EUGenMed – Maastricht team

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Maastricht University: youngest and most international university in the Netherlands (international students represent 45% of the total student body). Renowned for excellence and innovation in learning.

Department of Health, Ethics and Society (HES): Interdisciplinary teaching and research about health in society through philosophy, ethics, sociology, law, gender research, history and anthropology. Working in the Faculty of Health, Medicine and Life Sciences and within the research schools CAPHRI and GROW.

Courses:
- **Gender and diversity** as topic in health sciences courses and in courses on communication and reflection in medicine.
- **Gender Medicine**: Elective course in medical curriculum for 2nd year students.
• Gender Impact Assessment FP5 (2000-2001)

• Gender Basic project FP6 (2005-2008)


• Public health: ‘the organised effort of society to improve the health of the population’ (Beaglehole 2004)

Crucial:

• the population perspective (NOT the individual)

• relying on epidemiology (the study of the distribution and determinants of health-related states or events in human populations)

• Application of this study to:
  – promote the health of the entire population / of subpopulations
  – prevent disease and disability
  – provide preventive, curative and rehabilitative care to the population
Sex and Gender Interact

Regitz-Zagrosek, V. 2012. Sex and Gender Differences in Health. *EMBO Reports* 13(7): 596-603
Highlighting the Influence of Sex and Gender-Related Factors

Cumulative Life Course Risk Factors for Non-Communicable Disease (NCD)
Highlighting the influence of sex and gender-related factors

- Accumulated Risk of Developing Non-Communicable Diseases
- Established adult behavioral risk factors
- Smoking
- Physical inactivity
- Obesity
- Diseases
- Born weight
- Growth rate
- Socioeconomic status
- Maternal nutrition

Fetal Life | Childhood | Adolescence | Adult Life

Adapted from Darton-Hill et al., 2004
Session 1.2
Public Health and prevention
Setting the stage

• What kind of accepted knowledge exists on sex and/or gender aspects in public health and prevention?

Health topics:
- Sex and gender differences in cardiovascular diseases and cardiovascular risk factors (Oertelt Prigione)
- Further NCDs (Cancers, mental health, chronic respiratory diseases)
  - Increasing burden of chronic respiratory diseases in women
  - Mental disorders and milder types of unwell-being (anxiety-, mood-, eating-, identity-, and personality-disorders, as well as (work)stress): gender-specific association between autonomy and related characteristics, attachment styles and experiences and psycho-pathology (Bekker);
  - Gender and adolescents’ mental health, gender and men’s mental health (Zemp)
- Accidents, injuries, violence
- Sexual and reproductive health (Zemp)
- Gender and childhood obesity (Zemp)
- Sex and gender specific lifestyle factors and their interplay with ethnicity (e.g. nutrition and risk of diabetes) (Binder-Fritz)
- Screening programmes and the issue of health literacy (Binder-Fritz)
- Occupational health: interaction gendered working conditions, related environmental risks, postures, relations, tasks and autonomy, sex-differences and resulting pathologies
Session 1.2
Public Health and prevention
Setting the stage

- Sex and gender differences in cardiovascular risk factors (Oertelt-Prigione)

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Sex</th>
<th>Control (%)</th>
<th>Case (%)</th>
<th>Odds ratio (99% CI)</th>
<th>PAR (99% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current smoking</td>
<td>F</td>
<td>93</td>
<td>20.1</td>
<td>2.86 (2.36–3.48)</td>
<td>15.8% (11.9–19.3)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>33.0</td>
<td>53.1</td>
<td>3.05 (2.78–3.33)</td>
<td>44.0% (40.9–47.2)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>F</td>
<td>79</td>
<td>25.5</td>
<td>4.26 (3.51–5.18)</td>
<td>19.1% (16.8–21.7)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>74</td>
<td>16.2</td>
<td>2.67 (2.36–3.02)</td>
<td>10.1% (8.9–11.4)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>F</td>
<td>28.3</td>
<td>53.0</td>
<td>2.95 (2.57–3.39)</td>
<td>35.8% (32.1–39.6)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>19.7</td>
<td>34.6</td>
<td>2.32 (2.12–2.53)</td>
<td>19.5% (17.7–21.5)</td>
</tr>
<tr>
<td>Abdominal obesity</td>
<td>F</td>
<td>33.3</td>
<td>45.6</td>
<td>2.26 (1.90–2.68)</td>
<td>35.0% (28.0–43.6)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>33.3</td>
<td>46.5</td>
<td>2.24 (2.03–2.47)</td>
<td>32.1% (28.0–36.5)</td>
</tr>
<tr>
<td>Psychosocial index</td>
<td>F</td>
<td>-</td>
<td>-</td>
<td>3.49 (2.41–5.04)</td>
<td>40.0% (28.6–52.6)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>-</td>
<td>-</td>
<td>2.58 (2.11–3.14)</td>
<td>25.3% (18.2–34.0)</td>
</tr>
<tr>
<td>Fruits &amp; Veg</td>
<td>F</td>
<td>50.3</td>
<td>39.4</td>
<td>0.58 (0.48–0.71)</td>
<td>17.8% (11.9–24.1)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>39.6</td>
<td>34.7</td>
<td>0.74 (0.66–0.83)</td>
<td>10.3% (6.9–15.2)</td>
</tr>
<tr>
<td>Exercise</td>
<td>F</td>
<td>16.5</td>
<td>9.3</td>
<td>0.48 (0.39–0.59)</td>
<td>37.3% (26.1–50.0)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>20.3</td>
<td>15.8</td>
<td>0.77 (0.69–0.85)</td>
<td>22.9% (16.9–30.2)</td>
</tr>
<tr>
<td>Alcohol</td>
<td>F</td>
<td>11.2</td>
<td>6.3</td>
<td>0.41 (0.32–0.53)</td>
<td>46.9% (34.3–60.0)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>29.1</td>
<td>26.6</td>
<td>0.88 (0.81–0.96)</td>
<td>10.5% (6.1–17.5)</td>
</tr>
<tr>
<td>ApoB/ApoA1 ratio</td>
<td>F</td>
<td>14.1</td>
<td>27.0</td>
<td>4.43 (3.43–5.70)</td>
<td>52.1% (44.0–60.2)</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>21.9</td>
<td>35.5</td>
<td>3.76 (3.23–4.38)</td>
<td>53.3% (48.3–59.2)</td>
</tr>
</tbody>
</table>

Yusuf S. 2004. The Lancet
What needs to be done? Evaluate the appropriateness of currently used screening techniques and potential preventive measures for women and men (Oertelt-Priegione).

Ex. A) Before large trials proved otherwise, aspirine has been widely used in the primary prevention of myocardial infarction for women.

Berger, J.S. 2006. JAMA
Ex. B) Sensitivity of common fecal occult blood (FOBs) tests differs between women and men

- Large study testing seven different fecal occult blood screening tests
- Significantly less sensitive in women
- Physiological differences in colonic transit times might play a role ($F < M$)
What kind of accepted knowledge exists on sex and/or gender aspects in public health and prevention?

**Structural topics:**
(economic crisis, means for preventive programs, organisation of preventive responsibilities, structure and restructuration of health systems):

- New trends in migration (high diversity of patients and immigrant subpopulation groups: high-tech migration, feminisation of migration, labour migrants in EU, refugees) (Binder-Fritz)
- Poverty issues
- Means for preventive programmes:
  - How can interventions with proven effectiveness in the general population be adapted to be effective for ethnic minority populations? (Binder-Fritz)
  - How can vulnerable groups be reached (elderly; sex workers...)? (Zemp)
What kind of accepted knowledge exists on sex and/or gender aspects in public health and prevention?

Other topics?

- Health care system interventions and restructuring: e.g. 2014 gender equality plan and gender impact assessment in Tuscany: statutory responsibilities in health policy, impulse to reduce gender inequalities in health, creation of regional and local Health & Gender centres and regional gender inequality programme) (Turco)

- Allocation policies?
Are there examples of best practices and/or tools (for the inclusion of S&G in public health and prevention)?

**Best practices - interventions:**

- Gender specific tobacco control strategies: Pap smear screening as an occasion for smoking cessation and physical activity counselling (Results of a randomised controlled trial conducted in the 3 Italian areas of Florence, Turin and Mantua) (Turco)

- Gender-sensitised weight loss and healthy living programme (White)

- Autonomy-connectedness (Practice-based intervention informed by gender-specific association between autonomy and related characteristics, attachment styles and experiences, and psychopathology. Development of autonomy groups for the prevention and treatment of mental disorders and milder types of unwell-being, e.g. anxiety-, mood-, eating-, identity-, and personality-disorders as well as (work)stress prevention. Gender-sensitive scale – to assess autonomy connectedness – and treatment protocol) (Bekker)
Session 1.2
Public Health and prevention
Setting the stage

• [Continued] Are there examples of best practices and/or tools (for the inclusion of S&G in public health and prevention)?

*Best practices - interventions:*

- Balancing gender differences in the patient use of health services (primary care services organisation): more flexible opening hours and definition of different strategies for inviting patients to attend “health checks” (Turco)

- Obligatory national registry programs, e.g. National myocardial infarction registry in Hungary (Jánosi)

The aim of the study was as follows:
- To collect data on AMI with and without ST segment elevation (STEMI and NSTEMI)
- To define the prevalence of primary percutan coronary interventions (pPCI) in patients (pts) with STEMI
- In pPCI to investigate the time of intervention (first medical contact and ballon inflation time)
- To have data on hospital course of the pts and on discharge medication
- To collect data on hospital and long term mortality
Care of patients with ST elevation myocardial infarction

Number of patients: 13262 (8133 men)

Admission to PCI center

- Men: 88.60%
- Women: 81.60%

Treated with primary PCI

- Men: 91.70%
- Women: 88.10%

* p=0.0000

PCI = percutan coronary intervention
Session 1.2
Public Health and prevention
Setting the stage

- [Continued] Are there examples of best practices and/or tools (for the inclusion of S&G in public health and prevention)?

**Best practices of policy:**

- Gender-sensitive screening programmes, Gender Medicine Section within the department of Drug Research (Italian National Institute of Health – ISS), Italian National Agency for Regional Health Services (AGENAS) working towards gender-oriented guidelines for specific diseases, the Italian government agency for the insurance against work-related injury is publishing gender-oriented researches and recommendations; gender-oriented regional plans of the Italian Map of Health; screening programmes (Signani)

- Gender as priority action in Health plans and programmes (e.g. introduction of 2 gender related indicators in 2014 in Tuscany: gender differences in the treatment of acute coronary syndrome and % adhesion by sex in colon-rectal cancer screening programme. Measurement of performance in these domains + implementation of initiatives to decrease the gender gap registered in the two indicators (Turco)
[Continued] Are there examples of best practices and/or tools (for the inclusion of S&G in public health and prevention)?

**Best practices - policies and awareness-raising initiatives:**
- Increased number of public meetings named “Gender Medicine” (from 1 to 10) between 2008 and 2013 and strict correspondence between the meeting location and the gender orientation of the Regional Health Plan + Increase in the medical disciplines that are interested in gender medicine (from 7 to 22) with additional attention from general practitioners and recent interest of the social sciences) (Signani)
• [Continued] Examples of best practices and/or tools (for the inclusion of S&G in public health and prevention)?

**Best practices - policy and awareness-raising initiatives**

- Organisation by German equal opportunity commissioners of local and regional events – lectures, talks, discussion rounds – at the community level to raise awareness of sex and gender differences in health and diseases) and prioritisation of diseases that need research and increased awareness (e.g. atrial fibrillation, heart failure) (Schnabel)

- US National Report cards on women’s health (collaboration of researchers and decision makers) (Zemp)

- The “sex and gender collaborative” in the United States: [SGWHC.org](http://SGWHC.org) (Miller); the Dutch Alliance of Gender and Health (Veenis)

- Integrating gender into the CanMEDs 2005 (enabling competencies) (Zemp)
Session 1.2
Public Health and prevention
Setting the stage

• [Continued] Are there examples of best practices and/or tools (for the inclusion of S&G in public health and prevention)?

*Best practices - tools and/or methodologies:*

- Tool Sex/Gender Based Analysis from Health Canada (tool or “analytical approach that integrates a sex and gender perspective into the development of health research, policies and programs, as well as health planning and decision-making processes” [http://www.hc-sc.gc.ca/hl-vs/gender-genre/analys/index-eng.php](http://www.hc-sc.gc.ca/hl-vs/gender-genre/analys/index-eng.php)) (Gansefort)

- Bias Free Framework (tool for identifying and eliminating biases that derive from social hierarchies such as sexism, racism, ableism, ageism, etc. in research, legislation, policies, programmes, service delivery or practice: [http://www.biasfree.org/](http://www.biasfree.org/)) (Gansefort)

- Strategy: Epi goes Gender (inclusion of sex/gender issues in the entire study process)
Inclusion of sex/gender aspects during the whole research process (question, methods, results, discussion, interpretation and publication) ➔ **We need** interdisciplinarity, theory based (intersectional) approaches, sex/gender sensitive training/education, critical focus on men’s health.
Session 1.2
Public Health and prevention
Setting the stage

• [Continued] Are there examples of best practices and/or tools (for the inclusion of S&G in public health and prevention)?

  Personalised medicine / Other:

  - What about the standardised –omics (genomics, including sequencing, x/Y chromosome analysis, transcriptome, proteome, metabolome) data in cardiovascular disease and population cohorts as promising tools for the exploitation of sex-related differences? (Schnabel)
What kind of benefits do we expect from incorporation of sex and/or gender in public health and prevention?

- Acknowledging diversity; Identifying evidence gaps; Observing differential effects of interventions; Taking action to adapt interventions; Improving research design, analysis and reporting (Binder-Fritz)

- Improving uptake of preventive measures, personalize health care (socially not genetically), increase awareness in the general population and among medical professionals (Oertelt-Prigione)

- Increasing efficiency of interventions; Reaching vulnerable groups; reducing social inequities; increasing social inclusion (Zemp)
What are unmet needs in gender research in public health and prevention?
- Reaching vulnerable groups
- Needs of the elderly; (informal) care
- Men’s health issues (Zemp)
- Ageing workers; sex/gender-sensitive design and ergonomics of working equipment; decision-making and management of risks at work; factors inducing higher strain and stress levels (Turco)

What are the most urgent or important issues in public health and prevention that could benefit from the inclusion of sex and gender dimensions?
- Intersectionality (e.g. to consider the interplay of sex and gender with ethnicity and other social determinants of health) (Aguirre; Binder Fritz)
- Evaluation of appropriateness (evidence-based and economic) of current preventive strategies (e.g. colon carcinoma screening, cardiovascular prevention approaches, obesity prevention / promotion of physical activity, interventions in adolescents,...) (Oertelt-Prigione; Zemp)
- Toxicological risk assessment for chemicals based on gender and age parameters (Turco)
Session 1.2
Public Health and prevention
How to fulfill these needs?

• Whom should we convince and/or invite in Europe and/or in your country?
  – Funding agencies and research foundations. Example: ZonMW (Dutch organisation funding research and stimulating use of knowledge to improve health and healthcare in the Netherlands) (Zemp, Veenis. Schnabel)
  – National ministries of education and research (Schnabel)
  – NGOs and Health Centres. Example: Health Centre Frauenzentrum in Graz, Austria; MiMi-Gesundheitsprojekt: Mit MigrantInnen für MigrantInnen) (Binder-Fritz)
  – Gender and health experts, public health specialists (national institutes of public health and university researchers) (Aguirre; Gansefort; Veenis)
  – Sex and Gender-sensitive prevention (e.g. NGO Landesvereinigung für Gesundheit und Akademie für Sozialmedizin Niedersachse) (Gansefort)
  – Patient organisations (Veenis)
  – Organisation management in gender training/gender mainstreaming (Gansefort)
Originally, the title was who should we convince. However, this was never mentioned in the questionnaires/slides. Rather, people mentioned who should be invited to the workshops...

Lucy Dalibert; 02.04.2014
Session 1.2
Public Health and prevention
How to fulfill these needs?

• To whom shall we communicate? Who shall constitute our audience?

• How shall we communicate our results and findings?

• Suggestions for workshop co-chairs: Elisabeth Zemp Stutz
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