P01: URINARY PHYTOESTROGENS AND DEPRESSION IN PERIMENOPAUSAL US WOMEN: NHANES 2005-2008

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BACKGROUND:

Fluctuating hormonal levels observed during the menopausal transition may increase vulnerability to depression in susceptible women. Thus, it is of interest to examine the effect of natural estrogens such as phytoestrogens on the risk of depression in perimenopausal women.

METHODS:

Our analysis included 193 perimenopausal women of the National Health and Nutrition Survey (NHANES) 2005-2008 aged 45-55 years. Urinary concentrations of phytoestrogens (isoflavones and lignans) were measured by HPLC-APPI-MS/MS. Depression was assessed using the Patient Health Questionnaire-9 (PHQ-9). Logistic regression models examined the association of phytoestrogens concentrations (creatinine-standardized and log-transformed) with depression (yes/no).

RESULTS:

Unadjusted odds ratios (OR) of the associations between urinary phytoestrogen concentrations and perimenopausal depression were below 1; however, only lignans were significantly inversely associated with depression. The latter findings were not attenuated in multivariate analysis including age, race, body mass index, poverty income ratio, smoking, alcohol consumption, cancer, diabetes, and cardiovascular disease (lignans: OR=0.66; 95% confidence intervals (CI) 0.50-0.87, enterodiol: OR=0.63; 95% CI 0.51-0.78, enterolactone: OR=0.75; 95% CI 0.60-0.93).

LIMITATIONS:

Our cross-sectional study design does not allow for causal inferences. Because information to precisely assess perimenopausal symptoms was missing, we defined perimenopause based on women’s age.

CONCLUSIONS:

Lower lignans but not isoflavones concentrations were statistically significantly associated with an increased risk of depression in perimenopausal women. Because of medical risks associated with the use of hormone therapy, further investigation on the effect of lignans on the risk of depression in perimenopausal women is warranted.
P02: PREVENTION OF EXISTENTIAL DISTRESS IN LGBT YOUTH CONFRONTING SEXUAL ORIENTATION: AN ASSESSMENT OF THE CURRENT SITUATION IN VALAIS

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Promotion Santé Valais mandated the research department at Malévoz Psychiatric Hospital in Valais to do a Needs Assessment report concerning the mental health of the LGBT population group in Valais. The report was completed in the spring of 2012. The findings of the report were presented in the form of an analysis followed by proposals detailing a course of action.

The report was based on a qualitative research approach using Needs Assessment methodology. Twenty-one professionals involved in the social, educational, and healthcare network, working in relation with LGBT issues, were interviewed. The interviews were based upon a semi-structured questionnaire consisting of five questions that opened up the conversational space. They were transcribed and analyzed. The Social-Ecological Model was also privileged in this research strategy, as it is supported by the World Health Organization’s health prevention orientation.

Our methodological choice allowed the perceptions of the professionals to emerge from the interviews, generating conversations that reinforced the communicational and relational dimension within the network. These critical reflections reinforced the level of coherence in relation to LGBT social and healthcare issues. Dialogical space was created on multiple levels enhancing the transformational process. Not only did the interviews inform the public through the report, but also a public conference and validation session allowed for larger conversations to be orchestrated. The final report was later used as a guide for a television documentary, informing the larger public.

The perceptions of the professionals underscore the importance of the social determinants of health and the minority stress model, offering in-depth descriptions of the social construction of existential distress among LGBT youth in Valais. The effects of discrimination were related in the narratives of the professionals.

Homophobia was perceived as a contributing factor in high suicide rates among LGBT youth. The report suggests a course of action integrating LGBT people in work groups where social, educational, and healthcare initiatives are being developed. In this way, public health policy will be made with the participation of the LGBT community, insuring a form of reflexivity in the process of formulating guidelines. The report contributed to the implementation of preventative measures designed to reduce existential distress among LGBT youth in Valais.
P03: MAJOR DEPRESSIVE EPISODE PREDICTS OVERALL MORTALITY AFTER A 5.5 YEAR FOLLOW-UP

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Background

Studies on the association between depression and mortality have yielded inconsistent results given serious methodological limitations including 1) the comparison of mortality rates in psychiatric samples with population mortality rates, 2) assessment of depression with self-report rating scales rather than with diagnostic interviews, and 3) lack of accounting for somatic comorbidities. Accordingly, the aim of the present study was to compare incident mortality in a population-based cohort between subjects with current, remitted or without major depressive disorder (MDD) at baseline, with adjustment for age, sex, socio-economic status, CVRF, physical activity, alcohol consumption, previous history of cardiovascular disease and antidepressant use.

Method

Subjects in the age range of 35 to 66 years were randomly selected from the population of Lausanne (Switzerland). The baseline investigation of the 3,525 participants, which took place between 2003 and 2008, included a somatic exam and a semi-structured psychiatric interview. The MDD diagnosis was assigned according to DSM-IV. Deaths were recorded through the registry of inhabitants between the baseline psychiatric examination and July 2012. The mean follow-up was 5.2 years. On 95\% of subjects, information on whether or not they were living could be collected. Proportional hazard models were used to estimate the effect of remitted and current MDD status on overall mortality during the follow-up.

Results

At the baseline psychiatric evaluation, 7.7\% met criteria for current MDD and 36.1\% for remitted MDD. Compared to participants who never experienced MDD, participants with current MDD had a higher mortality risk (unadjusted HR: 2.3, 95\% CI: 1.1 – 4.8). This association remained significant after adjustment for age, sex and socio-economic status adjustment (HR: 2.9, 95\% CI: 1.3 – 6.1) as well as after additional adjusting for CVRF, physical activity, alcohol consumption, previous history of cardiovascular disease and antidepressant use (HR: 2.7, 95\% CI: 1.2 – 5.9). Conversely, there was no evidence for an association between remitted MDD and mortality either in unadjusted HR (0.5, 95\% CI: 0.3 – 1.1) nor in multivariate adjusted HR (0.7, 95\% CI: 0.3 – 1.4).

Conclusion

MDD is associated with increased mortality, independently of known cardiovascular or behavioral risk factors. This emphasizes the need to give depression appropriate prevention and treatment.
P07: LES AUTRES, UNE BANDE DESSINÉE POUR PROMOUVOIR LA SANTÉ DES JEUNES

Muriel Etienne, Sophie Lochet

STOP SUICIDE

Le poster présente la bande dessinée Les Autres, un nouvel outil de promotion de la santé mentale créé par 5 organisations romandes de prévention et le dessinateur genevois JP Kalonji. La BD contient 6 histoires qui racontent des « tranches de vie » de jeunes dans des situations délicates et abordent les thèmes de la dépendance d’un parent, de l’anorexie, des questionnements sur l’orientation sexuelle, du harcèlement à l’école, des contraintes sexuelles et des idées noires. Le but de cette bande dessinée est de parler du mal-être que peuvent vivre certain-e-s jeunes et inviter leur entourage à les soutenir. Le message principal est que « les autres » peuvent être une ressource essentielle pour repérer et aider un-e jeune en difficulté. C’est pourquoi un dossier accompagne les histoires en fin d’ouvrage, avec des ressources d’aides, des numéros et des sites.

Les Autres est un outil de promotion de la santé mentale et du bien être des jeunes et en cela il contribue aussi à la prévention du suicide.
P08: THE ASSOCIATION BETWEEN ROAD TRAFFIC NOISE EXPOSURE, ANNOYANCE AND HEALTH-RELATED QUALITY OF LIFE (HRQOL)

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Background:
Quality of life is a relevant factor for mental health. Noise annoyance has been associated with a decreased HRQOL and further negative health effects.

Methods:
In 2008, we enrolled 1375 adults aged between 30 and 60 years and residing in the urban and suburban area of Basel, Switzerland. Road traffic noise exposure was determined using the SonBASE model in suburban areas and the traffic cadastre for the city of Basel. Self-rated annoyance, general health status and mental health status were assessed by written questionnaire using a four points Likert scale, the von Zerssen list of somatic complaints and the SF-36 mental health module. Data were analysed using multivariate mixed-effects regression models adjusted for age, sex, self-reported physical activity, smoking behaviour, education, marital status and the noise model used. Stratifications were performed for gender, age, noise exposure below and above median, sleep disturbance score below and above median and self-reported doctor diagnosed comorbidity.

Results:
Average road traffic noise exposure was 46 dB(A) with 5.5% of the study population exposed to noise levels > 70 dB(A). Annoyance to road traffic noise was highly associated with road traffic noise exposure. The association between the von Zerssen score and 10 dB(A) road traffic noise increase was significant in crude models (0.59, 95% CI: 0.09, 1.09) and borderline significant after adjustment (0.47, 95% CI: -0.01, 0.95). The SF-36 and the von Zerssen scores were strongly associated with annoyance to road traffic, industry and neighbour noise. In the crude model, SF-36 was borderline associated (0.47, 95% CI: -0.05, 0.98) with road traffic noise, however the association weakened upon adjustment (0.09, 95% CI: -0.43, 0.61). A strong interaction was detected for SF-36 (p < 0.001) and the von Zerssen (p < 0.001) score in relation to road traffic noise when comparing groups with low vs. high sleep disturbance scores.

Conclusion:
Annoyance to road traffic, industry and neighbour noise induces decreased HRQOL more than road traffic noise itself. Subjects having a low sleep quality are more likely to have decreased HRQOL when exposed to road traffic noise. This study suggests that annoyance to various noise sources may influence mental health.
Volunteering is an important component of civil society, promoting solidarity and a sense of community while simultaneously disburdening the social welfare. It has also been acknowledged as an important source of well-being among those who volunteer. Research has primarily focused on the salutary effects of volunteering on senior citizens, as they seem to benefit more from such activities. However, most volunteers are between 35-45 years of age and active members of the workforce, trying to accommodate their voluntary engagement between paid work and private life. In this study, we observed volunteering in context (rather than in isolation) and focused exclusively on working individuals who volunteer on the side. We conducted an online survey among 746 Swiss workers, of which 292 were engaged in formal volunteering in different organizations. We assessed work-life balance perceptions, paid job demands and resources and several health outcomes. Volunteers also provided detailed information about their voluntary work and their motives to volunteer. Two main findings were drawn from this survey: First, volunteering was associated with less work-life conflict, lower levels of stress and burnout, and higher levels of psychological, emotional and social well-being when compared to the sample of non-volunteers. This effect, albeit small, was found above and beyond the influence of paid job demands and resources. Moreover, a mediation analysis showed that work-life conflict perceptions partially explained the relationship between volunteering and health outcomes. Second, we found an effect for volunteer motives on the volunteering-health relationship: individuals scoring high in self-protective motives (e.g. “By volunteering I feel less lonely”, “Volunteering is a good escape from my own troubles”) reported poor health in all outcomes compared to volunteers with low self-protective motives. In sum, although volunteering requires an additional expenditure of energy and time resources, those involved experience more balance in life, presumably due to a heightened sense of self-efficacy, as shown in previous research (Mogilner et al, 2012). This, in turn, partially explains better health outcomes in this sector. Finally, the findings on motives shed light on the importance of self- vs. other-oriented reasons to volunteer and how these can be a crucial determinant of health outcomes.
P12: WOHNUNGSLOS ODER PSYCHISCH KRANK? ERGEBNISSE EINER PRÄVALENZSTUDIE IN DEN ZÜRCHER WOHNENRICHTUNGEN

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Ziel der vorliegenden Studie war, im Rahmen einer einmaligen Befragung psychiatrische Diagnosen und weitere relevante Gesundheitsaspekte zu erfassen, wobei auch Angaben zur selbstwahrgekommenen Gesundheit und zum Verhalten hinsichtlich vorhandener Versorgungsangebote mit einbezogen wurden. Die Studie beschränkte sich auf Erwachsene und untersuchte die vier Wohneinrichtungen Begleitetes Wohnen (BeWo), Betreutes Wohnen City (Bewo City), Notschlafstelle und die Nachtpension. Von rund 460 konnten insgesamt 338 Personen befragt werden.

P13: PARENTS OF CHILDREN WITH MENTAL VERSUS PHYSICAL HEALTH PROBLEMS: PARENTAL MENTAL HEALTH AND HEALTH LITERACY CONCERNING THEIR CHILD’S CONDITION AND ITS TREATMENT

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Aims:

To study 1) the mental health of parents whose child suffers from a chronic mental or physical health problem; 2) the parent's health literacy concerning the child's condition and its treatment; and 3) associations with and between these two variables.

Methods:

Parental reports from a population-based Swiss survey of 9 to 14 year-old children were analysed.

Results:

Parents of children with mental health problems reported worse mental health than parents of children suffering from physical health conditions. Furthermore, poorer parental mental health was associated with 1) greater severity of the child's health condition; 2) a significant financial impact of the child’s condition on the family; 3) parents having limited available time for themselves due to the child’s condition; 4) dissatisfaction with their partner/relationship; and 5) a low (versus high) level of education. Furthermore, parents of children with mental health problems were more likely to report poor health literacy regarding their child’s health condition and its treatment compared to caregivers of children with physical health conditions. Additionally, the likelihood of reporting poor health literacy was higher among parents with relatively low mental health, as well as among fathers.

Conclusions:

For healthcare professionals to improve the life situation of children suffering from a chronic health condition (particular mental health problems), the mental health of their parents, as well as associated burdens, must be considered. Improving parental health literacy, especially of parents with children suffering from a mental health condition, could enhance therapeutic outcomes in the child.
P14: ANGEHÖRIGENBERATUNGSSTELLEN MIT AUSGEWIESENEN STELLENPROZENTEN

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Angehörigenberatungsstellen mit ausgewiesenen Stellenprozenten


Jugendarbeitslosigkeit und psychische Gesundheit: Ein unterschätztes Problem in der Schweiz?


Unsere Studie beabsichtigt die Förderung der Arbeitsfähigkeit und die Reduktion ausserordentlicher Renten. Dazu wurde ein Screeninginstrument zur Früherkennung psychischer Störungen erstellt und bei jungen Arbeitslosen validiert. Das Screeninginstrument soll Beratende der Arbeitslosenversorgung helfen, psychische Belastungen frühzeitig und schnell zu erkennen.


Das Screeninginstrument erfasst die psychosozialen Kompetenzen und Verhaltensauffälligkeiten, die Resilienz, das Selbstwertgefühl und die Selbstwirksamkeitserwartung. Um die Sensitivität und Spezifität des Screeninginstruments überprüfen zu können, wurden die Teilnehmer nach dem Screening zu einem persönlichen klinischen Interview eingeladen.

Befragt wurden 150 junge Arbeitslose aus dem Kanton Zürich. Die Teilnehmer wurden in Motivationssemester und anderen Brückenangebote rekrutiert.
P16: POTENTIAL OF RHYTHMICAL MASSAGE IN THE CONTEXT OF MENTAL/BEHAVIOURAL DISEASES

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Objective:
Rhythmical massage (RM) is a therapy extensively used in anthroposophic medicine. Ca. 1/3 of the patients who participated in a recent prospective cohort study on effectiveness of RM under real-world conditions (n=79) presented with a mental/behavioural disease (MBD). The data on this patients’ subgroup were now analysed.

Methods:
Patients referred for a MBD to RM at the Paracelsus-Hospital Richterswil, or at the Paracelsus Centre Sonnenberg Zürich, Switzerland, and who accomplished this therapy according to protocol (n=21) were included in the present analysis. Self-perceived clinical effectiveness was assessed with the health-related quality-of-life questionnaire SF-36 (0-100 scale, whereby average values of the summary measures for healthy women, 40-60 years old, are close to 50), Goal Attainment Scaling (GAS, individual expectations on RM and their eventual fulfilment assessed by interviews, scale between -2 and +4) and Symptom Scores (0-10 scale, with 0 corresponding to absence of symptom and 10 to worst possible). In addition, treating physicians were asked to score Disease Severity (again in a 0-10 scale). All outcomes were determined at the beginning of the therapy and after the last therapy session; a follow-up took place at 6 months after the first session. Data are shown as mean ± S.E.M..

Results:
Patients were in average 44.5 years old (range 23-63), in their majority (n=18) female and in most cases had been prescribed RM for fatigue (n=12) and depression (n=5); if present, co-diagnoses varied extensively. Mean duration of the main symptoms at recruitment was 4 years (median 7 months), ca. half of the patients (n=11) patients underwent other therapies additionally to RM, in some cases (n=3) psychotherapy. Most outcomes improved markedly from baseline to therapy end. In particularly, physical and mental health summary measures from SF-36 increased by +5.0 ± 2.31 (p<0.05) and +9.9 ± 4.29 (SF-36, p<0.05), respectively, GAS by +2.5 ± 0.23 (p<0.001). Physicians’ disease severity scores and patients’ symptom scores were reduced by -3.3 ± 0.49 (p<0.001) and -3.0 ± 0.55 (, 0<0.001), respectively. These improvements were maintained until follow-up.

Conclusions:
In average, patients with MBD experienced improvements of their condition during treatment with RM in a multimodal anthroposophic medicine setting. Further, controlled clinical studies should be performed to investigate which factors are responsible for the observed improvements.
P17: RELY-I - THE STUDY ON RELIABLE DISABILITY EVALUATION OF WORK CAPACITY IN PSYCHIATRY. A STUDY PROTOCOL

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Introduction:

Stakeholders have raised concern about the lack of transparency and reliability of psychiatric assessment of work capacity. Current practice in psychiatric disability evaluation shows that Swiss psychiatrists use heterogeneous concepts of work capacity[1]. To improve transparency and reliability, we developed a structured functional approach with a focus on work capacity of the claimants in psychiatric assessment. We evaluate its reliability as part of real assessments of work capacity.

Method:

This is a multi-centre (four assessments centres (MEDAS); SUVA Clearinghouse), single arm, observational study in German-speaking Switzerland. We plan to involve 30 first-time claimants with a history of mental disease who will be evaluated by 20 psychiatrists trained in functional assessment which has an explicit focus on the claimants' remaining abilities and limitations[2]. Each assessment will be videotaped and shown to 3 randomly selected psychiatrists who will independently rate mental functions, activity limitations and percentage work capacity in previous and suitable alternative work. The main outcome will measure percentage work capacity; secondary outcomes are mental functions and activity limitations. We will fit multilevel models to estimate intraclass correlation coefficients.

Conclusion:

We assume that the structured functional approach will increase transparency and reliability of psychiatric assessments. Performing the study as part of real assessments for disability/accident insurance gives the results high credibility and relevance. Finding acceptable levels of reliability will encourage us to continue with a randomized controlled trial (RELY-II).


P18: SCHLAFPROBLEME IN DER SCHWEIZ

Marco Storni
Bundesamt für Statistik

Ausgangslage


Vorgehen

Als Datengrundlage wird die Schweizerische Gesundheitsbefragung 2012 herangezogen, welche vom Bundesamt für Statistik durchgeführt wird. Die Stichprobe beträgt 21'597 zufällig ausgewählte Personen in Privathaushalten. Die Gesundheitsbefragung erlaubt es, verschiedene Symptome von Schlafproblemen zu analysieren:

- Einschlafschwierigkeiten
- unruhiger Schlaf
- mehrmaliges Aufwachen
- zu frühes Aufwachen
- Einnahme von Schlafmitteln


Resultate

P19: VISUELLE KOMMUNIKATION IM FACHBEREICH GEBURTSHILFE: ABBAU VON ZUGANGSBARRIEREN FÜR SCHWANGERE MIGRANTINNEN DURCH DEN EINSATZ VON PIKTORGRAMMEN

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Hintergrund

Ziel des Projektes war die Entwicklung eines Geburten-Notaufnahme-Piktogramms, das an die existierende Bild- und Beschreibungssprache des Zentrumsitals anknüpft, in Abgrenzung zur allgemeinen Notaufnahme nur Frauen anspricht, welche in Eile zur Geburt kommen, sprachunabhängig verständlich, auf Distanz erkennbar und einfarbig einsetzbar ist.

Methodik

Ergebnisse
83% (n=29) der Befragten waren schwangere Migrantinnen, 66% (n=23) benötigten die Unterstützung eines Übersetzers beim Ausfüllen der in deutscher Sprache verfassten Fragebögen. 94% (n=33) der Teilnehmer konnten die Bedeutung der ausgewählten Piktogramme richtig zuordnen, d.h. einen Zusammenhang mit Schwangerschaft oder Geburt herstellen. Eine Mehrheit von 43% (n=15) der Befragten bevorzugte Variante 2 (minimalistisch, ohne SOS-Zusatz). Die Subgruppenanalyse ergab für Variante 2 bei denjenigen Teilnehmern, die einen Übersetzer benötigt hatten bzw. selbst schwanger waren, mit jeweils 48% noch grössere Zustimmungsraten.

Diskussion
Es konnte ein zielgruppenspezifisches Piktogramm entwickelt und ausgewählt werden, das schwangere Migrantinnen zur Geburtseingangnahme führt und gleichzeitig an die vorhandene Signaletik anknüpft. Limitierend wirken jedoch ein möglicher Selektionsbias und der insgesamt geringe Stichprobenumfang, welcher auf zeitliche Restriktionen innerhalb eines Bauprojektes zurückzuführen war.
P20: THE EFFECTS OF HEALTH WORKER MOTIVATION AND JOB SATISFACTION ON TURNOVER INTENTION IN RURAL GHANA: CAN DISTRICT MANAGERS IMPROVE RETENTION?

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Background
Motivation and job satisfaction have been identified as key factors of health worker retention and turnover in low- and middle-income countries. District health managers in decentralised health systems usually have a broadened decision space that enables them to positively influence health worker motivation and job satisfaction, which in turn impacts on retention and performance at district-level. The study explores the effects of motivation and job satisfaction on turnover intention and how motivation and satisfaction can be improved by district health managers in order to reduce retention and increase performance of health workers.

Methods
We conducted a cross-sectional survey in three districts of the Eastern Region in Ghana and interviewed 256 health workers from several staff categories (doctors, nursing professionals, allied health workers and pharmacists) on their intentions to leave their current health facilities as well as their perceptions on various aspects of motivation and job satisfaction. The effects of motivation and job satisfaction on turnover intention were explored through logistic regression analysis.

Results
Overall, 69% of the respondents reported to have turnover intentions. Motivation (OR=0.74, 95% CI: 0.60-0.92) and job satisfaction (OR=0.74, 95% CI: 0.57-0.96) were significantly associated with turnover intention and higher levels of both reduced the risk of health workers having this intention. The dimensions of motivation and job satisfaction significantly associated with turnover intention included career development (OR=0.56, 95% CI: 0.36-0.86), workload (OR=0.58, 95% CI: 0.34-0.99), management (OR=0.51, 95% CI: 0.30-0.84), organisational commitment (OR=0.36, 95% CI: 0.19-0.66), and burnout (OR=0.59, 95% CI: 0.39-0.91).

Conclusions
Our findings indicate that many of the determinants of motivation and job satisfaction significantly associated with turnover intention can be positively influenced by district health managers. However, health managers in Ghana often lack the skills as well as the capacity to adequately managing their districts, which is reflected in the motivation and job satisfaction outcomes described in our study. Therefore it is worth strengthening human resource management skills at district level and supporting managers to implement retention strategies.
P21: INCIDENCE OF SECOND MALIGNANCIES FOR PROSTATE CANCER IN THE CANTON OF ZURICH, 1980-2010

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Introduction:

The number of men living with prostate cancer (PCa) is growing rapidly. It is of public health importance to assess risk of second primary cancers in these men, especially since it is thought that PCa treatment may be associated with an increased risk of second primary tumours. Moreover, this could lead to identification of potential underlying etiological mechanisms.

Materials & methods:

We calculated standardized incidence ratios (SIRs) for second primary tumours comparing men diagnosed with PCa between 1980 and 2010 in the Canton of Zurich (n=20,559) and the general male population in the Canton.

Results:

A total of 1,718 men developed a second primary tumour after PCa diagnosis with lung and colon cancer being the most common, 15 and 13% respectively. The majority of men diagnosed with PCa were over 65 years old (76%) and had a grade II tumour (45%). Overall, there was an increased risk of a second primary tumour among men with PCa, compared to the general population (SIR 1.11 (95%CI 1.06-1.17)). Site-specific SIRs varied from 1.19 (1.05-1.34) to 2.89 (2.62-4.77) for lung and thyroid cancer, respectively. When stratified by treatment, the highest SIR was observed for thyroid cancer and (3.57 (1.30-7.76)) when undergoing surgery, whereas liver cancer was most common when treated with radiotherapy (3.21 (1.54-5.90) and kidney bladder was most prevalent for those on hormonal treatment (3.15 (1.93-4.87). Stratification by tumour grade showed an SIR for all cancers of 1.28 (1.17-1.40) for men with a grade I tumour, 1.10 (1.02-1.18) for men with a grade II tumour, and 1.03 (0.91-1.15) for those with a grade III/IV tumour. For PCas diagnosed prior to 1995, the SIR for a second primary tumour was 1.05 (0.98-1.12), whereas it was 1.17 (1.10-1.25) for those diagnosed from 1995 onwards.

Conclusion:

In the Canton of Zurich, there was an increased risk of second primary cancers among men with PCa compared to the general population. Increased diagnostic activity after PCa diagnosis may partly explain increased risks within the first years of diagnosis, but our time-stratified analyses indicated that these increased risks remained and even increased over time. These observations suggest a need for careful management of prostate cancer survivors.
P22: SURVIVAL AFTER BREAST CANCER IN YOUNGER SWISS WOMEN

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Background
In developed countries breast cancer (BC) is the most frequent cancer in women aged less than 40 years. It accounts for 30-40% of all female cancers and is the leading cause of cancer death for young women. This study examines the survival experience of younger women diagnosed with BC in Switzerland.

Methods
Data on BC cases diagnosed before the age of 50 years were obtained from 11 Swiss cancer registries for the incidence years 1996-2009 (N=7,973). SEER summary stage was calculated based on the TNM classification system.

Relative survival (RS) was estimated by dividing the observed survival (OS) after diagnosis by the survival as expected in the general female population based on all cases diagnosed between 1996-2009 (complete analyses). OS and RS probabilities were calculated for 1-, 3-, 5- and 10-year survival (age groups 20-39, 40-49 and 20-49 years).

Results
For all stages combined, RS in women aged 20-49 years was 98.8% (95% CI 98.5-99.0) after one year, 93.2% (95% CI 92.5-93.8) after three years, 87.7% (95% CI 86.8-88.5) after five years and 75.8% (95% CI 74.3-77.3) after ten years since diagnosis. Overall, RS was lower among women aged 20-39 years 70.8% (95% CI 67.4-73.8) than women aged 40-49 years 77.3% (95% CI 75.6-79.0).

Ten years after diagnosis, RS by stage was 89.8% (95% CI 87.9-91.4) for the localized stage, 70.6% (95% CI 67.8-72.2) for the regional stage and 19.6% (95% CI 12.7-27.5) for the distant stage. Cases with unknown stage had showed a 10-year RS of 60.3% (95% CI 50.4-68.8).

Analyses by age-group and stage revealed lower survival for women aged 20-39 years than women aged 40-49 years for all stages. Respectively, 10-year RS by stage was 86.1% (95% CI 83.9-88.1) versus 90.7 (95% CI 88.8-92.3) local, 65.1% (95% CI 62.1-68.0) versus 72.7% (95% CI 69.8-75.4),regional and 5.0% (95% CI 1.4-12.2) versus 17.3% (95% CI 10.6-25.4) distant. However, cases without stage information showed reversed results with RS of 73.1% (95% CI 66.7-78.4) in women aged 20-39 years versus 56.1% (95% CI 44.8-66.0) in women aged 40-49 years.

Conclusion
Our study found a lower survival in women with BC aged 20-39 years at time of diagnosis compared to women aged 40-49 years. However, whether or not age is an independent risk factor remains unclear. Further investigations are needed to study the impact of age and other prognostic factors on BC survival in younger women.
P23: NATIONALE DEMENZSTRATEGIE 2014-2017

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Ziele der Strategie

Die Demenzstrategie stellt den an Demenz erkrankten Mensch und die ihn im Alltag begleitenden Bezugspersonen in den Mittelpunkt. Übergeordnetes Ziel der Strategie ist, durch eine demenzgerechte, integrierte Versorgung die Betreuung und Behandlung während des gesamten Krankheitsverlaufs auf den Erhalt von Lebensqualität auszurichten. Dabei spielen die individuellen Lebensumstände (z.B. Erwerbstätigkeit oder Zivilstand) und Bedürfnisse eine wichtige Rolle.

Massnahmen


Erarbeitung und Umsetzung


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Contexte

Depuis les années 80, la prévalence de l’excès de poids chez l’enfant a fortement augmenté dans la plupart des pays développés. En Suisse, selon le monitoring de l’indice de masse corporelle (IMC) mené par Promotion santé suisse, 17% des enfants et des adolescents, tous niveaux scolaires confondus, présenteraient un excès de poids (surpoids ou obésité). Le canton de Valais participe à ce monitoring depuis 2008/09.

Méthode


Résultats


Conclusion

P25: EXPLORING SALT PREFERENCE AND TASTE IN SELECTED GROUPS IN SWITZERLAND

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Objective:

To explore preferences for, and the ability to differentiate between, four white breads with different salt contents among selected groups of people taking part in public activities related to a museum exhibition on salt.

Methods:

The survey was carried out in the canton of Vaud within the framework of the “Fondation Verdan” museum’s exhibition on Salt (23.05.2013-05.01.2014), located close to the CHUV in Lausanne. The bread tasting took place on different occasions inside the museum, during two open days at a professional school in Montreux and during the 2013 “Comptoir Suisse” in Lausanne. The tasting experiment included four white breads prepared using different salt contents: 19, 14, 10 and 5 grams of salt per kilogram of flour. The usual salt content is 19g salt/kg flour. The breads were prepared by a local baker in Lausanne and were labeled using four different colors, in random order of salt content. Tap water was available on demand during bread tasting. Participants were asked (1) to rank the breads according to salt content and (2) about their preferred bread. Information on age and sex was collected.

Results:

Among the 327 participants, aged between 7 and 81 years, 23% and 30.6% preferred the breads containing 10g and 14g of salt per kg, respectively. We found no significant differences in preference by gender, age or contexts. A majority of adults (68.5%) and children (57%) has correctly identified the most salted bread, while approximately 60% of adults and 40% of children correctly identified the least salted bread.

Conclusions:

Differentiating the salt contents of the four proposed breads was challenging for most participants, in particular children. Breads containing slightly less salt than the bread usually sold in bakeries seemed appreciated by participants, given that the most salted bread was not the preferred one by the majority of participants. Gradual reductions in the salt content of breads are likely to be well accepted by the Swiss population, similar to what was observed in other European countries. Given that bread is an important source of salt in the Swiss diet, gradual reductions in the salt content of breads, if applied broadly, may significantly reduced salt intake in Switzerland and consequently benefit cardiovascular health.
P26: FACTORS ASSOCIATED WITH DISCREPANCY BETWEEN PERCEIVED AND IDEAL BODY WEIGHT IN A MIDDLE INCOME COUNTRY IN THE AFRICAN REGION.

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Background.

We examined discrepancy between self perceived and ideal body weight (BW) and associated factors among overweight (BMI 25-29) and obese (BMI>30) adults in the Seychelles, a middle income island state in the African region.

Methods.

We conducted a population based survey with 1240 participants in the Seychelles aged 25-64 years, participation rate 73%. Perceived and ideal BWs were assessed using pictorial silhouettes (score range: 0-9) and discrepancy was defined as the difference between the former and the latter.

Results.

The prevalence of overweight and obesity was 35.2% and 32.3%, respectively. Among overweight or obese participants, 75.7% reported their ideal BW to be smaller than their perceived BW and this discrepancy was significantly larger for women than for men (1.0 vs. 1.6; p<0.001). As many as 78.7% of the participants perceived weight accurately. In univariate analysis, factors significantly associated with discrepancy were young age (only for females), female sex (odds ratio 2.8), being obese vs. overweight (6.8), high SES (2.8), accurate weight perception (0.7), having been advised to lose weight (1.7) and reporting effort to lose weight over the last 12 months (4.1), but not with knowing his/her own weight and not with hypertension or diabetes treatment. Similar associations were also generally found in multivariate analysis.

Conclusion.

A large proportion of overweight or obese adults reported thinner ideal than perceived BW. We identified several associated factors which may be useful to consider for clinical and public health weight control interventions.
P27: EDUCATIONAL DIFFERENCES IN DIETARY INTAKE AND COMPLIANCE TO DIETARY RECOMMENDATIONS AMONG THE ADULT POPULATION OF LAUSANNE

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Objective:

To describe dietary intake and compliance to the Swiss dietary recommendations according to educational level.

Methods:

Cross-sectional, population-based study conducted between 2009 and 2012 in Lausanne (Switzerland) including 4338 adult participants (53% women, mean age 57.6±10.5 years). Education was categorized as high (tertiary education), middle (upper secondary education), vocational education and low (primary education).

Results:

Participants in the highest vs. lowest educational group had higher intake of total fat (Δ=absolute difference [95% confidence interval]: 3.8g[1.8;5.8]/2.2g[0.5;3.9] in men/women), MUFA (Δ=2.4g[1.4;3.3]/2.0g[1.0;2.9] in men/women), fiber (Δ=1.0[0.1; 1.9]/0.9g [0.0; 1.7] in men/women), iron (Δ=0.3mg[0.0;0.6]/0.3mg[0.0;0.5] in men/women) and carotene (Δ=618µg[278.5;958.0]/565µg [165.5;965.2] in men/women). Men in the highest educational group also had a higher intake of calcium (Δ=80µg[18.1;143.1]) and vitamin D (Δ=0.8µg[0.55;1.01]). Women in the highest vs. lowest educational group had lower intake of protein (Δ=2.0g[-3.8;-0.2]), carbohydrates (Δ=5.0g[-10.0;-0.06]) and retinol (Δ=116µg[-191.1;-41.1]). Men in the lowest vs. highest educational group better complied to the Swiss dietary recommendations for proteins (Odds Ratios, OR [95% confidence interval]: 1.89[1.20-2.98], saturated fatty acids (OR: 1.63[1.12-2.38] and for total fat (OR: 1.99[1.42-2.79]), but not for calcium (OR: 0.56[0.38-0.81]. No educational differences in compliance were observed for women, except for retinol for which compliance was higher in women with lowest vs highest education. The association between education and compliance to dietary recommendations was mostly accounted for by adjustment for country of birth.

Conclusion:

In the adult population in Lausanne, nutrient intake and compliance to recommendations differed by educational level. Differences in compliance seemed to be explained by country of birth.
P28: SOCIOECONOMIC DETERMINANTS OF DIETARY PATTERNS IN LOW AND MIDDLE INCOME COUNTRIES: A SYSTEMATIC REVIEW

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SES determinants of diet in LMICs: a review

Background:

High socioeconomic status (SES) is related to a healthier diet in high income countries (HICs), but whether social differences in diet are also present in low and middle income countries (LMICs) is a matter of debate.

Objective:

To perform a systematic review of the relationships between SES and dietary intake in LMICs.

Design:

Systematic review of population-based studies carried out among adults in LMICs and published between 1996 and 2013. Both cohort and cross-sectional studies were included. Associations of SES markers or urban/rural setting with dietary intake were assessed.

Results:

34 studies from 16 LMICs were included (5 low income countries and 11 middle income countries; 32 cross sectional and 2 longitudinal). Most studies were conducted in Brazil (8), China (5), and Iran (5). High SES or urban location were associated with higher intake of calories, protein, total fat, cholesterol, polyunsaturated, saturated and monounsaturated fatty acids, iron, vitamins A and C, and with lower intake of carbohydrate and fiber. High SES was also associated with higher fruit and/or vegetables consumption, diet quality and diversity. Although very few studies were performed in low income countries, similar patterns were generally observed in low and in middle income countries, except for fruit intake that was lower in urban compared to rural areas in low income countries.

Conclusion:

In LMICs, high SES or living in an urban area is associated with overall healthier dietary patterns. However, it is also associated with higher energy, cholesterol, and saturated fats intake. Social differences in diet should be considered when targeting social inequalities in non communicable diseases (NCDs) in LMICs.
P29: RELATIONSHIP BETWEEN DOMAINS OF PHYSICAL ACTIVITY, SITTING TIME, AND DIFFERENT MEASURES OF OVERWEIGHT/OBESITY IN SWISS ADULTS

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Background:
Physical inactivity, overweight/obesity and poor nutrition are important risk factors for non-communicable diseases. While these factors have independent effects on health, there are also associations between them. However, little is known about the associations between different domains and patterns of physical activity and overweight, especially when taking energy intake into account. The aim of this study was to investigate associations between physical activity and body weight cross-sectionally and longitudinally while taking into account total energy intake and other potential confounders.

Methods:
The analyses were based on data from the first (SAP 2) and second (SAP 3) follow-up of the SAPALDIA cohort study (Swiss Cohort Study on Air Pollution and Lung and Heart Disease in Adults). For cross-sectional analyses, different domains of physical activity (at work, in house and garden, for transport, for leisure) based on the International Physical Activity Questionnaire (IPAQ) as well as different measures of overweight and obesity (BMI, waist circumference, waist-to-hip ratio, waist-to-height ratio, percent body fat) were included. For longitudinal analyses, four short questions regarding moderate and vigorous physical activity were available and could be put in relation to BMI and weight changes. More than 3000 and almost 4500 individuals were included in the cross-sectional and longitudinal analyses, respectively. Logistic regression models were used for analyses.

Results:
In the cross-sectional analyses, individuals in the medium and highest tertiles of leisure-time, vigorous and total physical activity were significantly less affected by obesity (based on BMI, waist circumference, waist-to-height ratio and percent body fat) than those in the lowest tertile. There were also some significant associations for moderate activities and walking, especially with percent body fat. More sitting was associated with a higher percentage of body fat. There were no associations for physical activity at work or in house and garden. According to the longitudinal analyses, individuals inactive both at SAP 2 and 3 had an increased risk of a BMI≥30 or a weight gain of at least 3%.

Conclusions:
This study confirms associations between physical activity and body weight also for the population of Switzerland, both in cross-sectional and in longitudinal analyses. However, associations differed by domain and intensity of physical activity and by outcome measure.
P30: ASSOCIATION OF SOCIO-DEMOGRAPHIC FACTORS WITH IRON AND CALCIUM INTAKE IN A REPRESENTATIVE SAMPLE OF THE ADULT GENEVA POPULATION, SWITZERLAND.

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Objectives:

To assess the influence of socio-demographic factors on 1) dietary intake of iron and calcium and on 2) compliance to iron and calcium intake recommendations in a Swiss population-based sample.

Subjects/Methods:

Data was drawn from annual surveys of the adult resident population of the Swiss canton of Geneva (Bus-Santé study) over the period 1999-2009. Dietary intake was assessed using a validated self-administered, semi-quantitative Food Frequency Questionnaire. Factors examined were gender, nationality (Swiss/non-Swiss) and educational level (primary/secondary/tertiary education). Recommendations by the Swiss Society of Nutrition for nutrient intake were used to determine compliance. These recommendations remained unchanged throughout the study period.

Results:

Overall, 9,320 adults (4659 women, mean age 51.5 years, 55% Swiss, 33% primary and 43% secondary education) participating in the annual surveys conducted between 1999 and 2009 were included. Nationality significantly affected iron intake in women and men with non-Swiss consuming more iron (10.4 mg/day vs 9.9 mg/day, p<0.001 for women; 12.7 mg/day vs 12 mg/day p<0.05 for men). Swiss men and women significantly consumed more calcium (1285 mg/day vs 1116mg/day, p<0.001 for men; 1058 mg/day vs 987 mg/day, p<0.001 for women) than non-Swiss. Compared to participants with primary education, participants with tertiary education consumed less calcium (1213 mg/day vs 1129 mg/day for men, p<0.001). 76% of women were not achieving the recommended iron daily intake regardless of education and nationality. Swiss men and women had adequate intakes of calcium and complied with recommendations more than non-Swiss participants. Education had a negative effect on the compliance of calcium intake for men, with participants with lower vs. higher education being more likely to comply with recommendations for iron and calcium intake.

Conclusion:

Education was not a strong determinant of iron and calcium intake in this population. Swiss nationality positively affected calcium intake and compliance with recommended values but this was not the case for iron intake and compliance. Policies targeting low iron and calcium intake in the population should take into account the strong effect of nationality and the related cultural attitudes towards food.
P31: SIRENE - AN INTERDISCIPLINARY STUDY ON THE HEALTH EFFECTS OF TRANSPORTATION NOISE EXPOSURE: A STUDY PROTOCOL

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**Background:**

Little is known about how acute and short-term noise effects, especially those observed during sleep, translate into long-term health consequences. Further, it is unclear which noise exposure patterns (degree of intermittence of noise events, diurnal distributions) are most detrimental for health.

**Aims:**

The goal of the interdisciplinary study SiRENE (Short and Long Term Effects of Traffic Noise Exposure) is to investigate acute, short- and long-term effects of road, railway and aircraft noise exposure on annoyance, sleep disturbances and cardiometabolic risk. In addition, the role of individual characteristics such as age and gender, noise sensitivity and genetic predispositions will be elucidated.

**Methods:**

SiRENE involves a refined nationwide assessment of noise exposure, designed to identify the most health relevant noise exposure patterns. During one-week in the sleep-laboratory, volunteers will be randomly exposed to different noise scenarios and effects on sleep, cardiometabolic parameters and subsequent cognitive performance will be investigated. Noise annoyance and coping responses in the Swiss population will be evaluated via a representative survey. Taking into account biomarkers and other factors including air pollution, the traffic source specific exposure-response association for cardiometabolic morbidity and mortality will be calculated from two large epidemiological studies (SAPALDIA Biobank and Swiss National Cohort).

**Results:**

This three-year interdisciplinary study will provide traffic source-specific exposure-response functions. SiRENE will investigate which noise exposure patterns and acoustical characteristics are most detrimental for human health and wellbeing. These results will contribute to a better understanding of health risks from traffic noise and are highly relevant for regulating environmental noise.
P32: SUBSITE-SPECIFIC COLORECTAL CANCER TRENDS IN SWITZERLAND 1996-2011

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BACKGROUND
Incidence of colorectal cancer in Switzerland ranks 2nd in women and 3rd in men, and is the 3rd most frequent death due to cancer in both sexes. Currently, around 2'300 men and 1'780 women are newly diagnosed with colorectal cancer per year. For all anatomical subsites combined, age-adjusted incidence rates for the period 1996-2011 had been decreasing, with -0.6% and -0.8% change per annum for men and women, respectively. Incidence reports from several countries have shown diverging trends if different subsites of the colon were analysed, causing a frequency shift towards more proximal parts. Hypotheses involving a range of risk or protective factors or the influence of screening methods have been proposed. The aim of our study is to determine whether Swiss cancer trends show a similar pattern.

METHODS
Malignant primary diagnoses for ICD-10 C18.0-18.4 (proximal colon), C18.5-18.7, C19 (distal colon) and C20 (rectum) from 1996-2011 were abstracted from the national cancer dataset, which combines data from cantonal cancer registries for the purpose of national cancer monitoring. All cantons providing registration data for the whole analysis period were included: ZH, GR/GL, SG/AR/AI, TI, VD, VS, NE, and GE. Annual percentage changes (APC) in incidence rates were determined with the Joinpoint Regression Program v 4.0.4.

RESULTS
We collected >10'000 diagnoses of proximal colon, >12'000 of distal colon, and >8'000 of rectal cancer. While age-specific and age-adjusted incidence trends for proximal colon remained flat (age-adjusted APC +0.1% and +0.7% for men and women, respectively), incidence of distal colon cancer was decreasing (age-adjusted APC -0.8% and -1.0% for men and women, respectively). Trend differences were more pronounced at age >70 in both sexes. Rectal cancer incidence trends were also negative.

CONCLUSIONS
We have shown a distal to proximal shift in colon cancer incidence over time in Switzerland, which was similar in men and women. An attractive hypothesis for the selective decrease in distal colon cancers would be cancer prevention by opportunistic sigmoidoscopy and colonoscopy, which might have removed more polyps in the distal than in the proximal colon. If this hypothesis is substantiated by further studies, it lends support for the introduction of colorectal cancer screening programs in Switzerland.
P33: POPULATION MIXING AND THE RISK OF CHILDHOOD LEUKEMIA: A NATIONAL COHORT STUDY

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Background:
Many potential risk factors for childhood leukemia (CL) have been investigated, among them exposure to infectious agents. Kinlen (1988) proposed that CL might be a rare complication to a yet unidentified subclinical infection. Marked influxes into rural scarcely populated areas may lead to population growth and foster local epidemics of this postulated infection, followed by an increase in incidence of CL. Studies investigating this hypothesis were inconclusive. We examine the association between population mixing and CL incidence in Switzerland in a national cohort study.

Methods:
We included all children aged <16 years in the 1990 and 2000 censuses from the Swiss National Cohort Study, which links the Swiss censuses with emigration, birth and mortality registries. For this study it was also linked to the Swiss Childhood Cancer Registry to identify incident cases of CL. We calculated population growth during 5 years preceding census for each municipality and investigated associations with CL incidence using Cox regression.

Results:
The analyses included 2'569'395 children; 534 developed CL. For rural areas, we found some evidence of an increased risk for CL: Hazard ratios (HR) for the 1st-3rd tertiles of positive population growth compared to zero or negative growth were 1.65 (95% confidence interval (CI), 1.003-2.721), 1.32 (0.809-2.160) 1.30 (0.813-2.094) respectively. For urban areas, positive population growth was associated with a decreased risk of CL: HRs were 0.773 (0.588-1.015), 0.721 (0.548-0.947), 0.743 (0.566-0.977), respectively. There was evidence of effect modification between rural and urban areas (p for interaction .041).

Conclusion:
Our study finds some support for Kinlen’s hypothesis of an increased risk in rural but not in urban areas that experienced population growth.
P34: PARENTAL OCCUPATIONAL EXPOSURE TO BENZENE AND RISK OF CHILDHOOD CANCER: A CENSUS-BASED COHORT STUDY

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Background:

It has been suggested that parental occupational exposure to benzene is a risk factor for cancer in children. However, previous studies have produced heterogeneous results.

Aims:

To examine whether parental occupational exposure to benzene is associated with an increased cancer risk in a census-based cohort of children.

Methods:

Parental occupations were obtained for Swiss resident children aged <16 years from national censuses in 1990 and 2000. Record linkages with the mortality and migration registries allowed calculating individual follow-up time from earliest census to the end of 2008. We identified incident cancer cases through record linkage with the Swiss Childhood Cancer Registry. Parental occupational exposure to benzene (none, low, high) was assigned to ISCO88 job codes using a job exposure matrix. We investigated the association between parental benzene exposure and cancer incidence using Cox proportional-hazards models.

Results:

Analysis of paternal (maternal) exposure was based on 13.2 (9.0) million person years of follow-up and 1,520 (1,036) diagnoses of cancer, of which 438 (285) were leukaemias and 339 (227) were tumours of the central nervous system (CNS). Hazard ratios (HRs) comparing high with no paternal exposure were 1.09 (95% confidence interval 0.80-1.49) for any cancer, 0.84 (0.43-1.63) for leukaemia and 0.92 (0.43-1.96) for CNS tumours. Corresponding HRs comparing high or low with no maternal exposure were 1.17 (0.90-1.52), 1.73 (1.12-2.67), and 0.67 (0.31-1.43) respectively. Adjusting for a range of potential confounders (socio-economic status, crowding, degree of urbanity, birth weight, birth order, ionizing background radiation, proximity to highways, fuelling and service stations, power lines and broadcast transmitters) did not materially affect the results.

Conclusion:

This nationwide cohort study suggests an increased risk of leukaemia among children whose mothers were exposed to benzene at work.
P35: DEPRESSIONEN UND HERZERKRANKUNGEN IN DER MEDIZINISCHEN STATISTIK

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Ausgangslage

Methodik

Resultate
Im Jahr 2003 waren 12'847 Patienten mit Hauptdiagnose Depression hospitalisiert. Unter diesen weisen beim letzten Spitalaufenthalt im Durchschnitt 4.2% Herzerkrankungen auf. Bei den Patienten mit Schizophrenie beträgt diese Zahl 1.9%, bei denjenigen mit Angstzuständen 5.1% und bei Patienten mit Alkoholkrankheiten 4.5%. Bei Patienten mit Unfallverletzungen sowie Krankheiten des Bewegungsapparates beträgt diese Zahl 6.6%.

Schlussfolgerungen
P36: BACKGROUND IONIZING RADIATION AND THE RISK OF CHILDHOOD CANCER: A CENSUS-BASED NATIONWIDE COHORT STUDY

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Background:

Exposure to medium or high doses of ionizing radiation is a known risk factor for cancer in children. The extent to which low dose radiation from natural sources contributes to the risk of childhood cancer remains unclear. Objectives: In a nationwide census-based cohort study, we investigated whether the incidence of childhood cancer was associated with background radiation from terrestrial gamma and cosmic rays. Methods: Children aged <16 years in the Swiss National Censuses in 1990 and 2000 were included. The follow-up period lasted until 2008 and incident cancer cases were identified from the Swiss Childhood Cancer Registry. A radiation model was used to predict dose rates from terrestrial and cosmic radiation at locations of residence. Cox regression models were used to assess associations between cancer risk and dose rates. Results: Of 2,093,660 children included at census, 1,832 later developed a cancer, 531 leukemia and 423 a tumor of the central nervous system (CNS). Hazard ratios (HRs) comparing the exposure category ≥200 nSv/h to <100 nSv/h were 1.61 (95% confidence interval (CI): 1.11-2.33) for any cancer, 2.02 (1.10-3.71) for leukemia and 1.97 (0.97-4.02) for CNS tumors. In an analysis with a linear exposure term, the HR for any cancer per 100 nSv/h increase in dose rate was 1.24 (1.04-1.49). Adjustment for a range of potential confounders had little effect on the results. Conclusions: Our study suggests that background radiation contributes to the risk of cancer in children including leukemia and CNS tumors.
P37: EFFECTS OF PARTICULATE MATTERS ON BLOOD PRESSURE IN TWO POPULATION-BASED STUDIES

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Aims:

To explore the association of short-term exposure to particulate matter with aerodynamic diameters < 10 µm (PM10) with systolic blood pressure (SBP), diastolic blood pressure (DBP), and pulse pressure (PP) taking outdoor temperature into account in two large population-based studies in Switzerland.

Methods and Results:

We used data from the Bus Santé study including 5605 adults in the State of Geneva and the CoLaus study including 6183 adults in the city of Lausanne. PM10 and meteorological data were measured from fixed monitoring stations. We analyzed the association of short-term exposure to PM10 (on the day of examination visit and up to 7 days before) with SBP, DBP, and PP by linear regression, controlling for potential confounders and effect modifiers. Average PM10 levels were 22.4µg/m³ in Geneva and 31.7µg/m³ in Lausanne. In adjusted models, for each 10 µg/m³ increase in 7-Day PM10 average, SBP and PP increased by 0.490 (95 % confidence interval, 0.056 to 0.925) mmHg and 0.583 (0.296 to 0.870) mmHg in Geneva, 0.301 (0.042 to 0.561) mmHg and 0.183 (0.017 to 0.348) mmHg in Lausanne, respectively. Stronger associations of SBP and PP with PM10 were observed when outdoor temperature was above 5°C. These associations tended to be stronger in women, in people older than 55 years, and in non-smokers.

Conclusion:

Positive associations of SBP and PP with short-term exposure to PM10 were found and replicated in the Swiss adult population. Our results suggest that even low levels of air pollution may substantially impact cardiovascular risk in the general population.
P38: WEIGHT STEP MANAGEMENT AS PART OF SUCCESSFUL COACHING MEASURE WITH OBESE CLIENTS

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Weight step management as part of successful coaching measure with obese clients

BACKGROUND.
To know more about weight steps and weight levels over an agreed weight reduction period is essential for people suffering of obesity and related diseases. Approximately 30% of humans are in a state of obesity related to the body mass index table.

METHOD.
Case Study was done with three women from different circumstances and motivation (22, PCOS, BMI 27; 41 high blood pressure, BMI 33; (51, menopausal, BMI 31.6). A final weight goal was determined based on the daily basal metabolic rate as a leading factor. Change of lifestyle was defined on individual requirements. A step counter was introduced and recommended to follow up the non-sitting times per day. DEBEC procedure (Diagnostic, Eating behavior, Body moving, Easing, Coaching) was used as certain guideline.

RESULT.
One finalized the program with weight loss of 18kg (=BMI 23), one stopped after 6 weeks and one is still ongoing (BMI 33 to 31). Three case studies showed the phenomenon of certain stops within weight loss with similar pattern. With weight loss success the expectation increased but the slacking effect stopped this development. A significant recognition was to explain what happened in their organism when weight stagnates for a certain period and motivate to continue. Stagnation could be a week, 10 days or longer based on various reasons (received weight, circumstances, health, mood, weather etc.). And stagnation made high psychological pressure.

CONCLUSION.
Normally with change of lifestyle factors combined with some exercises weight reduction is stated after the first and second week. Then a slacking effect let the weight stagnate on a certain level which reduces the motivation of the patient. Latest at this point coaching on personal and individual bases must take place to help the patient receiving the next step and level. The step-level-step mechanism of a successful weight loss process should be investigated within a study including the psychological impact.
P39: WEGE AUS DER PSYCHISCHEN BELASTUNG ADIPÖSER MENSCHEN WÄHREND GEWICHTSREDUKTION

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Fallbeobachtungen haben gezeigt, dass die Zeiträume des Aufenthalts auf einem GP bis zum Erreichen des nächsten GP unterschiedlich lang sind. Sie können selbst bei diszipliniertem Einhalten von Ernährungs- und Bewegungsplänen bis 6 Monate betragen. Die Höhe der Gewichtsplateaus und Unterschiede sind individuell und können je nach Ausgangslage und definierter Kalorienreduktion/Tag beispielsweise in 100g-, 500g- bis 5000g Schritten pro Woche/Monat erreicht werden.

Eine wesentliche Problematik bei der Begleitung von Abnehmenden ist die Überwindung der Frustration durch die Dauer (bis 6 Mon) des Aufenthaltes auf einem Plateau bis zum Erreichen des nächsten tieferen bei anhaltender Disziplin des Probanden.

Die psychische Belastung adipöser Patienten, die mittels Ernährungsumstellung und Lebensstiländerung Gewicht verlieren sollen, wird in der Praxis immer noch unterschätzt, neue elektronische Medien (diverse Fitness-Apps) verstärken dies durch virtuelle Trophäen oder negative Kommentare, was zusätzlichen Druck erzeugt, wenn das errechnete Ergebnis durch persönliche Schwierigkeiten nicht erreicht werden kann.

P40: INVENTORY OF STRUCTURED PROGRAMS TARGETING CHRONIC DISEASES OR MULTI-MORBIDITY IN 2013 IN SWITZERLAND

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Background
Chronic diseases represent a huge burden for healthcare systems. New models of care have been developed to reduce fragmentation, improve coordination as well as continuity of care. We aimed at describing existing structured programs targeting chronic diseases or multi-morbidity in Switzerland.

Methods
We conducted a multiple-step telephone survey. First, we systematically contacted cantonal (e.g. cantonal medical associations, public health departments) and national institutions (e.g. BAG, Swiss medical societies, networks of physicians, health insurance). Then, we approached key persons working in the domain of chronic care and those mentioned during previous contacts. To be eligible, programs needed to be structured and active in 2013, to target adult patients and >= one chronic disease(s) or multi-morbidity. A German and French speaking physician–researcher collected data, using a predefined extraction grid.

Results
Forty-four programs were identified in 14 of the 26 Swiss cantons. Most targeted diabetes and neuropsychiatric disorders, then chronic obstructive pulmonary disease and finally cardiovascular diseases. Multi-morbidity was less often the focus of structured programs (6 programs). On average, 3.3 healthcare professionals were the main actors of the programs (range 1-8). While four programs did not involve any physician, 18 considered specialist physicians only, 10 only primary care physicians and 12 both types of physicians. Nurses, physiotherapists and dieticians were involved in 29, 14 and 14 of the programs, respectively. Interventions took place in the ambulatory care sector (n=32), at patients' home (n=12), in the community (n=11) and also partly in hospitals (n=20). Programs considered the following elements of the chronic care model: delivery system design (n=44), clinical information system (n=40), self-management support (n=40), decision support (n=24). In addition, they were mostly organized at the loco-regional level.

Conclusions
Our survey identified 44 structured programs targeting chronic diseases or multi-morbidity. Despite being on the rise, this supply is largely insufficient to truly respond to the need of the current and future population of patients with chronic disease or multi-morbidity in Switzerland. Further developments will need a better involvement and participation of primary care physicians, as well as a stronger support from the confederation for financial and legal frameworks.
P41: EXPECTATION OF SICKNESS ABSENCE DURATION: A REVIEW ON STATEMENTS IN GUIDELINES IN WESTERN COUNTRIES

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Introduction
Sickness absence is considered to be high in many Western countries and difficult to manage. Certifying physicians manage sickness absence and may be provided with guidelines. Some guidelines contain statements on expected sickness absence duration, according to diagnosis. We compared the statements and explored their evidence base.

Methods
We identified guidelines through systematic surveys of our international network, scientific literature and Internet. We extracted statements and methodologies from the guidelines. We compared the diagnoses included, expected durations and development processes. We presented our findings to the developers, to comment and/or correct any misinterpretations.

Results
We identified 4 guidelines from social insurance systems (France, Serbia, Spain and Sweden) and 4 guidelines from private organisations (1 Netherlands, 3 US). We excluded Serbia for language reasons.

Diagnoses overlap, but comparison is hampered by differences in coding (ICD 9 or 10) and level of aggregation (three or four digit, clustering of diseases and treatment situations).

Expectations about duration are defined differently (minimum, maximum, optimum; mean, median, percentile distribution). Some guidelines specify the durations to age and work requirements, further complicating comparison. In a sample of 5 diagnoses we found similarities in expected duration but also differences: the expected duration of low back pain (ICD9 724.2 or ICD10 M54.5), depending on work requirements, varied from 7 to 14 days in one guideline and 0 to 49 in another (maximum expectation 64 days if BMI ≥30).

Guidelines are developed using different approaches, but pragmatic expert consensus is frequently used, supplemented with data on sickness absence from different registers, other guidelines and non-systematic literature reviews.

We found no formal evaluation of the effectiveness of these guidelines.

Conclusions
Expectations about duration of sickness absence by diagnosis are expressed in guidelines. The statements are to some extent similar but also show differences. The expectations are difficult to compare and their evidence base is unclear. Their effectiveness needs to be established.
Hintergrund und Ziel der Arbeit
Die Schweiz hat am 1. Januar 2012 die neue Tarifstruktur SwissDRG eingeführt. Weil das Erkennen der besonders verletzlichen Patientengruppen und deren Abbildung in den Tarifstrukturen unter SwissDRG eine grosse Herausforderung darstellt, wurde im Rahmen der DRG-Begleitforschung unter anderem evaluiert, welche Patientengruppen aus Spitalexpertensicht im Spitalalltag vulnerabel sind und was sich mit der Einführung von SwissDRG für diese verändert hat.

Material und Methoden

Ergebnisse und Diskussion

Fazit für die Praxis
- Die Steuerung des gerechten und angemessenen Zugangs zur Gesundheitsversorgung bildet primär eine gesundheitspolitische Frage, die durch die Politik bzw. die Gesetzgebung geregelt und entschieden werden muss und nicht auf die Leistungserbringer (Krankenhaus, Ärzteschaft, Pflege) abgewälzt werden darf. Es ist Aufgabe des Staates, allfällige Fehlanreize zu vermeiden und eine Tarifstruktur zu gewährleisten, die auch den Bedürfnissen besonders verletzlicher Patientengruppen gerecht wird.
- Durch die unterschiedlichen Finanzierungs- bzw. Tarifsysteme des stationären und des ambulanten Bereichs werden Entscheide, wann welche Patienten wo behandelt bzw. therapiert werden, allzu oft mit Blick auf finanzielle Erwägungen und nicht mit Blick auf das Patientenwohl getroffen.
P44: ANALYSIS OF CHILDREN’S PERSONAL AND BEDROOM EXPOSURE TO ELF-MF IN ITALY AND SWITZERLAND

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Background:
Little is known about the real everyday exposure of children in Europe to extremely low frequency magnetic fields (ELF-MF). The aims of this study are i) to identify factors determining personal and bedroom ELF-MF exposure measurements of children; ii) to evaluate the reproducibility of various exposure summary measures in children; and iii) to compare personal with bedroom measurements.

Methods:
In Switzerland and Italy 172 children aged between 5 -13 years were equipped with personal measurement devices (EMDEX II) to record ELF MF exposure during their regular activity during 48 hours twice, in the warm and the cold season. In addition, 24h measurements were taken in the bedroom of the children. In order to maximize the exposure situations we oversampled children living or attending school within 200 m of a high voltage power line (HVPL ≥ 132 kV) or within 50 m of an underground cable and children living in a building with built-in transformer station.

Results:
In our study sample geometric mean personal ELF-MF exposure was 0.04 µT and geometric mean bedroom exposure was 0.05 µT. Living or attending school within 100 m of a highest voltage power line increased personal exposure by a factor of 3.3 (95% CI: 2.2-5.1) and bedroom measurements by a factor 5.7 (95% CI: 2.7-12.3) compared to a control group neither exposed to power lines or living in a building with transformers. Repeated measurements within the same subject showed moderate to good reproducibility for the geometric mean (Spearman correlation 0.80 for personal measurements and 0.86 for bedroom measurements) but less for the 95th and 99th percentile. Spearman correlation between bedroom and personal exposure was 0.86 for the geometric mean but considerably lower for the 95th and the 99th percentiles.

Conclusions:
Most previous study on ELF-MF childhood leukaemia used mean bedroom exposure. Our study demonstrates that mean bedroom measurements is well correlated with personal mean exposure at a given time and has a high temporal reproducibility.
P45: TIME-TRENDS AND PREDICTORS OF CHILDHOOD CANCER SURVIVAL IN SWITZERLAND

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Background:
Cancer is the second most common cause of death in children in developed countries. The aim of this study was to investigate time trends and factors associated with survival from childhood cancer on a national level in Switzerland.

Methods:
We analyzed data from 4639 children diagnosed between 1979 and 2008 with cancer at age 0 to 14 years in Switzerland. We analyzed time trends in survival using Kaplan-Meier method and Cox regression to define annual reduction in risk of death (ARR) as 1-hazard ratio. We assessed trends in survival using log-rank test for trend. In addition, we assessed whether sex, age at diagnosis, region of residence and nationality were associated with risk of death using multivariable cox models separately for different diagnostic groups.

Results:
Overall, 5-year survival improved significantly from 66.5% (95% confidence interval [CI] 62.2-70.5) in 1979-1983 to 83.9% (CI 81.2-86.2) in 2004-2008. ARR over the whole period was 3% (p<0.01) for all diagnostic groups, largest for lymphomas (9%, p<0.01), renal tumors (7%, p<0.01) and leukemia (5%, p<0.01). ARR was small with non-significant trends in survival for tumors of the central nervous system (CNS) (2%, p=0.06), soft-tissue sarcomas (STS) (2%, p=0.22) and germ cell tumors (3%, p=0.33).

After adjusting for year of diagnosis and disease stage, females with leukemia had a lower risk of death (hazard ratio [HR] 0.8, CI 0.6-0.9). Risk of death was elevated in infants (age <1 year) diagnosed with leukemia (HR 1.4, CI 1.1-1.8), CNS tumors (HR 1.9, CI 1.2-3.0) and STS (HR 4.9, CI 2.4-10.1), but was lower in infants diagnosed with neuroblastoma (HR 0.3, CI 0.2-0.5), compared to those diagnosed aged 1-4 years. Risk of death was elevated in children with foreign nationality diagnosed with CNS tumors (HR 1.2, CI 1.1-1.5). We found regional differences of survival in children diagnosed with lymphoma (p=0.04) and hepatic tumors (p=0.04), with an elevated risk of death in more rural regions.

Discussion:
Survival after childhood cancer increased substantially over the study time. However, room for improvement remains for certain tumor types, such as CNS tumors and soft-tissue sarcomas, and for some tumors types diagnosed in infants, foreigners and children living in remote regions. Regional differences merit further investigations and we will expand our analysis to study survival in adolescents with cancer.