

## PARALLEL SESSION 3

Thursday 10 November 2016 17:40-18:40

### 3.A. Pitch presentations: Health across the life course

#### Family Planning needs and induced abortion in China: two cross-sectional studies

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#### Background

In China, the official estimated annual number of induced abortion ranged from 7 million to 13 million in recent year. The Chinese family planning (FP) services with a major concern on the birth control among married couples have been a political priority in China for more than thirty years until to the two child policy implemented from January 2016. Abortion is commonly used to end unintended pregnancy. This study aimed to describe the characteristics of abortion seekers in two time periods of studies in China.

#### Methods

Two cross-sectional surveys were conducted in 2005 and 2013 respectively and similar methods were used for collecting data. A questionnaire filled by the abortion service providers for all women seeking abortion within 12 weeks of pregnancy during a period of two months, the information included self-reported demographic & economic characteristics, history of induced abortion and practices regarding contraception. Twenty-four hospitals from 3 cities in 2005 and 295 hospitals from 30 provinces in 2013 participated in the studies, respectively.

#### Results

Total of participants consisted 7291 in 2005 and 79,174 in 2013 were included in the analysis. The higher repeated induced abortion were reported in 2013 (65%) than in 2005 (35%). The main reason of current unintended pregnancy was non-use of any contraception (65.1%) in 2005 and failure of contraception (50.3%) in 2013. Condom was most used as contraceptive method among married and unmarried women in both periods of studies, but the proportions of consistent and correct utilisation of condom were low in two time periods.

#### Conclusions

The large numbers of induced abortions are primarily due to contraceptive failure or no use of contraception. PAFP services are often lacking in hospital settings where majority induced abortion were performed. Integrating post-abortion family planning into existing health system is urgent needed, which is an opportunity and a challenge in China.

#### Key messages:

- A large numbers of induced abortions and repeat abortion in China are primarily due to contraceptive failure or no use of contraception
- PAFP services are often lacking in hospital settings where majority induced abortion were performed

#### Early disability pension among school dropouts: the matter of municipality characteristics

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#### Background

School dropout and early work life exit is a great public health challenge in many western countries. Long-term dependence on welfare benefits has severe individual lifetime consequences in terms of health and quality of life and is clearly a high socioeconomic burden on the society. The present study aim to investigate how medically based disability pension (DP) varies between Norwegian municipalities and whether the individual risk of early DP among school dropouts is influenced by municipality characteristics.

#### Methods

The study includes a nationally representative sample of 30% of all Norwegians (N=395,514) aged 21-40 in 2010 from Statistic Norway's event database. Having both individual level data and data on the municipality level we employ a multilevel approach in our analysis. We also apply STATA's spmapproach to analyse the spatial patterns of school dropout and DP rates across the 430 Norwegian municipalities.

#### Results

The prevalence of early DP differs in the Norwegian municipalities (lowest 0% to highest 8.3%), with an average of 1.82% for the total country. The study finds strong support for the relevance of individual factors, but also find that a number of municipality characteristics impact the risk of early DP among school dropouts. Especially variables related to the local socioeconomic situation such as education, income, unemployment and DP prevalence seem to be important.

#### Conclusions

DP's among young adults (<40 years) occur almost exclusively among non-completers of secondary education. Measures to avoid early DP must therefore be targeted at this disadvantaged group in the population. However, a municipality with dropout-issues does not necessarily imply a relatively high prevalence of early DP. Future research should emphasize how the community can facilitate young dropouts to complete their education. Additionally, we need more knowledge about health promotion and work inclusion particularly among the school dropouts.

#### Key messages:

- 85% of young adults entitled a DP has not completed secondary education
- the risk of early DP is influenced by the local socioeconomic situation

## Does intergenerational social mobility affect health, oral health and function among British adults?

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### Background

Socioeconomic position (SEP) influences adult health. People who experienced material disadvantages in childhood or adulthood tend to have higher adult disease levels than their peers from more advantaged backgrounds. Even so, life is a dynamic process and contains a series of transitions that could lead people through different socioeconomic paths. Research on social mobility takes this into account by adopting a trajectory approach, providing a long-term view of the effect of SEP on health.

The aim is examine the effects of intergenerational social mobility on adult general health, oral health and functioning in a population aged 50 and over in England.

### Methods

This study is based on the secondary analysis of data from the English Longitudinal Study of Ageing. Using cross-sectional data, nine social trajectories were created based on parental and adult occupational SEP. Regression models were used to estimate the associations between social trajectories and the following outcomes: adult self-rated health, self-rated oral health, oral health related quality of life, total tooth loss and grip strength; while controlling for socio-economic background and health related behaviours.

### Results

Associations with adult SEP were generally stronger than with childhood SEP. For adult self-rated health and edentulousness, graded associations with social mobility trajectories were observed. While, for grip strength a graded association was observed only among women. Finally, compared to the stable high group, being in the stable low SEP groups in childhood and adulthood was associated with poorer health for all examined outcome measures.

### Conclusions

Intergenerational social mobility was associated with self-rated health, total tooth loss, and grip strength measurements. Compared to only those who remained in a low SEP group over time reported worse self-rated oral health and oral health related quality of life.

### Key messages:

- Overall, this study suggested that intergenerational social mobility affects self-rated health, edentulousness and grip strength
- Also suggests that intergenerational social mobility might counteracts, to varying degrees, the effect of childhood SEP on health

## Labor trajectory and mortality in a nested case-control study from the Spanish WORKss cohort

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### Methods

This was a nested case-control study of workers from the Spanish WORKing life Social Security (WORKss) cohort. Cases were all deaths that occurred during 2004-2013 and

controls were living persons, matched on sex and age at the time the case occurred. We had access to employment information from 1981 to 2013. We used logistic regression to measure associations between the 3 labor trajectory states and case or control status for women and men separately.

### Results

In 2004-2013, there were 42,550 and 11,439 cases in men and women, respectively. With controls, the study sample consisted of 107,978 individuals. Time employed showed a significant protective effect for mortality in both women (OR, 0.88; 95% CI 0.81-0.94) and men (OR, 0.76; 95% CI, 0.70-0.79). The number of episodes and time spent in unemployment (OR, 1.16; 95% CI 1.12-1.20) and inactivity (OR, 1.17; 95% CI 1.14-1.21) were significantly related to mortality in men, but not women. Sensitivity analyses by labor relationship showed stronger effects of unemployment (OR, 1.42; 95% CI 1.13-1.78) and inactivity (OR, 1.34; 95% CI 1.09-1.65) for temporary workers.

### Conclusions

Working longer protects against premature and overall mortality. Unemployment and inactivity are associated with higher risk of mortality in men and had a stronger effect on temporary workers. No effect or trends were observed in women. These results may help plan labor and social policies that protect workers against employment gaps created by new contract arrangements.

### Key messages:

- Working longer is a protective factor against premature and overall mortality
- Unemployment and inactivity in the social security system are related to mortality risk in men but not in women

## Predictors of survival in the Swedish 60 to 96 years old population

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### Background

Longevity is multi-determined. In this study, biological, social and psychological factors were included in a multivariate model in order to investigate their predictive ability of survival in a nine year follow up period.

### Methods

The sample was drawn from the Swedish National study on Aging and Care (SNAC), including a representative database of Swedish inhabitants aged 60 to 96 years. The participants (N = 6986) were followed during the years 2002 to 2011. Data was collected including age, physical activity, body mass index (BMI), muscle strength, living alone or not, household economy, functional status, smoking habits and education. These variables were used as predictors in multiple logistic regression analyses in order to estimate the odds ratios of survival during the follow up period.

### Results

During the nine year period, 4447 participants (64%) survived. Education was the strongest predictor of survival with 57% higher odds to survive for higher educated participants (P<.001. 95%CI = 1.38 – 1.78), followed by not living alone, which increased the odds of survival with 37% (P<.001. 95%CI = .65 - .83). Light physical activity increased the odds of survival with 18% (P<.001. 95%CI = 1.12 – 1.24) and not smoking was significant related to survival but the odds ratio was as low as 10% (P<.01. 95%CI = 1.03 – 1.71).

### Conclusions

Social aspects such as education and not living alone are strong predictors of survival in older populations and must be considered in the understanding of differences in longevity. In

addition, life habits such as physical activity and smoking behaviors should be taken into account.

**Key message:**

- Both social and behavioral factors contribute to the understanding of differences in longevity in the Swedish population of 60 to 96 years old people in Sweden

**Self-rated health and related factors among persons 85 years or older**

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**Background**

Health promotion and prevention activities throughout life, even in advanced age, have shown positive effects on health of older people. The proportion of elderly who assess their general health as good has increased in Sweden, but it is in particular the younger pensioners who report better health. There are few studies on the health status of people older than 85 years. The aim was to study self-rated health and its association with living conditions, lifestyle factors, the most common health problems and functional ability, among the elderly.

**Methods**

This cross-sectional study was based on a population survey conducted in 2012. 249 persons, 85 years of age or older, answered a questionnaire in the county of Västmanland, Sweden (participation rate 57%). The mean age was 88 years for both genders. Multivariate logistic regression analyses were performed for self-rated health and related factors.

**Results**

The prevalence of good self-rated health was 41 and 27% for men and women, respectively. The prevalence of fair self-rated health was 47 and 61%, and of poor self-rated health 12 and 12%, respectively. The statistical analyses showed that female gender, impaired physical mobility, pain and anxiety/depression were strongly associated with poorer than good self-rated health, while educational level, living alone, safety, accidents, physical inactivity, obesity and impaired vision/hearing were not statistically significantly associated with self-rated health.

**Conclusions**

A majority of the participants had at least fair self-rated health, but the number of respondents was limited and the survey did probably not reach the most ill or disabled persons. Impaired physical mobility and health problems were strongly associated with self-rated health in this age group.

**Key messages:**

- A majority of the participants, 85 years or older, had at least fair self-rated health
- Impaired physical mobility and health problems were strongly associated with self-rated health in this age group

**Health literacy among paid caregivers of elderly people: preliminary Results of a Tuscan study**

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**Background**

Many elderly depend on paid non-familial caregivers to maintain their independence at home, specifically as regards to health care tasks and activities of daily living. Due to such a pivotal role, knowing the health literacy (HL) levels of caregivers is fundamental. The aim of this study is to assess the HL levels of a sample paid non-familial caregivers in the province of Pistoia (Italy).

**Methods**

The sample was enrolled among those caregivers who assist patients included in a Regional social support program aimed at giving money to help hire a caregiver. An ad hoc questionnaire was performed to acquire socio-demographic data of the caregivers, and information about the physical (BADL) and cognitive impairment (Pfeiffer test) of the elderly they assist. HL levels was measured through the Italian version of the Newest Vital Sign (NVS-IT). To date the study is ongoing.

**Results**

Data refer to 37 caregivers, with a mean age of 48.5±9.3 ys. Only one is Italian and most of them is Romanian (78.4%). Regarding the foreign caregivers, 94% presents a good level of understanding Italian language and the mean length of time they have been staying in Italy is 9.5±4.1 ys. 37.8% have attended the school for less than 12 ys. For all of them, responsibilities involve caregiving tasks, personal care, household and food preparation. As regards to assisted elderly, the mean age is 85.5±7 ys, 65% has a moderate/severe cognitive impairment and 40.5% a severe physical impairment. 32.4% of the caregivers presents adequate literacy, 48.6% possibility of limited literacy, and 18.9% high likelihood of limited literacy. The level of HL is not statistically associated with the other collected data.

**Conclusions**

Our preliminary results indicate that many caregivers present high likelihood or possibility of limited literacy. It is important that these caregivers could be identified prior to assigning roles involving health care, so as to tailor interventions and responsibilities.

**Key messages:**

- Inadequate health literacy is an under-recognized problem among paid non-familial caregivers of elderly
- Our results indicate that many caregivers present high likelihood or possibility of limited literacy, although they are asked to provide health-related activities for the elderly they assist