

# SP3-38 IMPROVED PREGNANCY DANGER SIGN KNOWLEDGE ENHANCES FACILITY DELIVERY IN RURAL BANGLADESH

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**Introduction** Achieving Millennium Development Goal 5 is crucial for Bangladesh. Knowledge about pregnancy danger signs is essential in avoiding maternal death. Currently Bangladesh is addressing selected pregnancy danger signs across the nation. The objective of this study was to determine the effect of improved pregnancy danger sign knowledge on institutional delivery.

**Methods** The International Center for Diarrhoeal Disease Research Bangladesh has been maintaining a Health and Demographic Surveillance System (HDSS) since 1966. A maternal, child health and family planning programme was introduced in 1977 in half of the HDSS area. A pictorial pregnancy follow-up card was introduced in 1987 and five selected pregnancy danger signs (bleeding, headache, oedema, mal-presentation, prolonged labour) pictures were included in 2000. The service providers asked each woman about each picture during her 1st & succeeding antenatal care visit.

**Results** 5538 women who gave birth during 2003 and 2004 were included in the analysis. Knowledge of at least one pregnancy danger sign was increased from 6.7% (192/2841) to 38.5% (1103/2865) in 2003 and 7.5% (196/2610) to 45.3% (1212/2673) in 2004 at first and succeeding visits respectively. Those women who knew at least one pregnancy danger sign were 1.34 (OR 1.34, 95% CI 1.05 to 1.71) and 1.21 (OR 1.21, 95% CI 1.07 to 1.36) times more likely to have a facility delivery than who didn't (adjusted).

**Conclusion** Bangladesh should aim to make the pictorial tool available in rural area and ensure to ensure that women understand the danger messages.

# SP3-39 VARIATIONS OF AVOIDABLE MORTALITY IN RUSSIA

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Variation of avoidable mortality in Russia and its relation to socio-economic conditions was analysed using official mortality data. Avoidable mortality in 2009 was 538.6 on 100 000 population for men and 177.4 for women, it is much more than in Europe. In age group 5–64 years avoidable deaths comprise 56.4% of all deaths (PP rate) for men and 53.3% of all deaths for women, varying among Russian regions from 45.4% to 69.3% and from 40.0% to 68.8% for men and women. 79.3% of avoidable deaths among Russian men is determined by the first group of causes of death related to primary prevention (M1); 0.4% is determined by the group of causes related to early diagnosis (M2); 20.3% is determined by the group of causes related to the quality of healthcare (M3). For women, these percentages are 67.6, 14.9 and 17.6 respectively. The highest and the lowest M1 are 34.7% and 59.8% for men, 19.5% and 56.7% for women. The lowest M2 are 0.001% for men 2.4% and for women, the highest M2 are 0.6% for men and 14.9% for women. The lowest M3 are 7.0% for men and 5.8% for women, the highest M3 are 15.9% for men and 16.3% for women. This data show that only the M1 is substantially higher in regions with low socio-economic level compared to wealthier regions. Mortality in disadvantaged regions from the first group of avoidable causes exceeds that in wealthy regions by 203.0% for men and by 238.3% for women.

# SP3-40 DISABILITY-FREE LIFE EXPECTANCY AND RELATED FACTORS IN JAPAN

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**Introduction** Disability-free life expectancy (DFLE) is an average number of years that a person can expect to live in "full health." The Japanese government asked all 47 prefectures to reflect DFLE in their health policies. To meet this political demand, we estimated DFLE of all the prefectures in Japan by the data of the Long-Term Care Insurance System implemented in 2000 and examined socio-demographic and health factors which might influence DFLE.

**Methods** We assumed those who were under the conditions of Need for Long-Term Care (category 2 or more) as "disabled." DFLE at age 65 (DFLE-65) was estimated by Sullivan's method which used the proportion of the stationary population of the non-disabled to the number of survivals from life table by age and sex. For evaluating factors potentially influencing DFLE-65, we conducted an ecological study of all 47 prefectures in Japan with several national statistics.

**Results** DFLE-65 in Japan in 2005 were 16.6, 20.2, and 18.4 years for male, female, and overall, respectively. In 2009, such figures were 17.1, 20.5, and 18.8 years, respectively. DFLE-65 in 2009 was strongly correlated with several causes of death, number of snowy days, and several healthy habits. The difference of DFLE-65 from 2005 to 2009 was strongly correlated with healthy dietary habits, exercise, income per capita, and snowy or rainy days.

**Conclusion** In Japan, DFLE-65 is still in an upward phase and implementation of healthy dietary habits and exercise might prolong the DFLE.

# SP3-41 AUTONOMY AS A PREDICTIVE FACTOR FOR OLDER PERSONS' SURVIVAL

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**Introduction** As reported by the literature, chronic diseases are related to the survival time of older populations.

**Objective** To study the association of autonomy, depression cognition loss and alcoholism with older persons' survival in a medium-sized city in São Paulo state (BRAZIL).

**Methodology** Systematic population sampling for unknown prevalence was performed. Three hundred and sixty-five people aged 60 years and older were interviewed by means of home enquiries in 2006–2007. The Activities of Daily Living (ADL) Scale (Katz, Downs *et al*, 1970), Instrumental Activities of Daily Living (IADL) Scale (Lawton and Brody, 1969), Abridged Geriatric Depression Scale (Yesavage JA, Brink TL *et al*, 1982), Mini-Mental Status Examination (MMSE) (Folstein, Folstein *et al*, 1975; Bertolucci, Brucki *et al*, 1994) and the CAGE Alcohol Use Assessment (Ewing, 1984) were applied. As to survival, the log-rank test was performed, and the proportionality of the curves for each one of the evaluations was observed. Next, they were conjointly studied by the Cox model and adjusted by gender and age.

**Results** 3 years after the enquiry, the ADL and IADL evaluations generated proportional survival curves. Only ADLs showed to be a

predictive factor for mortality ( $p=0.02$ ),  $HR=3.2$  (1.3 to 7.7), adjusted for the other scales, gender and age (Cox).

**Discussion and Conclusions** Of the elders' morbidity, ADL alterations are the causes for most concern as they are already noted to be predictive for mortality after 3 years of the cohort's survival.

### SP3-42 TRENDS AND CHARACTERISTICS OF SELF-REPORTED HIV TESTING IN WOMEN OF CHILDBEARING AGE, IN PERU 2000, 2004–2008

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**Introduction** In the 26-year HIV/AIDS epidemic in Peru more than 39 682 cases of HIV and 25 533 cases of AIDS have been reported. Despite a higher concentration of the epidemic in men who have sex with men, there has been transmission to other groups and a decline in the male to female ratio of HIV infection. The objective of our study was to examine trends and factors associated with obtaining HIV testing for women of childbearing age (WCBA).

**Methods** We used Demographic and Family Health Surveys databases of Peru from the years 2000, and 2004 to 2008 to study trends of self-reported HIV testing. The association between HIV testing and sociodemographic and reproductive health factors was assessed using bivariate analyses and logistic regression.

**Results** We analysed data from 124 797 Peruvian WCBA. There was a significant difference in the number of WCBA who reported having been tested for HIV, with more than a doubling of testing between 2000 (15.3%) and 2008 (39.6%) ( $p<0.001$ ). HIV testing was associated with urban residence (OR 1.96), higher educational level (OR 5.14), speaking Spanish (OR 3.10), having a partner (OR 3.21), self-perception of high risk for HIV (OR 1.41), and having had a sexually transmitted infection in the preceding year (OR 2.18).

**Conclusion** There has been an increasing number of WCBA who report HIV testing since 2000, but less than half of WCBA do not seek HIV testing. Major factors associated with HIV testing should be considered when planning new initiatives to increase HIV testing of WCBA.

### SP3-43 FACTORS INFLUENCING WOMEN TO RETURN TO RECEIVE THEIR PAP SMEAR RESULTS, IN THE STATE CAPITAL OF RIO DE JANEIRO IN BRAZIL

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**Introduction** Although actions for cervical cancer reduction in primary care were implemented in Rio de Janeiro in the '80s, the incidence and associated mortality are still among the highest in the country. For effective prevention it is essential women complete follow-up after their Pap smear. More information about the reasons preventing follow-up is needed.

**Objective** To investigate the factors that influence women not to return to receive their Pap smear result in the Brazilian Public Health System in Rio de Janeiro city, Brazil.

**Material and Methods** A cross-sectional study was conducted. All participants signed a consent form and 1278 women completed the protocol. The questionnaire included: socio-demographic status, self-evaluation about health status, knowledge about prevention, last Pap smear and reproductive history.

**Results** The percentage of women who did not return to receive the result of Pap smear was 23.1% (18.3–27.9). Schooling, marital status, race, religion and per capita income, self-evaluation about health status, knowledge about prevention, reason to perform exam, satisfaction level in medical attendance were not associated with the return for getting the results. Women who were not informed of a date to return for their result were less likely to return than those who had been informed, 47.0% (35.9–58.4).

**Discussion** The results showed that the behaviour of the health professional and the infrastructure of the healthcare system can influence the return of women to receive the Pap smear result and their follow-up treatment.

### SP3-44 PREGNANCY IN ADOLESCENCE: ALWAYS UNWANTED?

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**Introduction** Studies conducted all over the world show that the rates of pregnancy in adolescence are increasing, especially in the early adolescence (10–14 years of age). Although the majority of pregnancies in this period are not desired some studies suggest that a number of them are wanted. Aims: (1) Assess the prevalence of wanted pregnancy and possible associations with socioeconomic, demographic factors and social support network in a population of pregnant adolescents (2) Verify if age should be an effect modifier in these associations.

**Methods** Cross sectional study conducted with pregnant adolescents regularly attending two public maternity units. A sample of 232 pregnant adolescents aged 13–20 years (mean 17.3 years) completed a self-reported questionnaire.

**Results** Prevalence of intended pregnancy was 46.2%. Final adjusted model showed that being married (PR 1.80, 95% CI 1.27 to 2.56) and not having friends (PR 1.48, 95% CI 1.15 to 1.90) showed association with the desire to be pregnant. Girls studying in the elementary grade and aged 12–16 years desired to be pregnant less (PR 0.57, 95% CI 0.38 to 0.88).

**Conclusion** Pregnancy in adolescence may not always be unwanted. Some factors, such as being married and not having any friends may have influence in these cases. Professionals dealing with adolescents should be aware of these issues in order to identify high risk situations that could be managed.

### SP3-45 AIDS-FREE-TIME IN THE PRE AND POST-HAART ERAS IN THE SAO PAULO HIV COHORT, BRAZIL

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**Background** The effect of ART used before aids diagnosis has been the object of studies. The objectives were to estimate AIDS incidence rates, median AIDS-free-time and to investigate predictor factors for progression to AIDS.

**Methods** Retrospective cohort study, encompassing 1879 adult patients of the HIV São Paulo Cohort, during 1988–2005. The Kaplan-Meier methods, the Cox proportional hazard model and HRs estimates were used.

**Results** 981 patients progressed to aids. AIDS incidence rates were 11.6 and 7.1 person-years in the 1988–1996 and 1997–2003 periods, respectively. The median time of progression from HIV infection to AIDS without treatment was 53.7 months; with ART without HAART, 90.0 months; and with HAART, over 50% of patients