p.120
http://dx.doi.org/1471-24510.1186/1471-2458-9-120 **(Accès libre)**

BACKGROUND: The impact of obesity on health-related quality of life (HRQL) has been little explored in rural areas. The goal of this study is to ascertain the association between obesity and HRQL among Spanish women living in a rural area, and the influence of their educational level. METHODS: Cross-sectional study with personal interview of 1298 women (aged 18 to 60) randomly selected from the electoral rolls of 14 towns in Galicia, a region in the north-west of Spain. HRQL was assessed using the SF-36 questionnaire. The association between body mass index (BMI) and suboptimal scores in the different HRQL dimensions was summarised using odds ratios (ORs), obtained from multivariate logistic regression models. Separate analyses were conducted for women who had finished their education younger than 16 years old and women with secondary education to assess differences in the relationship between BMI and HRQL according to educational level. RESULTS: Among women with primary or lower education, obesity was associated with a higher prevalence of suboptimal values in the following dimensions: Physical functioning (OR: 1.97; 95%CI: 1.22-3.18); Role-physical (OR: 1.81; 95%CI: 1.04-3.14); General health (OR: 1.76; 95%CI: 1.10-2.81); and Role-emotional (OR: 2.52; 95%CI: 1.27-5.03). In women with higher education, physical functioning was the only dimension associated with obesity (OR: 2.02: 95%CI 0.83-4.97). CONCLUSION: The impact of obesity on women's HRQL is greater among those with a lower educational level. This group registered higher prevalence of obesity and poorer self-perceived health

(211) SHREWSBURY VA, O'CONNOR J, STEINBECK KS, STEVENSON K, *et al.* **A randomised controlled trial of a community-based healthy lifestyle program for overweight and obese adolescents: the Loozit study protocol**. BMC Public Health. 2009, vol. 9, p.119
http://dx.doi.org/1471-24510.1186/1471-2458-9-119 **(Accès libre)**

BACKGROUND: There is a need to develop sustainable and clinically effective weight management interventions that are suitable for delivery in community settings where the vast majority of overweight and obese adolescents should be treated. This study aims to evaluate the effect of additional therapeutic contact as an adjunct to the Loozit group program -- a community-based, lifestyle intervention for overweight and lower grade obesity in adolescents. The additional therapeutic contact is provided via telephone coaching and either mobile phone Short Message Service or electronic mail, or both. METHODS AND DESIGN: The study design is a two-arm randomised controlled trial that aims to recruit 168 overweight and obese 13-16 year olds (Body Mass Index z-score 1.0 to 2.5) in Sydney, Australia. Adolescents with secondary causes of obesity or significant medical illness are excluded. Participants are recruited via schools, media coverage, health professionals and several community organisations. Study arm one receives the Loozit group weight management program (G). Study arm two receives the same Loozit group weight management program plus additional therapeutic contact (G+ATC). The 'G' intervention consists of two phases. Phase 1 involves seven weekly group sessions held separately for adolescents and their parents. This is followed by phase 2 that involves a further seven group sessions held regularly, for adolescents only, until two years follow-up. Additional therapeutic contact is provided to adolescents in the 'G+ATC' study arm approximately once per fortnight during phase 2 only. Outcome measurements are assessed at 2, 12 and 24 months post-baseline and include: BMI z-score, waist z-score, metabolic profile indicators, physical activity, sedentary behaviour, eating patterns, and psychosocial well-being. DISCUSSION: The Loozit study is the first randomised controlled trial of a community-based adolescent weight management intervention to incorporate additional therapeutic contact via a combination of telephone coaching, mobile phone Short Message Service, and electronic mail. If shown to be successful, the Loozit group weight management program with additional therapeutic contact has the potential to be readily translatable to a range of health care settings. TRIAL REGISTRATION: The protocol for this study is registered with the Australian Clinical Trials Registry (ACTRNO12606000175572)

(212) NIEDERER I, KRIEMLER S, ZAHNER L, BURGI F, *et al.* **Influence of a lifestyle intervention in preschool children on physiological and psychological parameters (Ballabeina): study design of a cluster randomized controlled trial**. BMC Public Health. 2009, vol. 9, p.94 http://dx.doi.org/10.1186/1471-2458-9-94 **(Accès libre)**

BACKGROUND: Childhood obesity and physical inactivity are increasing dramatically worldwide. Children of low socioeconomic status and/or children of migrant background are especially at risk. In general, the overall effectiveness of school-based programs on health-related outcomes has been disappointing. A special gap exists for younger children and in high risk groups. METHODS/DESIGN: This paper describes the rationale, design, curriculum, and evaluation of a multicenter preschool randomized intervention study conducted in areas with a high migrant population in two out of 26 Swiss cantons. Twenty preschool classes in the German (canton St. Gallen) and another 20 in the French (canton Vaud) part of Switzerland were separately selected and randomized to an intervention and a control arm by the use of opaque envelopes. The multidisciplinary lifestyle intervention aimed to increase physical activity and sleep duration, to reinforce healthy nutrition and eating behaviour, and to reduce media use. According to the ecological model, it included children, their parents and the teachers. The regular teachers performed the majority of the intervention and were supported by a local health promoter. The intervention included physical activity lessons, adaptation of the built infrastructure; promotion of regional extracurricular physical activity; playful lessons about nutrition, media use and sleep, funny homework cards and information materials for teachers and parents. It lasted one school year. Baseline and post-intervention evaluations were performed in both arms. Primary outcome measures included BMI and aerobic fitness (20 m shuttle run test). Secondary outcomes included total (skinfolds, bioelectrical impedance) and central (waist circumference) body fat, motor abilities (obstacle course, static and dynamic balance), physical activity and sleep duration (accelerometry and questionnaires), nutritional behaviour and food intake, media use, quality of life and signs of hyperactivity (questionnaires), attention and spatial working memory ability (two validated tests). Researchers were blinded to group allocation. DISCUSSION: The purpose of this paper is to outline the design of a school-based multicenter cluster randomized, controlled trial aiming to

reduce body mass index and to increase aerobic fitness in preschool children in culturally different parts of Switzerland with a high migrant population. TRIAL REGISTRATION: Trial Registration: (clinicaltrials.gov) NCT00674544

(213) MERMIN SE, GRAFF SK. **A legal primer for the obesity prevention movement**. Am J Public Health. 2009 Oct., vol. 99, n° 10, pp.1799-1805
http://dx.doi.org/10.2105/AJPH.2008.151183 **(Accès payant)**

Public health advocates and scientists working on obesity prevention policy face challenges in balancing legal rights, individual freedom, and societal health goals. In particular, the US Constitution and the 50 state constitutions place limits on the ability of government to act, even in the best interests of the public. To help policymakers avoid crossing constitutional boundaries, we distilled the legal concepts most relevant to formulating policies aimed at preventing obesity: police power; allocation of power among federal, state, and local governments; freedom of speech; property rights; privacy; equal protection; and contract rights. The goal is to allow policymakers to avoid potential constitutional problems in the formation of obesity prevention policy

(214) KUO T, JAROSZ CJ, SIMON P, FIELDING JE. **Menu labeling as a potential strategy for combating the obesity epidemic: a health impact assessment**. Am J Public Health. 2009 Sept., vol. 99, n° 9, pp.1680-1686
http://dx.doi.org/10.2105/AJPH.2008.153023 **(Accès payant)**

OBJECTIVES: We conducted a health impact assessment to quantify the potential impact of a state menu-labeling law on population weight gain in Los Angeles County, California. METHODS: We utilized published and unpublished data to model consumer response to point-of-purchase calorie postings at large chain restaurants in Los Angeles County. We conducted sensitivity analyses to account for uncertainty in consumer response and in the total annual revenue, market share, and average meal price of large chain restaurants in the county. RESULTS: Assuming that 10% of the restaurant patrons would order reduced-calorie meals in response to calorie postings, resulting in an average reduction of 100 calories per meal, we estimated that menu labeling would avert 40.6% of the 6.75 million pound average annual weight gain in the county population aged 5 years and older. Substantially larger impacts would be realized if higher percentages of patrons ordered reduced-calorie meals or if average per-meal calorie reductions increased. CONCLUSIONS: Our findings suggest that mandated menu labeling could have a sizable salutary impact on the obesity epidemic, even with only modest changes in consumer behavior

(215) SACKS DA. **Gestational diabetes--whom do we treat?** N Engl J Med. 2009 Oct. 1, vol. 361, n° 14, pp.1396-1398
http://dx.doi.org/10.1056/NEJMe0907617 **(Accès réservé EHESP)**

(216) KIRBY T. **Australia considers string of preventive health measures**. Lancet. 2009 Sept. 19, vol. 374, n° 9694, p.963
http://www.ncbi.nlm.nih.gov/pubmed/19774704 **(Accès réservé EHESP)**

(217) LEFF DR, HEATH D. **Surgery for obesity in adulthood**. BMJ. 2009, vol. 339, p.b3402
http://www.ncbi.nlm.nih.gov/pubmed/19773325 **(Accès réservé EHESP)**

(218) RUBINO F. **Access to bariatric surgery and patients with diabetes**. JAMA. 2009 Sept. 9, vol. 302, n° 10, pp.1055-1056
http://dx.doi.org/302/1010.1001/jama.2009.1288 **(Accès réservé EHESP)**

(219) WAKE M, BAUR LA, GERNER B, GIBBONS K, *et al.* **Outcomes and costs of primary care surveillance and intervention for overweight or obese children: the LEAP 2 randomised controlled trial**. BMJ. 2009, vol. 339, p.b3308
http://www.ncbi.nlm.nih.gov/pubmed/19729418 **(Accès réservé EHESP)**

OBJECTIVE: To determine whether ascertainment of childhood obesity by surveillance followed by structured secondary prevention in primary care improved outcomes in overweight or mildly obese children. DESIGN: Randomised controlled trial nested within a baseline cross sectional survey of body mass index (BMI). Randomisation and outcomes measurement, but not participants, were blinded to group assignment. SETTING: 45 family practices (66 general practitioners) in Melbourne, Australia. PARTICIPANTS: 3958 children visiting their general practitioner in May 2005-July 2006 were surveyed for BMI. Of these, 258 children aged 5 years 0 months up to their 10th birthday who were overweight or obese by International Obesity Taskforce criteria were randomised to intervention (n=139) or control (n=119) groups. Children who were very obese (UK BMI z score >or=3.0) were excluded. INTERVENTION: Four standard consultations over 12 weeks targeting change in nutrition, physical activity, and sedentary behaviour, supported by purpose designed family materials. Main outcomes measures Primary measure was BMI at 6 and 12 months after randomisation. Secondary measures were mean activity count/min by 7-day accelerometry, nutrition score from 4-day abbreviated food frequency diary, and child health related quality of life. Differences were adjusted for socioeconomic status, age, sex, and baseline BMI. RESULTS: Of 781 eligible children, 258 (33%) entered the trial; attrition was 3.1% at 6 months and 6.2% at 12 months. Adjusted mean differences (intervention - control) at 6 and 12 months were, for BMI, -0.12 (95% CI -0.40 to 0.15, P=0.4) and -0.11 (-0.45 to 0.22, P=0.5); for physical activity in counts/min, 24 (-4 to 52, P=0.09) and 11 (-26 to 49, P=0.6); and, for nutrition score, 0.2 (-0.03 to 0.4, P=0.1) and 0.1 (-0.1 to 0.4, P=0.2). There was no evidence of harm to the child. Costs to the healthcare system were significantly higher in the intervention arm. CONCLUSIONS: Primary care screening followed by brief counselling did not improve BMI, physical activity, or nutrition in overweight or mildly obese 5-10 year olds, and it would be very costly if universally implemented. These findings are at odds with national policies in countries including the US, UK, and Australia. TRIAL REGISTRATION: ISRCTN 52511065 (www.isrctn.org)

(220) JENKINSON CM, DOHERTY M, AVERY AJ, READ A, *et al.* **Effects of dietary intervention and quadriceps strengthening exercises on pain and function in overweight people with knee pain: randomised controlled trial**. BMJ. 2009, vol. 339, p.b3170
http://www.ncbi.nlm.nih.gov/pubmed/19690345 **(Accès réservé EHESP)**

OBJECTIVE: To determine whether dietary intervention or knee strengthening exercise, or both, can reduce knee pain and improve knee function in overweight and obese adults in the community. DESIGN: Pragmatic factorial randomised controlled trial. SETTING: Five general practices in Nottingham. PARTICIPANTS: 389 men and women aged 45 and over with a body mass index (BMI) of > or = 28.0 and self reported knee pain. INTERVENTIONS: Participants were randomised to dietary intervention plus quadriceps strengthening exercises; dietary intervention alone; quadriceps strengthening exercises alone; advice leaflet only (control group). Dietary intervention consisted of individualised healthy eating advice that would reduce normal intake by 2.5 MJ (600 kcal) a day. Interventions were delivered at home visits over a two year period. MAIN OUTCOME MEASURES: The primary outcome was severity of knee pain scored with the Western Ontario McMaster (WOMAC) osteoarthritis index at 6, 12, and 24 months. Secondary outcomes (all at 24 months) included WOMAC knee physical function and stiffness scores and selected domains on the SF-36 and the hospital anxiety and depression index. RESULTS: 289 (74%) participants completed the trial. There was a significant reduction in knee pain in the knee exercise groups compared with those in the non-exercise groups at 24 months (percentage risk difference 11.61, 95% confidence interval 1.81% to 21.41%). The absolute effect size (0.25) was moderate. The number needed to treat to benefit from a > or = 30% improvement in knee pain at 24 months was 9 (5 to 55). In those randomised to knee exercise improvement in function was evident at 24 months (mean difference -3.64, -6.01 to -1.27). The mean difference in weight loss at 24 months in the dietary intervention group compared with no dietary intervention was 2.95 kg (1.44 to 4.46); for exercise versus no exercise the difference was 0.43 kg (-0.82 to 1.68). This difference in weight loss was not associated with improvement in knee pain or function but was associated with a reduction in depression (absolute effect size 0.19). CONCLUSIONS: A home based, self managed programme of simple knee strengthening exercises over a two year period can significantly reduce knee pain and improve knee function in overweight and obese people

with knee pain. A moderate sustained weight loss is achievable with dietary intervention and is associated with reduced depression but is without apparent influence on pain or function. TRIAL REGISTRATION: Current Controlled Trials ISRCTN93206785

(221) BARTON GR, SACH TH, JENKINSON C, DOHERTY M, *et al.* **Lifestyle interventions for knee pain in overweight and obese adults aged > or = 45: economic evaluation of randomised controlled trial**. BMJ. 2009, vol. 339, p.b2273
http://www.ncbi.nlm.nih.gov/pubmed/19690341 **(Accès réservé EHESP)**

OBJECTIVE: To estimate the cost effectiveness of four different lifestyle interventions for knee pain. DESIGN: Cost utility analysis of randomised controlled trial. SETTING: Five general practices in the United Kingdom. PARTICIPANTS: 389 adults aged > or = 45 with self reported knee pain and body mass index (BMI) > or = 28. INTERVENTIONS: Dietary intervention plus quadriceps strengthening exercises, dietary intervention, quadriceps strengthening exercises, and leaflet provision. Participants received home visits over a two year period. MAIN OUTCOME MEASURE: Incremental cost per quality adjusted life year (QALY) gained over two years from a health service perspective. RESULTS: Advice leaflet was associated with a mean change in cost of -31 pounds sterling, and a mean QALY gain of 0.085. Both strengthening exercises and dietary intervention were more effective (0.090 and 0.133 mean QALY gain, respectively) but were not cost effective. Dietary intervention plus strengthening exercises had a mean cost of 647 pounds sterling and a mean QALY gain of 0.147 and was estimated to have an incremental cost of 10,469 pounds sterling per QALY gain (relative to leaflet provision), and a 23.1% probability of being cost effective at a 20,000 pounds sterling/QALY threshold. CONCLUSION: Dietary intervention plus strengthening exercises was estimated to be cost effective for individuals with knee pain, but with a large level of uncertainty. TRIAL REGISTRATION: ISRCTN93206785

(222) THURSTON RC, SOWERS MR, STERNFELD B, GOLD EB, *et al.* **Gains in body fat and vasomotor symptom reporting over the menopausal transition: the study of women's health across the nation**. Am J Epidemiol. 2009 Sept. 15, vol. 170, n° 6, pp.766-774
http://dx.doi.org/10.1093/aje/kwp203 **(Accès réservé EHESP)**

Although most women report vasomotor symptoms (hot flashes, night sweats) during midlife, their etiology and risk factors are incompletely understood. Body fat is positively associated with vasomotor symptoms cross-sectionally, but the longitudinal relation between changes in body fat and vasomotor symptoms is uncharacterized. The study aim was to examine whether gains in body fat were related to vasomotor symptom reporting over time. Measures of bioelectrical impedance for body fat, reproductive hormones, and reported vasomotor symptoms were assessed annually over 4 years from 2002 to 2006 among 1,659 women aged 47-59 years participating in the Study of Women's Health Across the Nation. Body fat change was examined in relation to vasomotor symptoms by using generalized estimating equations. Body fat gains were associated with greater odds of reporting hot flashes in models adjusted for age, site, race/ethnicity, education, smoking, parity, anxiety, and menopausal status (relative to stable body fat, gain: odds ratio = 1.23, 95% confidence interval: 1.02, 1.48; P = 0.03; loss: odds ratio = 1.07, 95% confidence interval: 0.89, 1.29; P = 0.45). Findings persisted controlling for estradiol, the free estradiol index, or follicle-stimulating hormone concentrations. The relations between body fat changes and night sweats were not statistically significant. Body fat gains are associated with greater hot flash reporting during the menopausal transition

(223) WEE CC. **A 52-year-old woman with obesity: review of bariatric surgery**. JAMA. 2009 Sept. 9, vol. 302, n° 10, pp.1097-1104
http://dx.doi.org/2010.1001/jama.2009.1197 **(Accès réservé EHESP)**

Ms J is a 52-year-old woman with severe obesity and depression, anxiety, and osteoarthritis who has not been able to sustain weight loss through dieting and is now considering having weight loss surgery. She would like to know the long-term effects of surgery, including its psychological consequences. The article discusses the consequences of the 2 most commonly performed bariatric procedures, Roux-en-Y gastric bypass and laparoscopic adjustable gastric banding, and

their effects on weight loss, comorbidities, psychological function, and overall quality of life. Evidence suggests average weight loss at 10 years after surgery of 25% and 13%, respectively. The risk of perioperative mortality varies with patient factors and surgeon experience but is typically less than 1% with experienced surgeons. Roux-en-Y gastric bypass has a higher complication rate than laparoscopic adjustable gastric banding. Many obesity-related comorbidities such as diabetes and hypertension resolve or improve with weight loss, and quality of life generally improves in parallel with weight loss. However, depression and anxiety, as Ms J experiences, do not necessarily improve as a result of surgery

(224) **A community strategy to prevent obesity**. Lancet. 2009 Aug. 8, vol. 374, n° 9688, p.428
http://dx.doi.org/10.1016/S0140-6736(09)61429-X **(Accès réservé EHESP)**

(225) KESSE-GUYOT E, CASTETBON K, ESTAQUIO C, CZERNICHOW S, *et al.* **Association between the French nutritional guideline-based score and 6-year anthropometric changes in a French middle-aged adult cohort**. Am J Epidemiol. 2009 Sept. 15, vol. 170, n° 6, pp.757-765
http://dx.doi.org/10.1093/aje/kwp174 **(Accès réservé EHESP)**

In light of increasing obesity among the elderly, understanding the role of nutritional guidelines in preventing weight gain is of major importance. The authors evaluated the impact of the French Programme National Nutrition Sante (PNNS)-Guideline Score (GS) (maximum score, 15 points) on anthropometric changes in a large population-based study. Subjects in the present analysis (n = 3,531) were participants in the SUplementation en VItamines et Mineraux AntioXydants (SU.VI.MAX) study (1994-2002) and had available data for estimating the PNNS-GS and anthropometric data at baseline and 6 years later. Data were analyzed by using multivariate linear regression models for the association with anthropometric changes and multiple logistic regression to estimate odds ratios of becoming overweight or obese. The authors found a significant negative association between PNNS-GS and changes in markers of anthropometry. In addition, better adherence to the PNNS-GS was associated with a lower incidence of overweight (odds ratio = 0.93, 95% confidence interval: 0.88, 0.99) and obesity (odds ratio = 0.89, 95% confidence interval: 0.80, 0.99) after a 6-year follow-up period. These observations support the role of nutritional guidelines in prevention of age-related weight increase and development of obesity

(226) ROEHR B. **"Soda tax" could help tackle obesity, says US director of public health**. BMJ. 2009, vol. 339, p.b3176
http://www.ncbi.nlm.nih.gov/pubmed/19654182 **(Accès réservé EHESP)**

(227) PATEL SR. **Invited Commentary: understanding the role of sleep**. Am J Epidemiol. 2009 Oct. 1, vol. 170, n° 7, pp.814-816
http://dx.doi.org/10.1093/aje/kwp228 **(Accès réservé EHESP)**

Chronic sleep deprivation is increasingly entertained as a novel risk factor for obesity. However, the vast majority of studies on this topic have relied on unvalidated subjective measures of habitual sleep habits. The accompanying paper by Lauderdale et al. (Am J Epidemiol. 2009;170(7):805-813) presents the first longitudinal analysis of the relation between sleep duration and weight change by using an objective assessment of sleep. The lack of evidence for an association in this work suggests that the absolute time slept may not be important for weight regulation but raises questions as to what self-reported sleep duration is measuring. One intriguing possibility is that self-reported sleep may reflect the time spent in deeper stages of sleep, which physiologic studies suggest may be more relevant from a metabolic standpoint. Further research into the relation between sleep quantity and quality relative to obesity by use of more refined measures of sleep is needed to identify which, if any, aspects of sleep are important in weight homeostasis

(228) MOLLOY GJ, STAMATAKIS E, RANDALL G, HAMER M. **Marital status, gender and cardiovascular mortality: behavioural, psychological distress and metabolic explanations**.

Soc Sci Med. 2009 July, vol. 69, n° 2, pp.223-228
http://dx.doi.org/10.1016/j.socscimed.2009.05.010 **(Accès réservé EHESP)**

The intermediate processes through which the various unmarried states can increase the risk of subsequent cardiovascular disease mortality are incompletely understood. An understanding of these processes and how they may vary by gender is important for understanding why marital status is strongly and robustly associated with subsequent cardiovascular disease. In a prospective study of 13,889 Scottish men and women (mean age 52.3, Standard Deviation: 11.8 yrs, range 35-95, 56.1% female) without a history of clinically diagnosed cardiovascular disease, we examined the extent to which health behaviours (smoking, alcohol, physical activity), psychological distress (General Health Questionnaire-12 item) and metabolic dysregulation (obesity levels, and the presence of hypertension and diabetes) account for the association between marital status and cardiovascular mortality. There were 258 cardiovascular deaths over an average follow up of 7.1 (Standard Deviation=3.3) years. The risk of cardiovascular mortality was greatest in single, never married men and separated/divorced women compared with those that were married in gender stratified models that were adjusted for age and socio-economic group. In models that were separately adjusted, behavioural factors explained up to 33%, psychological distress explained up to 10% and metabolic dysregulation up to 16% of the relative change in the hazard ratios in the observed significant associations between marital status and cardiovascular mortality. Behavioural factors were particularly important in accounting for the relationship between being separated/divorced and cardiovascular mortality in both men and women (33% and 21% of the relative change in the hazard ratios, respectively). The findings suggest that health behaviour, psychological distress and metabolic dysregulation data have varying explanatory power for understanding the observed relationship between cardiovascular disease mortality and unmarried states

(229) KHLAT M, JUSOT F, VILLE I. **Social origins, early hardship and obesity: a strong association in women, but not in men?** Soc Sci Med. 2009 May, vol. 68, n° 9, pp.1692-1699
http://dx.doi.org/10.1016/j.socscimed.2009.02.024 **(Accès réservé EHESP)**

This study investigates the relation between early life conditions and adult obesity in France, using a rich data set collected through the 2003 nationally representative Life History Survey. No salient factor emerged in men, while in women, after controlling for current socio-demographic characteristics, a relation was found between obesity and the following factors: father's occupation (OR=3.2 for women whose father was a clerical worker, versus those whose father was in a higher-level occupation); experience of economic hardship in childhood (OR=2.0), and; high parity (OR=2.1 for parities of more than 3 versus parity of 1). Neither early family history nor mother's working status surfaced as significant factors. Those findings highlight a definite gender pattern, with a strong association between early disadvantage and obesity in women, but not in men. Potential mechanisms are discussed, particularly the "habitus", the "thrifty phenotype" and the "feast-famine" hypotheses, and possible interactions with childbearing and motherhood. An integration of social and biological perspectives is needed to reach a better understanding of the processes involved, and to achieve progress in primary and secondary prevention

SIDA

sommaire

(230) WELAGA P, HOSEGOOD V, WEINER R, HILL C, *et al.* **Coming home to die? The association between migration and mortality in rural South Africa**. BMC Public Health. 2009, vol. 9, p.193
http://dx.doi.org/1471-24510.1186/1471-2458-9-193 **(Accès libre)**

BACKGROUND: Studies on migration often ignore the health and social impact of migrants returning to their rural communities. Several studies have shown migrants to be particularly susceptible to HIV infection. This paper investigates whether migrants to rural households have a higher risk of dying, especially from HIV, than non-migrants. METHODS: Using data from a large and ongoing Demographic Surveillance System, 41,517 adults, enumerated in bi-annual rounds

between 2001 and 2005, and aged 18 to 60 years were categorized into four groups: external in-migrants, internal migrants, out-migrants and residents. The risk of dying by migration status was quantified by Cox proportional hazard regression. In a sub-group analysis of 1212 deaths which occurred in 2

(231) WATTS JM, DANG KK, GORELICK RJ, LEONARD CW, *et al.* **Architecture and secondary structure of an entire HIV-1 RNA genome**. Nature. 2009 Aug. 6, vol. 460, n° 7256, pp.711-716
http://dx.doi.org/10.1038/nature08237 **(Accès payant)**

Single-stranded RNA viruses encompass broad classes of infectious agents and cause the common cold, cancer, AIDS and other serious health threats. Viral replication is regulated at many levels, including the use of conserved genomic RNA structures. Most potential regulatory elements in viral RNA genomes are uncharacterized. Here we report the structure of an entire HIV-1 genome at single nucleotide resolution using SHAPE, a high-throughput RNA analysis technology. The genome encodes protein structure at two levels. In addition to the correspondence between RNA and protein primary sequences, a correlation exists between high levels of RNA structure and sequences that encode inter-domain loops in HIV proteins. This correlation suggests that RNA structure modulates ribosome elongation to promote native protein folding. Some simple genome elements previously shown to be important, including the ribosomal gag-pol frameshift stem-loop, are components of larger RNA motifs. We also identify organizational principles for unstructured RNA regions, including splice site acceptors and hypervariable regions. These results emphasize that the HIV-1 genome and, potentially, many coding RNAs are punctuated by previously unrecognized regulatory motifs and that extensive RNA structure constitutes an important component of the genetic code

(232) AL-HASHIMI HM. **Structural biology: Aerial view of the HIV genome**. Nature. 2009 Aug. 6, vol. 460, n° 7256, pp.696-698
http://dx.doi.org/10.1038/460696a **(Accès payant)**

(233) CHECK HE. **US AIDS chief lays out priorities**. Nature. 2009 July 9, vol. 460, n° 7252, p.162
http://dx.doi.org/10.1038/460162a **(Accès payant)**

(234) STONE VE, BOUNDS BC, MUSE VV, FERRY JA. **Case records of the Massachusetts General Hospital. Case 29-2009. An 81-year-old man with weight loss, odynophagia, and failure to thrive**. N Engl J Med. 2009 Sept. 17, vol. 361, n° 12, pp.1189-1198
http://dx.doi.org/10.1056/NEJMcpc0900644 (**Accès réservé EHESP**)

(235) SERVICE RF. **American Chemical Society fall meeting, 16-20 August, Washington, D.C. Sugary Achilles' heel raises hope for broad-acting antiviral drugs**. Science. 2009 Sept. 4, vol. 325, n° 5945, p.1200
http://dx.doi.org/325/594510.1126/science.325_1200a **(Accès réservé EHESP)**

(236) COHEN J. **HIV/AIDS research. Potent HIV antibodies spark vaccine hopes**. Science. 2009 Sept. 4, vol. 325, n° 5945, p.1195
http://dx.doi.org/325/5910.1126/science.325_1195 **(Accès réservé EHESP)**

(237) LEGER P, CHARLES M, SEVERE P, RIVIERE C, *et al.* **5-year survival of patients with AIDS receiving antiretroviral therapy in Haiti**. N Engl J Med. 2009 Aug. 20, vol. 361, n° 8, pp.828-829
http://dx.doi.org/10.1056/NEJMc0809485 **(Accès réservé EHESP)**

(238) WASSWA H. **Uganda runs out of antiretroviral drugs after shortfall in aid**. BMJ. 2009, vol. 339, p.b3255
http://www.ncbi.nlm.nih.gov/pubmed/19666681 **(Accès réservé EHESP)**

(239) LENNOX JL, DEJESUS E, LAZZARIN A, POLLARD RB, *et al.* **Safety and efficacy of raltegravir-based versus efavirenz-based combination therapy in treatment-naive patients with HIV-1 infection: a multicentre, double-blind randomised controlled trial**. Lancet. 2009

Sept. 5, vol. 374, n° 9692, pp.796-806
http://dx.doi.org/10.1016/S0140-6736(09)60918-1 **(Accès réservé EHESP)**

BACKGROUND: Use of raltegravir with optimum background therapy is effective and well tolerated in treatment-experienced patients with multidrug-resistant HIV-1 infection. We compared the safety and efficacy of raltegravir with efavirenz as part of combination antiretroviral therapy for treatment-naive patients. METHODS: Patients from 67 study centres on five continents were enrolled between Sept 14, 2006, and June 5, 2008. Eligible patients were infected with HIV-1, had viral RNA (vRNA) concentration of more than 5000 copies per mL, and no baseline resistance to efavirenz, tenofovir, or emtricitabine. Patients were randomly allocated by interactive voice response system in a 1:1 ratio (double-blind) to receive 400 mg oral raltegravir twice daily or 600 mg oral efavirenz once daily, in combination with tenofovir and emtricitabine. The primary efficacy endpoint was achievement of a vRNA concentration of less than 50 copies per mL at week 48. The primary analysis was per protocol. The margin of non-inferiority was 12%. This study is registered with ClinicalTrials.gov, number NCT00369941. FINDINGS: 566 patients were enrolled and randomly allocated to treatment, of whom 281 received raltegravir, 282 received efavirenz, and three were never treated. At baseline, 297 (53%) patients had more than 100 000 vRNA copies per mL and 267 (47%) had CD4 counts of 200 cells per microL or less. The main analysis (with non-completion counted as failure) showed that 86.1% (n=241 patients) of the raltegravir group and 81.9% (n=230) of the efavirenz group achieved the primary endpoint (difference 4.2%, 95% CI -1.9 to 10.3). The time to achieve such viral suppression was shorter for patients on raltegravir than on efavirenz (log-rank test p<0.0001). Significantly fewer drug-related clinical adverse events occurred in patients on raltegravir (n=124 [44.1%]) than those on efavirenz (n=217 [77.0%]; difference -32.8%, 95% CI -40.2 to -25.0, p<0.0001). Serious drug-related clinical adverse events occurred in less than 2% of patients in each drug group. INTERPRETATION: Raltegravir-based combination treatment had rapid and potent antiretroviral activity, which was non-inferior to that of efavirenz at week 48. Raltegravir is a well tolerated alternative to efavirenz as part of a combination regimen against HIV-1 in treatment-naive patients. FUNDING: Merck

(240) SMITH AD, TAPSOBA P, PESHU N, SANDERS EJ, *et al.* **Men who have sex with men and HIV/AIDS in sub-Saharan Africa**. Lancet. 2009 Aug. 1, vol. 374, n° 9687, pp.416-422
http://dx.doi.org/10.1016/S0140-6736(09)61118-1 **(Accès réservé EHESP)**

Globally, men who have sex with men (MSM) continue to bear a high burden of HIV infection. In sub-Saharan Africa, same-sex behaviours have been largely neglected by HIV research up to now. The results from recent studies, however, indicate the widespread existence of MSM groups across Africa, and high rates of HIV infection, HIV risk behaviour, and evidence of behavioural links between MSM and heterosexual networks have been reported. Yet most African MSM have no safe access to relevant HIV/AIDS information and services, and many African states have not begun to recognise or address the needs of these men in the context of national HIV/AIDS prevention and control programmes. The HIV/AIDS community now has considerable challenges in clarifying and addressing the needs of MSM in sub-Saharan Africa; homosexuality is illegal in most countries, and political and social hostility are endemic. An effective response to HIV/AIDS requires improved strategic information about all risk groups, including MSM. The belated response to MSM with HIV infection needs rapid and sustained national and international commitment to the development of appropriate interventions and action to reduce structural and social barriers to make these accessible

(241) SSEWAMALA FM, HAN CK, NEILANDS TB. **Asset ownership and health and mental health functioning among AIDS-orphaned adolescents: findings from a randomized clinical trial in rural Uganda**. Soc Sci Med. 2009 July, vol. 69, n° 2, pp.191-198
http://dx.doi.org/10.1016/j.socscimed.2009.05.019 **(Accès réservé EHESP)**

This study evaluated an economic empowerment intervention designed to promote life options, health and mental health functioning among AIDS-orphaned adolescents in rural Uganda. The study used an experimental design in which adolescents (N=267) were randomly assigned to receive an economic empowerment intervention or usual care for orphaned children. The study

measured mental health functioning using 20 items of the Tennessee Self-Concept Scale (TSCS: 2)--a standardized measure for self-esteem-and measured overall health using a self-rated health measure. Data obtained at 10-month follow-up revealed significant positive effects of the economic empowerment intervention on adolescents' self-rated health and mental health functioning. Additionally, health and mental health functioning were found to be positively associated with each other. The findings have implications for public policy and health programming for AIDS-orphaned adolescents

Tuberculose

sommaire

(242) LEWIS CP, NEWELL JN. **Improving tuberculosis care in low income countries - a qualitative study of patients' understanding of "patient support" in Nepal**. BMC Public Health. 2009, vol. 9, p.190
http://dx.doi.org/1471-24510.1186/1471-2458-9-190 **(Accès libre)**

BACKGROUND: In the new Stop TB Strategy for Tuberculosis (TB) Care, direct observation of treatment has been replaced by "supervision and patient support". However, it is still unclear what patient support means and how it is to be best implemented. The objective of this study was to accurately document patients' support needs during TB treatment from their own perspectives, to inform development of appropriate support and supervision strategies that meet patients' needs. METHODS: In-depth individual interviews and focus group discussions were conducted in three districts in Nepal. Analysis took place concurrently with data collection to allow emerging issues to guide selection of subsequent interviewees. In total 23 patients, 15 male and 8 female, were interviewed and six focus group discussions were held. Issues from these interviews were grouped into emergent themes. RESULTS: Respondents reported that the burden of treatment for TB was high, particularly in terms of difficulties with social and psychological aspects of undergoing treatment. They saw three main areas for support during their treatment: relevant information for them and their families about their disease, its treatment, potential side-effects and what they should do if side-effects arise; approachable and supportive healthcare staff with whom patients feel comfortable discussing (often non-medical) problems that arise during treatment; and some flexibility in treatment to allow essential elements of patients' lives (such as income generation, food-growing and childcare) to continue. They were anxious to ensure that family support did not absolve healthcare workers from their own support responsibilities. CONCLUSION: In order to support people with TB more during their treatment, health policy and practice must appreciate that TB affects all aspects of TB patients' lives. A focus on caring for each patient as an individual should underlie all aspects of treatment. Improved communication between healthcare providers and patients and increased patient knowledge and understanding of the treatment programme would give those receiving treatment a sense of individual empowerment and raise their confidence in treatment

(243) RINTISWATI N, MAHENDRADHATA Y, SUHARNA, SUSILAWATI, *et al.* **Journeys to tuberculosis treatment: a qualitative study of patients, families and communities in Jogjakarta, Indonesia**. BMC Public Health. 2009, vol. 9, p.158
http://dx.doi.org/1471-24510.1186/1471-2458-9-158 **(Accès libre)**

BACKGROUND: Many tuberculosis (TB) patients in Indonesia are diagnosed late. We seek to document patient journeys toward TB diagnosis and treatment and factors that influence health care seeking behavior. METHODS: TB patients in Jogjakarta municipality (urban) and Kulon Progo district (rural) were recruited from health care facilities participating in the DOTS strategy and health care facilities not participating in the DOTS strategy, using purposive sampling methods. Data were collected through in-depth interviews with TB patients and members of their family and through Focus Group Discussions (FGD) with community members. RESULTS: In total, 67 TB patients and 22 family members were interviewed and 6 FGDs were performed. According to their care seeking behavior patients were categorized into National TB program's (NTP) dream cases (18%), 'slow-but-sure patients' (34%), 'shopaholics' (45%), and the NTP's

nightmare case (3%). Care seeking behavior patterns did not seem to be influenced by gender, place of residence and educational level. Factors that influenced care seeking behavior include income and advice from household members or friends. Family members based their recommendation on previous experience and affordability. FGD results suggest that the majority of people in the urban area preferred the hospital or chest clinic for diagnosis and treatment of TB whereas in the rural area private practitioners were preferred. Knowledge about TB treatment being free of charge was better in the urban area. Many community members from the rural area doubted whether TB treatment would be available free of charge. CONCLUSION: Most TB patients took over a month to reach a DOTS facility after symptoms appeared and had consulted a number of providers. Their income and advice from household members and friends were factors that influenced their care seeking behavior most

(244) HARSTAD I, HELDAL E, STEINSHAMN SL, GARASEN H, *et al.* **Tuberculosis screening and follow-up of asylum seekers in Norway: a cohort study**. BMC Public Health. 2009, vol. 9, p.141
http://dx.doi.org/1471-24510.1186/1471-2458-9-141 **(Accès libre)**

BACKGROUND: About 80% of new tuberculosis cases in Norway occur among immigrants from high incidence countries. On arrival to the country all asylum seekers are screened with Mantoux test and chest x-ray aimed to identify cases of active tuberculosis and, in the case of latent tuberculosis, to offer follow-up or prophylactic treatment.We assessed a national programme for screening, treatment and follow-up of tuberculosis infection and disease in a cohort of asylum seekers. METHODS: Asylum seekers >or= 18 years who arrived at the National Reception Centre from January 2005 to June 2006, were included as the total cohort. Those with a Mantoux test >or= 6 mm or positive x-ray findings were included in a study group for follow-up.Data were collected from public health authorities in the municipality to where the asylum seekers had moved, and from hospital based internists in case they had been referred to specialist care.Individual subjects included in the study group were matched with the Norwegian National Tuberculosis Register which receive reports of everybody diagnosed with active tuberculosis, or who had started treatment for latent tuberculosis. RESULTS: The total cohort included 4643 adult asylum seekers and 97.5% had a valid Mantoux test. At least one inclusion criterion was fulfilled by 2237 persons. By end 2007 municipal public health authorities had assessed 758 (34%) of them. Altogether 328 persons had been seen by an internist. Of 314 individuals with positive x-rays, 194 (62%) had seen an internist, while 86 of 568 with Mantoux >or= 15, but negative x-rays (16%) were also seen by an internist. By December 31st 2006, 23 patients were diagnosed with tuberculosis (prevalence 1028/100 000) and another 11 were treated for latent infection. CONCLUSION: The coverage of screening was satisfactory, but fewer subjects than could have been expected from the national guidelines were followed up in the community and referred to an internist. To improve follow-up of screening results, a simplification of organisation and guidelines, introduction of quality assurance systems, and better coordination between authorities and between different levels of health care are all required

(245) FEARS R, ZUMLA A, TER M, V. **European bodies can help to tackle TB worldwide**. Nature. 2009 Aug. 13, vol. 460, n° 7257, p.796
http://dx.doi.org/10.1038/460796c **(Accès payant)**

(246) PATTON GC, COFFEY C, SAWYER SM, VINER RM, *et al.* **Global patterns of mortality in young people: a systematic analysis of population health data**. Lancet. 2009 Sept. 12, vol. 374, n° 9693, pp.881-892
http://dx.doi.org/10.1016/S0140-6736(09)60741-8 **(Accès réservé EHESP)**

BACKGROUND: Pronounced changes in patterns of health take place in adolescence and young adulthood, but the effects on mortality patterns worldwide have not been reported. We analysed worldwide rates and patterns of mortality between early adolescence and young adulthood. METHODS: We obtained data from the 2004 Global Burden of Disease Study, and used all-cause mortality estimates developed for the 2006 World Health Report, with adjustments for revisions in death from HIV/AIDS and from war and natural disasters. Data for cause of death were derived

from national vital registration when available; for other countries we used sample registration data, verbal autopsy, and disease surveillance data to model causes of death. Worldwide rates and patterns of mortality were investigated by WHO region, income status, and cause in age-groups of 10-14 years, 15-19 years, and 20-24 years. FINDINGS: 2.6 million deaths occurred in people aged 10-24 years in 2004. 2.56 million (97%) of these deaths were in low-income and middle-income countries, and almost two thirds (1.67 million) were in sub-Saharan Africa and southeast Asia. Pronounced rises in mortality rates were recorded from early adolescence (10-14 years) to young adulthood (20-24 years), but reasons varied by region and sex. Maternal conditions were a leading cause of female deaths at 15%. HIV/AIDS and tuberculosis contributed to 11% of deaths. Traffic accidents were the largest cause and accounted for 14% of male and 5% of female deaths. Other prominent causes included violence (12% of male deaths) and suicide (6% of all deaths). INTERPRETATION: Present global priorities for adolescent health policy, which focus on HIV/AIDS and maternal mortality, are an important but insufficient response to prevent mortality in an age-group in which more than two in five deaths are due to intentional and unintentional injuries. FUNDING: WHO and National Health and Medical Research Council

(247) SALVI SS, BARNES PJ. **Chronic obstructive pulmonary disease in non-smokers**. Lancet. 2009 Aug. 29, vol. 374, n° 9691, pp.733-743
http://dx.doi.org/10.1016/S0140-6736(09)61303-9 **(Accès réservé EHESP)**

Chronic obstructive pulmonary disease (COPD) is a leading cause of morbidity and mortality worldwide. Tobacco smoking is established as a major risk factor, but emerging evidence suggests that other risk factors are important, especially in developing countries. An estimated 25-45% of patients with COPD have never smoked; the burden of non-smoking COPD is therefore much higher than previously believed. About 3 billion people, half the worldwide population, are exposed to smoke from biomass fuel compared with 1.01 billion people who smoke tobacco, which suggests that exposure to biomass smoke might be the biggest risk factor for COPD globally. We review the evidence for the association of COPD with biomass fuel, occupational exposure to dusts and gases, history of pulmonary tuberculosis, chronic asthma, respiratory-tract infections during childhood, outdoor air pollution, and poor socioeconomic status

(248) CHOPRA M, LAWN JE, SANDERS D, BARRON P, *et al.* **Achieving the health Millennium Development Goals for South Africa: challenges and priorities**. Lancet. 2009 Sept. 19, vol. 374, n° 9694, pp.1023-1031
http://dx.doi.org/10.1016/S0140-6736(09)61122-3 **(Accès réservé EHESP)**

15 years after liberation from apartheid, South Africans are facing new challenges for which the highest calibre of leadership, vision, and commitment is needed. The effect of the unprecedented HIV/AIDS epidemic has been immense. Substantial increases in mortality and morbidity are threatening to overwhelm the health system and undermine the potential of South Africa to attain the Millennium Development Goals (MDGs). However The Lancet's Series on South Africa has identified several examples of leadership and innovation that point towards a different future scenario. We discuss the type of vision, leadership, and priority actions needed to achieve such a change. We still have time to change the health trajectory of the country, and even meet the MDGs. The South African Government, installed in April, 2009, has the mandate and potential to address the public health emergencies facing the country--will they do so or will another opportunity and many more lives be lost?

(249) BDOOL KARIM SS, CHURCHYARD GJ, ABDOOL KQ, LAWN SD. **HIV infection and tuberculosis in South Africa: an urgent need to escalate the public health response**. Lancet. 2009 Sept. 12, vol. 374, n° 9693, pp.921-933
http://dx.doi.org/10.1016/S0140-6736(09)60916-8 **(Accès réservé EHESP)**

One of the greatest challenges facing post-apartheid South Africa is the control of the concomitant HIV and tuberculosis epidemics. HIV continues to spread relentlessly, and tuberculosis has been declared a national emergency. In 2007, South Africa, with 0.7% of the world's population, had 17% of the global burden of HIV infection, and one of the world's worst tuberculosis epidemics,

compounded by rising drug resistance and HIV co-infection. Until recently, the South African Government's response to these diseases has been marked by denial, lack of political will, and poor implementation of policies and programmes. Nonetheless, there have been notable achievements in disease management, including substantial improvements in access to condoms, expansion of tuberculosis control efforts, and scale-up of free antiretroviral therapy (ART). Care for acutely ill AIDS patients and long-term provision of ART are two issues that dominate medical practice and the health-care system. Decisive action is needed to implement evidence-based priorities for the control of the HIV and tuberculosis epidemics. By use of the framework of the Strategic Plans for South Africa for tuberculosis and HIV/AIDS, we provide prioritised four-step approaches for tuberculosis control, HIV prevention, and HIV treatment. Strong leadership, political will, social mobilisation, adequate human and financial resources, and sustainable development of health-care services are needed for successful implementation of these approaches

(250) CHOPRA M, DAVIAUD E, PATTINSON R, FONN S, *et al.* **Saving the lives of South Africa's mothers, babies, and children: can the health system deliver?** Lancet. 2009 Sept. 5, vol. 374, n° 9692, pp.835-846
http://dx.doi.org/10.1016/S0140-6736(09)61123-5 **(Accès réservé EHESP)**

South Africa is one of only 12 countries in which mortality rates for children have increased since the baseline for the Millennium Development Goals (MDGs) in 1990. Continuing poverty and the HIV/AIDS epidemic are important factors. Additionally, suboptimum implementation of high-impact interventions limits programme effectiveness; between a quarter and half of maternal, neonatal, and child deaths in national audits have an avoidable health-system factor contributing to the death. Using the LiST model, we estimate that 11,500 infants' lives could be saved by effective implementation of basic neonatal care at 95% coverage. Similar coverage of dual-therapy prevention of mother-to-child transmission with appropriate feeding choices could save 37,200 children's lives in South Africa per year in 2015 compared with 2008. These interventions would also avert many maternal deaths and stillbirths. The total cost of such a target package is US$1.5 billion per year, 24% of the public-sector health expenditure; the incremental cost is $220 million per year. Such progress would put South Africa squarely on track to meet MDG 4 and probably also MDG 5. The costs are affordable and the key gap is leadership and effective implementation at every level of the health system, including national and local accountability for service provision

(251) KAPP C. **South Africa tries new approach to resistant tuberculosis**. Lancet. 2009 Aug. 8, vol. 374, n° 9688, p.441
http://www.ncbi.nlm.nih.gov/pubmed/19681189 **(Accès réservé EHESP)**

(252) LONNROTH K, JARAMILLO E, WILLIAMS BG, DYE C, *et al.* **Drivers of tuberculosis epidemics: the role of risk factors and social determinants**. Soc Sci Med. 2009 June, vol. 68, n° 12, pp.2240-2246
http://dx.doi.org/10.1016/j.socscimed.2009.03.041 **(Accès réservé EHESP)**

The main thrust of the World Health Organization's global tuberculosis (TB) control strategy is to ensure effective and equitable delivery of quality assured diagnosis and treatment of TB. Options for including preventive efforts have not yet been fully considered. This paper presents a narrative review of the historical and recent progress in TB control and the role of TB risk factors and social determinants. The review was conducted with a view to assess the prospects of effectively controlling TB under the current strategy, and the potential to increase epidemiological impact through additional preventive interventions. The review suggests that, while the current strategy is effective in curing patients and saving lives, the epidemiological impact has so far been less than predicted. In order to reach long-term epidemiological targets for global TB control, additional interventions to reduce peoples' vulnerability for TB may therefore be required. Risk factors that seem to be of importance at the population level include poor living and working conditions associated with high risk of TB transmission, and factors that impair the host's defence against TB infection and disease, such as HIV infection, malnutrition, smoking, diabetes, alcohol abuse, and indoor air pollution. Preventive interventions may target these factors directly or via their

underlying social determinants. The identification of risk groups also helps to target strategies for early detection of people in need of TB treatment. More research is needed on the suitability, feasibility and cost-effectiveness of these intervention options

(253) NOYMER A. **Testing the influenza-tuberculosis selective mortality hypothesis with Union Army data**. Soc Sci Med. 2009 May, vol. 68, n° 9, pp.1599-1608
http://dx.doi.org/10.1016/j.socscimed.2009.02.021 **(Accès réservé EHESP)**

Using Cox regression, this paper shows a weak association between having tuberculosis and dying from influenza among Union Army veterans in late nineteenth-century America. It has been suggested elsewhere [Noymer, A. and M. Garenne (2000). The 1918 influenza epidemic's effects on sex differentials in mortality in the United States. Population and Development Review 26(3), 565-581.] that the 1918 influenza pandemic accelerated the decline of tuberculosis, by killing many people with tuberculosis. The question remains whether individuals with tuberculosis were at greater risk of influenza death, or if the 1918/post-1918 phenomenon arose from the sheer number of deaths in the influenza pandemic. The present findings, from microdata, cautiously point toward an explanation of Noymer and Garenne's selection effect in terms of age-overlap of the 1918 pandemic mortality and tuberculosis morbidity, a phenomenon I term "passive selection". Another way to think of this is selection at the cohort, as opposed to individual, level

Rapports et dossiers en ligne

Diabète

sommaire

Shadi Chamany, Lynn D. Silver, Mary T. Bassett,et al. **Tracking Diabetes: New York City's A1C Registry.** The Milbank quarterly, Volume 87, Number 3, September 2009
http://www.milbank.org/quarterly/8703feat.html **(Accès libre)**

Diabète de type 2 : un traitement tout en nuances. Dossier / RICHARD (Denis), REMBLIER (Catherine). – Le Moniteur hospitalier, n° 218, 2009/08-09, pp. 21-31
-Des données épidémiologiques alarmantes
- Antidiabétiques oraux : une famille en expansion
- Prise en charge des pathologies associées
A consulter à la bibliothèque

Réduire le risque cardiovasculaire du diabétique. Dossier / Varroud-Vial (Michel), Rodde (Didier), et al. – Le concours médical, vol. 131, n° 13, 2009/09/08, pp. 484-505
A consulter à la bibliothèque

Grippe A

sommaire

Bruce M. Altevogt, Clare Stroud, Sarah L. Hanson, et al. **Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report**. 2009. 160 p., pdf
http://www.nap.edu/catalog.php?record_id=12749# **(à télécharger gratuitement sur simple inscription)**

> The influenza pandemic caused by the 2009 H1N1 virus underscores the immediate and critical need to prepare for a public health emergency in which thousands, tens of thousands, or even hundreds of thousands of people suddenly seek and require medical ...

WHO supports fair access to influenza A (H1N1) vaccine / L'OMS se prononce en faveur d'un accès équitable au vaccin contre la grippe pandémique H1N1 2009. Bulletin de l'Organisation mondiale de la Santé .Volume 87, septembre 2009, 645-732
http://www.who.int/bulletin/volumes/87/9/09-030909.pdf **(Accès libre)**

Junfeng Liu, David J. Stevens, Lesley F. Haire, et al. From the Cover: **Structures of receptor complexes formed by hemagglutinins from the Asian Influenza pandemic of 1957.** PNAS October 2009 106: 17175-17180.
http://www.pnas.org/content/106/40/17175 **(Accès payant)**

Actualisation de l'avis relatif aux recommandations sur les priorités sanitaires d'utilisation des vaccins pandémiques dirigés contre le virus grippal A(H1N1). 2 octobre 2009. Haut Conseil de la santé publique HCSP. 30p., pdf
http://www.hcsp.fr/docspdf/avisrapports/hcspa20091002_H1N1.pdf **(Accès libre)**

Nous testons des stratégies de vaccination contre A(H1N1). / FLAHAULT (Antoine), GRUSZOW (Sylvie). - RECHERCHE (LA), N° 433, 2009/09. - 76-79
A consulter à la bibliothèque

"Google Flu Trends". Google propose un modèle d'estimation en temps réel basé sur les requêtes de recherche.
L'entreprise américaine Google, connue principalement pour son moteur de recherche sur Internet, se targue de pouvoir donner une estimation de la propagation du virus de la grippe, quasiment en temps réel et à l'échelle mondiale, en se basant sur les données relatives aux recherches lancées sur Google.
http://www.google.org/flutrends/ **(Accès libre)**
Le sujet a fait l'objet d'un article dans la revue Nature : **Detecting influenza epidemics using search engine query data.**
http://www.nature.com/nature/journal/v457/n7232/full/nature07634.html **(Accès payant)**

Sadique M. Z., Adams E. J., et Edmunds W. J., et al. **Estimating the Costs of School Closure for Mitigating an Influenza Pandemic**, BMC Public Health, 2008, 8:135.
http://www.biomedcentral.com/content/pdf/1471-2458-8-135.pdf **(Accès libre)**

Sélection de dossiers et sites Internet

The Lancet's H1N1 Resource Centre
http://www.thelancet.com/H1N1-flu **(Accès libre)**

Blog : Le journal de la pandémie 2.0.
http://blog.slate.fr/h1n1/ **(Accès libre)**

Bureau régional de l'OMS pour l'Europe
http://www.euro.who.int/influenza/AH1N1/20090425_1?language=French

U.S. Government H1N1, avian and pandemic flu information
http://www.pandemicflu.gov/ **(Accès libre)**

CDC Centers for Disease Control and Prevention
http://www.cdc.gov/h1n1flu/ **(Accès libre)**

Organisation mondiale de la santé OMS
http://www.who.int/csr/disease/swineflu/en/index.html **(Accès libre)**

DynaMed topic on Swine Influenza (EbscoHost)
http://www.ebscohost.com/dynamed/h1n1/ **(Accès libre)**

Dossier de l'InVS
http://www.invs.sante.fr/surveillance/grippe_dossier/default.htm **(Accès libre)**

Site interministériel de préparation à un risque de pandémie grippale
http://www.grippeaviaire.gouv.fr/ **(Accès libre)**

Site du ministère de la santé et des sports
http://www.sante-sports.gouv.fr/dossiers/sante/grippe-porcine-h1n1/grippe-porcine-h1n1.html **(Accès libre)**

Maladie d'Alzheimer

sommaire

World Alzheimer Report 2009. Alzheimer's Disease International. September 2009. 96p., pdf
http://www.alz.co.uk/research/files/World%20Alzheimer%20Report.pdf **(Accès libre)**

Maladies cardio-vasculaires

sommaire

La prévention et la prise en charge des accidents vasculaires cérébraux en France. Elisabeth Fery-Lemonnier. Octobre 2009.
http://www.sante-sports.gouv.fr/publications-documentation/publications-documentation-sante/rapports/prevention-prise-charge-accidents-vasculaires-cerebraux-france.html **(Accès libre)**

Maladies chroniques

sommaire

Gaining health. Analysis of policy development in European countries for tackling noncommunicable diseases / Améliorer la santé. Analyse de l'élaboration des politiques dans les pays d'Europe pour lutter contre les maladies non transmissibles. Anna Ritsatakis and Péter Makara. Regional Office for Europe of the World Health Organization. 2009. 265p.
http://www.euro.who.int/Document/E92828.pdf **(Accès libre)**

Global Burden of Diseases, Injuries and Risk Factors Study Operations Manual. Final Draft. January 20, 2009. Harvard University; Institute for Health Metrics and Evaluation at the University of Washington; Johns Hopkins University; University of Queensland; World Health Organization. 142p., pdf
http://www.globalburden.org/GBD_Study_Operations_Manual_Jan_20_2009.pdf **(Accès libre)**

> The final draft of the Global Burden of Diseases, Injuries and Risk Factors Study Operations Manual is now available. It is intended to serve as a guide for the Expert Groups working on the GBD Study. There are opportunities to provide input and feedback, and instructions to do so are included in the operations manual.

Congrès : Mieux vivre au quotidien avec une maladie chronique. Plan 2007-2011 pour l'amélioration de la qualité de vie des personnes atteintes de maladies chroniques.
22 et 23 octobre 2009. Paris.
http://www.sfsp.fr/activites/file/INVITATION_MaladiesChroniques.pdf **(Accès libre)**

Maladies infectieuses

sommaire

Modèles contre maladies infectieuses. / SALLET (Gauthier). - RECHERCHE (LA), N° 433, 2009/09. - 70-72 : réf. bibl.
A consulter à la bibliothèque

Paludisme

sommaire

Ulrike Fillinger et al. **Lutte intégrée contre les vecteurs du paludisme au moyen de larvicides microbiens et de moustiquaires imprégnées d'insecticide au Kenya occidental : essai contrôlé / Integrated malaria vector control with microbial larvicides and insecticide-treated nets in western Kenya: a controlled trial.** Bulletin de l'Organisation mondiale de la Santé .Volume 87, septembre 2009, 645-732
http://www.who.int/entity/bulletin/volumes/87/9/08-055632.pdf **(Accès libre)**

Pathologies liées à l'obésité

sommaire

Communiqué de presse : **20 sociétés médicales d'experts et de spécialistes proposent 17 chantiers prioritaires à la commission chargée des problèmes de prévention et de prise en charge de l'obésité, mise en place par Président de la République** - 6 octobre 2009. SFSP. 5p., pdf
http://www.sfsp.fr/activites/file/CPcommisionobesite.pdf **(Accès libre)**

Politiques publiques en matière d'obésité : cas des femmes de milieu défavorisé. INRA. 1p., html
http://www.inra.fr/les_partenariats/collaborations_et_partenaires/entreprises/en_direct_des_labos/politiques_publiques_en_matiere_d_obesite **(Accès libre)**

SIDA

sommaire

Towards universal access: scaling up priority HIV/AIDS interventions in the health sector. Progress report, September 2009. / Vers un accès universel : étendre les interventions prioritaires liées au VIH/sida dans le secteur de la santé. Rapport de situation, Septembre 2009. WHO. 165p., pdf
http://www.who.int/hiv/pub/2009progressreport/en/ **(Accès libre)**

VIH, emploi et handicap : avis suivi de recommandations sur la prise en compte des personnes vivant avec le VIH dans les politiques du handicap. Conseil National du SIDA. Avis suivi de recommandations. 10/09/2009. 35p., pdf
http://www.cns.sante.fr/IMG/pdf/2009-09-10_avi_fr_prise_en_charge.pdf **(Accès libre)**

Guidelines for the Prevention and Treatment of Opportunistic Infections Among HIV-Exposed and HIV-Infected Children. Recommendations from CDC, the National Institutes of Health, the HIV Medicine Association of the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the American Academy of Pediatrics. 2009. CDC. 176p., pdf
http://aidsinfo.nih.gov/contentfiles/Pediatric_OI.pdf **(Accès libre)**

Tuberculose

sommaire

C Dye et al.**Tendances de l'incidence de la tuberculose et de ses déterminants dans 134 pays / Trends in tuberculosis incidence and their determinants in 134 countries.** Bulletin de l'Organisation mondiale de la Santé .Volume 87, septembre 2009, 645-732
http://www.who.int/bulletin/volumes/87/9/08-058453.pdf **(Accès libre)**

CORDIS. [Date: 2009-09-24]. **Des chercheurs européens mettent au point un test de dépistage de la tuberculose.**
http://cordis.europa.eu/fetch?CALLER=FR_NEWS&ACTION=D&SESSION=&RCN=31285 **(Accès libre)**

Note pour les sources citées :
Ce bulletin de veille a pour objectif de valoriser l'information produite par d'autres sites que l'EHESP et sélectionnée par les documentalistes de l'EHESP. Si une information de votre site a été mentionnée et que cela ne vous convient pas, merci de nous contacter par mail