b

ISPM News Archive 2016

ISPM PhD students win awards at the 8th GHS symposium



Childhood Cancer Epidemiology Group

12.12.2016

The symposium of the Graduate School for Health Science took place in Münchenwiler on 30th November – 1st December this year, where PhD students Garyfallos Konstantinoudis and Annette Weiss from the <u>Childhood Cancer</u> <u>Epidemiology Group</u> were awarded.

With his poster on "Spatial clustering of childhood leukaemia: A nation-wide study", Garyfallos Konstantinoudis won the prize for the best poster. Garyfallos' project examines if childhood leukaemia cases form clusters in space in Switzerland. Although the study provides evidence for an individual cluster in a small rural area in Switzerland, after adjusting for multiple tests, this cluster was not found to be something extra-ordinary. Thus, this project highlights the need to account for multiple tests before such clusters are publicized. The study was funded by the Swiss Cancer Research and Swiss National Science Foundation.

Annette Weiss won the prize for the best presentation with her talk on "When cure causes harm – hearing loss after childhood cancer". Using data from the Swiss Childhood Cancer Survivors Study, Annette's project assessed if changes in current cancer treatment regimens affected the incidence of hearing loss in long term survivors of childhood cancer in Switzerland over the past decades. The study showed that the incidence of hearing loss has stabilized and survivors seemed to benefit from new treatment regimens with less ototoxic radiation and more carefully dosed platinum chemotherapy (Weiss et. al., Pediatric Blood & Cancer, 2016). The Swiss Cancer League and the European Union funded this project.

COMI study launched in Basel-Stadt



06.12.2016

The study measuring the quality of indication for surgery in the <u>Swiss Implant</u> <u>Registry (SIRIS)</u> was successfully launched in the Kanton Basel-Stadt in November 2016. It extends the registry by assessing patient-reported outcome measures in patients receiving hip and knee prostheses.

The COMI study aims to assess the appropriateness of hip and knee replacement surgery in the Kanton Basel-Stadt. Inappropriate would be to perform these surgical procedures in patients whose functional status of the hip or knee joints is still too good and their pain level still too low to warrant a surgical intervention. As their pain relief is smaller compared with that of 'typical' recipients of an arthroplasty, they may be less satisfied with the surgical result.

The comparison of pre to post-operative pain and function as well as quality of life in different patient subgroups (e.g. age groups) allows us to measure the quality and appropriateness of the current use of hip and knee replacement surgery.

The appropriateness of the indication for surgery is assessed in an observational longitudinal study at the two orthopaedic hospitals of the Kanton Basel-Stadt. For this purpose, patients are asked to complete the validated disease-specific COMI questionnaire before surgery as well as 6 and 24 months after surgery.

Further readings:

http://www.saez.ch/aktuelle-ausgabe/details/auf-der-letzten-meile-zum-patienten-3.html

ISPM signs DORA



02.12.2016

The San Francisco Declaration on Research Assessment (DORA) recognizes the need to improve the ways in which the outputs of scientific research are evaluated. DORA has been initiated by the American Society for Cell Biology (ASCB) together with a group of editors and publishers of scholarly journals.

The group met in December 2012 during the ASCB Annual Meeting in San Francisco and subsequently circulated a draft declaration among various stakeholders. DORA as it now stands has benefited from input by many of the original signers listed on the <u>DORA website</u>. DORA is a worldwide initiative covering all scholarly disciplines. Individuals and organizations who are concerned about the appropriate assessment of scientific research are encouraged to sign DORA.

Read more and sign on the **DORA** website

IMI GetReal Project concludes



28.11.2016

GetReal researchers and a wide range of stakeholders, including participants external to the consortium, gathered at the Royal Flemish Academy of Belgium for Science and Arts in Brussels on 24 November 2016.



Project researchers including Matthias Egger, Noemi Hummel, Eva Didden, Yann Ruffieux and Gablu Kilcher from <u>WP4</u> presented their activities and outputs of the past three years. Lively panel sessions discussed the value and impact of the GetReal results for R&D, HTA and regulatory practice. And participants also had the opportunity to try out some of the exciting tools developed during the project.

Read further on www.imi-getreal.eu

Presentations of the first Swiss Stata Users Group Meeting are now online



25.11.2016

Close to 60 persons attended on Nov 17, 2016, the first Swiss Stata Users Group Meeting at the "Haus der Universität in Bern" including Bill Gould, president of Stata Corp in College Station, Texas.

Now, one week later, all the presentations on the topics covered - an interesting mix, indeed - are now freely available on www.stata.com/meeting/switzerland16/#proceedings

Strong start for cannabis survey



21.11.2016

More than 1,000 people participated in a survey of cannabis use in its first day on the website <u>www.canreg.ch</u>. University researchers and health departments in Bern, Basel, Geneva, and Zurich launched the anonymous online survey to clarify the conditions under which cannabis users would participate in a longer study of the controlled sale of the drug.

According to statistics from Suchtmonitoring Schweiz, cannabis is the most frequently used illegal substance in Switzerland, consumed by 6.5 percent of the population.

The survey includes questions on a variety of topics, among them the quantity of cannabis used, reasons for use, and form of cannabis consumption. Users can fill out the survey between November 21 and December 21, 2016.

ISPM's Andreas Haas wins SSPH+ Award



18.11.2016

Congratulations to <u>Andreas Haas from ISPM Bern</u> for winning the annual SSPH+ Award for the best published PhD article in public health. His publication "Retention in care during the first 3 years of antiretroviral therapy for women in Malawi's option B+ programme: an observational cohort study" was <u>published online in *The Lancet*</u> <u>HIV</u> on March 18, 2016.

The work is part of a large collaborative project <u>"Umoyo+"</u> underway in <u>the HIV</u> <u>Hepatitis group</u> at the Institute of Social and Preventive Medicine. The main aim of Umoyo+ is to evaluate a newly introduced program designed to minimize mother-tochild transmission of HIV in Malawi. The interdisciplinary team of researchers at ISPM has been working in close collaboration with researchers and members of NGOs and the Ministry of Health in Malawi.

Haas's publication was one of 16 submitted by PhD students for the SSPH+ competition. All publications were evaluated by an international jury, and the winner was announced at the <u>Swiss Public Health Conference 2016</u> on "Refugees and Public Health" on November 15, 2016.

"Local Organiser's Award" at the Society for Back Pain Research (UK)



THE LOCAL ORGANIZER'S AWARD

11.11.2016

"Local Organiser's Award" (one of the 3 best paper awards) at the Society for Back Pain Research (UK) for a paper on "effect of previous surgery on complication rates" from the Schulthess clinic in Zurich and SwissRDL.

BACI	SOCIETY FOR K PAIN RESEARCH red charity No.326229
THE LOCAL OF	GANISER'S AWARD
Pre	esented to
	ev, FS Kleinstuck, H-J Becker, T Pigott, ski, Anne F Mannion
for t	their paper
	isk Of Complications During Surgery Fo In Patients With Prior Spine Surgery' at
Barton Grange	Hotel, Preston, UK
03 & 04 M	lovember 2016
× CRoberts-	
Dr Lisa Roberts	Mr Steven Vogel Secretary

The paper was based on a master thesis written in the Schulthess clinic in Zurich in collaboration with the SwissRDL. The study demonstrated a significant dose-response effect of previous surgery on the risk of incurring a complication during subsequent spine surgery. The results can be used by the surgeon when assessing the risk/benefit ratio of further surgery, for informing and consenting the patient.

Medicine at the end of life: what can we do, what do we want to do, what should we do?



19.10.2016

A debate of the Bern Dialog: Medicine and Society

7 November, 2016, 6–7:30 pm

Kulturcasino Bern

Medicine meets ethics and politics, the polarizing debate:

Should the general public be responsible for paying for life support at the end of life?

Should extraordinary medical interventions be undertaken at an advanced age?

Do we open the door to discussion of an age-dependent value of life?

For more information & registration:

www.dialog-medizin-gesellschaft.ch

The Swiss Cerebral Palsy Registry: a tool to improve the health of disabled children



27.09.2016

Children with cerebral palsy not only have difficulty moving but can have other health issues such as speech or learning problems.

Caused by brain damage or malformation that occurs before, during, or immediately after birth, around 160 children are born with cerebral palsy every year in Switzerland. Though it is the most common physical disability in children, we have had no systematic collection of data to the determine the scope of the problem and improve the health of these children.

To change this, a group of Swiss paediatricians has founded a Swiss registry for cerebral palsy (SCPR). Financed primarily by the <u>Stiftung Cerebral</u>, SCPR is maintained by ISPM.

For more information, contact <u>Anne Tscherter</u>.

<u>Kick-off meeting</u> of the SCPR: 29 September 2016, <u>Swiss Federation of Clinical Neuro-</u> <u>Societies (SFCNS) Congress</u>, Basel.

Bild Quelle: Stiftung Cerebral

Invitation to the Kick-off Meeting (PDF, 442KB)

Matthias Egger is the new president of the National Research Council of the SNSF



23.09.2016

Matthias Egger, internationally renowned epidemiologist and public health expert, will be the new president of the National Research Council of the SNSF as of 2017.

On 23 September 2016 he was elected as president of the Research Council by the Executive Committee of the Foundation Council of the SNSF for the 2017-2020 term of office. He will succeed Martin Vetterli, who will become president of EPF Lausanne next year. Matthias Egger (59) has been director of the Institute of Social and Preventive Medicine (ISPM) at the University of Bern for the last ten years.

Read the **SNF** news article

GetReal Work Package 4 Stakeholder Workshop in London, UK



23.09.2016

On 15 September 2016, the work package 4 (WP4) team including Matthias Egger, Georgia Salanti and Eva Didden from the ISPM, presented a Stakeholder Workshop in London, UK.

Participants hailed from Academia, Pharma Industry, Health Technology Assessment Bodies, Regulators, Consulting Firms as well as from other GetReal work packages. Everyone was invited to discuss and provide feedback on real-life applicability and acceptability of the methods that have been developed by the WP4 team. The workshop had a good attendance and much enthusiastic participation through both direct interaction and via online real-time polling. Breakout sessions allowed delegates and WP4 members to critically scrutinize the suggested approaches with regard to their comprehensibility and practical relevance. The conclusions of this workshop, supplemented by an online survey, will now support the completion of a Best Practice and Recommendations report, including methodological guidelines, and the enrichment of a Methods Navigator website.

Article about ISPM in MMS Bulletin



Medicus Mundi Schweiz

Netzwerk Gesundheit für alle Réseau Santé pour tous Network Health for All

16.09.2016

The MMS Bulletin #138 published an article about the ISPM: "Promoting health and disease prevention within Switzerland and around the world" written by ISPM collaborator Luciano Ruggia.



Read the <u>full article here</u>.

Read the MMS Bulletin #138 here.

Wie Registerdaten helfen, Krebserkrankungen bei Kindern vorzubeugen, Behandlung und Überlebenschancen zu optimieren und eine gute Lebensqualität zu erreichen



Schweizer Kinderkrebsregister Registre Suisse du Cancer de l'Enfant Registro Svizzero dei Tumori Pediatrici Swiss Childhood Cancer Registry

Wissenschaftliches Symposium am 08./09. September 2016 an der Universität Bern

Krebs kommt bei Kindern selten vor; trotzdem ist es auch in diesem Alter die zweithäufigste Todesursache. Krebserkrankungen bei Kindern unterscheiden sich von denen bei Erwachsenen. Es braucht spezialisierte Behandlungen, medizinisches Spezialwissen und fachkundige Krebsregister für Kinder. Dank der ständig verbesserten Behandlung meistern heute 87 Prozent der erkrankten Kinder in der Schweiz den Krebs und können geheilt werden. Oft ist die Behandlung sehr intensiv. Zwei von drei ehemaligen Patientinnen und Patienten entwickeln später im Leben teils schwerwiegende Gesundheitsprobleme, sogenannte Spätfolgen.

Damit diese früh erkannt werden ist es wichtig, regelmässig und langfristig den Gesundheitszustand von ehemaligen Patienten zu überprüfen. Das Schweizer Kinderkrebsregister sammelt seit 1976 die Daten aller Kinderkrebspatienten. Mit diesen Routinedaten werden Ursachen von Krebs bei Kindern erforscht, die Heilungsraten überwacht und Spätfolgen untersucht, damit die Therapie optimiert und das Risiko behandlungsbedingter Spätfolgen reduziert werden kann.

Das Schweizer Kinderkrebsregister ist eines der ältesten spezialisierten Krebsregister für Kinder weltweit. Es ist seit 2004 dem Institut für Sozial- und Präventivmedizin (ISPM) der Universität Bern angegliedert. Das Kinderkrebsregister feiert das 40jährige Jubiläum mit einem wissenschaftlichen Symposium (auf Englisch), sowie einem Informations- und Austauschnachmittag für Betroffene, Eltern und Interessierte mit Podiumsdiskussion (auf Deutsch). Weitere Informationen sowie das Programm finden Sie auf der folgenden Webseite:

http://www.kinderkrebsregister.ch

Wissenschaftliches Symposium: öffentlich, englisch Datum Donnerstag 8.9.2016 13:30-17:45 und Freitag 9.9.2016 8:30-12:40 Ort: Hauptgebäude der Universität Bern, Kuppelsaal Nr. 501 Medienschaffende herzlich willkommen Das wissenschaftliche Symposium (auf Englisch) informiert über Kinderkrebsregister in der Schweiz und Europa, zeigt Ursachen von Kinderkrebs auf, und beschreibt die Wichtigkeit der lebenslangen Nachsorge. Behandelnde Ärztinnen und Ärzte aus der Schweiz, Europa und den USA und Krebsregisterexperten diskutieren über das Thema «How can we futher improve long-term health outcomes» im Rahmen einer Podiumsdiskussion.

Informations- und Austauschnachmittag für Betroffene, Eltern und Interessierte: öffentlich, deutsch

Datum: Freitag 09.09.2016; 13:50-16:15

Ort: Hauptgebäude der Universität Bern, Kuppelsaal Nr. 501

Der Informationsnachmittag informiert über die Arbeit und den Nutzen des Schweizer Kinderkrebsregisters, was sich in der Behandlung von Krebs bei Kindern in den letzten Jahren verändert hat, und das Risiko für verschiedene Spätfolgen. Der Informationsnachmittag schliesst mit einer öffentlichen Podiumsdiskussion ab.

Thema der Podiumsdiskussion: Das Leben nach dem Krebs – Was ist gut, was nicht? Was wird in der Schweiz getan, um die Situation für Betroffene zu verbessern? Bei der Podiumsdiskussion kommen ehemalige Kinderkrebspatienten, Kinderonkologen und Experten aus der Gesundheitsversorgung und Politik zu Wort. Wir diskutieren Meinungen zur Nachsorge, zu Spätfolgen und zur aktuellen Gesundheitsversorgung und was in Zukunft verbessert werden könnte.

Das Schweizer Kinderkrebsregister lädt Sie herzlich ein, sich am Symposium und am Austauschnachmittag über aktuelle Entwicklungen zum Thema Kinderkrebs zu informieren.

Bitte registrieren Sie sich für den Informations- und Austauschnachmittag unter folgendem Link: <u>http://www.kinderkrebsregister.ch</u>

The Swiss Multiple Sclerosis Society funds ISPM research to identify the most effective and safe drugs in early treatment of multiple sclerosis



24.08.2016

Over the last 20 years, the treatment of multiple sclerosis (MS) and information landscape have changed dramatically.

The advent of disease-modifying drugs in the mid-1990s heralded a period of rapid advancements in the understanding and management of MS. With the support of magnetic resonance imaging it is now possible to diagnose MS and start treatment at the time of the first clinical attack. To date several competitive disease-modifying drugs are available for MS and patients and clinicians have to deal with an enlarging body of evidence that increases the uncertainty about optimal treatment choice.

The proposed project aims to answer these two questions: a) What happens when people who receive a diagnosis of MS decide to start treatment with a disease modifying drug (DMD)? b) Which DMDs have the best efficacy-safety profile?

To answer these questions, Georgia Salanti and her colleagues will conduct a systematic review of the scientific literature that aims to evaluate the benefit and safety of all the available disease-modifying drugs compared with placebo and among themselves. The project will start in December 2016. ISPM members will also include Matthias Egger and Cinzia Del Giovane and the project will be carried out in collaboration with the Cochrane Multiple Sclerosis and Rare Diseases group.

First Swiss Stata Users Group meeting will take place in Bern



15.07.2016

The first ever Swiss Stata Users Group meeting will take place on November 17 this year at the Haus der Universität, University of Bern and brings together Stata users from across Switzerland to network, educate, and share experiences.

Inititated and organized by Ben Jann from the Institute of Sociology and Radoslaw Panczak and Marcel Zwahlen from the Institute of Social and Preventive Medicine at the University of Bern, the first Swiss Stata Users Group meeting will will take place at the Haus der Universität on November 17, 2016. On <u>www.stata.com/meeting/switzerland16</u> you can register or submit a proposal for a presentation.

Head of Research Group Georgia Salanti in the Unipress



06.07.2016

A portrait of our Head of Research Group Georgia Salanti is published in the newest edition of Unipress.

Sie bringt die neuen Ideen

Für Georgia Salanti, angehende Professorin, ist Mathematik alles andere als lebensfern: Mit moderner Biostatistik hilft sie, die besten medizinischen Behandlungen zu finden.

Read the whole portrait as PDF:

Unipress 168: Portrait Georgia Salanti (PDF, 103KB)

Or follow the link to Unipress No. 168:

Unipress 168 - Forschung und Wissenschaft an der Universität Bern

Our librarian in the Unipress



06.07.2016

A portrait of our head librarian Doris Kopp is published in the newest edition of Unipress.

Zwischen Zettelkasten und Datenbank

Aus Liebe zum Buch wurde sie Bibliothekarin, mit Büchern hat sie allerdings kaum mehr zu tun: Doris Kopp, Leiterin der Bibliothek am Institut für Sozial- und Präventivmedizin, ist Expertin für Literaturrecherche. Ohne sie sässen viele Forschende in der Klemme...

Read the whole portrait as PDF:

Unipress 168: Porträt Doris Kopp (PDF, 100KB)

Or follow the link to Unipress No. 168:

Unipress 168 - Forschung und Wissenschaft an der Universität Bern

ESTHER Switzerland First Call for Projects



04.07.2016

Since 2011, Switzerland is member of the European ESTHER Alliance that promotes institutional health partnerships worldwide.

The Alliance defines institutional health partnerships as "collaborative relationships between at least two institutions based on trust, equality and mutual interest to work as peers towards common objectives. They contribute to the improvement of health services through reciprocal institutional strengthening, capacity building and health workforce development". ESTHER partners work mostly in low and middle-income countries (LMIC) to tackle priority issues for health and help achieve the UN Global Goals for Sustainable Development.

ESTHER Switzerland uses the model of institutional health partnerships to foster effective north-south and south-south partnerships that can build capacity of the health workforce and health institutions and finally contribute to strengthen health systems and health outcomes. The Secretariat of ESTHER Switzerland is located at the ISPM in Bern.

For its cooperation with ESTHER Switzerland during the period 2016-2018, the Swiss Agency for Development and Cooperation (SDC) has established two funds to promote institutional health partnerships:

1) Partnerships Grant Fund: this fund will make available up to CHF 300,000 each year for projects focused primarily in sexual and reproductive health and rights including HIV/AIDS

2) Start-up Fund: this fund will make available up to CHF 30,000 to assess new partnership projects that could be managed by ESTHER Switzerland.

Both funds are open to partnerships which include at least one health institution in Switzerland (preference given to hospitals, universities and research institutions) and one health institution of the same type in a low or middle income country. Typical projects focus on service deliver and could aim at the training of health care staff (medical staff, nurses, management positions, etc.). Research projects (e.g., cohort studies) are outside the scope of the present call. For more information on the two funds kindly consult the grant documents which are available on this page.

Thanks to this SDC support, ESTHER Switzerland is now launching its First Call for Projects. The deadline for submission is 18 September, 2016.

More information can be found at <u>http://www.esther-switzerland.ch/grants/</u>

More awards for ISPM PhD students!



27.06.2016

This year the Swiss Paediatric Oncology Group (SPOG) celebrated its 40th anniversary. The celebration included two events: the annual scientific meeting and a symposium on achievements and new challenges in paediatric oncology. The events took place at the Inselspital in Bern on 3rd - 4th of June. Researchers from all around Switzerland presented their work on childhood cancer.

Among the presenters were several PhD students from ISPM and two of them won prize awards. Garyfallos Konstantinoudis won the first prize for the presentation of non-laboratory research. The presentation was entitled "Spatial clustering of childhood leukaemia in Switzerland". Garyfallos' results suggest that leukaemia cases tend to form clusters in space. This might reflect the effects of local pollution sources. The study was funded by the Swiss cancer research and the Swiss national science foundation.

Annette Weiss won the third prize for the presentation on "Auditory complications after childhood cancer in Switzerland". Annette's project determined the prevalence of hearing loss and tinnitus in Swiss childhood cancer long-term survivors compared to siblings by using data from the Swiss Childhood Cancer Survivors Study. The study confirms that chemotherapy with platinum compounds, cranial radiation and brain surgery are risk factors for hearing loss after childhood cancer. The Swiss Cancer League and the European Union funded this project.

SSC/SSCC-SSP joint annual meeting

A joint annual meeting of the Swiss Society for Cardiology (SSC), Swiss Society for Cardiac and Thoracic Vascular Surgery (SSCC), and Swiss Society for Pneumology (SGP) took place at the SwissTech Convention Center in Lausanne on 15th – 17th of June this year.

Florian Halbeisen won a prize for the best abstract in pneumology with his study "Lung function in patients with primary ciliary dyskinesia (PCD): a multinational study". Florian's study described lung function in a large retrospective international PCD cohort compared to the normal population and to lung function in cystic fibrosis patients. The study was funded by the EU FP7 project BESTCILIA, the Foundation Milena Carvajal - Pro-Kartagener and the cantonal lung leagues Bern, St. Gallen, Ticino, Valais and Vaud.

ISPM is a new member of Medicus Mundi Switzerland



Medicus Mundi Schweiz

Netzwerk Gesundheit für alle Réseau Santé pour tous Network Health for All

20.06.2016

Medicus Mundi Switzerland is the network of Swiss organisations working in international health.

Medicus Mundi Switzerland promotes knowledge sharing and know-how among its members and partners, and the development of joint positions and strategies. The work of Medicus Mundi is organized around 4 priorities: global health and Switzerland, sexual and reproductive health, HIV/Aids and international cooperation, and the global shortage of human resources for health.

ISPM joined Medicus Mundi Switzerland on June 8th, 2016.

At the same time, Luciano Ruggia, ESTHER Project Manager and ISPM Research Fellow, was elected as a board member of Medicus Mundi Switzerland.

In 2016 the Swiss Childhood Cancer Registry celebrates its 40th birthday!



Schweizer Kinderkrebsregister Registre Suisse du Cancer de l'Enfant Registro Svizzero dei Tumori Pediatrici Swiss Childhood Cancer Registry

15.06.2016

We kindly invite you to the 2-day scientific Symposium on: "How routine data help to prevent cancer in children, optimize treatment and improve long-term outcomes"

When: 08. – 09. September 2016

Where: Main building, University of Bern (Kuppelsaal Nr. 501)

Registration: fortyyears.childhoodcancerregistry.ch

The Symposium will cover the following topics:

- Childhood cancer registration in Switzerland and Europe
- Searching for causes of childhood cancer
- Monitoring of late effects and organization of follow-up care
- Implementing results in treatment: views from the US and Switzerland

You will find more details in the program.

Program 40 Years SCCR Symposium (PDF, 301KB)

NIH awards funding renewal for IeDEA-SA



10.06.2016

At the end of May, the next five year funding cycle (2016-2021) for the International Epidemiologic Databases to Evaluate AIDS – Southern Africa project was confirmed. Led by co-Principal Investigators Prof. Matthias Egger and Prof. Mary Ann Davies (University of Cape Town) the project is supported by several NIH institutes: NIAID, NICHD, NCI, NIMH, and NIDA.

Southern Africa is the epicentre of the HIV/AIDS epidemic, with some of the largest antiretroviral therapy (ART) programmes worldwide. <u>IeDEA-SA</u> undertakes research to improve the long-term delivery of HIV care and ART services. The combined database includes individual-level data on more than 640,000 adults and children on ART in 17 large collaborating cohorts in Malawi, Zambia, South Africa, Mozambique, Lesotho and Zimbabwe.

Webinar Broadcast: IMI GetReal Initiative Work Package 4



23.05.2016

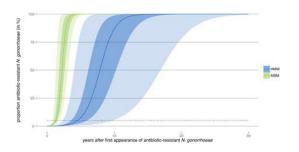
On 10 May 2016, the Work Package 4 team: Matthias Egger, Georgia Salanti, Eva Didden and Christine Fletcher presented the webinar "Synthesis and integration of real-world evidence in network meta-analyses and outcome prediction".



The webinar gave participants an understanding of important methodological key deliverables achieved by the IMI GetReal team. More than 200 listeners tuned in to listen to the presentations and participate in the Q&A discussion that followed.

Read the full report

Antibiotic treatment speeds up spread of gonorrhea resistance



23.05.2016

Screening and treatment of infected patients, rather than frequent change of sexual partners, found to be the major driver of antibiotic resistance spread in gonorrhea.

Neisseria gonorrhoeae is a sexually transmitted bacterium that has developed broad resistance against antibiotics. Current public health efforts aim to reduce the overall burden of N. gonorrhoeae infection by expanded screening and treatment of sexually active individuals. Concerned about the uncertain consequences of this strategy for antibiotic resistance, researchers from the ISPM, together with colleagues from ETH Zurich, used mathematical modelling to understand what drives the spread of resistance.

In a study published in PLOS Pathogens, the researchers analyzed data from surveillance programs and found that resistant strains spread much faster in men who have sex with men (MSM) than in heterosexual populations. On average, MSM do have more sexual partners than heterosexual men and women. However, the intuitive argument that a faster spread of an infection, due to a higher number of sexual partners, will result in a faster spread of resistance did not hold. Rather than the higher number of partners, it was the higher level of antibiotic treatment for N. gonorrhoeae infections among MSM (presumably because they more frequently develop symptoms or seek out screening for STIs) that was responsible for the faster spread of resistance.

This has obvious implications. As the researchers discuss, "as higher treatment rates result in faster spread of antibiotic resistance, treatment recommendations for N. gonorrhoeae should carefully balance prevention of infection and avoidance of resistance spread."

Read the publication here

Sexual transmission of Ebola



04.05.2016

Modeling study shows how sexual transmission of Ebola can extend the epidemic in Sierra Leone by several months.

Several studies have recently provided evidence that Ebola virus can be transmitted sexually from survivors after recovering from the life-threatening acute phase characteristic of Ebola virus disease. However, there is considerable uncertainty regarding the impact of sexual transmission from convalescent survivors on the final phase of the Ebola epidemic in West Africa.

Christian Althaus from the Immuno-Epidemiology research group and colleagues from France, Germany and the University of Bern developed a mathematical model that accounts for a secondary transmission route of Ebola virus through sexual contact with otherwise healthy survivors. They found that while very few additional cases are expected, a 3-month period of convalescent infectivity could extend the epidemic in Sierra Leone by nearly 3 months, and a 6-month convalescent period could double the current length by extending it an additional 18 months.

While the number of infectious survivors is expected to greatly decline over the coming months, the results of this study show that further transmission events may still be expected. Public health communities must therefore remain vigilant as each sexual transmission event can lead to a new Ebola transmission cluster.

Read the publication here

Picture credit: UNFPA

8. Nationales Symposium für Qualitätsmanagement im Gesundheitswesen



04.05.2016

<u>Swiss RDL</u> organisiert das Symposium zusammen mit der Berner Fachhochschule und mit der Schweizerischen Gesellschaft für Qualitätsmanagement im Gesundheitswesen und ladet Sie herzlich zur Teilnahme ein. Das Symposium beschäftigt sich mit der Thematik der Nachhaltigkeit im Gesundheitswesen und im Qualitätsmanagement.

Erfolge im Qualitätsmanagement – «Von Scheitern und Nachhaltigkeit»

Ganz im Sinne der Nachhaltigkeit wird sich das Nationale Symposium nochmals mit dieser Thematik beschäftigen. Ein erfolgreiches und nachhaltiges Qualitätsmanagement ist eine kontinuierliche Aufgabe, die, in Anbetracht der ständigen Veränderungen im Gesundheitswesen von der Führung getragen und gestützt werden muss. Neben Experten, die während des Ganztagesprogrammes zur Methodik und Umsetzung von Nachhaltigkeit sprechen werden, stellen wir exemplarisch Beispiele nachhaltiger Qualitätsinitiativen aus der Schweiz und dem Ausland vor, und lassen uns Einblicke in deren Faktoren für erfolgreiche und gescheiterte Initiativen geben. Während mehrerer Workshops können sie sich vertieft mit den Experten und ihren Spezialgebieten beschäftigen.

Weitere Informationen finden Sie unter <u>www.qmsymposium.ch</u>.

Im Rahmen des 8. Nationalen QM-Symposiums findet auch die Verleihung des 7. Swiss Quality Award für herausragende Qualitätsprojekte im Gesundheitswesen statt. Weitere Informationen unter <u>www.swissqualityaward.ch</u>.

Outstanding Paper Award 2015 from the Spine J for Lukas Staub et al.



01.04.2016

Lukas, Emin and the group received the

renowned annual paper award in the top spine journal from the North American Spine Society for the paper entitled "Total disc arthroplasty versus anterior cervical interbody fusion: use of the Spine Tango registry to supplement the evidence from randomized control trials".

The paper gives a practical example how medical registries can be used to supplement the evidence provided from randomized controlled trials. The real-life as well as the long-term perspectives are absolutely essential when it comes to judging therapies.

The clinical results in the large international spine registry are similar between the cervical total disc arthroplasty (TDA) and the anterior interbody fusion (AIF) in patients who are typically excluded from RCTs, which has not been reported so far. In well selected patients, TDA appears to be slightly more beneficial to AIF, which was also shown in a recent Cochrane review.

Link to abstract

New project funded by SNF

Dirichlet-Multinomial

$$P(n_1, n_2, n_3, n_4) =$$

$$\frac{N!}{\prod_{k=1}^4 n_k} \frac{\Gamma(A)}{\Gamma(N+A)} \prod_{k=1}^4 \frac{\Gamma(n_k + a_k)}{\Gamma(a_k)}$$

29.03.2016

Georgia Salanti's grant proposal «Enhancing methods for evaluating the comparative safety of medical interventions» will be funded by SNF. The project will start in September 2016

The aim of this project is to advance the methods for synthesizing evidence from randomized trials on the safety of interventions by developing and exploring metaanalytical models for correlated rare events and network meta-analysis of adverse events. We will develop multivariate approaches that are expected to increase precision in the estimation of the treatment effects. Such an increase in precision is highly desirable in the area of safety where events are rare. The team at ISPM will include Georgia Salanti, Orestis Efthimiou, Matthias Egger and Sven Trelle.

Epidemiology with distinction for Fabienne Krauer and Eliane Rohner



24.03.2016

Fabienne and Eliane both graduated with distinction in their masters in epidemiology at the London School of Hygiene and Tropical Medicine on March 5th 2016. Fabienne received the University of London International Programmes 150th Anniversary Prize for the highest mark in the epidemiology distance learning programme.

Fabienne's success is even more impressive when you know that she took the LSHTM course whilst studying for her masters in Biomedical Science at the University of Bern. Fabienne's two masters theses examined different aspects of the 2013-2015 Ebola virus disease outbreak in West Africa. She is now working on Zika virus, the latest emerging infectious disease outbreak. Follow Fabienne on <u>Twitter @fabikrauer</u>

Eliane's master thesis was about invasive cervical cancer incidence rates and associated risk factors in HIV-positive women who initiated antiretroviral therapy in Johannesburg, South Africa. She works with the International epidemiologic Databases to Evaluate AIDS Southern Africa (IeDEA-SA) project, studying the epidemiology of oncogenic viruses and HIV-related cancers.

Fabienne and Eliane join ISPM's increasing number of ongoing students and alumni who take LSHTM distance learning courses or attend the courses in London.

Study Identifies Three State Laws that 'Substantially Reduce' Gun Deaths



23.03.2016

A study published recently in The Lancet shows which gun laws in the US are most effective in preventing firearm deaths.

In the United States of America, every day 92 people on average are killed by firearms, while a further 231 are shot. The burden of fatal firearm injuries varies widely between states and disproportionally affects young black men. US states have enacted different firearm laws to strengthen or deregulate existing federal gun control law.

Bindu Kalesan (Assistant Professor at Boston University and former PhD student at ISPM Bern) and colleagues analyzed nationwide data on firearm legislation and firearm mortality in the US.

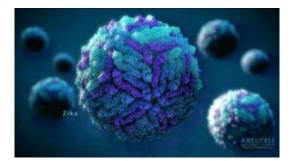
The researchers found that of 25 firearm laws, nine were associated with reduced firearm mortality, nine were associated with increased mortality, and seven had an inconclusive association. If the three most effective laws (which require universal background checks for the purchase of firearms and for ammunition, and firearm identification) were implemented everywhere more than 80% of firearm-related deaths could be prevented.

Coauthors of the study included Matthew Mobily and Jeffrey Fagan of Columbia University, and Olivia Keiser from ISPM Bern. The research groups of Bindu Kalesan and Olivia Keiser plan to continue to collaborate in the future.

Link to publication: The Lancet

Picture credit: flickr.com/sloth2048

Is Zika virus a cause of neurological disorders?



23.03.2016

ISPM, the World Health Organization (WHO) and Pan American Health Organization (PAHO) have published their perspective in the New England Journal of Medicine about the evidence for causal links between Zika virus and outbreaks of microcephaly and Guillain-Barré syndrome. Nicola Low, Fabienne Krauer and Maurane Riesen in the Sexual and Reproductive Health research group are leading this project.

Zika virus is currently spreading in Brazil and other parts of Latin America and the Caribbean, carried by mosquitoes like Aedes aegypti. Previously thought to be a mild viral illness, Zika virus infection is being linked to increases in microcephaly and a range of other congenital anomalies, and the post-infectious paralytic Guillain-Barré syndrome. On February 1 2016, Margaret Chan, Director General of WHO declared the clusters of microcephaly and Guillain-Barré syndrome a Public Health Emergency of International Concern.

The research team developed a causality framework, based on the "Bradford-Hill criteria." The framework defines questions about each of ten dimensions of causality: temporality; biological plausibility; consistency; exclusion of alternative explanations; dose-response relationship; strength of association; reversibility; experiment; analogy; and specificity.

The research team from ISPM, together with colleagues at WHO, PAHO and other international institutions are using systematic review methods to appraise the evidence. This 'living review' will generate methods to allow real time updates about the evidence for causality in the fast moving world of emerging infectious diseases.

Links

- New England Journal of Medicine Perspective
- WHO website
- Sexual and Reproductive Health research group and systematic review protocol

Picture credit: Ekins S et al.

The Lancet: Paracetamol 'not clinically effective' in treating osteoarthritis pain or improving physical function



23.03.2016

In a large-scale analysis of pain-relief medication for osteoarthritis, researchers find that paracetamol does not meet the minimum standard of clinical effectiveness in reducing pain or improving physical function in patients with knee and hip osteoarthritis. Although paracetamol was slightly better than placebo, researchers conclude that, taken on its own, paracetamol has no role in the treatment of patients with osteoarthritis, irrespective of dose.

Source of the this press release: The Lancet journals, London.

The study, published today in The Lancet, is the largest analysis of randomised trials of medical pain relief for osteoarthritis to date, and finds that diclofenac 150mg/day, a non-steroidal anti-inflammatory drug (NSAID), is the most effective short-term pain relief. However, the authors caution against long-term use of NSAIDs because of known side-effects.

Worldwide, 9.6% of men and 18% of women over the age of 60 have osteoarthritis. Estimates suggest that 26.9 million adults in the USA have the disease, and 8.75 million in the UK. Osteoarthritis is the leading cause of pain in elderly people. It can impair physical activity, which increases patients' risk of obesity, cardiovascular disease, diabetes, and general ill-health.

Dr Sven Trelle from the University of Bern, Bern, Switzerland, and colleagues, pooled data from 74 randomised trials published between 1980 and 2015. With data from a total of 58556 patients with osteoarthritis, the study (a network meta-analysis) compared the effect of 22 different medical treatments and placebo on pain intensity and physical activity. The 22 treatments included various doses of paracetamol and seven different NSAIDs.

Paracetamol and NSAIDs are usually the first line treatment for mild to moderate pain management in osteoarthritis, but paracetamol is used more frequently in the long-term because of the cardiovascular and gastrointestinal side effects associated with long-term NSAID use.

The analysis found that all 22 preparations of medications, irrespective of dose, improved symptoms of pain compared with placebo. Although some doses of paracetamol had a small effect on improving physical function and decreasing pain, the effect was only slightly better than placebo, and did not reach the minimum clinically important difference (effect size of -0.17 vs. clinically important difference of -0.37). In comparison, diclofenac at the maximum daily dose of 150 mg/day was most effective for the treatment of pain and physical disability in osteoarthritis (effect size -0.57), and superior to the maximum doses of frequently used NSAIDs, including ibuprofen, naproxen, and celecoxib.

According to Dr Trelle, "NSAIDs are usually only used to treat short-term episodes of pain in osteoarthritis, because the side-effects are thought to outweigh the benefits when used longer term. Because of this, paracetamol is often prescribed to manage long-term pain instead of NSAIDs. However, our results suggest that paracetamol at any dose is not effective in managing pain in osteoarthritis, but that certain NSAIDs are effective and can be used intermittently without paracetamol." "NSAIDs are some of the most widely used drugs for patients with osteoarthritis. There is a range of different drugs at different dosages that doctors can prescribe, but patients often switch between drugs, or stop taking them because the first one they use hasn't sufficiently helped control the pain. We hope our study can help better inform doctors about how best to manage pain in this population." The length of follow-up in most of the included trials was 3 months or less, and the authors acknowledge that other studies which include longer-term follow-up may be necessary. Although the overall number of patients included in the analysis was large, the number of individual trials assessing individual doses was still low.

Writing in a linked Comment, Professor Nicholas Moore and colleagues from the Department of Pharmacology at the University of Bordeaux, Bordeaux, France, point to the limitations of the study: "Other widely used NSAIDs were not included in this meta-analysis, probably because no recent trials have been done of these drugs or because any recent trials that did assess them were too small. These omissions are unfortunate because these drugs might be as effective but much cheaper than the newest drugs." He concludes: "the most remarkable result is that paracetamol does not seem to confer any demonstrable effect or benefit in osteoarthritis, at any dose. This finding is not entirely unexpected. Paracetamol has been on the market for as long as most of us remember. Its efficacy has never been properly established or quantified in chronic diseases, and is probably not as great as many would believe. Its safety is also questioned, not just in overdose." He adds: "Many patients could be suffering needlessly because of perceived NSAIDs risks and paracetamol benefits (which might not be real). Perhaps researchers need to reassess both these perceptions (or misconceptions) and the use of other analgesic options that have been discarded over time, such as dipyrone."

Bruno R da Costa, PhD, Stephan Reichenbach, MD, Noah Keller, MMed, Linda Nartey, MD, Simon Wandel, PhD, Prof Peter Jüni, MD, Dr Sven Trelle, MD: Effectiveness of non-steroidal anti-inflammatory drugs for the treatment of pain in knee and hip osteoarthritis: a network meta-analysis, Lancet, 17.03.2016

Abstract of the article: <u>http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)30002-2/abstract</u>

Cancer in Switzerland – the Swiss Cancer Report 2015 is out



Which cancer types are most common? How often are children diagnosed with cancer? Does cancer-related mortality increase? Are all regions in Switzerland equally affected?

Today, 21.03.2016, the Federal Statistical Office, the National Institute for Cancer Epidemiology and Registration and the <u>Swiss Childhood Cancer Registry</u> publish the Swiss Cancer Report 2015. This report contains the newest available data for cancer in Switzerland.

Press release

SNF professorship for Olivia Keiser



Olivia Keiser

02.03.2016 - Olivia Keiser, head of the research group HIV/ hepatitis at ISPM, was awarded an SNF professorship grant for her project "Understanding the HIV epidemic in Malawi: integrating quantitative and qualitative data in a mathematical model". The research program is funded for the duration of four years and includes an interdisciplinary team of modellers, statisticians and social scientists.

Within Malawi and many other countries in sub-Saharan Africa, HIV prevalence varies widely between small areas. The reasons for this variability remain poorly understood. Taking Malawi as a case study, Olivia Keiser and her team will develop a novel interdisciplinary modelling approach to study how this variability may be related to the spatial distribution of ethnic groups and cultural practices that influence social and behavioural factors that impede or promote the transmission of HIV, and uptake of preventive measures.

To develop the model, the research team will extract socio-behavioural factors, possible associations, and hypothesised causal pathways from qualitative literature. They will then analyse several large datasets to study the causal associations between HIV-related factors and HIV status and identify high risk population groups, which can be targeted for interventions. Finally they will develop and parameterise a mathematical model for HIV disease progression and transmission to evaluate the effectiveness and cost-effectiveness of interventions. Priority interventions will be discussed with the Ministry of Health.

The research programme will provide an in-depth understanding of region-specific socio-behavioural drivers of the HIV epidemic in Malawi, and will help determine how best to invest limited resources.

13 neue Förderungsprofessuren an der Universität Bern

Medienmitteilung der Universität Bern

Marie Skłodowska-Curie fellowship for Georgia Salanti



26.01.2016 - Clinical studies that are planned without prior consideration of existing evidence potentially experiment with an unnecessarily large number of patients or try to answer a question to which the answer is already available.

This project aims to develop a framework of efficient and sustainable research planning that minimizes cost and has the potential to direct resource allocation by optimally planning future clinical studies based on existing evidence. A circular updating process is suggested; before a trial is planned the existing evidence (a network meta-analysis) about the effectiveness of all competing interventions is considered and its conclusiveness is statistically evaluated. If further experiments are needed these are designed considering patient's preferences and with an aim to render the existing evidence conclusive. The new data is then used to update the existing knowledge. This innovative approach to plan clinical studied requires methodological developments from various fields (biostatistics, operational research, epidemiology) and its feasibility will be evaluated in answering a real clinical guestion about the best intervention for a given condition and in designing a new trial. The circular updating process is of high interest to public research funding bodies, guideline developers and pharmaceutical companies. The project has a strong public engagement component as patients and major health care organizations are involved in many of the planned activities in the development of the circular updating process. The team at ISPM will include Georgia Salanti, Adriani Nikolakopoulou, Matthias Egger and others.

New national licence agreement offers Switzerland full access to Cochrane evidence



12.01.2016 - New national licence agreement offers Switzerland unlimited access to the Cochrane Library - the leading resource in evidence-based health care. Swiss patients and healthcare practitioners will now have access to more than 6500 published systematic reviews in healthcare interventions through one-click access to the Cochrane Library.

It is a leading resource in evidence-based research across areas including pregnancy, mental health, surgical procedures, and public health. Cochrane Reviews provide independent high-quality evidence to aid healthcare decision making.

Cochrane is a global independent network of researchers, professionals, patients, carers, and people interested in health. The organization gathers and summarizes the best evidence from research to help make informed choices about treatment. Cochrane contributors - 37,000 from more than 130 countries - work together to produce credible, accessible health information that is free from commercial sponsorship and other conflicts of interest. Many contributors are leaders in their fields - medicine, health policy, research methodology, or consumer advocacy. The team of Cochrane Switzerland, based at Lausanne and Berne, is active in all language regions of Switzerland.

Find out more at cochrane.org