

ABSTRACT: 2016 ELAM Institutional Action Project Symposium

Project Title: Gender equality: 'Fix the knowledge' in sex- and gender-related differences in medicine. A new teaching and research direction at the Faculty of Medicine at the University of Zurich

Name and Institution: Beatrice Beck Schimmer, Institute of Anesthesiology, University and University Hospital of Zurich, Switzerland

Collaborators: Jean-Marc Fritschy (Vice-Dean) and Natalie Lerch-Pieper (academic career development and gender equality) both from the Dean's Office, Faculty of Medicine, University of Zurich); Gender equality office, University of Zurich

Background, Challenge or Opportunity: Sex- (biological characteristics) and gender- (cultural attitudes and behaviors) related differences are not well enough taken into account in medical education nor properly addressed in research.

Purpose/Objectives: Purpose of this project is in a first step to increase awareness of this important topic within our Faculty. We aim at establishing an education and research program focusing on **sex- and gender-related differences in medicine**.

Methods/Approach:

- 1) **Focus on education:**
 - a. Sex-related differences in diseases: Problem-based learning (PBL) sessions of the undergraduates will be established with open-ended problems involving this topic. (March 2016 v)
 - b. A survey will be performed asking teaching professors of undergraduates if and to which extend sex/gender-related issues are highlighted in their educational activity (baseline evaluation). (July 2016, establishment of survey started v)
 - c. Teaching professors integrate the sex/gender topic into their teaching material. (October 2016)
 - d. Prof. Dr. V. Regitz-Zagrosek from the Institute of Gender in Medicine, Charité Berlin, Germany, will be invited to give two lectures per year about gender differences (1st undergraduate year). (April 2016, started v)
- 2) **Focus on research:**
 - a. Identification of a foundation, affiliated to the UZH, which is interested in collaborating with the project group. (April 2016, started v)
 - b. Fundraising within the Federal Program of Equal Opportunities. (call will be launched in May 2016, grant application September 2016, started v)
 - c. Establishment of matching funds (financial resources from the Federal Program of Equal Opportunities) within call from a UZH foundation. Funded grants will get an additional match (approx. 20%) if the research plan addresses a sex/gender-related topic. (June 2017)

Outcomes and Evaluation Strategy:

- 1) Evaluation of implementation of the topic of sex/gender-related differences in medicine in education: follow-up survey (2018)
- 2) Satisfaction of undergraduates: feedback evaluation form (after each year)
- 3) Funds acquired through Federal Program
- 4) Feedback from the dean and vice-dean

GENDER EQUALITY: 'FIX THE KNOWLEDGE' IN SEX- AND GENDER-RELATED DIFFERENCES IN MEDICINE. A NEW TEACHING AND RESEARCH DIRECTION AT THE FACULTY OF MEDICINE AT THE UNIVERSITY OF ZURICH

Beatrice Beck Schimmer, Institute of Anesthesiology, University and University Hospital of Zurich, Switzerland

Collaborators: Jean-Marc Fritschy (Vice-Dean) and Natalie Lerch-Pieper (Academic Career Development and Gender Equality) both from the Dean's Office, Faculty of Medicine, University of Zurich; Gender Equality Office, University of Zurich



BACKGROUND

Since 2000 the Swiss Federal Equal Opportunity at Universities Program promotes gender equality at Swiss universities. The Faculty of Medicine at the University of Zurich (UZH) joins this program since 2002. From 2002-2012 with the financial support of the Swiss Federal Program the Faculty established and implemented a **mentoring program** with a special focus on young women talents in research as mentees. In 2013 resources from this program were secured for a new Faculty project providing **protected research time** particularly to outstanding women physician-scientists. The final goal of our project is to increase the number of women professors at the Faculty level as well as women leaders in medicine ('Filling the Gap'; Faculty of Medicine, University of Zurich, Switzerland; http://www.med.uzh.ch/Nachwuchsfoerderung/fillingthegap_en.html).

In line with these former goals pursued within the Swiss Federal Program we would like to focus on a new dimension of equal opportunities. **Sex- (biological characteristics) and gender- (cultural attitudes and behaviors)** related differences are not well enough taken into account in medical education nor properly addressed in research.

OBJECTIVES

We aim at establishing an education and research program focusing on **sex- and gender-related differences in medicine**. Purpose of this project is in a first step to increase awareness of this important topic within our Faculty.

APPROACH

1) FOCUS ON EDUCATION

- Sex-related differences in diseases: Problem-based learning (PBL) sessions of the undergraduates will be established with open-ended problems involving this topic. (March 2016 v)
- A survey will be performed asking teaching professors of undergraduates if and to which extend sex/gender-related issues are highlighted in their educational activity (baseline evaluation). (July 2016, establishment of survey started v)
- Teaching professors integrate the sex/gender topic into their teaching material. (October 2016)
- Prof. Dr. V. Regitz-Zagrosek from the Institute of Gender in Medicine, Charité Berlin, Germany, will be invited to give two lectures per year about gender differences (1st undergraduate year). (April 2016, started v)

2) FOCUS ON RESEARCH

- Identification of a foundation, affiliated to the UZH, which is interested in collaborating with the project group. (April 2016, started v)
- Fundraising within the Swiss Federal Equal Opportunity at Universities Program. (call will be launched in May 2016, grant application September 2016, started v)
- Establishment of matching funds (financial resources from the Federal Program of Equal Opportunities) within call from a UZH foundation. Funded grants will get an additional match (approx. 20%) if the research plan addresses a sex/gender-related topic. (June 2017)

OUTCOMES

In a first approach we have designed a '**ill-structured**' **problem in PBL** for undergraduates. Participating in a problem-solving process students gather information and should learn new concepts, principles, or skills. We chose a typically women-related pathology (PBL problem), namely Takotsubo cardiomyopathy (TCM), presented as a women suffering from acute chest pain. TCM is a transient cardiac syndrome that mimics acute coronary syndrome, which is characterized by patients having chest pain, ST-segment elevation on electrocardiogram, and elevated cardiac enzyme levels consistent, while coronary artery stenosis is absent. Patients with TCM are more likely to be female (90%). With the help of TCM we will be able to make a link to **sex- and gender-related differences** in diseases as mentioned in the work of Vera Regitz-Zagrosek (**Figure 1**).

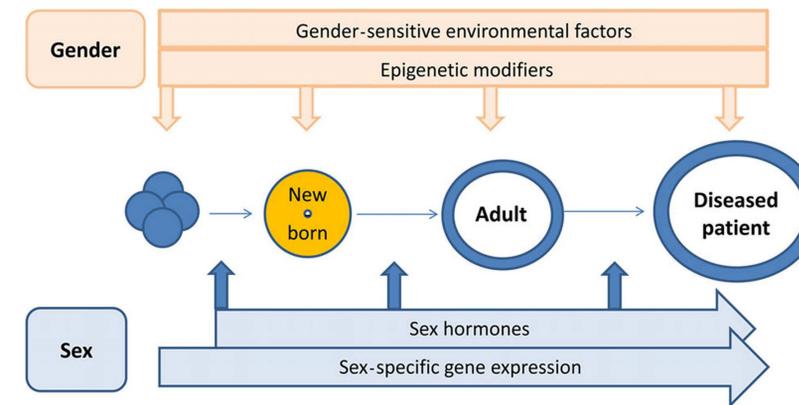


Figure 1

Societal (upper) and biological (lower) conditions affect germ cells, the newborn, the adult and finally the development of diseases in women and men (1)

Beside PBL a survey is being developed to assess the current education activities focusing on sex- and gender-related differences in medicine.

In parallel to the education activities, an action plan was developed for research. Here we started setting up a new grant focusing on the topic of sex- and gender-related differences in medicine. This document will be ready in August 2016 to be submitted to the Swiss Federal Equal Opportunity at Universities Program (**fundraising**). Due to budget restrictions at the Faculty level fundraising is an attractive contribution beside the innovative approach of the project. A **matching program** will be established with the financial resources with a 20% additional funding of a sex- or gender-related research aim.

EVALUATION STRATEGY

- Evaluation of implementation of the topic of sex/gender-related differences in medicine in education: follow-up survey (2018)
- Satisfaction of undergraduates: feedback evaluation form (after each year)
- Funds acquired through Federal Program
- Feedback from the dean and vice-dean of the Faculty of Medicine
- Feedback from other Faculties at the University of Zurich

DISCUSSION

During our first activities within the Institutional Action Plan (IAP) we contacted different stakeholders at the Faculty level in education and research such as teaching professors, researchers as well as health care providers. Due to the fact that our project team with the Faculty mentoring as well as the 'Filling the Gap' program is already well known for being active in the field of gender equality since years it was an easy task to find partners to discuss our idea. It became evident that the topic of sex- and gender-related differences in medicine has 'orphan' character. Everybody agreed that efforts should be made to properly address the most obvious 'risk factor' for the patient, namely sex and gender (2). Implementing sex- and gender-based aspects would help further improving health care in prevention, diagnosis and therapeutic treatment.

SUMMARY

Within IAP activities we were able to initiate the first steps increasing awareness for the topic of sex- and gender-related differences in medicine in education as well as in research at the Faculty of Medicine at the University of Zurich. Successful implementation of the proposed activities may prepare the grounds for further activities. Moreover, we hope that after this pilot phase we might transfer this topic from education und research to the level of faculty development.

REFERENCES

- (1) Eur Heart J. 2016, 37:24-34 (2) EMBO Rep. 2012; 13:596-603 Picture right top: Insmed

This poster was presented at the 2016 ELAM® Leaders Forum.